



NORWELL MASTER PLAN

Master Plan Steering Committee Planning Board Norwell, Massachusetts

2004 - 2024

Master Plan Steering Committee

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Many thanks to all the board and commission members, town staff and Norwell citizens who participated in creating this Master Plan.



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Master Plan Steering Committee Planning Board Norwell, Massachusetts

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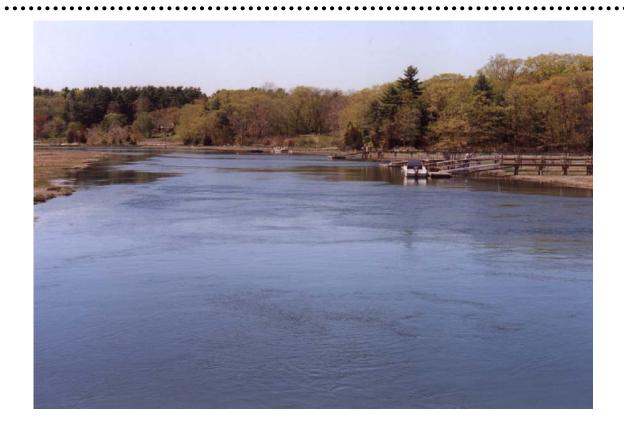
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A Technical and Resource Appendix is available in a separate volume.



EXECUTIVE SUMMARY



The Town of Norwell is a green and comfortable residential suburb that offers its residents a very good quality of life. From its roots as a shipbuilding and farming community, Norwell grew into a semi-rural, low-density residential suburb after 1950 with a mix of historic homes and middle-class, modest housing. Over the next generation, the town's calm beauty and excellent school system attracted new residents to the houses that sprang up steadily along country roads and in subdivisions.

Since the 1990s, Norwell has entered a more affluent and mature suburban incarnation. Housing is becoming more expensive, new homes are getting bigger, traffic seems more pervasive and intense, and the demand for school and other town services continues to increase. Almost everyone in Norwell talks about the town's "rural character" and wants to enhance or save it. Some residents are not sure they like the changes they have seen in recent years. Others are more comfortable with the transformations, but still worry about ensuring that the changes are appropriate to the town's sense of its own identity. In this context of development pressures that threatened to bring irrevocable change, the town in 2000 decided to develop a community master plan.

The purpose of a master plan is to provide a community with the opportunity to articulate and review its values and goals through public discussion, agree on what kind of town it wants to be in the future, and identify the key areas where it must act both to preserve enduring character and to seize opportunities to shape change. A master plan sets forth a set of strategies, tools and specific actions to make the plan a reality. Norwell is facing strategic

choices to preserve and enhance its quality of life and community character. The Master Plan is a guide to making those strategic choices.

The premise of this Master Plan is that Norwell must innovate – both to protect the essential elements of its identity as a community and to take advantage of opportunities for improving life for town residents. In the past, change could be managed with a relatively simple regulatory framework and a reactive approach to unusual challenges. But continuing the same way of doing business will not resolve the issues that increasingly concern residents – because these concerns arise from a changed context. Although in many ways Norwell seems much like it was decades ago, the cumulative effect of development has brought the town to a much more mature suburban identity. As a result, the town faces both more constrained choices and more constrained opportunities. In this context, Norwell must adopt some new ideas and ways of doing things in order to have a better chance of retaining its cherished community character.

NORWELL'S VISION FOR THE FUTURE

Norwell's Vision Statement crystallizes residents' ideal vision of what the town will be like twenty years from now. Based on the results of resident views expressed in a survey and community meetings, it emphasizes protecting the town's natural environment and its green and semi-rural character, while enhancing the town's small-town and family-oriented community life, and its overall livability. The Vision serves as a statement of values and a source of inspiration to guide decision-making and implementation of the Master Plan.

Norwell in 2024 is a predominantly residential town with a strong sense of community identity and semi-rural visual character:

- Planning for the future and maintaining a fiscally strong town government
- Maintaining a small town, family-oriented residential character
- Shaping development to be in harmony with town character and environmental constraints
- Providing a sufficient variety of economic and housing opportunities to support excellent services and community diversity
- Protecting the town's natural beauty, water resources, and environmental health through a network of "green infrastructure"
- Preserving historic buildings and landscapes

Norwell is known in the South Shore for its livability, services, and community cohesion:

- Norwell is financially sound and maintains excellent infrastructure and services through efficient, cost-effective and forward-thinking management.
- Norwell is centered on its village community, a mixed-use, lively but low-key Norwell Center.
- Norwell is *walkable* with a network of trails and sidewalks linking residents with each other, civic buildings, open space, and shopping areas.
- Norwell is welcoming, with sufficient housing affordability to accommodate senior citizens, town employees, and young families.
- Norwell has *the most attractive stretch of Route 53* in the region characterized by pedestrian-friendly nodes of commercial development.
- Norwell is *green,* with a network of protected open space and regulations that promote environmentally sound, appropriate development.

COMMUNITY PARTICIPATION IN THE MASTER PLAN PROCESS

In 2000, the Planning Board recommended to Town Meeting that Norwell complete a community master plan. Town Meeting approved, and in the spring of 2001, the Planning Board and its subcommittee, the Master Plan Steering Committee (MPSC), selected a team of consultants to assist Norwell in crafting a master plan. Norwell citizens had multiple opportunities to participate in guiding and crafting the plan:

- A survey was distributed to all town households and businesses.
- Three town-wide workshops and forums took place.
- Six precinct workshops focused on neighborhood-level concerns.
- Two business community meetings focused on development in business areas.
- Four thematic working group meetings discussed open space, housing, economic development, and transportation and facilities.
- Meetings of the MPSC were open to the public.

In addition to the survey, the MPSC mailed all residents a summary of the proposed vision statement, goals, policies and potential implementation actions before the second town-wide forum. Newspaper articles and occasional columns reported on the progress of the Master Plan. The MPSC visited town boards and commissions to discuss Master Plan issues. Accompanying this process, the consultants prepared three detailed interim reports that functioned as the working documents of the planning process and that were made available for public review in the Library and on the www.norwellmasterplan.org web site: 1) *Existing Conditions, Trends and Challenges*; 2) *Vision – Goals – Policies*; and 3) *Implementation and Action Plan.* These documents, as well as this final Master Plan document, large maps and a Technical Appendix binder containing model bylaws and other materials to assist in implementation, are also available in the Planning Department office.

SURVEY RESULTS

Survey respondents were asked what they think are the best and worst things about Norwell and about the top issues facing the town in the next twenty years. They were also polled on their major concerns in the areas of community facilities and services; transportation and traffic; natural resources, open space, and cultural resources; economic development; and land use and growth management. Almost 500 respondents returned the survey – representing over 15% of Norwell households and more people than typically vote at Town Meeting. The top five issues facing the town identified by respondents were, in order, the tax burden, protection of drinking water, protection of open space, preservation of educational quality, and traffic control and improvements. The tax burden and protection of drinking water were given almost identical importance. There was great agreement on the best things about Norwell: rural, small town character, open space, and natural features. Other positive aspects of the town identified by survey respondents included the school system, the people in the community and the high level of civic participation. Most respondents thought that traffic and congestion issues were the worst thing about Norwell: congestion at Queen Anne's Corner; Route 53 traffic; lack of safe pedestrian and bike routes; and speeding. The

other main area of dissatisfaction focused on development issues, such as too much or inappropriate development, oversized homes, and loss of open space to development.

Shaping and Managing Growth to Achieve the Vision

This Master Plan provides the elements of an integrated growth management approach that will help Norwell achieve the goals enshrined in the Vision Statement. Norwell needs to pursue a balanced combination of strategies that support the town's environmental and historic character while accommodating changes. Focusing just on protection of water resources, or on open space protection, or on building up the nonresidential tax base, or on zoning changes alone will not meet the community's multi-faceted needs. The elements of an integrated growth management strategy that emerged through the planning process are threaded throughout the Master Plan:

- recreational resources. The Green Network is the foundation of an environmental and open space preservation and management system functioning as the "green infrastructure" that supports a healthy environment for people and wildlife. The Green Network concept should be used not only by boards and commissions charged with resource protection or open space planning, but also to guide development, so that it complements the assets that make Norwell such an attractive place to live. Master Plan maps identify the high priority areas for protection and enhancement.
- Tools for shaping development to conserve open space and complement community character. Norwell will still see additional development. There are close to 3,200 acres of land on 645 parcels, some with an existing house, that could be subdivided under current zoning. The town needs to establish new ways to accommodate growth and redevelopment in order to preserve the character established by older settlement patterns. Conservation Subdivision development, which clusters homes in order to preserve larger blocks of open space, is much more likely to help Norwell retain its remaining semi-rural character than a continuation until buildout of conventional large-lot development patterns.
- Tools for meeting affordable housing goals in ways compatible with town character. By establishing a proactive affordable housing policy, Norwell can shape affordable housing to fit its own needs for more diversity in housing types and affordability, while still complementing the town's traditional development patterns and meeting state goals. The existing housing stock and neighborhood patterns mean that housing in Norwell will continue to be overwhelmingly characterized by substantial, single-family homes on their own lots. Including some diversity of housing types and permanent affordability will not change Norwell's fundamental residential character.

- Economic development strategies to increase the tax base. Norwell is lucky to have the industrial and commercial parks located at the northern end of Route 3 and Route 53 that add to the tax base with insignificant impacts on residential neighborhoods. If the town is to increase non-residential tax revenues to mitigate the high residential tax burden, this is where opportunity lies. As a long-term strategy, the town can allow additional density in these parks, contingent on sewer or other wastewater improvements, in order to attract higher value development.
- Economic development strategies to enhance quality of life. Route 53 commercial
 areas and Norwell Center can better serve Norwell residents if more attention is paid to site design, traffic and
 parking management, pedestrian needs, and creating a climate that attracts mixed-use development and desired
 businesses.
- Strategies to enhance mobility town-wide. Although management of traffic congestion, enhanced enforcement, and installation of traffic calming measures are all important, creation of a town-wide network that allows residents of all ages to move around town safely on foot and by bicycle will improve everyone's quality of life and offer alternatives to vehicle travel for some trips.
- Strategies to use town property to achieve new goals. The town needs a
 comprehensive evaluation of all its property, land as well as buildings, for its potential to meet goals ranging
 from consolidation of the public works department and creation of a community center, to donation of land or
 buildings for affordable housing.

CRITICAL ARENAS FOR ACTION

Through the survey, public meetings, and committee discussion, the MPSC identified the key arenas for town action in the future. Within these four arenas, the town can deploy a variety of policy approaches, regulatory tools, management programs and voluntary initiatives to achieve its goals.

Protecting and managing natural systems

Protecting Norwell's drinking water supply and its rivers and streams are among residents' highest priorities. These goals require continuing the town's careful attention to water issues by implementing conservation measures and developing new drinking water sources. Land use strategies complement water supply management efforts, ranging from preservation of open space in water supply zones to reduction of impervious surfaces in new development. Protection of surface water and wetlands from nonpoint source pollution requires controlling stormwater runoff from impervious surfaces like roads, driveways, parking lots and roofs; limits on use of upland buffers to wetlands; and clustered site design through Conservation Subdivisions that allow greater infiltration of water and reduction of impervious surfaces than do conventional large-lot subdivisions. In some cases, new

regulations and management programs are needed. In others, increased public awareness and voluntary actions on private property are more appropriate approaches. The Plan identifies areas that should be the focus of conservation efforts and suggests that private property owners sharing environmentally sensitive lands such as wetlands develop guidelines for a joint approach to management of these areas.

Protecting and enjoying community character

Concerns about community character focus on three issues: preservation of the open space character of roadside views and remaining large parcels; encouraging new development and redevelopment to be in harmony with the surrounding neighborhood; and protection of historic resources. New regulatory and management tools can help Norwell shape development to protect the town's traditional semi-rural character and historic resources. The approaches recommended in this Plan, such as Conservation Subdivision development for parcels of 5 acres or more, are intended to make sure that if remaining land is developed, the new development must maximize the retention and integrity of open space. Although Norwell has a very active Historical Commission and a demolition delay bylaw, the town should consider providing stronger protection to Norwell's most important historic sites.

Meeting affordable housing goals in ways compatible with community character

The median price of Norwell single-family homes rose to \$474,000 in 2003, reflecting the rise in housing prices throughout Massachusetts in recent years. The town offers limited diversity in housing type or price, constraining housing choices for town employees, elderly people who want to downsize but stay in town, and young adults who would like to stay in their home town. Norwell does not meet the state goal of 10% permanently affordable housing under the Chapter 40B law. By developing and implementing an active plan with a variety of strategies to meet the state goal, Norwell can provide more housing options without damaging its fundamental neighborhood and community character.

Promoting economic development to enhance the tax base and improve quality of life

High residential tax bills are a burden for many Norwell residents. They result from the fact that residential values have been increasing faster than commercial and industrial values. Norwell residents do not want to see more land area assigned to business uses, but they are interested in moderating the tax burden while retaining high quality town services. This requires a long-term strategy to bring higher value development to the industrial and office parks, such as zoning for higher density in commercial and industrial areas contingent on sewer connections to Rockland or other new wastewater management options. Norwell residents would also like the commercial districts on Route 53 and in Norwell Center to provide more retail variety and to be more attractive and functional as community centers. New standards for design and development, along with improvements to traffic function, clustering of business uses, pedestrian amenities, and in the case of Norwell Center, limited amounts of small-scale rental housing, would help attract more diverse retailers and service providers.

MASTER PLAN GOALS AND IMPLEMENTATION STRATEGIES

Protect the Natural and Cultural Heritage of Norwell in a Connected Green Network

- Create a Green Network of natural and cultural resources, open space and recreational opportunities by protecting continuous open space greenways through private stewardship agreements among neighbors, conservation restrictions, and, if needed, purchase.
 - Protect critical environmental systems, especially the quality and quantity of groundwater and surface water in ponds and streams
 - Preserve open space in interconnected natural resources systems to protect water resources and wildlife habitat
 - Preserve the cultural resources of Norwell in the form of historic buildings and sites, and the working landscapes of farms, nurseries, and woodlots.
 - o Provide recreational access to open space for both passive and active recreation

Strategies:

- Focus first on two priority greenway systems: (1) along Third Herring Brook from Church Hill to Wompatuck State Park, and (2) along the North River and Second Herring Brook from Stetson Meadows to Black Pond. Each of these potential greenway systems contains diverse natural resources, historic sites and landscapes, and opportunities for interpretive recreational trails.
- Protect water flows in streams and recharge of groundwater by minimizing creation of new impervious surfaces through a variety of strategies including open space preservation, Conservation Subdivision zoning, and promoting water conservation.
- Seek comprehensive management of septic systems, starting with master plans for trouble spots, GIS mapping and record keeping, and seek funding for mitigation projects.
- Implement enhanced stormwater management programs to reduce nonpoint source pollution of streams, ponds, and wetlands. Implementation actions include promoting environmentally-sensitive landscaping, smaller lawn size and limited use of fertilizers and pesticides, and improving maintenance of the drainage system.
- Promote public education on the neighborhood level about natural resources, wildlife habitat and stormwater flows and encourage neighborhood voluntary efforts to monitor the health of local streams and other natural resources.
- Explore options for protection of historic resources such as local historic districts, neighborhood conservation districts, and a local landmarks bylaw.
- Enhance access to open space and recreational sites by adding parking spaces where needed and improving signage, maps and other outreach materials.

Revive the pathways committee to seek funding and oversee the creation of a detailed bicycle and
pedestrian path system linking neighborhoods, open spaces, recreational areas, schools, and other town
destinations.

Shape Residential Development to Preserve Community Character

- Plan, manage and shape development to accommodate change while ensuring harmony with Norwell's community character and environmental constraints.
- Provide for housing options available across a range of incomes.

Strategies:

- Manage residential development to preserve Norwell's remaining open space character by establishing Conservation Subdivision zoning for all residential parcels of 5 acres or more. This will ensure preservation of more unfragmented open space and creation of a smaller expanse of impervious surfaces. Consider making this a mandatory, by-right zoning regulation with a strong site plan review process to ensure town oversight for high design and development standards.
- Consider implementing Large Home Site Plan Review to influence the siting of very large houses on their lots and their impact on public views.
- Establish overlay buffer zones along roads to preserve trees and views. A scenic corridor overlay could require that, within 25 feet of the pavement, property developers must retain specified sizes or types of vegetation (with provision for a driveway).
- Establish coordinated review of all new residential development by all relevant boards, commissions and staff.
- Support creation of affordable housing compatible with town character by reviving the Norwell Housing Partnership and pursuing the use of town-owned properties for affordable housing.
- Establish a variety of regulatory and programmatic options to promote creation of affordable housing such as scattered-site affordable accessory units and small units on nonconforming lots. Through the Housing Partnership, explore contacts with nonprofit housing developers, the potential for a "friendly 40B" on town-owned property, and creation of an Affordable Housing Trust. Appropriately sited and designed rental projects, small-scale scattered-site affordable housing, deed restrictions on existing moderately priced houses, as well as a range of other approaches, can help the town integrate affordable housing harmoniously into the community.

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Promote Higher Value Economic Development in Existing Business Areas

- Maximize non-residential tax revenue from existing industrial and commercial areas while protecting town character and quality of life.
- Improve the Town Center with more pedestrian-friendly design and retail variety.
- Improve Route 53 with more pedestrian-friendly design and higher value development.

Strategies:

- Pursue a strategy to increase non-residential tax revenues by allowing higher density development in the
 office and industrial parks contingent on sewer connections or other wastewater capacity improvements.
- Improve the appearance and function of Route 53 by concentrating development in village-like centers, reviewing parking ratios and allowing shared parking, and developing a streetscape plan with pedestrian amenities.
- Collaborate with neighboring towns on Route 53 standards for new development to create more walkable areas, cluster businesses, and reduce curb cuts to improve traffic function.
- Make Norwell Center a more vital focus of community life by allowing small-scale shops and offices by
 right. Residents in public meetings envisioned additional family-oriented businesses, such as an ice cream
 store, in the Center. Eliminating the special permit requirement for small shops and offices may encourage
 new business entries.
- Upgrade the streetscape and make improvements to reduce speeding and enhance pedestrian safety in Norwell Center. Wide intersections and few pedestrian amenities currently signal drivers that they do not need to slow down in the Center.
- Develop design guidelines and an overlay district with special permit incentives for small-scale multifamily and mixed-use development. People living in apartments above shops or in small multifamily buildings would create more activity in Norwell Center and help attract new retail options. Some of the apartments could also be designated as permanently affordable. If necessary, communal septic systems should be explored to make it possible for more people to live in the Town Center.
- Revise the home occupations section of the zoning by-law to require a special permit for those occupations that require clients to come to the business and for exterior building or site alterations that result from the business activities. This change would protect neighbors from impacts of home businesses while continuing to allow home businesses that do not have a significant impact on abutters and the neighborhood as a whole.

Transportation and Circulation

- Work towards a multi-faceted transportation system including
 - o Access to regional public transportation
 - Well-maintained roads for safe and efficient access to local roads and regional routes
 - A system of pedestrian and bicycle routes throughout town and connecting to regional nonmotorized transportation routes
- Create an enhanced public assets management system to efficiently maintain public infrastructure.

Strategies:

- Preserve the character of Route 123 through inclusion in MassHighway's Community Roads Program.
- Mitigate traffic congestion on Route 53 through rezoning and promoting common regulatory strategies throughout the corridor.
- Implement enforcement and traffic calming strategies on high traffic, cross-town roads.
- Create a network of safe pedestrian and bicycle routes throughout town by planning for sidewalks in selected areas and safe roadside pedestrian paths on more rural roads, maintaining trails in open space, and providing marked bicycle routes.
- Establish a public works asset management system to support a program of regular road maintenance and improvements. Efficient asset management over time results in lower road repair costs.
- Participate in regional transportation planning to enhance access to public transportation.

Community Facilities and Services

• Provide residents with high-quality and cost-effective government facilities and services.

Strategies:

- Implement the recommendations of the Water Master Plan. Water conservation measures, distribution system improvements, and identification of new supplies are among the recommendations.
- Consider consolidating responsibility for maintenance of all town property and infrastructure in one
 Public Works department. Evaluate the current division into several departments to see if consolidated
 management would increase efficiency and decrease costs.
- Prepare a comprehensive study of town facilities needs and alternative uses of town properties.
 - Inventory and evaluate all town-owned property for appropriate use. All buildings and land owned by the town should be evaluated for future use.
 - Consider buildable town-owned parcels for new uses such as affordable housing, recreational
 use or town facilities.
 - Plan for a new police station and technology.

- Study potential uses for the Osborne Building and site, including affordable housing and a community center.
- Provide administrative support for the Town Planner. Because more proactive policies and regulations
 require more professional guidance, allowing the Planner to spend more time on complex issues while
 assigning routine administrative work to a staff person would benefit the town and enhance implementation
 of the Master Plan.

The Master Plan covers all of the elements listed in MGL Chapter 41, sec. 81D, which governs the content of municipal master plans: goals and policies, land use, housing, economic development, natural and cultural resources, open space and recreation, services and facilities, circulation, and implementation.

IMPLEMENTATION AND STEWARDSHIP OF THE MASTER PLAN

The everyday demands of town government and turnover in town staff and officials can sometimes make it difficult to seek guidance from the Master Plan in decision-making. Effective implementation of a master plan requires stewardship: someone has to be responsible for monitoring progress and bringing changes to the attention of the community. The Planning Board should seek volunteers for appointment to a Master Plan Implementation Committee to take on that role and the Board should direct the Town Planner to provide staff support to the committee. The Committee should work with town officials, boards and commissions, and departments to incorporate Master Plan policies and strategies into the decision making process and to make Master Plan implementation actions part of the capital improvement plan and departmental work plans. In addition, the committee should make annual reports to the Planning Board, Board of Selectmen and Town Meeting on the progress of implementation, discussing unforeseen opportunities and barriers, as well as changing conditions. Every five years, public meetings should be organized to review, modify or confirm the principles and priorities of the Master Plan, so that it remains a useful guide for town decision-making. By bringing the Master Plan vision, goals and implementation program before the community at regular intervals, the Master Plan Implementation Committee will make the Plan a living document and an effective road map for managing and shaping change in Norwell.

I. Shaping Norwell's Future



A. Identity and Change in Norwell: The Master Plan Process

Like all communities, the Town of Norwell is always undergoing change. Once a rural town, then a semirural, low-density residential suburb with a mix of historic homes and middle-class, modest housing, Norwell is now entering a more affluent and mature suburban incarnation. Housing has become more expensive, new homes are bigger, traffic is more pervasive and intense, and the demand for school and other town services is increasing. Just about everyone in Norwell talks about the town's "rural character" and wants to enhance or save it. Some residents are not sure they like the changes they have seen in recent years. Others are more comfortable with the transformations, but still worry about ensuring that the changes are appropriate to the town's sense of its own identity.

As late as 1930, Norwell had a small population of around 1,500 people and town residents depended primarily on agriculture and small scale industry. Norwell's transformation into a suburban residential community occurred during the 1950s and 1960s as Route 3 opened up the South Shore to development. By the mid-1970s, Norwell residents were already contending with changes to the identity and character of their community. The challenges that they faced then have recurred periodically as the town reconciles its vision of itself as a rural community with the increasing impacts and consequences of suburban, residential development.

In 1976 a Norwell resident (probably a board or commission member) replied to the state's 1976 Local Growth Policy Questionnaire by describing the Town's concerns about future growth and development. Norwell's concerns focused on water supply, wetlands protection, open space and scenery preservation, wildlife habitat preservation, potential changes to community character, and fiscal costs and benefits. Norwell's goals were to "maintain the traditional rural character of the town" and ensure "controlled orderly growth through zoning [and] conservation acquisition." The major growth-related issues included "increased taxes, sewage, solid waste disposal, police and fire departments, major highway, i.e., [Route]228, and the MBTA assessment," and the actions that the writer believed were necessary to resolve these issues were "acquisition of open spaces, wetlands, marginal land, historical and/or scenic lands via Conservation Commission or others." There was also mention of extending the sewer trunk line via the state (a Route 228 study) or neighboring towns (Rockland and Scituate) and resolving solid

waste disposal on a regional basis. Asked to describe likely changes in 20 years, the writer expected a population of 13,000 - 25,000 but no significant changes in the character or identity of the community by 1996.

It is striking that Norwell today faces many of the same concerns as Norwell almost thirty years ago. The Town has retained a much lower population than predicted, partially because households tend to have fewer persons than a generation ago, and it has preserved significant amounts of open space. About 20 percent of Norwell is now protected open space with another 26 percent in wetlands or surface water. However, over 600 houses have been built in Norwell since 1996, spreading out along town roads and replacing fields and woods with subdivisions. During the building boom of the late 1990s, Norwell's changing landscape prompted renewed debate about the Town's identity and character.

The Master Plan

In 2000, the Planning Board recommended to Town Meeting that Norwell complete a community master plan. Town Meeting approved, and in the spring of 2001, the Planning Board and its subcommittee, the Master Plan Steering Committee (MPSC), selected a team of consultants led by *Community Design* Partnership, Inc., (CDP) of Boston to assist Norwell in crafting a master plan. The planning process focused on three broad areas:

- *Natural and cultural heritage*: The "green infrastructure" of natural resources, open space, and recreational resources, and the "heritage infrastructure" of historic places and cultural landscapes constitute an environmental and historical legacy that is the foundation of Norwell's community character.
- Housing, neighborhoods, and economic development: Norwell is primarily a residential community, but it
 depends on a small but important group of businesses for tax revenues and to serve community and
 regional needs.
- Transportation, infrastructure, services and facilities: Municipal services and facilities must meet the needs of all the town's residents and the transportation system must allow people to move safely and efficiently around town in vehicles or by other modes.

Community Participation

Norwell citizens participated in guiding and crafting the plan through a survey distributed to all town households and businesses, three town-wide workshops and meetings, six precinct workshops, two business community meetings, four thematic working group meetings, and the open meetings of the MPSC. Newspaper articles and occasional columns reported on the progress of the Master Plan. The MPSC visited town boards and commissions to discuss Master Plan issues.

Based on the survey, the town-wide visioning workshop and three precinct workshops, the MPSC and the consultants developed a draft Vision Statement and Goals. The MPSC mailed a summary of the proposed Vision Statement and Goals, along with potential policies and implementation actions to all Norwell households with an announcement of the second town-wide workshop to discuss the Vision. The Vision and Goals provide the guiding aims for the Master Plan. Working group meetings on housing, transportation and infrastructure, and the green network (natural and cultural heritage) discussed issues and alternatives. A second round of precinct meetings engaged residents in further discussions about alternative approaches to attaining the vision and goals. A third town-wide meeting focused on a set of proposed implementation options in the areas of natural and cultural

resources, housing and residential development (including affordable housing), traffic and infrastructure, and economic development. Accompanying this process, the consultants prepared three detailed interim reports that functioned as the working documents of the planning process and were put on the www.norwellmasterplan.org web site for public review: 1) *Existing Conditions, Trends and Challenges*; 2) *Vision – Goals – Policies*; and 3) *Implementation and Action Plan*.

B. The Structure of the Plan

The Norwell Master Plan distills the results of the public process and three interim reports into a focused set of strategies and actions to achieve the Vision and Goals. The first two chapters describe the planning process, the vision and goals, and the survey and meeting results that informed the planning process. Chapter III focuses on community characteristics and trends and the financial implications of different kinds of development options. Chapters IV through VIII focus on individual elements of the plan, in each case including a summary of the "community agenda" on that topic that emerged in the survey and public meetings, a summary of trends and challenges based on existing conditions, maps and illustrations and implementation actions. Chapter IX contains the proposed land use and management plan and integrates the distinct plan elements discussed in previous chapters. The final chapter focuses on a structure and program for assuring that the Master Plan is a living document that guides policy and decision making and is subject to regular review and revision as conditions change. The Master Plan covers all of the elements listed in MGL Chapter 41, sec. 81D, which governs the content of municipal master plans: goals and policies, land use, housing, economic development, natural and cultural resources, open space and recreation, services and facilities, circulation, and implementation.

The three interim reports should be considered to be part of the complete Master Plan and can be consulted for more detail. In addition, a Technical and Resource Appendix accompanies this plan. The Appendix includes several technical memoranda on methodology as well as examples of bylaws, best practices and similar materials to assist in the implementation stage of the plan. The Interim Reports and the Final Plan are available on the Town web site and in the Planning Board office and the Town Library. The Technical and Resource Appendix is available in the Planning Board office.

II. A Twenty-Year Vision

A. The Master Plan Vision Statement

Norwell's Vision Statement presents an ideal picture of the Town, expressing the community's values, aspirations and sense of identity. Through the process of creating and confirming the vision statement, Norwell residents decided on the future they desired and committed themselves to work towards that ideal. The Vision Statement is intended to serve as the guiding image for Town decision makers as they face the challenges of the future.

A preliminary Vision Statement was drafted after the town visioning workshop and meetings in each precinct and it incorporated the survey findings. The MPSC then mailed the draft Vision to all residents and made it available for comment on the Master Plan web site. Finally, the Vision was discussed, refined and confirmed in a public meeting.

THE NORWELL VISION STATEMENT

Norwell in 2021 is a predominantly residential town with a strong sense of community identity and semi-rural visual character:

- Planning for the future and maintaining a fiscally strong town government
- Maintaining a small town, family-oriented residential character
- Shaping development to be in harmony with town character and environmental constraints
- Providing a sufficient variety of economic and housing opportunities to support excellent services and community diversity
- Protecting the town's natural beauty, water resources, and environmental health through a network of "green infrastructure"
- Preserving historic buildings and landscapes

Norwell is known in the South Shore for its livability, services, and community cohesion:

- Norwell is *financially sound* and maintains *excellent infrastructure and services* through efficient, cost-effective and forward-thinking management.
- Norwell is centered on its village community, a mixed-use, lively but low-key Norwell Center.
- Norwell is *walkable* with a network of trails and sidewalks linking residents with each other, civic buildings, open space, and shopping areas.
- Norwell is welcoming, with sufficient housing affordability to accommodate senior citizens, town employees, and young families.
- Norwell has *the most attractive stretch of Route 53* in the region characterized by pedestrian-friendly nodes of commercial development.
- Norwell is green, with a network of protected open space and regulations that promote environmentally-sound, appropriate development.

B. Norwell Debates its Future: the Survey and Public Meetings

The best thing about Norwell: The small town feel and the lovely woods and other natural surroundings....When the people all pull together it's so great. Town Fair fireworks. Friends you've known for 30 years...

Precinct Two resident for 20 or more years, aged 35-44, with children under 12.

The nice people and how much they care about the town.

Precinct Two resident for less than 5 years, aged 35-44, with children 5-12.

Amount of undeveloped land; small-town atmosphere; schools; location to ocean and highway.

Precinct One resident for 10-19 years, aged 45-64, with children aged 5-19.

The worst thing about Norwell: Its reticence about providing more facilities and activities that would round out the town in a more "community-focused" way. The town has grown, the traffic increases and the townspeople become more isolated in some ways. A community center coupled with some strategically linked sidewalks/bikepaths would greatly benefit the townspeople.

Precinct Two resident for 5-9 years, aged 35-44, with children under 12.

We moved here 40 years ago to enjoy the peace and open spaces of the town, the great schools and the people. Now, longtime residents are being shoved aside by newcomers thinking only "ME!"

Precinct One resident, aged 65 or over.

In the survey, meetings and workshops Norwell residents focused on several key questions designed to prompt debate about Norwell's future. What do Norwell residents like about their town and what concerns them? What aspects of town life do they want to preserve, and what kinds of improvements would they like to see? How do residents envision the future of Norwell and what are the goals they would like to accomplish for the town?

The Norwell Master Plan Survey

The community survey was prepared by the consultants in collaboration with the Master Plan Steering Committee. The four-page survey was mailed in May 2001 to every Norwell household and to the mailing list of the Norwell Chamber of Commerce. The survey included twenty questions on respondent characteristics, overall concerns, public facilities and services, traffic and transportation, natural and cultural resources, economic development, and land use and growth management. Both check-off and free-answer question types were included. The survey questionnaire with a detailed analysis of the results and tabulations for each of the questions can be found in Interim Report No. 2 – Vision, Goals, Policies.

Who responded to the survey?

Over 15 percent of Norwell households responded to the survey – 497 responses were tabulated and another 34 late responses were read for comments. The survey results therefore represent the views of a larger number of people than the 200-300 persons that typically attend Town Meeting. The respondent group was balanced among the three precincts, with a small plurality from Precinct Two. The survey results somewhat under represented newer residents, people under 35 years old, and single person households. The presence of children in the household was generally representative of the Norwell population, though skewed slightly by the older bias of the respondent population.

The Best and the Worst

Norwell residents know what they like about their town. When asked what is the best thing about Norwell, over half of the survey respondents identified rural, small town character or open space and natural features. Almost a quarter named the school system as the best thing and 12 percent mentioned the people and civic participation. Most of the other attributes identified by respondents were linked in some way to these primary characteristics, such as beauty, historic character, quality of life, and quiet.

There was more variety in the answers identifying the worst thing about Norwell, but nearly 60 percent mentioned traffic and road issues: traffic, speeding, heavy trucks; Route 53; lack of pedestrian safety, sidewalks, and bike trails; road conditions and safety; and Queen Anne's Corner. The other major cluster of concerns, accounting for most of the rest of the responses, focused on development issues, for example, too much or inappropriate development, oversized homes, and loss of open space.

The Top Five Issues for the Next Twenty Years

Survey respondents were asked to rank the top four most important issues facing Norwell during the next twenty years out of sixteen issues. (They also could write in other issues if they wished.) Based on a weighted average, the five issues mentioned most often were (1) tax burden, (2) protect drinking water, (3) protect open space, (4) preserve educational quality, and (5) traffic control and improvements. Tax burden and protection of drinking water were at virtually the same level of concern based on the weighted average, but substantially more people (34% of all respondents) listed the tax burden as the number one issue.

Town Wide and Precinct Meetings

In the town-wide workshops, precinct meetings, and meetings for the business community Norwell residents and business owners discussed the Town's assets and liabilities, priorities and concerns, and identified their vision of the kind of town Norwell should be twenty years from now. A detailed description and analysis of the workshop activities and results are available in Interim Report No. 2 – Vision, Goals, Policies.

The priorities developed in these workshops reflected many of the same concerns and goals expressed in the survey.

- Maintain town character
- Preserve open space
- o Create green pathways and bike trails
- o Improve public works and town infrastructure and address water threats
- Create a town recreation/community center and improve current sports and recreation facilities
- o Diversify the tax base
- o Overhaul zoning to curtail unchecked growth
- o Develop a traffic management plan to address congestion and increasing truck traffic
- o Create affordable housing, especially for the elderly

- o Enhance the town center by making it more pedestrian friendly
- Improve town management by coordinating action among different boards, town employees and offices

While most of the major themes that were discussed at the community-wide meeting were reiterated at each of the precinct meetings, participants in each precinct were asked to focus particularly on the issues most important to that precinct.

Precinct One

Precinct One considers itself as having the greatest diversity of all the precincts, particularly with its many businesses. However, Precinct One residents feel that they bear the burden of the whole town in terms of traffic and affordable housing. They particularly supported measures to "tame" Route 53, such as design guidelines for development, sidewalks, limits on drive-through businesses, and focusing more activity in Norwell Center. In addition, Precinct One residents emphasized preservation of open spaces, distribution of affordable housing throughout all precincts, and development of sidewalks and walking paths.

Precinct Two

Precinct Two participants strongly supported efforts to preserve the town's rural character, historic spaces, and strong school system, while recognizing the need to limit taxes. In this workshop there was consensus around the need to calm traffic and improve traffic safety, provide sidewalks and trails for pedestrians to connect neighborhoods, enhance Norwell Center, avoid very large houses on small lots, control mounded septic systems and establish more environmentally friendly development regulations and residential landscape maintenance practices. This group also saw the need for more recreational facilities and a community center, and for more affordable housing that fits into Norwell's character.

Precinct Three

Like community members in other precincts, residents of Precinct Three enjoy Norwell's small town, rural community with its scenic vistas, good school system, and convenient location. Participants in the Precinct Three discussion were concerned about transportation issues such as traffic congestion, speeding, dangerous intersections, and the lack of sidewalks. They suggested that new commercial development be directed to Norwell Center. In addition, they particularly emphasized the importance of the town's natural resources and preservation of open spaces such as cranberry bogs, agricultural areas, and river views and they identified the need for affordable housing.

C. Master Plan Goals

Protecting the Natural and Cultural Heritage of Norwell: The Green Network

- Preserve open space in interconnected natural resources systems to protect water resources and wildlife habitat.
- Preserve the cultural resources of Norwell in the form of historic buildings and sites, and the working landscapes of farms, nurseries, and woodlots.
- Provide recreational access to open space for both passive and active recreation.

Residential Development

- Plan, manage and shape development to accommodate change while ensuring harmony with Norwell's community character and environmental constraints.
- Provide housing options for households across a range of incomes.

Economic Development

- Maximize non-residential tax revenue from existing industrial and commercial areas while protecting town character and quality of life.
- Improve Route 53 with more pedestrian-friendly design and higher value development.
- Improve the Town Center with more pedestrian-friendly design and retail variety.

Transportation and Circulation

- Work towards a multi-faceted transportation system including
 - (1) access to regional public transportation
 - (2) well-maintained roads for safe and efficient access to local roads and regional routes
 - (3) a system of pedestrian and bicycle routes throughout town and connecting to regional non-motorized transportation routes
- Create an enhanced public assets management system to efficiently maintain public infrastructure

Community Facilities and Services

Provide residents with high-quality and cost-effective government facilities and services

III.Land Use and Growth Management I

A. Community Characteristics and Trends

Norwell Population 1930 - 2000

Year	Population	% Change
1930	1519	
1940	1871	23.17
1950	2515	34.42
1960	5207	107.04
1970	7796	49.72
1980	9182	17.78
1990	9279	1.01
2000	9765	5.24

Source: U.S. Census

Comparative Population Growth Rates 1990-2000

<u>Town</u>	Percent Percent
Pembroke	16.38
Marshfield	12.97
Hanover	10.51
Rockland	9.61
Scituate	6.42
NORWELL	5.24
Cohasset	2.63
Hingham	0.31
Weymouth	- 0.14

Source: Metro Data Center, MAPC
– US Census

Norwell Households 2000

- Total 3250
- Family households 2709
- Married-couple family --2424
- Female householder, no husband present – 212
- Single person household 462

Source: US Census

Population

Compared to neighboring towns, Norwell is growing at relatively modest rates and has retained a lower population density. After explosive population growth during the 1950s and 1960s, Norwell since 1980 has settled down to decennial population growth rates in the single digits. Between 1990 and 2000 the Town grew by 486 people or 5.24 percent.

Norwell is a predominantly family community. According to the 2000 Census, family households (persons related by blood or marriage) make up 83.4 percent of the total 3,250 households in Norwell and 44 percent of all Norwell households include persons under 18 years old. Single-person households account for 14.2 percent of all households. There are small numbers of single parents and of unmarried partners living together.

As a family community with a strong commitment to public education, Norwell has to plan for changes in the school population. Norwell's school enrollments peaked in the 1970s during the first baby boom and then declined to their lowest levels in 1992. The Town is currently experiencing the consequences of the "baby boom echo" as the children of the baby boom generation go through their school years. The 2002-2003 enrollment of 2,020 was slightly below the previous year's but the school population is projected to peak again in 2006 or 2007, before

the small "baby bust" generation enters its childbearing years. As long as Norwell's general demographic composition remains more or less the same, another cycle of rising enrollments will peak a generation from now in about 2030.

Like the state population as a whole, Norwell's population is aging. Norwell's population has a median age of 40.1, two years older than in 1990 and somewhat higher than the current statewide median of 36.5. Although the current proportion of elderly people in town (12.6 percent of residents are 65 or older) is slightly below the state average, it

is not clear if this segment of the population will grow or not. Many older people are finding it harder to stay in town because of rising taxes. Some older residents would like to sell the houses where they raised families and move to smaller properties needing less upkeep, but there are limited options within Norwell.

Land Use and Zoning

Norwell is overwhelmingly residential. Approximately 85 percent of Norwell land parcels, covering 61 percent of the total land area, are in residential use and 94 percent of the housing units are single family homes. A quarter of the land area is under government control, with the town accounting for 20 percent and the Commonwealth accounting for 5 percent. This state land includes part of Wompatuck State Park. An additional 6 percent of the town's land is in forest, agricultural and recreational uses. One-third of the land in this category is in truck farming (small-scale vegetable raising and horticulture). Land in commercial uses covers three percent of the land area, and industrial uses account for only one percent of the town's total land area. The remaining land is owned by non-profit organizations.

Zoning

Norwell has a relatively simple zoning structure with two residential zoning districts, three business districts, and five overlay districts (for saltmarsh protection; floodplain, watershed and wetlands protection; wireless facilities; aquifer protection; and village-style (cluster) development for people 55 or over). All districts have a one-acre minimum lot size. Norwell's two residential zoning districts have the same one-acre parcel requirements for new development. The base zoning for the residential districts permits only single family homes, with two exceptions: 1) conversion to two-family dwellings of houses in existence before the 1952 adoption of the zoning bylaw; and 2) accessory dwellings occupied by relatives by blood, marriage or adoption or by persons 60 years old or more. The town's cluster overlay district (VOD or Village Overlay District) was created as part of a strategy to preserve important open space parcels known as the Donovan Fields and applies only to that area.

Certain neighborhoods in Norwell could not be recreated under current zoning. For example, the Residence B district, located in the western part of town, includes neighborhoods dating from the 1950s and 1960s with homes on lots of less than one acre. Areas now zoned for commercial or industrial use also contain some residential buildings, but they are increasingly being crowded out by strip-style commercial development.

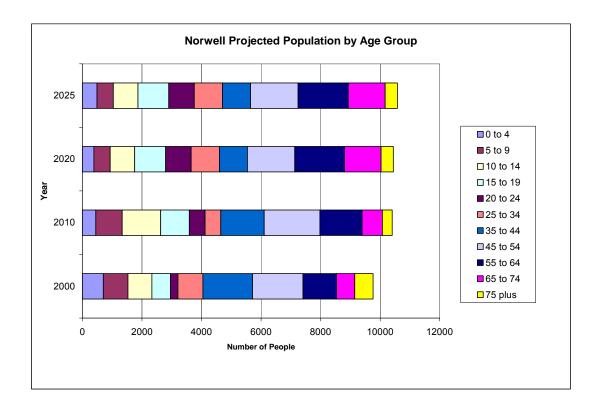
There are 17 parcels of developable or potentially-developable commercial lands totaling 0.5 percent of total acreage in Norwell. Commercial uses are located along Route 53 and in Norwell Center, while industry is concentrated in two industrial parks west of Route 53 and Route 3 – Accord Industrial Park and Assinippi Industrial Park, respectively.

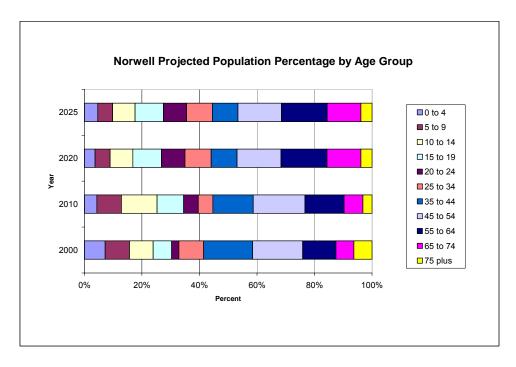
(See the Land Use and Zoning Map.)

B. Growth and Buildout

Projected Population Growth

Norwell's population growth has been moderate in the last two decades, averaging 0.3 percent a year between 1980 and 2000, and is not projected to grow faster in the coming years. The Metropolitan Area Planning Council (MAPC) projects a total population of 10,441 in 2020, reflecting the same 0.3 percent annual average growth. The population projections take into account the age composition of the current population, birth rates, and the in-migration and out-migration rates. MAPC's population projections by age group show that after 2010, the school age population is expected to decline both in numbers and in percentage until 2025, while the population over 55 years will increase. If we use the 2000 census data of 2.96 persons per household, the 2000-2020 increase of 676 people would produce an additional 228 households. However, it is likely that the number of persons per household will continue to decrease, especially as the population grows older.





Residential buildout

"Buildout" refers to the amount of development that would exist in the town if all land were developed to the greatest extent permitted by zoning. Communities rarely reach total buildout and even old, densely-built communities always have some land that is underutilized or available for redevelopment.

In 2000, the state Executive Office of Environmental Affairs commissioned MAPC to provide a buildout

Norwell Age of Housing Units		
Build Date	Percent of Total	
Before 19 1950-197 1980-198 1990-200	9 60% 9 10%	
_	nits 1950-1999	
1950-197 1980-198 1990-198	34	
Source: US Cer	nsus, 1990, 2000.	

analysis to Norwell. The analysis was based on map data, not on parcel data or field examination. It took into account mapped wetlands and other environmental constraints and was based on by-right development, that is, it did not include development resulting from special permits, comprehensive permits (Chapter 40B development), or variances. The buildout included the potential for subdivision of parcels with existing buildings as well as construction on open parcels. The state buildout suggested the potential for 2,395 additional housing units in Norwell.

Many Norwell residents and town officials feel the EOEA buildout numbers were too high. The assessor's database classifies 1,043 acres as developable or potentially developable parcels, though it is unlikely that every one of the acres in these parcels is buildable. At the

current average rate of 38 new homes a year, buildout of 1,043 houses would occur in approximately 30 years.

Using parcel data and making judgments from map data based on apparent site constraints such as wetlands, site configuration, or other limitations, the Master Plan consultant team estimated the range of buildout possibilities under current zoning with its one-acre minimum lot requirement. (The analysis does not include Chapter 40B projects at higher densities.) In this analysis, there are 583 vacant residential parcels, each with two or more acres that make a combined total of 1,794 potentially buildable upland acres. An additional 62 parcels with

over two acres each and an exiting house contain a total of 529 acres of potentially buildable upland. If a house were to be built on every one of these acres, there would be 2,323 additional single family homes at buildout. This number is similar to the EOEA buildout. If each of the vacant parcels were not subdivided but simply built with one house each, there would be 583 new houses. If each of the parcels that already have a house were not subdivided for additional houses but all the open parcels were built out, then there would be 1,794 new houses. These estimates were not based on field evaluation of each parcel, so additional limitations may reduce the development potential of these acres. At a construction rate of approximately 38 homes per year, it would take 47 years to build these new 1,794 new homes, resulting in over 5,000 new residents, based on 2000 census data on average household size.

(See the Buildout Status Map.)

Norwell Estimated Residential Buildout One Acre per Housing Unit under Existing Zoning			
Buildout Status	Total Acres	Buildable Upland Acres	Number of Parcels
Total Residential	8492	4001	3813
Built-Out Parcels			
Under 2 acres with house	2454	0	2527
At least 2 acres with house but constrained*	2843	2207	641
Total	5297	2207	3168
Subdividable Parcels			
Subdividable - over 2 acres with house	677	529	62
Subdividable – vacant over 2 acres	2518	1794	583
Total 3195 2323 645 *Parcels greater than two acres unlikely to be further subdivided because of parcel configuration, wetlands, or other constraints			

Additional Factors About Buildout

Population and buildout projections use growth rates based on current and historic rates. They are not predictions. Projections of years to buildout depend on assumptions about available wastewater technology, the economy and the robustness of the building industry. Added to these considerations in Norwell's case is the fact that Chapter 40B projects can be built at densities greater than current zoning allows. However, although the real estate market is currently very favorable for Chapter 40B development, these conditions may change.

Implementation of the Master Plan policies and strategies will give Norwell the tools to shape its future and be better prepared to face unexpected challenges and opportunities. Rather than depending on future projections, Norwell can take the initiative to create the future town that its residents desire.

C. Development Dollars and Cents: Costs and Taxes

Potential for more business development

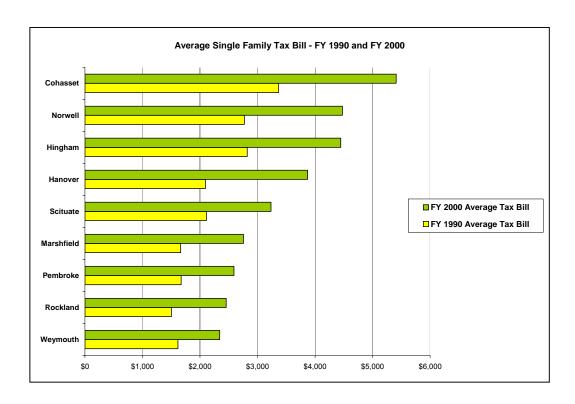
_				
	<u>Norwell Tax Rates</u> (all property classes)			
	2000 2001	12.25 14.00 14.55 14.54 15.45		
	2002 16.16 2003 12.72 <u>Average Single Family</u> <u>Tax Bill</u>			
	1990 2000 2001 2002 2003	\$4,475 \$4,806 \$5,113		
		: Mass Dept of ue; Norwell Assessor		

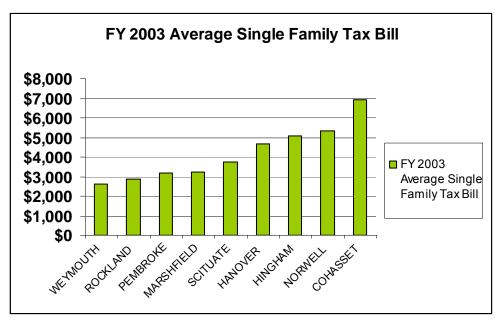
Although Norwell has more non-residential tax revenue per capita than many neighboring towns and may benefit by increasing its business base, it has little developable or potentially developable vacant land zoned for commercial or industrial use. In the survey and public meetings, Norwell residents showed no interest in zoning more land for commercial development. Under those conditions, permitting higher density commercial and industrial development is the best way to increase investment in the existing zones.

Taxation and regional comparisons

In FY 2000, commercial and industrial properties represented approximately \$209 million or 16.8 percent of the total \$1.245 billion in assessed value and 11.5 percent of total municipal revenues (which include state aid and other revenue sources). The proportion of non-residential assessed value (commercial, industrial, and personal property) has followed an area-wide downward trend, slipping from 19.9 percent in 1990 to 18.1 percent in 2000 – not because of declining business property values but because residential values rose more rapidly. Even with this 1.9 percent reduction, however, Norwell is still doing

better than many of its neighbors. Among nine neighboring communities (including Norwell), the average decline in the nonresidential share of assessed value was 12.4 percent. The high value of Norwell real estate means that Norwell property owners pay high tax bills, with an average single family tax bill nearly the same as Hingham. Within the group of nine neighboring communities only Cohasset has a higher average single family tax bill.





Costs of Development

Residential, commercial, industrial and open space land uses result in varying demands and impacts on the community in terms of traffic, school costs, environmental quality, social community, and scenic character. Town officials are particularly concerned about the net financial cost or benefit of development and the long-term fiscal

sustainability of development policies designed to meet the community's goals. As residential real estate values continue to increase and Norwell embarks on new capital projects, additional residential development will increase the demand for services and push taxes higher.

Model and Scenarios

Using a simple financial model, the consultant team tested several scenarios to assess the relative fiscal implications of 1) residential development, 2) commercial development and 3) preservation of open space. The model is based on FY 2002 town-wide expenditures and revenues, and is intended to illuminate differences among policy alternatives, not to evaluate specific parcels or proposals. The model compared the fiscal impacts of the following land uses:

- Residential development of 50 single family homes on 50 acres (current one-acre zoning).
- Residential development of 500 units of housing on 50 acres (condominium or multi-family rental development – currently not permitted by zoning but possible under Chapter 40B).
- Commercial development of 50 acres (current zoning limits).
- Acquisition of 50 acres of undeveloped land by town purchase.

Findings

Residential properties in Norwell, as in most other towns, are subsidized by commercial and industrial uses. On average, each dollar of revenue from residential development is more than offset by \$1.15 in the cost of providing services. The fiscal impact of developing 50 acres with 50 single family housing units is less than one third of one percent of the town's 2002 expenditures of \$28 million. Developing 50 acres for 500 condominiums or apartments at an average density of 10 units per acre would have a higher fiscal impact of about one percent of town expenditures.

Commercial development contributes positively to net revenue, costing the town only about 50 cents in services for every dollar it receives in revenue. Full buildout of the existing vacant developable commercial land in Norwell at current permitted densities and with current assessed average property values would add less than one percent to the Town's annual revenues. By encouraging higher density development in commercial and industrial zones, the town could leverage this favorable cost/benefit ratio.

Assumptions

- Revenue and cost data provided by the town for FY 2002 focused on the largest categories in the town budget, such as tax revenues, state aid, education costs, public safety, public works, and debt service. The model used town-wide or zoning district-wide averages, for example cost per resident, per acre, or per pupil.
- Costs and revenue were allocated across three broad land use categories: Residential, Commercial/ Industrial, and Open Space. The allocations were made based on the relative total valuations for the categories provided by the assessor's database for 2001.

- New single family homes were assumed to have the same value as the average of existing house. In fact, new houses tend to be larger and more expensive than the average existing home, so new houses may have higher valuation and produce more tax revenue.
- The values of new condominium or multifamily housing units were estimated from the valuations of Norwell condominiums.
- The average number of school children per single family house (0.64) was estimated from 2002 school enrollments. The projected number of school children per housing unit in multifamily developments (0.38) was estimated based on actual student counts in a Chapter 40B multifamily development in Lexington and the proposed unit mix of a 40B rental proposal in Cohasset.
- Open space in this model includes land in all zoning districts that is not tax-exempt: vacant residential, commercial and industrial land whether classified by the assessor as developable, potentially developable or undevelopable; commercial open space uses such as campgrounds; and land in Chapter 61, 61A or 61B tax abatement programs for forestry, agriculture or recreation.

Residential Development Scenario

- A 50-acre parcel developed for residential use under one acre zoning would have a net cost to the Town of about \$80,000, or slightly less than 0.3% of annual expenditures. On average, each single family home would result in a net cost to the town of \$1,600.
- Multi-family development of 500 units on 50 acres would be expected to have a higher total net annual cost to the town of \$300,000 or slightly over 1% of annual expenditures. On average, each unit would cost the town \$600. Although multi-family units produce less property tax revenue than single family homes, their households are smaller and consume fewer town services, especially education. However, the higher density results in a higher cost to the town for the same number of acres.
- The key factor behind the net cost of residential development is education, almost \$7,000 in spending per student in FY 2002, excluding debt and state aid. School spending at \$14 million comprised slightly over half of Norwell's budget.

Commercial Development Scenario

- On average, Commercial/Industrial uses contribute a net \$5,000 per acre to the Town budget.
 Commercial/Industrial uses generate no educational costs and are valued much higher (\$514,000 per acre) than residential (\$177,000 per acre), resulting in higher property tax revenue.
- Developing almost all of the remaining developable commercial land at the same density and valuation as the existing average would increase annual net revenues by about \$225,000 (0.8% of the budget).

Open Space Preservation Scenario

Vacant tax-paying land is the most beneficial to the Town budget. Protected open space whose purchase price has been paid off is the next most beneficial. Open space preservation is less costly than development if the

land is donated or otherwise protected without being purchased by the town. If bonds are used to fund Town purchase of open space at market value-*, open space is more expensive than residential development during the life of the bonds but is significantly less expensive after the bonds have been retired.

- On average, Norwell's open space lands consume only 40 cents of each dollar they generate. While the
 taxable value of land is low, so is the need for services. Each acre of open space contributes about \$90 net per
 year.
- Preserving 50 acres of undeveloped land through conservation restrictions or a gift of land would cost the Town less than \$14,000 per year, based on 2001 valuations, due to loss of property tax revenue.
- If the Town instead bought 50 acres at an average market price of \$17,000 per acre (remembering that this average price includes undevelopable as well as developable land) and funded the purchase with a 15-year bond at 5%, the annual cost to the town would be about \$80,000 per year until the bond was paid off. As in the case of preservation by gift, the Town would also lose the approximately \$14,000 per year in taxes paid by 50 acres of unprotected open space.

(See the Technical Appendix for details on this analysis, including the assumptions and their rationale.)

IV. Protecting the Natural and Cultural Heritage of Norwell: The Green Network



GOALS:

- Preserve open space in interconnected natural resources systems to protect water resources and wildlife habitat.
- Preserve the cultural resources of Norwell in the form of historic buildings and sites, and the working landscapes of farms, nurseries, and woodlots.
- Provide recreational access to open space for both passive and active recreation.

A. Community Agenda - Survey and Public Meeting Results

Norwell residents who responded to the Master Plan Survey and participated in the public meetings give the highest value to protection of natural resources, open space, and cultural resources. In the survey, protecting

drinking water and open space were the second and third most highly rated overall issues of concern for the next twenty years. When asked to rank a group of natural and cultural resource issues from "Very Important (5)" to "Unimportant (1)" in the survey, no item under this category received less than a 3.78 ranking. All of the top-ranked issues were water-related: protection of drinking water (4.88), protection of surface water (4.42), and protection of open space for drainage and pollution control (4.35). Respondents expressed concern about development of the remaining open space in town and preservation of rural character. In the public meetings, participants also emphasized preservation of rural town character, preservation of open space and views, protection of environmental health, and creation of trails, bikeways, and improved recreational opportunities.

Nearly half of the survey respondents failed to respond to a question asking for particular areas that should be permanently preserved. (One respondent commented that the town should not purchase more land but rather make existing open space more accessible for passive recreation.) Of those who did, the areas identified by almost 50 percent were lands along the North River (including addition of more trails and recreational uses), Whiting Fields at Lincoln and Main Streets, and the Main Street/Norwell Town Center area.

B. The Green Network Plan

The Green Network Plan is organized around the three key components of Norwell's "green infrastructure," Natural Resources, Cultural Resources, and Recreational Resources, with the goal of creating an interconnected system protecting environmental health, historic sites, and recreational areas. These resources can be considered a set of linked landscape networks rather than isolated features on separate parcels. Recommended actions focus on preserving these networks within a system of corridors that connect larger conservation areas. This approach is the best way to preserve the town's ecological skeleton, its river and stream corridors, and is also useful in establishing the cultural landscape corridors and recreational trails that will preserve Norwell's historic character and quality of life.

The Green Network plan represents a synthesis of priorities across these three resource themes and a range of activities designed to move forward on multiple fronts. Different Boards and Commissions may take the lead in pursuing these actions, as appropriate to their individual missions within town government, guided by an overarching strategy of protecting a permanent network of resources in each category. The Conservation Commission, the Historical Commission, and the Recreation Commission can work together with volunteer groups and enhance their effectiveness by collaboration.

The most strategic approach to creating the Norwell Green Network will focus on those areas that contain a combination of important natural, cultural and recreational resource opportunities. The top two priorities should be protection of continuous open space corridors or greenways along the Third Herring Brook from Church Hill to Wompatuck State Park and along the North River and Second Herring Brook from Stetson Meadows to Black Pond. Each of these potential greenways contains diverse natural resources, many historic sites and landscapes, and exciting opportunities for interpretive recreational trails. (See the Composite Map of Natural, Cultural and Recreational Resources in Chapter IX.) Norwell's adoption of the Community Preservation Act means that it now can draw on a fund of dedicated resources for open space and historic site protection.

C. Environment and Natural Resources

1. Trends and Challenges

Norwell residents value the town's substantial open space and natural resources and have made strong efforts to protect them. The town has been focused on targeting the remaining open space "jewels," but has not had a strategy for creating a larger network to effectively support those jewels as more than isolated properties. Fragmented open space does not necessarily preserve either natural resources or rural character. Norwell's challenge is to preserve sufficient "green infrastructure" on both public and private land to meet its goals of preserving both natural resources and rural character.

Natural resources in Norwell are organized primarily by the river and stream corridors and drainage basins. The most important is Third Herring Brook, both because it drains the largest and least-disturbed area, but also because it contains the wells and recharge areas that supply most of Norwell's drinking water.

Landscape and topography

Norwell's landscape is defined by a sloping coastal plain dotted with small hills and valleys. The town's lowest elevations are found along the North River, near sea level. The high points include Mount Blue (220 feet) and Judges Hill (240 feet), both near the northern border, as well as a series of lower hills scattered throughout the town. Most of the remaining land rises and falls in gentle folds, generally between 75 and 150 foot elevations. The North River and its floodplain cuts a half-mile-wide channel through this sandy plateau, leaving fairly steep 50'-100' wooded bluffs in some areas.

Water resources and wetlands

Over a quarter of Norwell's area is composed of water and wetlands. Norwell's ponds and streams reflect the complexity of its rolling topography. The town falls into two major watersheds. About 15 percent of the town drains northward from a ridge parallel to Cross Street into the Weir River basin, while the remainder drains south and east into the North and South River basins. The swamps and ponds located across Norwell's broad northern half drain either to the west into Third Herring Brook, or east to First Herring Brook, Second Herring Brook and Stony Brook, then flowing into the North River at Norwell's eastern edge. Norwell's drinking water wells draw from aquifers that coincide with a series of streams and wetland areas draining primarily into Third Herring Brook on the border with Hanover.

Like the streams, Norwell's wetlands are distributed evenly across the landscape and include a great diversity of wetland types, from salt marshes and wooded swamps to natural and cranberry bogs. A series of large wooded swamps in the northwest part of town form the slow-draining headwaters of the First, Second and Third Herring Brook watersheds and a large band of wetlands is located along the North River.

Vegetation and wildlife

Norwell's stony hillsides and uplands support a mixed woodland of white pine and oaks that covers most of the town, with sugar maple, hickory and beech mixed in smaller amounts. The swamps and lowlands are dominated by red maple, cedar, alder, shadbush and other water-loving species. Both environments are filled with an understory and groundcover of holly, mountain laurel, hobblebush, red-berried elder, bunchberry, and many ferns and club

mosses, including rare species. The Town's streams, ponds, wetlands and forests support diverse wildlife. These include common suburban-adapted animals like deer, fox, chipmunk, squirrel, skunk, woodchuck and cottontail rabbit, as well as less common beaver, mink, otter, shorttail weasel and snowshoe hare. These mobile animals are not unusual in the region, nor are they particularly threatened by development.

More vulnerable are the smaller reptiles, amphibians and invertebrates whose lives are closely tied to specific ponds, streams and wetland systems. These include common species liked garter and milk snakes; painted, spotted, box and snapping turtles; bull and green frogs and a variety of toads and salamanders. One species of special concern, the Eastern Box Turtle, has been found in Norwell, according to the Massachusetts Natural Heritage program.

Norwell has three certified vernal pools located off Jacobs Lane and Prospect Street near Jacobs Pond. Biologists working on state natural heritage surveys have realized that many rare and valuable species depend on vernal pools. These wet depressions are, by definition, flooded during only part of the year. Lacking fish populations and common wetlands vegetation, they support unique wildlife communities that have adapted to wet and dry cycles. Vernal pools must be certified by Massachusetts's Natural Heritage and Endangered Species Program in order to receive protection under the state wetlands act. A recently published state atlas of *potential* vernal pools (based on aerial photographic analysis) shows about forty potential sites in Norwell, distributed fairly evenly across town. Protection of these vernal pools, which probably include only those greater than 100' wide, requires field investigation to establish the presence of recognized indicator species. Many smaller pools that could not be identified in the aerial photographs might be revealed by field studies.

As shown on the map of Natural Resource Priorities, this town-wide system of wetlands, ponds and streams, united by the North River, represents a natural network of open space of immense value to local residents. This value stems both from the aesthetic beauty of these areas and from the plants and animals that flourish there. Just as important are the environmental services that natural areas provide, such as flood control, filtering and recharge of water supplies, and absorption and treatment of contaminated runoff. The loss of these services – which now cost the town little, if anything – would necessitate a huge public investment in finding new sources of water, and managing stormwater runoff.

2. Natural Resources Maps

The Natural Resources Maps demonstrate the importance of Norwell's systems of ponds, streams, and wetlands to both residents and wildlife. The first map, titled simply "Natural Resources," shows the concentration of public wells, the Zone 2 Area of Contribution to the wells and the Zone 3 Surface Drainage Area, likely habitat for rare species and both certified and potential vernal pools in the watershed of Third Herring Brook. The state's Natural Heritage and Endangered Species Program (NHESP) designates "Priority Habitat" for state-protected endangered species that indicate where the habitat exists for these species. NHESP also designates "Estimated Habitat" for documented occurrences of rare wetlands wildlife within the last 25 years. The maps of Estimated Habitat must be consulted by project proponents who seek an Order of Conditions from the Conservation

Commission. The Commission cannot issue the Order until the NHESP has provided an opinion on whether a proposed project would have an adverse effect within an area of Estimated Habitat.

The second map, "Natural Resources with Priorities," shows those areas in Norwell that are the highest priorities for protection and careful management from the point of view of natural resource conservation. Many of the Highest Priority areas are already protected open space. Although wetlands are also Highest Priority areas and are protected by law, in many cases they are privately owned, as are many of the lands designated as "Secondary Priority" areas. Because of their environmental sensitivity, these privately-owned lands require careful management.

3. Action Plan - A Natural Resource Network

While the core of the stream and wetland system is protected by state law and by earlier private efforts, such as that which saved Black Pond Bog in the 1960s, the threat now is from activities that incrementally impinge on the edges of the natural resource areas. This process is slow and difficult to measure from year to year – but eventually the quality of wildlife habitat, the purity of surface and subsurface waters, and the natural beauty of the land will begin to erode. Moreover, because these natural systems are linear in nature, a small amount of disturbance in the wrong place can affect everything up- and down-stream.

Natural Resource Objectives: Protection, Understanding, and Public Education

Permanently Protect Critical Environmental Systems

Permanent protection of critical environmental systems will require an ongoing process of research, mapping, and protection of key parcels. While general assumptions about the value of wetlands and stream corridors allow the town to plan generally for the preservation of all such corridors, more detailed decisions about specific areas within those riparian systems will require continued site-specific investigation. Landowners can play an important role in helping to identify important natural areas, vernal pools, and other resources. Public outreach and education is doubly important in that many of these valuable assets are located on lands that are privately owned, and while not fully developable because of wetlands and other physical constraints, are vulnerable to the effects of nearby clearing and other alterations of the landscape.

ACTION PLAN:

- Identify sensitive ecological resources and verify with selective field investigation.
- Prioritize parcels for acquisition or conservation restrictions to buffer sensitive ecological resources.
- Consolidate data on local environmental systems and continue GIS mapping in greater detail.
- Complete a town-wide survey and certification process for vernal pools.

Protect the quality of subsurface water supplies and surface streams and water bodies

As town residents already know, Norwell's dependence on septic systems and a local water supply makes water quality protection a paramount concern. A continuing program to protect the quality and supply of subsurface and surface water is a key element of a natural resource protection plan, not only for community drinking water supplies but also for retaining healthy wildlife habitat. Monitoring and management of septic systems is critical to preservation of water quality. Failing septic systems have forced many communities to develop sewer systems.

More dispersed, non-point sources of water contamination include stormwater runoff from impervious surfaces such as roads, driveways, parking lots, and building roofs, as well as from lawns treated with fertilizers and pesticides. Recent research shows a negative impact on stream health when 10-15% of a watershed is covered with impervious surfaces. Thus, the overall density of development and the design of subdivisions are critical to water quality throughout the town.

ACTION PLAN:

- Prioritize parcels for acquisition of land or conservation restrictions within the Zone II for wells.
- Pursue neighborhood master plans for septic system trouble spots and funding for mitigation projects.
- Improve maintenance of catch basins and roadside swales draining into nearby streams.
- Explore comprehensive management of septic systems, starting with GIS mapping and record keeping tied to the parcel database.
- Promote environmentally-sensitive landscaping, particularly planting of smaller lawns with diverse, drought-tolerant grass species, and reduced use of fertilizers.
- Support use of package treatment plants to reduce groundwater contamination in Zone IIs.
- Establish Conservation Subdivision zoning to reduce overall impervious surfaces
- Establish stream teams to monitor the environmental health of Second and First Herring Brooks, Bound Brook, Black Pond Brook, Wildcat Brook, Wildcat Creek, Margaret's Brook, Copeland Tannery Brook, Dwelly's Creek and Stony Brook in partnership with watershed associations.

Protect the quantity of water supplies by managing withdrawals and preserving surface flows and recharge of groundwater.

While land use and development can affect the *quality* of water, as the town continues to grow, their impacts on the *quantity* of water will become just as important. Quantity can be affected in two ways. First, new wells can compete with existing wells for a finite amount of groundwater, and more intense uses can increase the draw from existing wells. Second, new subdivisions, roads, land clearing, and changes in drainage can reduce the amount of water that is recharged into groundwater aquifers -- lowering water tables, drying up streams, and diminishing well flows. Norwell's neighbors in Cohasset and Scituate depend for some of their drinking water on resources that originate in Norwell and the town must protect these regional resources as well as its own water supplies.

ACTION PLAN:

- *Protect First Herring Brook as the headwaters of Scituate's water supply.*
- Protect Bound Brook Pond and the headwaters of Cohasset's water supply.
- Protect the East end of Rt.123 as Scituate's water supply.
- Manage potential use conflicts with private wells in Zones II and III of municipal wells.
- Monitor the potential for increased water supply demand from future residential development and implement the measures recommended in the Water Supply Master Plan.

Promote public education and outreach to build understanding of natural resource values and enhance support for protection and stewardship activities.

Because natural resources protection will require public investment, and also because areas that are already developed drain into natural resource zones, expanded public outreach and education are critical to implementation of the Green Network Plan. Norwell is very fortunate to be the home of the South Shore Natural Science Center and the North and South Rivers Watershed Association, both of which can play a central role in public education about Norwell's natural resources. The pioneering efforts of Cap'n Bill Vinal can serve as the foundation of updated information on the town's resources. The Wildlands Trust of Southeastern Massachusetts can provide assistance in a variety of conservation education areas. It already holds a conservation restriction on a property in Norwell. The town could follow the lead of a number of communities that have organized events for landowners at which representatives of local land trusts and statewide environmental organizations like The Trustees of Reservations (already present in Norwell) and Mass Audubon discuss the process and the benefits to landowners of conservation restrictions. The Manomet Center for Conservation Studies in Plymouth has launched a regional program to help towns on the South Shore make science-based conservation decisions. A variety of resources, including pamphlets, fact sheets, videos and other materials that are already available from nonprofit organizations and from state and regional agencies can be used to inform Norwell residents on how best to manage their own property to protect and enhance natural resources.² Over the long term, an ongoing program of public education will be as important to natural resources conservation in Norwell as protection of specific lands.

ACTION PLAN:

- *Update Cap'n Vinal's materials about the natural history of Norwell.*
- Work with local, regional, and state environmental organizations to develop a program of education and outreach for environmental resources, especially with neighborhood involvement in stream and swamp conservation.
- Develop a signage program for local streams, swamps and hills, including labeling of catch basins and drainage ways so that residents understand how stormwater flows to the Town's streams.
- Consider formation of a Third Herring Brook Watershed Association to focus attention on Norwell's priority natural resource area.

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¹ See www.manomet.org/regional.

² One of the most extensive sources is the library of information at <u>www.stormwatercenter.net</u>.

D. Historic, Cultural and Scenic Resources

1. Trends and Challenges

Norwell's pattern of historic sites and other cultural resources reveals the town's origins in settlement along the banks of the North River, and later around the stage road that became Rt. 53. The North River estuary was a major shipbuilding center on Massachusetts Bay during the early Republic, and during the nineteenth century, agriculture and domestic manufactures, such as shoemaking, were also important to the local economy. Chicken farms became prominent in the early twentieth century. The earliest historic sites and landscapes follow the North River's historic shippards and meadows, anchored by Norwell Center and the neighborhood of Church Hill. Later development saw the growth of Ridge Hill as a distinct community in western Norwell. Other historic neighborhoods, particularly the Mount Blue district, likewise retain an identifiable character rooted in their past.

Priorities that emerged from the Master Plan public meetings included protecting and interpreting the history of the North River and the shipyards, protecting the character of Norwell Center, and preserving what remains of "Old Ridge Hill" along High Street. Elsewhere in town, residents are most concerned with preserving Norwell's scenic back roads, with their stone walls and overarching trees.

None of Norwell's identified historic resources, except for the Jacobs Farm House, has significant protection from exterior changes and they have only limited protection from demolition. The Town has 128 buildings and an additional 33 areas, burial grounds, structures, and other objects of historical interest listed in the 1999 Massachusetts Historical Commission inventory of cultural and historical resources. Fifty-five of these same elements are also listed on the State Register of Historic Places, including about 45 structures that were inventoried in 1982 for the successful nomination of the Norwell Village Historic District to the National Register of Historic Places. Listing on the State and National Registers means that state or federal projects that could have an impact on a listed resource must take preservation of the resource into account, but private owners are not affected by the designation. Inclusion on the State or National Register does not protect a historic site or building from change or demolition.

There are no Local Historic Districts or Local Historic Landmarks in Norwell that would require property owners in the district to obtain a Certificate of Appropriateness from the Historical Commission in the case of any exterior alterations to their properties. However, the Historical Commission works with property owners and exerts influence about changes to buildings listed on the State and National Registers. Uniquely in Norwell, Jacobs Farm House has a Preservation Restriction (PR) that runs with the deed, requiring consultation with the holder of the PR before any changes to the building. Norwell does have a Demolition Delay Bylaw, passed in 1999, which can delay the demolition, partial demolition or removal of historic resources in the following categories:

- Resources listed or pending listing on the National or State Registers of Historic Places
- Buildings, structures or properties within 200 feet of the boundary of a federal, state or local historic district (currently meaning the Norwell Village National Register District)
- Buildings, structures or properties included or pending inclusion in the state's Inventory of Historic and Prehistoric Assets

However, if no acceptable preservation option is found, the demolition may proceed. Because this is a relatively new bylaw (and was erroneously included in the zoning bylaw rather than as a general bylaw), the Historical Commission has found that regulated buildings are still being demolished without notice to the Commission. Between 1999 and 2001, five regulated buildings were demolished.

There are five designated scenic roads in Norwell: Bowker Street, Jacobs Lane, Norwell Avenue, Stetson Road, Stetson Shrine Road, and Tiffany Road. Scenic road designation means that a public hearing and Planning Board permission is required before any alteration to trees or stone walls within the road right of way. However, scenic road protection does not mean the trees and walls may not be eliminated.

In general, the status of Norwell's historic resources is typical in that structures have been preserved while the setting and visual context have been changed. A notable exception is the recent Donovan property project in which the town ensured preservation of meadows surrounding historic estate buildings as well as the structures themselves, thus protecting both the resource and the visual character of that resource in its original setting. Less well-documented than the historic sites are other types of cultural resources, such as archaeological sites, working landscapes (farms, boat yards, and wood lots), scenic resources, and other special places that may not be scenic or historic, but are still important to the identity and life of the town.

Historic and cultural resources need to be seen not as isolated structures or historic districts, but as a continuous network of cultural landscapes that embody Norwell's rich heritage. Like the "green infrastructure" of natural resources, this "heritage infrastructure" should preserve the essential structures, landscapes, and traditional land uses needed to continue to tell the story of Norwell to succeeding generations. The core of a cultural landscape network stretches in an arc from Church Hill, connects Stetson Meadows to Norwell Center along the North River, continues up Central Street to the Mt. Blue neighborhood, and follows Grove Street and Prospect to Ridge Hill and Assinippi. Within this broad swath are many of the cultural resources that still "tell the story of the town," and which offer opportunities for conservation and interpretation of Norwell's history and rich cultural heritage.

Community Preservation Act funds provide continuing resources for historic preservation projects. A minimum of 10 percent of Community Preservation Act funds must be used for historic preservation.

2. Cultural Resources Maps

The Cultural Resources Map identifies and locates all Norwell sites on the Massachusetts Register of Historic Places as well as an additional 26 sites of local historic interest. The map also identifies cemeteries, the sites of historic shipyards, scenic roads, historic landscapes, and "places of the heart" – the buildings, institutions, community gathering places, and natural areas that participants in the public meetings identified as especially meaningful to Norwell residents.

The Cultural Resources with Priorities Map identifies the areas where a concentration of cultural resources requires special sensitivity when new public or private land use changes or developments are proposed.

3. Action Plan – A Cultural Resource Network

Implementing a plan to preserve and celebrate Norwell's heritage requires coordinated planning, conservation and management of cultural resources on a town-wide basis. In the short term this means identifying the existing historic areas and scenic roads with markers while continuing inventory and analysis to define historic patterns of development and identify historic sites and other scenic roads and areas of the town that may have been previously overlooked. As these resources are better understood, programs to promote conservation by private landowners and town agencies will be easier to implement. The Historical Commission has already begun a program to provide plaques and house histories for residents who request them. Other programs could include signs and outdoor displays at key areas, interpretive guidebooks that educate local citizens, and outreach materials (including existing materials from historic preservation organizations) that promote conservation of historic homes, stone walls, and roadside trees. Over the long term, these activities will build support for town-wide efforts to preserve Norwell's remaining farms and heritage landscapes.

Greater legal protection for historic resources is available through designation of local historic districts, historic landmarks or neighborhood conservation districts (a less stringent form of historic district regulation), as well as additional scenic roads.³ Local Historic Districts and Conservation Districts can be created through a study process, discussion with property owners, enactment of bylaws, and organization of a system to evaluate requests for Certificates of Historical Appropriateness. It is also possible to designate individual sites or resources as local historic landmarks (with the agreement of property owners) to make them subject to a similar regulatory process, as the Town of Barnstable has done, rather than creating local historic districts. Finally, historic preservation easements, like the one on the Jacobs Farm House, can be held by private nonprofit preservation organizations, as well as by the Historical Commission. The Massachusetts Historical Commission can assist the town in finding appropriate models for Norwell.

ACTION PLAN:

Regulation

- Transfer the Demolition Delay Bylaw from the Zoning Bylaw to the General Bylaws.
- Explore creating a Local Historic District or a Neighborhood Conservation District in the Village National Historic District area to provide regulation or advisory review for external changes to properties.
- Explore state or local historic district or neighborhood conservation district designation for Ridge Hill, Church Hill, and the Mt. Blue neighborhoods.
- Explore enactment of a local historic landmark bylaw (including a requirement for agreement by property owners) to regulate external changes to especially important individual properties.

Management

- Design and install signage for historic buildings, sites, districts and roads.
- Develop historical maps to better define historic patterns of development.

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³ The City of Cambridge has several Neighborhood Conservation Districts that illustrate the way that these districts can be tailored to a particular area, from entirely advisory review to regulation of some kinds of changes and not others. See www.cambridgema.gov/~Historic/ncd brochure.pdf.

- Promote private restoration and conservation of historic structures and surrounding landscapes.
- Continue working with private owners to prepare house histories and historic plaques.
- Promote Preservation Restrictions for buildings and sites of exceptional historic value.
- Review the status of existing scenic roads and consider others for designation.
- Continue a systematic inventory of historic resources
- Expand the inventory of historic properties to include sites over 50 years old, historic landscapes and roadways.
- Develop a management program for scenic roads and outreach materials for their residents on appropriate private landscape practices along scenic roads.
- Develop an interpretive program and guidebook for the North River and each of the historic neighborhoods.
- Secure conservation of remaining farms and heritage landscapes by working with landowners on long-term maintenance and conservation/restoration of historic elements.
- Map scenic viewpoints and reestablish historic overlooks with judicious tree pruning and plans for public access.

E. Open Space and Recreation

1. Trends and Challenges

The 1997 Open Space Plan identified public and private lands that are permanently protected, lands that are

Norwell Open Space: Permanent and Limited Protection				
Owner	Acres			
Permanently Protected Land				
Norwell Conservation Commission	1,150			
Scituate Conservation Commission	40			
Norwell Water Department	365			
State of Massachusetts (Wompatuck Park0	490			
Trustees of Reservations (Norris Reservation)	100			
Nature Conservancy (Black Pond Reservation)	55			
Massachusetts Audubon Society	12.6			
South Shore Natural Science Center	15			
8 Conservation Restrictions on private land	192.7			
Agricultural Preservation Restrictions	71			
Subtotal Permanent Protection	2,491.3			
Limited Protection – Temporary Tax Abatements				
7 parcels under Ch. 61 Forestry	219			
10 parcels under Ch. 61A Agriculture	205			
2 parcels under Ch. 61B Recreation	65			
Subtotal Temporary Protection	489			
Unprotected But Development Unlikely				
Town Forest and Nursery	175			
Town Active Recreation Lands (Parks, Athletic Fields)	85			
Cemeteries	13.5			
Subtotal Public Land Unlikely to be Developed	273.5			
TOTAL OPEN SPACE LANDS	3,253.8			

temporarily protected, and lands that lack protection from development but are unlikely to be developed because of ownership or use. Nearly 2,500 acres are permanently protected, 489 acres are temporarily protected in tax abatement programs (Chapter 61, 61A and 61B), and over 270 acres are unprotected but unlikely to be developed. In addition to local and state government, four non-profit environmental organizations own permanently protected land in Norwell. Private landowners have agreed to eight conservation restrictions (CRs) permanently prohibiting development and providing protection for a total of 192.7 acres. There is also one Agricultural Preservation Restriction (APR) in Norwell, prohibiting any construction or activity detrimental to retaining the agricultural use of

that 71-acre property

Under M.G.L. Chapter 61, private property owners can receive tax abatements for land used for recreation, forestry and agricultural purposes. As long as these lands are in the Chapter 61 programs, they cannot be developed. The Town has first right of refusal if the property owner wishes to sell, but towns sometimes find themselves unable to act quickly enough. Should the land be sold to another buyer or be converted to another use, the property owner must repay the last 10 years of the tax abatement, with interest, to the Town. The high value of land for development in towns such as Norwell means that the buyer of the property often finds it worthwhile to repay the forgone taxes to the town as part of the real estate deal.

Norwell's protected open spaces form a substantial inventory, in many cases linked by streams and wetlands. Protected networks of natural resources and passive open space are already substantial, but the recreational network is the most fragmentary in its current state. Recreation sites are scattered in school properties, ball fields, and a few areas with designated natural recreation facilities, but they are not well-linked. A network of designated trails, paths, and on-road routes to recreation and open space sites has the potential to unite the town and its people.

2. Protected Open Space and Recreational Resources Maps

The Protected Open Space Map shows land parcels in Norwell that are permanently protected and cannot be developed. The Recreational Resources Map identifies primary and secondary recreational destinations in Norwell, as well as existing, proposed and potential trails for walking, biking, and hiking. In addition, the map indicates a wide variety of formal and informal recreational opportunities identified by residents in the master plan discussions. The Recreational Resources with Priorities Map identifies a priority network of routes, trails and paths to connect existing hiking trails and important recreational destinations with all parts of town, as well as proposed regional bicycle and pedestrian paths.

3. Action Plan - Open Space and Recreational Network

Because Norwell already has a significant amount of protected open space, open space protection priorities should focus on permanent protection of environmental resources and habitat, as noted in the natural resources section, assuring connections among open space parcels, and enhancing public access to and recreational use of open space. Creation of a network of trails, paths, and routes within connecting town neighborhoods to open space and other important town destinations is essential to give Norwell residents the opportunity to learn about and enjoy the Town's unique open spaces.

The Conservation Commission has been active in laying out trails through town-owned conservation land and, with the Norwell Pathways Committee, has planned for a Bike Path connecting all the schools from Ridge Hill to Norwell Center. There is an exciting opportunity to connect the Norwell bike path with the Hanover Greenway to the west and south, the Scituate Bike Path connecting to the future commuter rail station to the east, and to bike paths in Hingham to the north. Likewise, hiking trails could be established linking existing conservation areas along the North River and in greenway areas along the First, Second, and Third Herring Brooks. With transverse connections skirting the undeveloped swamps and hills, there could eventually be paths connecting every

neighborhood with conservation land, recreation areas, Norwell Center, and other destination points. Building such an ambitious recreational network requires long-term action, starting with detailed planning and field work to establish the best locations, gain permission from willing landowners, and build support within each neighborhood.

The first priority should be to establish the outlines of the hiking trail network, particularly along the North River and the Herring Brooks, and complete the spine of the Bike Path, which will establish the critical cross connection from Ridge Hill to Norwell Center. With this structure in place, each neighborhood can gradually be connected to the town-wide network, either by woodland paths or sidewalks along existing streets. As with the management of natural and cultural resources, public education and outreach is critical -- to establish the idea of such a network in the public imagination and to allay the concerns that inevitably arise among some property owners. A continuous trail network in Norwell will also reinforce a sense of open space stewardship for Norwell residents by personalizing the need to protect open space. The fact that there could be a trail from Church Hill to Wompatuck, for example, can provide a great deal of support for protecting the natural resources along that corridor.

ACTION PLAN:

Recreational Access

- Review and improve access, parking and signage for North River access points.
- Inventory parking at open space areas and plan for development of new parking spaces where needed.
- Develop consistent site signage and outreach materials for recreational sites.
- Promote neighborhood involvement in planning for playgrounds and pathways in each area of town.
- *Incorporate parks, playgrounds and ball fields into new subdivisions.*
- Inventory potential athletic field sites based on construction suitability, with a preliminary cost-benefit analysis.

Connection: Pedestrian Paths and Bikeway

- Revive the pathways committee and seek grant funding for development of a detailed bicycle and pedestrian path system.
- Continue to incorporate sidewalk installation and improvements into ongoing roadway maintenance and private development projects.
- *Identify funding sources for acquisition of land or easements for the path system.*
- Form a Bikeway Boosters organization to build citizen support and oversee development of the bike path.
- Establish a policy to coordinate bike lane development with the design and construction of roadway improvements.
- Coordinate planning and application for bikeway funding with neighboring towns.
- Develop detailed layouts for major pedestrian trail spines.
- Coordinate planning for major trails with neighboring towns.
- Develop maps and interpretive materials describing natural history, cultural features, and historic sites along major trails.
- Develop temporary on-road bicycle routes, with signage, maps of existing routes and future bikeway alignment, and guidance for safe use.

V. Residential Development



GOALS:

- Plan, manage and shape development and redevelopment to accommodate change while ensuring harmony with Norwell's community character and environmental constraints.
- Provide housing options for households across a range of incomes.

A. Housing Development and Community Character

1. Community Agenda - Survey and Public Meeting Results

Because Norwell is predominantly residential, the impacts and character of new housing development are of intense interest and concern. During the master plan process, residents repeatedly expressed their appreciation for Norwell's semi-rural character and small-town atmosphere. Many residents are worried about the following trends:

- Growth rate and loss of open space: Residents see threats to remaining open space from a perceived high rate of residential construction in recent years, both along existing roads and in new subdivisions.
- *Mansionization:* Increasingly large houses new or the result of renovations or tear-downs seem out of character with smaller homes nearby, bringing neighborhood change that many find undesirable.
- Landscape changes: Clearing of trees and shrubs along Norwell's roads as the result of home construction, and increasingly large and intrusive mounded septic fields that are open to public view detract from he character of Norwell's bucolic roads.

• Chapter 40B residential projects: In towns that do not meet a state goal of 10 percent approved affordable units, residential projects with a minimum of 25 percent affordable units that meet certain other criteria and file under the state's Chapter 40B Comprehensive Permit Law are subject to a streamlined permitting process and can override density and other requirements of the town zoning by-law. Two 40B projects have been built in Norwell and several additional 40B proposals representing hundreds of new market rate and affordable housing units have bee filed. Residents are concerned about potential impacts on town character, environmental health, traffic congestion and the cost of providing services such as education and road maintenance.

Survey responses to questions on land use, growth management and affordable housing expressed a generalized concern about the amount, pace, and appearance of new development and the threat it poses to open space. Many respondents were willing to consider village-style clustering of development as a way to conserve larger blocks of open space than would be possible under conventional one-acre development. Asked to identify where new residential development should be encouraged, nearly half did not respond to this question. Another 25 percent replied that residential development should not be encouraged anywhere. This means that almost three quarters of the respondents did not identify any place to encourage new residential development. The remaining quarter of the respondents offered a wide variety of possible locations for new housing.

Many residents who participated in the public meetings discussed the fact that escalating housing costs have made Norwell too expensive for many town employees but in the survey nearly two-thirds of the respondents did not support using density bonuses as an incentive to create affordable housing. In addition, senior citizens who might wish to move from the homes in which they raised their families into a smaller housing unit in Norwell find that the town has few options for them because there is little diversity in the housing stock. Residents are wary of changes viewed as changing Norwell's low-density, single family, semi-rural residential character, but there are options to shape residential development in ways that can preserve more open space character and provide attractive affordable housing.

Norwell Age of Housing Units					
Build Date	Percent of Total				
Before 1950 1950-1979 1980-1989 1990-2000	23% 60% 10% 7%				
Average Annual Increase in Housing Units 1950-1999					
1950-1979 1980-1989 1990-1999	65 34 24				
Source: US C	Census, 1990, 2000.				

2. Trends and Challenges

There are 3,318 housing units in Norwell, of which 94 percent are single-family homes. The balance consists of 50 condominium units, eight two-family homes, one three-family, two land parcels with a small number of apartments, and two land parcels with mobile homes. The 2000 census listed 158 housing units (including 96 Housing Authority apartments) in structures of 2 to 19 units, as well as 43 mobile homes.

Because current residential zoning only allows single family housing, with very limited exceptions, all other uses are grandfathered, i.e., in place before the zoning was enacted. Recent

exceptions include the 40 condominium units in the village-style Donovan Farms cluster development and two developments built under the state's Chapter 40B affordable housing law. Ninety percent of Norwell homes are owner-occupied. The 257 rented units found in the 2000 Census include the 96 Housing Authority units, the small number of two or three-family structures, and single family homes being rented while their owners are temporarily away.

Residential Growth Rates and Loss of Open Space

Approximately a quarter of Norwell's housing units were built before 1950. Another 64 percent of the total was built in the next thirty years, when 1,973 housing units were built at an average rate of 65 per year. Residential development declined during the 1980s to an annual rate of 34 (a total of 343 units were added during the decade). In the 1990s, 239 housing units were added to Norwell's inventory, slowing the annual rate to 24 over the course of the entire decade. The number of building permits for single family homes increased during the late 1990s and early 2000s to an average of 35 to 40 per year. This constitutes about 1.4 percent of the total housing units counted in the 2000 census.

Typically, about half of the houses are built on frontage lots on existing roads as "Approval Not Required" projects. By law, the Planning Board must approve these lots as long as they conform to the required

Year	Single Family			
	Building Permits			
1995	31			
1996	38			
1997	37			
1998	29			
1999	37			
2000	38			
2001	35			
2002	57			
Average	38			
	Source: US Census			

zoning dimensions. As the open spaces along Norwell's roads get filled up with houses every 100 to 200 feet, people begin to feel that development is changing Norwell's semi-rural character. The rest of the new houses are built in subdivisions: a parcel of land is divided into the number of lots permitted under zoning (subject to environmental regulations) and a new road is built to provide access to these lots. Most Norwell subdivisions are small, with two to five lots. (Chapter 40B projects typically create more housing units because the law permits higher density than the zoning minimum of one acre per unit in return for the creation of affordable units.) Although the average annual

growth in the number of new housing units is less than in the early decades of postwar suburban expansion, residents are sensitive to the growth because the remaining open space becomes more precious as it becomes more scarce.

Building Caps

Some residents have suggested capping the number of building permits issued each year as a remedy for concerns about development pressure on open space. Building caps are most often enacted when:

- The number and pace of development projects is perceived by the town as high, raising concerns about infrastructure and service demands, as well as other issues such as the size, design, and cost of new housing.
- Rural or community character represented by green open space appears to be threatened by development.

Residents expect a building cap to result in a visible slowdown in development, reduced need for new expenditures on facilities and services, and preservation of open space. However, some towns find that a building cap proposal encourages developers and property owners to file subdivision plans and building permit applications before the cap is enacted, thus encouraging earlier development of some parcels than might otherwise have occurred. After the cap becomes law, development then continues at a greater pace than residents expect.

What building permit caps can do:

- Limit building permit numbers to recent averages.
- Keep the pace of development from accelerating after the cap is enacted.
- Phase development.
- Provide time for discussing, preparing and enacting regulatory and other initiatives for more orderly growth.

What building permit caps cannot do:

- Stop development.
- Reduce the current average pace of development.
- Determine the location of development.
- Determine overall building density.
- Determine the character (design, size, site orientation) of new development.
- Ensure preservation of important open space resources

In Massachusetts, building permit caps are allowed only as temporary measures while a town performs a planning task or provides infrastructure. The permit cap may not be lower than the average number of permits in recent years, which, for Norwell means 30-40 permits a year. Building caps have no effect on the location, design, size, appearance, or cost of building sites or new construction. A building permit cap would not address the issues of open

space preservation, visual impact, and environmental impact that underlie Norwell residents' concerns about the pace of development.

Two-Acre Zoning

Contrary to many people's expectations, two-acre zoning does not make a substantial difference in preserving open space and habitat networks, or limiting impervious surfaces, particularly where one-acre zoning already prevails, as is the case in Norwell. Compared to alternatives such as village-style cluster zoning, two-acre zoning fragments open space, making it less effective in preserving natural resources and wildlife corridors, and it lowers water quality because it results in more disturbance of open space and more impervious surfaces.

Establishing two-acre zoning would also affect Norwell's position if developers choose to appeal town denials or conditions on a Chapter 40B Comprehensive Permit to the state. State affordable housing policy makers would view a change from one-acre to two-acre zoning, with no provision for multi-family housing or an exceptionally aggressive affordable housing plan, as a choice to exclude housing diversity.

Conservation Subdivision Development

Conservation or open space subdivision development allows for smaller individual house lots in return for preserving larger portions of unfragemented open space. Norwell has only one such development, Donovan

Farms, which has integrated well into the surrounding neighborhood. Property values, both in the development itself and in the adjacent neighborhood, have continued to rise. Studies have shown that the value of housing in conservation subdivision developments actually increases at a higher rate than traditional subdivision properties. This form of development allowed the town to achieve a number of different objectives in the Donovan Farms project without a high financial burden to the town:

- Permanent protection of highly valued open space that reinforces rural character in a prominent location.
- Preservation of the estate houses as private residences.
- Town acquisition of land for a new cemetery.
- Over-55 housing that helped pay for the open space and cemetery lands without having an impact on school costs.
- State funding to assist in acquisition of the open space.
- Financial benefits through the sale of the land.

The Village Overlay District (VOD) was created in 1999 specifically to make this development possible. The by-law was written to be highly restrictive, requiring two-thirds vote of Town Meeting to include land in a VOD, 40 contiguous upland acres, one acre of upland for each dwelling unit, and permitting only a Village Residence Development with over-55 housing by Special Permit of the Planning Board. These restrictions create disincentives to developers interested in creating another subdivision designed to conserve open space.

Approval-Not-Required (ANR) Development

Approval-Not-Required (ANR) subdivisions allow frontage lots that conform to zoning to be subdivided without direct control by the Planning Board. ANR subdivision is unique to Massachusetts and functions as an incentive for development along existing roads. Although much of Norwell's road frontage has already been developed, the remaining wooded roadsides are therefore even more valuable from an open space point of view. A state zoning reform bill, the Massachusetts Land Use Reform Act, would, if enacted, eliminate ANR development. Subdivisions of land along existing roads would be treated like all other subdivisions and subject to standards and conditions. The bill also includes a discretionary provision for expedited review of minor subdivisions and would limit grandfathering of subdivision lots to three years.⁴

3. Action Plan – Managing Residential Development

Shaping Residential Growth to Preserve Open Space

ACTION PLAN:

 Establish a Conservation Subdivision Development (CSD) District in the zoning bylaw for parcels of 5 or more acres.

⁴ See the Technical Appendix and <u>www.masszoningreform.org</u>

Well-designed cluster subdivisions will preserve the open space and scenic values so important to Norwell residents much better than standard subdivisions. A simple methodology for planning these subdivisions has been developed and publicized by landscape architect Randall Arendt. Norwell should revise its cluster bylaw – renaming it Conservation Subdivision Development District to make the objective of the bylaw clear in its name – to reflect the methodology pioneered by Arendt and create effective design standards to advance the Town's goals.

Conservation subdivision design has four steps and reverses the process generally used in conventional subdivision design:

- Identify land on the site that should be permanently protected: 1) Primary Conservation Area constrained lands such as wetlands, floodplain and steep slopes; 2) Secondary Conservation Area
 environmental, scenic, and cultural resources such as wildlife corridors, mature woodlands and
 individual trees, stone walls and farm hedgerows. Once these lands are identified, the rest of the
 site becomes the Potential Development Area. Attention should be given to potential links
 between the subdivision's conservation areas and adjacent protected and unprotected open space.
- 2. Locate house sites within the potential development area to maximize views of open space.
- 3. Align streets and trails to serve the houses and provide access to open space.
- 4. Draw in the lot lines.

The advantage of this method is that it first identifies for preservation the most environmentally sensitive and scenic lands, rather than locating houses and roads first.

Model bylaws (under the name Open Space Subdivision) are available from the Metropolitan Area Planning Council, Massachusetts Coastal Zone Management, and other sources that include the four-step design process described above. The model bylaw includes the following procedural requirements and steps:

- Use of a registered Landscape Architect in the design process
- Encouragement of a pre-application conference with the Planning Board, Conservation Commission,
 Board of Health and any other appropriate boards or commissions.
- Submission of a Concept Plan made up of a Sketch Plan using the four-part design process and applying
 the by-law's design standards, and a Yield Plan showing the number of possible lots under a standard
 subdivision plan
- After Planning Board approval of the Concept Plan, submission of a Site Plan based on the Sketch Plan but fully engineered to include stormwater and wastewater management, utilities and other information required by subdivision rules and regulations.

The design standards include housing types and housing mix, percent of required open space (in the model bylaw, at least 50% of the site must be in contiguous open space, with a percentage of wetlands no more than the total site percentage of wetlands), buffers to roads and water resources, parking and driveways, and screening and landscaping, and so on.

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⁵ The most detailed discussion is in his book, *Growing Greener: Putting Conservation into Local Plans and Ordinances*, Washington, DC: Island Press, 1999.

Conservation Subdivision bylaws are most effective if they are permitted by right, that is, if they do not require a special permit. Many communities with Conservation Subdivision special permit bylaws have found that developers are often reluctant to pursue a special permit when they can build a profitable conventional subdivision by right. Within a special permit context, density bonuses to encourage developers to meet community goals, such as protecting a higher percentage of open space, providing housing restricted to over-55 occupants, or providing affordable units also have often proven ineffective without clear town support. In 2000, the Massachusetts legislature passed a law allowing municipalities to establish cluster development by right. While eliminating the disincentive of a special permit process, by-right Conservation Subdivisions would still receive carefully oversight through the Planning Board's subdivision review and the Board of Appeals site plan review processes. A carefully written bylaw, along with good subdivision rules and regulations, would allow the Town and the public sufficient review of the project. The elements appropriate for Norwell need to be worked out in more detail in the implementation phase of the Master Plan.⁶

• Establish a Flexible Development Special Permit option for all residential districts that allows exemptions from dimensional requirements without an increase in density

In some communities the open space or cluster subdivision bylaw is called a "flexible development" bylaw and requires a minimum amount of acreage for the development. However, the flexible development concept can also be applied to individual house sites as well as multiple sites. This is a special permit process in which the property owner(s) can apply for relief from the standard dimensional requirements, without any increase in density, for the following purposes:

- To minimize alteration of or damage to the natural and cultural features and topography of the land
- To avoid undue adverse impacts of new development on existing homes and neighborhoods
- To preserve wooded areas and other undeveloped open land, particularly along town roads
- To preserve the existing semi-rural appearance of the town.

Providing this option in Norwell would be valuable to allow property owners contending with standard dimensional requirements on lots with wetlands or other environmental constraints to site buildings more appropriately on a site than may be required by observance of setbacks and other dimensional rules in the zoning district. At the same time, the special permit process would ensure that the relief from standard dimensional requirements would not be allowed without public hearings and board review.

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⁶ Other useful models, in addition to Arendt's book and the MAPC model by-law, include the Town of Westford's Flexible Development by-law, and the Hingham Flexible Residential Development By-Law. The Technical Appendix includes by-law examples.

OPEN SPACE SUBDIVISION DESIGN: <u>Conventional Residential Development and</u> <u>Conservation Subdivision Development in Rural Areas</u>







Source: Peter Flinker [Dodson Associates], South County Design Manual, 2001.

Top: Rural Development Site

This rural area has a mix of open meadows and forested parcels and a few historic mill villages, as well as streams, ponds, wetlands, and farm fields.

Middle: Conventional Subdivision

Most of this area is zoned for two-acre single family development. The drawing does not show development on areas of poor soils, steep slope and difficult access. Nonetheless, this development pattern results in lowered water quality from polluted runoff, fragmented wildlife habitat, and destruction of scenic vistas.

Bottom: Open Space Subdivision

Two-thirds of the site has been permanently preserved by clustering the same number of houses allowed at the two-acre density on smaller lots at one side of the parcel. Most uses are single family, with provision for a limited number of accessory apartments or duplex units. The houses are clustered in neighborhood groups of 12 to 24 around a public space. Benefits include:

- Conservation restrictions to preserve farm uses and a natural buffer around the stream corridor
- Roads follow the lay of the land
- Shared driveways and parking, where possible, lower costs and increase yard space

Mansionization and "Tear-Downs"

Compared to the houses built a generation ago during Norwell's first phase of suburbanization, many of the new and renovated houses in Norwell today are very large. As the amount of vacant, buildable land begins to dwindle, some developers are finding it profitable to buy existing small homes, tear down the older houses, and replace them with much larger new homes. The land in these cases has become much more valuable than the houses sitting on them. Another more common way that the prevailing character of housing has been changing is through additions and renovations. Although many residents who are concerned about the increasing size of new housing in Norwell point to demolition of small houses as a major phenomenon, in fact the number of demolition permits each year is much smaller than the number of permits for alterations and renovations. According to the Building Inspector, many of the alterations involve large additions costing \$150,000-250,000. This kind of work can completely transform the character of an existing small house, giving the impression of a new structure. This residential construction trend sometimes has public visual and environmental impacts because of the lack of innovative and sensitive site and landscape design. It is these impacts – rather than the choice to have a newer or larger house – that are of most concern to Norwell residents.

Change in Size of New Houses in Norwell 1950-2001						
Decade	Number of Houses Built	Average Living Area (Sq.Ft.)	% Increase in Size	Increase in Size from 1970's Average		
1950s	579	1,571	-	-		
1960s	625	1,868	19%	-		
1970s	638	2,177	17%	-		
1980s	323	2,818	29%	29%		
1990s	303	3,378	20%	55%		
2000s	70	3,530	5%	62%		

Tools for Reviewing Very Large Houses ACTION PLAN:

- Create a Special Permit Process for Large Home Site Plan Review based on the methodology in the Town of Weston By-Law and make the Planning Board the Special Permit Granting Authority. Massachusetts prohibits zoning ordinances from regulating the interior area of a single-family building. (MGL Chapter 40A, sec. 3) This law was originally intended as an "anti-snob" law that would keep towns from setting a high minimum floor area. The Town of Weston has devised a zoning by-law that allows the Town to shape and influence the way that large houses are sited on their lots by requiring site plan review of houses over a certain square footage or proportion of the lot. This by-law has been accepted by the Attorney General. The salient elements of the Weston by-law are the following:
 - o <u>Definition of "Residential Gross Floor Area "(RGFA):</u> "The sum of the horizontal area(s) of the above-grade floors in the residential building(s) on a lot, excluding unfinished attics but including

- attached or detached garages. The RGFA shall be measured from the exterior face of the exterior walls."
- o Permitted by right in single family residential districts: "The Residential Gross Floor Area 'RFGA' of any new or replacement single family dwelling use constructed pursuant to a building permit issued on or after October 29, 1998, may not exceed the greater of 3,500 s.f. or 10% of the lot area up to a maximum of 6,000 s.f." These numbers may be appropriate to Norwell as well.
- O Permitted by Special Permit of the Planning Board with Site Plan Approval: single family dwellings that exceed the RGFA in the section above. This provision indicates that the Town is not prohibiting large houses but simply requiring that they undergo site plan review.
- Define a "Replacement Single Family Dwelling" to include substantial renovations and additions. In order to include very large houses that result from substantial renovation and addition under the site plan review, the bylaw includes a definition: "The supplanting of all or a portion of a demolished or substantially demolished single-family dwelling with a substitute single-family dwelling in the same or in a different location on the lot." In order to avoid discussions about what "substantially demolished" means, Norwell should define this as removal of 50% of the walls and roof of the original house.

Public Visual and Environmental Impacts of Residential Construction

The public impacts of residential development trends are the loss of forested and open space visual character along the roads, excessive stormwater runoff rather than infiltration through the conversion of natural vegetation into lawn and paved surfaces, and the potential for excessive nitrogen loading of subsurface water supplies from large septic systems. For construction convenience, home sites are often excessively cleared of natural vegetation along the road and around the new dwelling. This vegetation is valuable both environmentally and aesthetically. From a scenic point of view, this is particularly a problem with Form A or Approval-Not-Required development along Norwell's roads, though the environmental impacts are the same whether the clearing takes place on a subdivision cul-de-sac or on a main road. Lawns and paved surfaces produce more stormwater runoff than trees and shrubs. Very large homes require large septic systems, and mounded septic systems are sometimes constructed without appropriate grading to minimize steep slopes and sited inappropriately in relation to the road and the house.

Tools to Moderate the Public Visual and Environmental Impacts of Residential Construction ACTION PLAN:

- Create a scenic corridor overlay district for designated roads. The scenic road designation in Norwell can be
 expanded into a scenic corridor overlay district on designated roads. Within 25 feet of the pavement, property
 owners could be required to retain vegetation of a specified size or type, or all natural vegetation, with provision
 for a driveway.
- Establish detailed landscape standards in the subdivision regulations and require a landscape architect on all development teams. Landscape standards can be written to specify the resources and character the Town wishes

to protect. Requiring that a landscape architect be on project development teams will also tend to raise the quality of landscape design and subdivision design in general. The Cape Cod Commission has developed a model bylaw (which also contains review standards that can be incorporated into subdivision regulations) that includes requirements such as the following:

- o "Protect wildlife habitat: Sites shall be designed in such a way as to avoid impacts to rare and endangered species and wildlife habitat on a site, and to maintain contiguous forested areas.
- Preserve open space and specimen trees: In the design of a development, priority shall be given to retention of existing stands of trees, trees at site perimeter, contiguous vegetation with adjacent sites (particularly existing sites protected through conservation restrictions) and specimen trees.
- Understory vegetation: Understory vegetation beneath the dripline of preserved trees shall also be retained in an undisturbed state.
- Forested areas: Forested areas shall be preserved if they are associated with significant forest communities (as defined); wetlands, water bodies and their buffers; critical wildlife habitat areas; slopes over 25 percent.
- o *Revegetation after grading:* Proper revegetation techniques shall be employed using native plant species.... Revegetation shall occur on cleared sites within 7 calendar days of final grading and shall occur during the planting season appropriate to the selected plant species."
- Encourage location of mounded septic systems away from public view and require that they be graded to have gentle slopes that fit into the landscape and/or be appropriately screened. Many Norwell residents have expressed concern about the visual character of raised septic systems.
- Define a "Replacement Single Family Dwelling" to include substantial renovations and additions (see preceding section)
- Create a Special Permit Process for Large Home Site Plan Review based on the methodology in the Town of Weston By-Law and make the Planning Board the Special Permit Granting Authority. (see preceding section)

Coordinated board review of all new residential development

Many communities have a system whereby an applicant for a building permit must obtain a plan check from all relevant town boards, commissions, or departments before receiving the building permit. A system of this kind would ensure, for example, that the Conservation Commission has a chance to review all development for the presence of wetland resource areas. The plan check would apply to ANR as well as to residential subdivision and commercial development, thus assuring that no construction inadvertently impinges on the regulations.

ACTION PLAN:

Establish coordinated review of all new residential development, including ANR lots, by all relevant boards and commissions. Many communities have a system whereby an applicant for a building permit must obtain a plan check from all relevant town boards, commissions, or departments before receiving the building permit. A system of this kind would insure, for example, that the Conservation Commission has a chance to review all development for the presence of wetland resource areas. The plan check would apply to ANR as well as to

residential subdivision and commercial development, thus assuring that no construction inadvertently impinges on the regulations.

Technical Assistance Needs

With more complex regulations, the Planning Board and Zoning Board of Appeals need assistance in working with project proponents and ensuring that the regulations are correctly met. The Town has recently hired a Town Planner to provide professional staff assistance to help its volunteer boards and commissions. In addition to providing technical assistance, research, analysis, organization, and coordination to the Planning Board and Zoning Board of Appeals, the Town Planner can provide value to the Town by writing grant proposals for funding for open space, historic preservation, village revitalization, and other town projects, and by managing these projects. In order to take maximum advantage of having a Town Planner, the Town should provide some clerical assistance for routine tasks, so that the planner can give time to more complex tasks.

B. Housing Affordability

GOALS:

- Provide a mix of housing options affordable to seniors, town employees, and young families
- Increase the supply of affordable housing, consistent with state goals and with Norwell's community character, to provide 215 Chapter 40B-eligible units over 10 years to meet Chapter 40B goals.
- Provide different affordable housing types and scatter them throughout the community. Seek a mix that includes approximately 10% affordable accessory apartments, 50% rental units and 40% homeownership units.
- Create the affordable units in a manner consistent with town character
- Require the maximum length of affordability

1. Community Agenda - Survey and Public Meeting Results

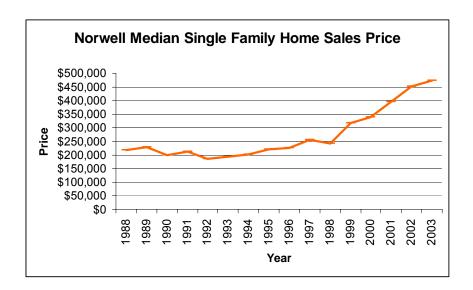
Many Norwell residents are concerned about affordable housing. Some are worried that Chapter 40B projects, which allow developers to bypass local zoning if the project is 25 percent affordable, will damage town character. Many residents who share those concerns also recognize that the community would benefit from having more diversity in its housing options.

In the survey, affordable housing was not one of the respondents' top four issues, though it did appear in the second tier of issues. Respondents were ambivalent to negative about potential affordable housing tools such as requiring a percentage of affordable units in every development or giving density bonuses for creation of affordable housing ("inclusionary" or "incentive" zoning tools). In the public meetings, there was general agreement that affordable housing was needed, but only as long as it fit into the town's character. Many participants recognized that the lack of affordable housing has some undesirable consequences, such as older residents being "pushed out," and a decrease in economic and social diversity. Precinct One residents were concerned that they would get all the impacts of any new affordable housing and expressed the view that it should be spread throughout town.

Affordable housing became an issue of intense interest in Norwell because of the numerous 40B projects proposed or expected in town. Two 40B projects have been built in Norwell, Jacobs Pond Estates, an age-qualified (over-55) development, and Silver Brook Farm. In early 2004, the Town was facing the possibility of five additional Chapter 40B projects. The town appealed the state's determination of eligibility of two projects, primarily on environmental grounds, one project was before the Zoning Board of Appeals, and two were awaiting state determination of eligibility. These five projects propose 231 units, of which 59 would be affordable. Residents are concerned about potential impacts on town character, environmental health, traffic congestion and cost of services. In addition to the proposed 40B projects, a group of Norwell volunteers is raising money to build a Habitat for Humanity single family home on a donated site.

2. Trends and Challenges

Norwell housing prices more than doubled over the course of the 1990s, increasing approximately 8 per cent per year. In Norwell, the median price of a single family home in 2003 was \$474,000, up 96% since 1998, reflecting both the increased value of existing homes and the focus on large, expensive homes in new construction (average building value for single family building permits increased 34% between 1995 and 2001). Median condominium prices in 2001 and 2002 were slightly higher than median single family home prices, reflecting the fact that the few condos in Norwell tend not to be entry-level ownership housing. In 2003, the median condo price was \$426,200 – below the single family median, but not much. This steep rise in housing prices was part of a general trend in the Greater Boston region. Norwell housing is expensive for new town employees who depend on a single income. The average full-time town employee salary is approximately \$42,000 a year. The average Norwell teacher salary in 2003 was \$55,341. Young people who grew up in Norwell and starting out in life with modest incomes would also find it difficult to afford the median priced house in Norwell.



Affordable Housing

Only 2.94% of Norwell's housing units, the 96 Housing Authority units, are currently counted as affordable according to the state's definition under Chapter 40B in the most recent inventory. This affordable housing inventory is based on census year 2000 units. Since 2000, Norwell has added 19 deed-restricted ownership affordable units through the Jacobs Pond Estates and Silver Brook Farm 40B condominium projects, as well as the market units in those projects. The Norwell Housing Authority maintains waiting lists for its own rental units for elderly and disabled persons and for the deed-restricted Ch. 40B units.

The state Comprehensive Permit Law (Chapter 40B) promotes a goal of 10 percent affordable housing in every Massachusetts municipality. Unless a town has low or moderate income housing units constituting at least ten percent of its current total year-round housing units, a developer can submit a Comprehensive Permit application to the Zoning Board of Appeals for an affordable housing project. The Comprehensive Permit consolidates all approvals into one process and allows a developer to bypass the local zoning bylaw and other Town planning regulations as long as the development provides 25 percent of units deed-restricted for a long period to households having incomes at or below 80 percent of the area median income and the development meets other subsidy, marketing, and design standards criteria. If the Zoning Board of Appeals conditions or denies the 40B permit, the developer may appeal the decision to a state board, the Housing Appeals Committee. In 40B rental projects, all of the units, both affordable and market rate, are counted towards the 10% goal, but in ownership projects only the affordable units are counted.

Assuming the production of only affordable units and no additional market units, Norwell would have to produce 235 additional affordable units to reach 10 percent of its housing units (with a base of 3,299 housing units in the 2000 census) in order to avoid future 40B proposals. However, all the 40B proposals in Norwell have been for ownership projects, of which only the 25% affordable units count towards the 40B inventory. This means that for every affordable unit, three market rate units are added and all the units add to the total number of housing units. Under these circumstances, even if there were no further housing units created through traditional subdivisions or building on frontage lots, it would take 40B projects with an additional 1,426 housing units (of which one-fourth or 357 would be affordable) to reach a 10% affordable goal based on the 2000 Census number of 3,299 housing units. The addition of 1,426 new homes to the 3,299 already existing would represent an increase of over 43 percent in the number of Norwell housing units, bringing the total to 4,725 (of which 473 would be permanently affordable). According to the 2000 US Census, average household size in Norwell is 2.94 persons, which means that 1,426 new units could bring nearly 4,200 new residents to Norwell. If average household size declines to 2.5 persons, the additional population would be 3,565. Rental projects through 40B or direct creation of affordable housing would be a more efficient way of meeting the 10% affordable housing goal without creating large numbers of additional market units.

By producing affordable housing units through implementation of a state-certified affordable housing plan, towns can avoid developer appeals of decisions on 40B projects. If the town demonstrates production of 40B-eligible units in the amount of three-fourths of one percent of total housing units (25 units for Norwell), it may seek certification of the plan from the state. If the plan is certified, the town may deny or condition Comprehensive

Permits for one year without appeal. If 40B-eligible units are created in the amount of 1.5 percent of the total year-round housing units, the town can deny or condition Comprehensive Permits for two years without appeal. A draft affordable housing plan prepared in conjunction with this Master Plan has been transmitted to the Board of Selectmen.

Norwell has not pursued Housing Certification under Executive Order 418, which was issued in 1999. This is a program separate from Chapter 40B. If a community achieves EO 418 Housing Certification each year, it will gain points in the state's Commonwealth Capital Fund scoring system for distribution of discretionary state funds for programs such as open space funding. For the purposes of EO 418 certification, towns must show production of new ownership units affordable to households with up to 150 percent of median income and new rental units affordable to households with up to 100 percent of median income. In the Boston area of which Norwell is a part, this means that middle income ownership units for a family of four can cost up to \$375,000 and middle income rental units can cost up to \$1,900 a month.

Norwell has an interest in providing a wider range of affordable housing and housing types than currently exists to serve its own residents and others with links to the town – seniors, young families, and employees. The Town can evaluate town-owned property to see if any is suitable for affordable housing. Financial resources dedicated to affordable housing already exist in the Community Preservation Act funds, at least 10% of which must be used for affordable housing. Until Norwell reaches the state's 10 percent affordability goal, it may continue to be subject to 40B proposals that may not fit with the town's sense of character or its vision for the future. Although the Town may seem close to build out, changes in wastewater technology and market opportunities may make previously undevelopable land more attractive to developers. By creating a credible affordable housing plan and working diligently to implement it, the Town will take charge of its own destiny in affordable housing and be in a far better position should it wish to deny or condition a 40B proposal.

3. Action Plan - Affordable Housing Compatible with Town Character

Many people may feel ambivalent about affordable housing because they have an image of high-rise or very dense housing, which they see as out of character with Norwell. Ironically, the face of affordable housing has changed so much that many people pass by affordable housing in a wide variety of Massachusetts communities without realizing that it is subsidized because it looks so similar to the other housing in town. In small suburban communities like Norwell, affordable housing can fit in very effectively with town character. Duplexes, cluster developments, condos or rentals in buildings designed to look like estate houses are some of the forms taken by affordable housing in towns with many of the same characteristics as Norwell, such as Andover, Weston, Sudbury, and Lincoln.

Affordable housing can be designed to fit into Norwell's semi- rural character. Examples of affordable housing types compatible with similar communities are shown below:



From left to right these are a single family home in a mixed-income development in Weston; a multi-family building designed in the vernacular, farmhouse style in Lexington; and a duplex in Sudbury. (Photos courtesy CHAPA.)

Planning and Organization for Affordable Housing Creation

- Reactivate the Norwell Housing Partnership to take a leadership role in promoting affordable housing creation and carrying out the affordable housing plan. The Norwell Housing Partnership has been dormant and should be reactivated with new appointments by the Board of Selectmen. The Partnership can take the lead in planning for affordable housing in Norwell and in raising public awareness about the need for affordable housing and the existence of innovative design options. Ideally, membership should include a variety of people with the knowledge and interest to work on this issue: public officials, business and community leaders, clergy, architects and Housing Authority representatives. The Massachusetts Housing Partnership has an excellent publication on how to create a local housing partnership (www.mhpfund.com) and can assist Norwell in reviving its Housing Partnership.
- Pursue EO 418 Housing Certification. To achieve certification, Norwell needs to have a housing plan and create
 units that are affordable to middle income households.
- Seek technical assistance from nonprofit groups and explore relationships with nonprofit developers and funding sources. Norwell does not have to reinvent the wheel in order to create and implement a robust affordable housing strategy. There are many organizations, such as the Massachusetts Housing Partnership (MHP) and Citizens Housing and Planning Association (CHAPA) that offer resources and technical assistance. MHP has assisted many communities in creating affordable housing that is compatible with community character. It also can provide pre-development funding, technical assistance, bridge financing and assistance to communities in working on Chapter 40B proposals. For example, MHP assisted the Town of Sherborn, one of the wealthiest towns in Massachusetts, in creating 15 affordable units. The Town contributed suitable town-owned land and MHP provided pre-development funding, technical assistance, and a high-risk loan before all approvals were in place to bring the project to construction. MHP also offers technical assistance to communities in working on Chapter 40B projects.

- Continue the agreement with the Norwell Housing Authority used in previous Ch. 40B projects to screen
 potential affordable housing occupants for eligibility. The Housing Authority has the experience to perform this
 task.
- Study the feasibility of creating a Norwell Housing Authority nonprofit subsidiary. Many housing authorities
 have formed nonprofit subsidiaries as a way to leverage their affordable housing expertise and knowledge of
 local condition and gain access to funding available only to nonprofits.

Regulatory Changes

- Revise the zoning bylaw to permit deed-restricted affordable accessory units by right and do not limit them to family members. Accessory apartments are a method of increasing the number of housing units without significant impacts on community character. Several communities on Cape Cod have created programs for affordable accessory apartments and many other communities are pursuing this option. In order to make accessory apartments eligible for Chapter 40B, the apartments must meet code standards, have a deed restriction to ensure long-term affordability (with cancellation of the restriction and the permit for the apartment on sale of the principal residence), and receive tenants who have been income-qualified by a housing agency like the Housing Authority. An accessory apartment program would not be likely to result in large numbers of affordable units, but it could provide some units on the margin that would have virtually no impact on town character.
- Consider allowing by right small-scale affordable single family homes and duplexes with one affordable unit on substandard, non-conforming lots, subject to site plan review. Parcels that lack required size or frontage but that otherwise provide necessary wastewater capacity could be made legal lots for building affordable units or duplexes in which one unit is affordable. Housing of modest size, with the number of bedrooms limited to the septic capacity of smaller lots, can provide scattered-site affordable units that fit easily into neighborhoods.
- Consider allowing affordable upper-story apartments above ground floor retail in the Town Center by right. By allowing small scale affordable apartments in the Town Center by right, subject to site plan review and the constraints of the wastewater system, the Town will gain more housing diversity as well as expand the market for businesses in the town center.
- Consider zoning for mixed-use residential and commercial development on Route 53 with incentives for affordable housing. Norwell can accommodate new development by zoning for mixed-use development in clustered locations along Route 53. Apartments, condos or town houses can be combined with shops and consumer services to create village-style developments that would also provide more retail variety for other Norwell residents. The incentive typically used in exchange for provision of permanently affordable units is a limited number of additional market units.
- Consider inclusionary/incentive zoning for subdivisions. Inclusionary zoning requires a developer to provide a certain percentage of affordable units within a development. This is a major tool for insuring that affordable housing production accompanies market-rate housing development, so the town does not continue to fall behind in meeting the Chapter 40B goal. Incentive zoning provides a benefit typically a density bonus in return for

providing affordable units. In order to achieve more affordable units, the Town needs to make the development of affordable housing economically feasible for developers who might otherwise prefer a 40B application. The correct threshold number of units must also be considered. For example, if inclusionary zoning applies to all developments of 10 or more units but the incentives are insufficient, developers may prefer to build 9 bigger and more expensive houses – and recent experience indicates that they will have little trouble finding buyers. For small subdivisions, an inclusionary zoning by-law should also provide for the possibility of a payment to an Affordable Housing Trust in lieu of providing affordable units. (See below.) Particularly because most Norwell subdivisions are small, it is important that the Town evaluate the market and developer behavior when setting threshold levels, density bonuses, and in-lieu payments to an affordable housing trust.

Creating Affordable Units

- Consider a Local Initiative Program project on town-owned property. The Department of Housing and
 Community Development's Local Initiative Program provides technical assistance to local communities that
 produce affordable units and counts them towards the Chapter 40B inventory, while allowing a greater degree of
 flexibility than is available for projects with direct financial subsidies
- Consider a "friendly 40B" project on town-owned property through an RFP process for developers. The town should identify potential sites that might be suitable for a 40B project, create design or performance guidelines and then search for a developer willing to work closely with the town.
- Work with the Community Preservation Committee on potential projects that link affordable housing creation to open space preservation and historic preservation. Norwell's recent implementation of the Community Preservation Act means that the town will have a minimum of 10 percent of the CPA funds assigned to affordable housing. The town should strive to leverage CPA funds to meet multiple objectives simultaneously. It is likely that in any one year, the CPA funds destined to affordable housing will be insufficient to create new units. CPA housing funds should be transferred to an Affordable Housing Trust (see below).
- Explore relationships with the South Shore Neighborhood Housing Corp, banks, churches, the South Shore HOME Consortium (Quincy-Weymouth) and other agencies. The South Shore Neighborhood Housing Corporation is the closest community-development corporation and nonprofit housing developer. It focuses its activities in Quincy but may be interested in assisting Norwell or a group of South Shore towns. Similarly, the South Shore HOME Consortium, which receives federal funding for affordable housing creation, currently includes only Quincy and Weymouth. Because HOME Consortium members must be geographically contiguous communities, Norwell would need to work with neighboring towns to form a group of new members, perhaps through its South Shore Coalition membership in the Metropolitan Area Planning Council. A potential model is the North Shore HOME Consortium, which includes 27 communities ranging from affluent Manchester-by-the-Sea and Boxford to more economically diverse Salem and Peabody. Banks are subject to the Community Reinvestment Act, which requires that they invest funds in community development activities. Church congregations may also take an interest in affordable housing projects and help raise funds. South Shore Habitat for Humanity is currently working with UCC on a potential site on South Street.

Financing Strategies

- Create an Affordable Housing Trust to receive CPA and other funds for affordable housing creation while
 projects are in the development phase. By filing a home rule petition, Norwell can follow in the footsteps of
 many communities and create an Affordable Housing Trust. The Trust would be the repository for any funds
 contributed by developers, by the CPA, by Town Meeting votes, and by private parties.
- Contribute town property, such as the Osborne Building, or undeveloped, town-owned parcels to affordable housing projects. The major barrier to affordable housing production in towns like Norwell is the high cost of land. By donating land to an affordable housing project, Norwell would provide a significant subsidy. The Town owns several individual parcels and groups of parcels with road access or potential access (identified in the Technical Appendix) that might be suitable for an affordable housing project. The Norwell Housing Authority also owns a parcel adjacent to its current buildings, though development would probably require costly wetlands replication. These parcels should be investigated in more detail for suitability and feasibility. If town offices move to the Sparrell Building, the town will have the opportunity to consider affordable housing for the Osborne Building. Mass Housing Partnership may be able to give some assistance in evaluating the potential of Osborne for affordable housing.
- Adopt the state law on tax title properties that provides for forgiveness of taxes if the property will be developed for affordable housing. Municipalities can adopt a state law that allows them to forgive taxes owed on tax title properties if a new owner will develop affordable housing. Although there may not be many opportunities of this type in Norwell, it is worthwhile to have this tool should an opportunity arise.
- Study the feasibility of tax abatements on existing homes occupied by income-eligible households in return for affordability agreements in deed restrictions. The Town of Marion surveyed its population to see if there would be interest in providing significant tax abatements to owner households with incomes at 80 percent or below of median in return for an affordability deed restriction.

4. Town-Owned Property Map

This map shows parcels from the Norwell Assessor's list (2001) that are owned by the Town and may be appropriate for affordable housing. Parcels less than one acre are included because of the potential for consolidation of lots. Because this is a map analysis and was not based on field examination of parcels, the suitability of any lot or group of lots for housing or any other use will require more detailed analysis of specific sites.

VI. Economic Development



GOALS:

- Maximize non-residential tax revenue from existing industrial and commercial areas while protecting town character and quality of life.
- Improve Route 53 with more pedestrian-friendly design and higher value development.
- Improve the Town Center with more pedestrian-friendly design and retail variety.

A. Community Agenda – Survey and Public Meeting Results

In the community survey and public meetings, Norwell residents identified high property tax bills as a major concern. They also expressed interest in improving the appearance, function, and business mix of both the Route 53 commercial corridor and Norwell Center. Improvements to the Route 53 commercial corridor and to Norwell Center can contribute to a goal of increasing tax revenues, but they are also important quality of life initiatives for Norwell residents. The potential impact of home businesses on neighborhoods periodically arises as an issue as well. Although residents would like to see business generate more tax revenue and be more attractively

sited, they want Norwell's fundamental residential character to remain intact. When asked, they showed no appetite for identifying new areas for nonresidential growth in town.

Respondents to the survey identified "tax burden" as their top concern from a list of 16 major issues. In contrast, "attract new business" was at the bottom of the list, despite its connection with alleviating the residential tax burden by increasing the business tax base. When asked to rank five issues related to economic development, using a range of "Very important" (5) to "Unimportant" (1), respondents overall were most positively disposed towards making retail areas more pedestrian-friendly. This, of course, focuses more on design improvements to existing economic resources than on attracting more economic growth. The other four items were more directly related to increasing economic activities – and the non-residential tax base. Respondents were somewhat willing to support attracting office development, with decreasing numbers seeing it as important to attract light industry or attract retail development. Finally, relatively few people said it was important to provide greater density in the business districts. Respondents were also asked to identify where in Norwell they thought new business development should be encouraged. A quarter of the respondents did not write anything and 20 percent said there should be no more business development anywhere. The overwhelming majority of the remainder identified existing business areas on Route 53, the existing industrial parks, the Town Center and Main Street.

At two meetings sponsored by the Norwell Chamber of Commerce, a small group of business owners representing home businesses, businesses on Route 53, and Norwell residents who own businesses in nearby towns agreed that access to Route 3 and other arterial roads is one of the primary reasons for locating a business in Norwell. Owners who reside in Norwell or neighboring towns were attracted by the elimination of significant commuting time, but the presence of an excellent labor force in the region is another benefit to a Norwell location.

Participants in the business meeting viewed the potential for more business development in Norwell as mixed. Under current zoning, the industrial parks are approaching buildout and there is limited land for development on Route 53. Traffic congestion, especially at Queen Anne's Corner, is also a barrier to location of new businesses on Route 53. Participants in the meeting expressed the fear that Route 53 will become like Route 9 in Natick and Framingham, but they also saw the state's corridor planning process for Route 53 as an opportunity to avoid that result. Expanding Route 53 into a four-lane highway would require land takings and be opposed by many businesses. There is currently no organization of businesses located along Route 53 and many of the chain businesses located there are not members of the Norwell Chamber of Commerce. The business community on Route 53, therefore, does not have an organized voice in planning for changes to that corridor.

According to the 2000 census, Norwell now has a number of home-based businesses employing approximately 260 people. A few participants in the precinct and business meetings were interested in creating office space that could be used for small and medium-sized businesses, for example, when a successful home business needs to expand and would like to stay in Norwell. It is not clear how much additional demand exists for small office space in Norwell that cannot be met by current inventory.

B. Increasing Nonresidential Tax Revenues

As residential real estate values have increased and the Town has embarked on some costly capital projects, residential taxes have risen. There are two ways to moderate the residential tax burden by increasing nonresidential tax revenues: (1) shift a greater percentage of the tax burden to non-residential property, or (2) attract more investment in non-residential property so that the value increases and tax receipts rise. Norwell can take steps to implement either or both of these methods of increasing non-residential taxes.

1. Trends and Challenges

Commercial and industrial lands make up 4 percent of Norwell's total land acreage, and resource-based economic and recreational activities such as farms, orchards, productive forest, cranberry bogs, and equestrian areas account for another 6 percent of acreage. The Town's business sector is concentrated on the western edge of town, with several blocks of consumer retail and services in Norwell Center. Industry is concentrated in the two industrial parks. Retail uses take up 121.7 acres of land in 54 parcels, and office uses (including office buildings which are part of manufacturing operations) account for 113.98 acres in 151 parcels. The number of commercial parcels in Norwell increased by a third from 180 in 1988 to 240 in 2001. By 2001 eleven industrial parcels had been added to the 21 in 1988, resulting in a total of 32, for a 52 percent increase.

Norwell's business sector grew substantially over the course of the 1990s. Norwell had 524 businesses in 1999 with a total payroll of \$365.4 million, making the average wage paid \$42,393. The number of businesses has nearly doubled since 1985 and the average number of employees per business has risen from 14 to 16.4. The service sector saw the largest employment increase while the FIRE sector (Finance, Insurance, and Real Estate) grew seven times bigger, adding 777 jobs from the mid-1980s to 1999. The trade, manufacturing, and government sectors also added jobs. The greatest sector declines were found in the TCPU sector (Transportation, Construction, and Public Utilities) and agriculture, while construction rebounded by 1999 after lean years during the recession of the early 1990s. Among the largest businesses in Norwell are Wear-Guard and Scudder Financial. The Norwell Chamber of Commerce has 97 members, a participation rate of 18.5 percent, with a majority coming from the service, FIRE and retail sectors

Norwell residents in general are well-educated and have white-collar jobs. According to the 2000 census data, 52 percent of residents over 25 had a bachelor's or higher degree and 52 percent of workers 16 and over had management, professional or related occupations. Norwell residents usually have very low unemployment rates, typically 50 to 67% lower than the state average. The median household income in Norwell as reported in the 2000 census was \$87,397, making Norwell the 29th wealthiest town in Massachusetts, and the mean family income was even higher at \$96,771. Forty-two percent of all households had incomes over \$100,000 and 27.5 percent had incomes less than \$50,000.

Split Tax Rates - Shifting the Tax Burden

Norwell currently taxes residential and nonresidential property at the same rate (13.18 per \$1,000 in FY 2004). Eighty-four percent of FY 2004 tax revenues come from residential property owners and 17 percent from

Commercial/Industrial/Personal Property (CIP) taxes, of which most (15 percent) is accounted for by commercial and industrial real estate.

State law permits shifting the tax burden from residential to nonresidential land uses, subject to certain limits, if a municipality is certified as assessing property at full and fair cash value. In FY 2002, 97 out of the 351 communities in Massachusetts opted to shift the tax burden through different tax rates for different classes of property. A split tax rate is more common among cities and towns that receive a greater percent of their revenue from nonresidential land than Norwell does. A common rule of thumb is that if a community gets 15% or less of its revenue from commercial and industrial property (like Norwell). a split tax rate is likely to harm efforts to attract nonresidential taxpayers. A 2000 study by the state Department of Revenue found that approximately a quarter of the Massachusetts towns that are in Norwell's position, receiving 10 – 19% of their revenue from CIP, opted for a split tax rate in that year.

The basic elements of the system work as follows:

- A split rate does not change the total amount of taxes levied; it just determines the share to be paid by the different property classes.
- The CIP share can be increased only up to 50 percent more than what it would be under a single tax rate.
- The residential share must be at least 65 percent of the single tax rate levy share.

Although a split tax rate might initially seem appealing, it can also make Norwell less attractive as a business location and thereby defeat the purpose of gaining more nonresidential tax revenue. Before opting for a split tax rate, Norwell should study the possible impacts of different rate levels on its nonresidential property owners and on attracting new businesses to town. It is worth noting that Norwell's neighboring communities, Hanover and Rockland, both of which have a greater percentage of tax revenue from CIP than Norwell, do not have a split tax rate.⁷

Increasing the Value of Non-Residential Real Estate

Norwell has 485 acres of land developed for commercial or industrial use outside the Town Center, containing 2.6 million square feet of building space. The average acre is valued at \$425,000 and contains 6,500 square feet of built space. There are 84 acres of vacant commercial land, of which 51 are deemed "developable." There is no vacant industrial land, although land in the Business B zone occupied by utility companies contains very little building space according to the Assessor's database. Parcels in the Industrial/Office parks in Business C are the most intensively developed parcels as well as the most valuable. Within each zone, commercial uses are more highly valued than industrial.

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⁷ For more information, see the Department of Revenue, Division of Local Services newsletter, *City & Town*, December 2000, pp. 3 – 6, available at www.dor.state.ma.us.

Size and Value of Existing Development in Business Zones					
	Acres	Building Gross Square Feet	Building GSF per Developed Acre	Total Valuation per Acre	Total Valuation Per Building GSF
Total	485	2,612,452	6,508	\$425,813	\$79
Vacant Commercial	84			\$56,706	
Developable	51	0	0	\$57,907	NA
Developed Commercial	307	1,992,356	6,488	\$522,749	\$81
Bus. C (Parks)	89	811,434	9,078	\$770,299	\$85
Bus. B (Other)	218	1,180,922	5,425	\$421,113	\$78
Industrial	94	620,096	6,571	\$438,422	\$67
Bus. C. (Parks)	74	611,465	8,287	\$527,637	\$64
Bus. B (Other)	21	8,631	420	\$118,414	\$282
	GSF = Gross Square Feet				Gross Square Feet
	Data source: Norwell Assessor				

The consultant team analyzed development capacity in the Route 53 and industrial park area. These parcels could theoretically accommodate an additional 4 million square feet of commercial and industrial building space under existing zoning. Over 80 percent of this potential additional capacity would be added to already developed sites. However, because this analysis does not take into account site-specific limitations, such as wetlands, it inherently overestimates the remaining development capacity under current zoning. On land classified as vacant and developable, there is potential to develop about 730,000 square feet on 51 acres. While derived from a different methodology, this is comparable to the nonresidential buildout estimate of 640,000 square feet made by MAPC and the Executive Office of Environmental Affairs in the buildout analysis prepared in 2000.

The parking and open space requirements in both business zoning districts also limit the amount of potential building space. The requirement of one parking space per 200 square feet of building space is particularly restrictive because structured parking is too costly to be supported by the relatively small buildings allowed under current zoning and surface parking directly reduces building floor area.

Norwell's parking requirements are high and can probably be reduced for some uses. The large expanses of parking in the town's commercial areas also create unnecessarily large impervious surfaces that impede infiltration of stormwater into the ground. In new commercial developments and as existing property is redeveloped, Norwell should take the opportunity to limit excess parking. Parking should be located to the rear and sides of buildings, parking areas should be designed in smaller groupings with more trees, and shared parking should be encouraged where feasible. Any development projects that are occupied in phases should also construct parking in phases, and evidence should be required to demonstrate the need for the buildout of the maximum number of spaces.

Although additional development capacity exists along Route 53 under current zoning, site limitations on remaining undeveloped sites are substantial, especially as long as there is no sewer service. Moreover, the traffic impacts of significantly more intensive development would likely raise concerns. Residents would welcome improvements to the aesthetics and function of Route 53, but they would be wary of the potential traffic impacts of more commercial growth.

2. Action Plan

- Rezone the industrial parks for higher densities, making the additional density contingent on a demonstration that the project would have sufficient sewer or other wastewater capacity.
- Study the feasibility of a small sewer system or connecting to the Rockland sewer treatment plant.

Norwell is fortunate to have two industrial parks located near a Route 3 exit at the western edge of town. These parks, in fact, include more office and non-industrial space than industry and have almost no impact on Norwell's residential areas except for limited traffic impacts on Route 228 at the entry to Accord Industrial Park. Increasing the permitted development intensity in Assinippi and Accord Parks by providing sewer access has many potential advantages as a long-term strategy for increasing nonresidential tax revenues in Norwell. For example, if the zoning for the 16-acre Scudder Financial site in Assinippi Park were changed to permit 5 floors, 15% open space (instead of 33%) and one parking space per 400 sf (instead of one per 200 sf), the increased 510,000 square feet of building space would bring the town an additional \$399,000 in annual net revenue, about a 300 percent increase over current revenues from the site. 8 However, this would require sewer service, paid for either by the property owner or the town, and that cost is not reflected in the estimate of net additional revenue. Currently, the Wear-Guard plant is connected to the Rockland sewer system. Rockland's treatment plant reportedly has additional capacity and Norwell should investigate the value of investing in sewer connections for the industrial parks and possibly for parts of Route 53. It is also important to remember that zoning and infrastructure simply provide potential. The economics of construction costs and rents would determine whether developers would take advantage of this potential in practice.

C. Improving Route 53 and Enhancing Norwell Town Center

1. Trends and Challenges

Most development along Route 53 is typical sprawl-style development in which stand-alone businesses on one-acre lots are crowding out the remaining residential uses. Each parcel has its own curb cuts, exacerbating traffic congestion, and there are no continuous sidewalks. At public meetings, the residents of Precinct One expressed a strong desire to see Route 53 become much more pedestrian friendly. The industrial parks are isolated from the retail areas on Route 53 and also lack pedestrian amenities. At lunch time, employees can be seen walking and jogging in the street in the industrial parks. By establishing new development standards for properties in the Route 53 corridor, the town can set the framework for improvements as properties are developed and redeveloped. In order to keep up with the market, retailers tend to redevelop their properties more often and more significantly than residential property owners. This means that a new regulatory framework can have significant results over 10 or 20 years as commercial property is upgraded.

Norwell Center cannot and should not be expected to make large contributions to Norwell's tax base. However, the Village Center can become a more inviting center of community life. Residents would like Norwell

⁸ The details of this analysis are available in the Technical Appendix.

Center to be a family-oriented activity center and they desire more shops and activity. In order to encourage a livelier village, the town needs to develop a more detailed plan and reduce the barriers to business entry, which now must go through a special permit process. Allowing small-scale apartments in the center would also enhance the "walk-to" market that helps small businesses flourish, which would benefit all Norwell residents.

2. Action Plan

Improve the Attractiveness and Function of the Route 53 Commercial Area ACTION PLAN:

- Create a Route 53 Committee with business and resident representatives to advise on potential changes and spearhead attention to Route 53 improvements in local and state planning. Because Route 53 has varied and interrelated problems encompassing traffic and parking, pedestrian environment, development standards, and aesthetic improvements, it is important to have a group of people in town who can focus on these issues. The Town should create a Route 53 Committee to work with the Town Planner and town decision makers on the details of a new framework for development on Route 53
- Review parking ratios and improve parking lot design standards. The character of Route 53 development is also shaped by the zoning requirements and the need for septic systems. Parking ratios should be reviewed and shared parking arrangements among businesses with different peak hours should be encouraged.
- Develop a streetscape improvement plan with pedestrian amenities. Sidewalk and streetscape improvements will improve the Route 53 environment for the residents of nearby neighborhoods while enhancing the overall attractiveness and value of Route 53 for businesses willing to make the investment in better quality site design and building construction. A streetscape plan for Route 53 should include continuous sidewalks with marked crossings and pedestrian-activated signals, street trees, improved lighting, and landscape standards for the sidewalk edge.
- Develop a Route 53 overlay district to concentrate development in village-like centers. Development standards along Route 53 vary considerably. Improvements to the appearance and function of Route 53 through design, traffic, pedestrian, and landscape initiatives incorporated in a zoning overlay district can make a difference over time as commercial properties are redeveloped. Zoning to promote commercial development in clustered, pedestrian-friendly settings, with internal circulation, a limited number of curb cuts, and parking that is buffered from the road and from residential areas will limit the expansion and continuation of generic, commercial strip development.
- Work with Hingham and Hanover and other neighbors to establish common standards and/or a common overlay district, perhaps through the Route 53 Corridor Study. Norwell should follow the model of Framingham and Natick, whose planning boards worked together to establish a common Route 9 overlay district with consistent design standards. This framework has been successful over the last decade in improving Route 9. Because these design improvements also improve traffic function, discussion of a common Route 53 overlay district with neighboring communities would be appropriate in the Route 53 Transportation Corridor Study currently underway.

- Request signal improvements at Queen Anne's Corner, coordinating with Hingham.
- Consider a small scale sewer system for the Route 53 corridor and the residential neighborhoods west of Route 53 to support higher quality commercial development and protect town water quality. Higher quality development, within the framework of strong design standards, would be more likely if Route 53 were connected to a sewer system. The Town should consider investigating the feasibility, benefits, and costs of a small sewer system covering Route 53, the smaller-lot residential neighborhoods west of Route 53, and the industrial and office parks. In addition to the potential economic benefits of a limited sewer system for this area, it would protect the water quality of the town's Washington Street wells, which are potentially threatened by the small-lot residential septic systems in this neighborhood.



COMMERCIAL DEVELOPMENT Growing Commercial Corridor: Conventional and Creative Development

Top:

Uncoordinated development along a rural arterial road includes a supermarket, shopping center, lumber yard, a corn field, driving range, and private homes.



Middle:

Conventional development on a parcel by parcel basis results in development without a center as developers construct speculative office buildings and small service businesses feed off the large buildings. Most of the investment goes into private parking lots and buildings, and the public street is neglected and unappealing.

Bottom:

Creative development accommodates all the uses of a traditional commercial strip in a village layout. Elements include:

- A simple street grid provides access and internal circulation by car or by foot
- On street short-term parking and rear lots for longterm parking
- Consistent building setback line at the street
- Pedestrian amenities include sidewalks, benches, and trees



Source: Peter Flinker, South County Design Manual, 2001.

Enhance Norwell Center

ACTION PLAN:

- Create a "Vibrant Village" Committee with representatives from businesses and residents. As in the case of Route 53, the Town should create a Committee to work with the Town Planner and town decision makers on implementing improvements to Norwell Center.
- Seek conservation restrictions on the fields at Lincoln Road
- Implement traffic calming and streetscape strategies to slow traffic going through the Center. On the approach to Norwell Center, distinctive signs and plaques, sidewalks or safe pedestrian walkways and more street trees will encourage motorists to slow down and provide safe pedestrian access to neighborhood residents. Traffic calming elements at the western and eastern edges of Norwell Center, such as neck downs to narrow the street and widen sidewalks at intersections, pavement treatments such as brick or cobble crossings and "Norwell Village" signs or markers can enhance the sense of the village as well as keep traffic speeds down.
- Improve the village streetscape with sidewalks, lighting, and landscaping at all edges. The Village streetscape should be improved in a variety of ways:
 - o Upgrade sidewalks
 - o Reduce and consolidate curb cuts
 - o Join the existing parking lots internally
 - o Install pedestrian scale lighting
 - o Consider a raised crosswalk (a speed table) to calm traffic and enhance safety
- *Upgrade the River Street edge of the Village with a sidewalk, curbing and street trees.*
- Narrow the Main Street / Central Street intersection. The intersection of Main Street and Central Street needs to be redesigned to signal motorists to slow down: narrow the roadways as they approach the intersection, reduce the turning radius, and define the road edges.
- Allow by right development of small scale retail and professional offices. In the public meetings, residents envisioned additional family-oriented businesses, such as an ice-cream store. Allowing by right development of small shops, rather than requiring a special permit, reduces the barriers to new business entries.
- Develop Village design guidelines and an overlay district with incentives for two-story, mixed-use development.
 Zoning changes that would encourage second story offices and apartments in one or two blocks of the Center would create more pedestrian activity and demand for new shops. Adding second story space or more development in Norwell Center may also be constrained by septic system needs and communal systems should be explored. Because Norwell Center is a historic area, design guidelines would be necessary.
- Explore a comprehensive wastewater management plan for the Town Center. Many communities are discussing new public-private communal wastewater options as a way to create livelier town centers with more businesses to serve local residents and the opportunity to accommodate mixed use development with housing.
- Adopt zoning for the post office site to promote a better connection to the Village when the site is redeveloped.
 A post office is an important civic anchor for any town center. However, the current configuration of the
 Norwell post office discourages walk-in business from people visiting stores in the center. The post office site

- and its surrounding parcels should also be rezoned so that in any future redevelopment of this site it will be more attractive and better connected to the rest of the Town Center.
- Connect Norwell Center to neighborhoods and open spaces with safe bike and pedestrian routes. Residents' vision of Norwell Center as more of a community meeting place also requires a network of safe pedestrian and bicycle routes linking the Center to neighborhoods and community destinations such as Gaffield Park and Playground, the Norris Reservation, and Fogg Forest. The Recreational Resources Map indicates existing and potential trails and bikeways and the Circulation and Transportation chapter discusses pedestrian and bicycle needs in Norwell as well as conceptual plans for pedestrian and bike access in the Main Street improvement project.

Regulate External Signs of Home Businesses

In 2000, 5.4 percent (260 people) of Norwell residents in the labor force worked at home, an increase of 72 people since 1990. The vast majority of home businesses have no discernible impact on surrounding neighborhoods. However, as more home businesses emerge, business parking and signage in residential neighborhoods can become controversial. Neighborhood concerns about home businesses have emerged in several cases when a home was modified to accommodate the business through additions, parking areas, or other physical changes. Neighbors are also often concerned about the potential for traffic. The zoning bylaw permits a variety of home occupations as long as there are not more than two additional employees and "provided that [the business] is not injurious or offensive to the neighborhood because of the emission of odors, fumes, dust, noise, smoke, vibration or other causes." There is no explicit mention of exterior alterations, signs, or traffic impacts.

ACTION PLAN:

Revise the home occupations section of the zoning by-law. Continue permitting home occupations by right as
long as there are no exterior alterations and clients do not come to the business as a matter of course. Create
a special permit requirement for occupations that require clients to come to the business and for exterior
building or site alterations and signs that result from the business activities.

VII. Transportation and Circulation



GOALS:

- Work towards a multi-faceted transportation system including
 - (1) access to regional public transportation
 - (2) well-maintained roads for safe and efficient access to local roads and regional routes
 - (3) a system of pedestrian and bicycle routes throughout town and connecting to regional nonmotorized transportation routes
- Create an enhanced public assets management system to efficiently maintain public infrastructure

A. Community Agenda – Survey and Public Meeting Results

The major circulation and transportation problems experienced by Norwell residents are congestion on Route 53, particularly at Queen Anne's Corner and Assinippi Corner; speeding on the principal east-west roads (Main Street, Grove Street, Old Oaken Bucket Road, and Pleasant Street); and unsafe conditions for pedestrians and bicyclists. During the master plan process residents repeatedly expressed frustration about speeding and the lack of safety for pedestrians and bicyclists, particularly young people. In the survey, when asked to identify the road or intersection that poses the biggest threat to safety, over a third of respondents chose Queen Anne's Corner or Route 53. Another nine percent identified Assinippi Corner, even though it is technically not located in Norwell. The other two roads that attracted significant concern were Route 123 and the Grove and Prospect intersection – which were mentioned by 11 percent each. The same areas were identified by the majority of respondents as being the most congested and most in need of aesthetic improvement.

B. Trends and Challenges

Norwell has approximately 100 miles of roadway. Route 3 and Route 53 are the only state-owned roads in Norwell and there are no interstate highways. Route 123/Main Street is classified as a Rural Minor Arterial and distributes traffic to town neighborhoods. It is the only major east-west route through Norwell and thus carries a majority of the traffic in town. Traffic counts reported by the Central Transportation Planning Staff in 2001 found that Main Street carries 11,000 vehicles a day. In addition to Main Street, the major travel routes are Grove Street/Old Oaken Bucket Road going east-west and Pleasant Street and River Street going north-south. These also serve as the principal cut-through routes for travel to and from neighboring communities as do School, Mount Blue, and Mount Hope Streets, which are used by residents of Cohasset and Scituate going to Route 3.

Norwell has access to two exits on Route 3, just outside of town, but made the decision when Route 3 was constructed not to have an exit itself. However, to get to these exits Norwell residents must negotiate two very congested intersections: Assinippi Corner (Route 53 and Route 123) in Hanover, and Queen Anne's Corner (Route 53 and Route 228) on the border with Hingham. The highway is surrounded by a large vegetated buffer as it cuts through the western edge of Norwell and the town wishes to retain that buffer if Route 3 is widened in the future.

The impact of a potential Route 3 widening project for Norwell is somewhat difficult to predict. In general it is intended to improve congestion on Route 3, but increased development on the South Shore (including large

Norwell Traffic Issues

Traffic Congestion

- Traffic delays (poor Level of Service)
- Traffic volumes exceed capacity
- High turning volumes
- Lack of adequate gaps at unsignalized intersections
- Signal timing and phasing

Design Issues

- Channelization and/or geometric deficiencies
- Lack of roadway edge definition
- Isolated flooding -- poor drainage at locations such as Mt. Blue Street near School Street, Summer Street near Old Oaken Bucket, and several locations on Pleasant Street
- Excessive number of curb cuts
- Intersection configurations

Traffic Routes

- Truck traffic on River Street
- Cut-through traffic on local roads destined for Route 3, Scituate, and the malls

Safety Issues

- Vehicular speeding on local roads
- Pedestrian safety and lack of sidewalks or wide shoulders on roads and marked crosswalks
- Backing into main stream traffic
- Sight distance deficiencies

residential projects already underway in Plymouth) may result in little improvement. Traffic on Route 3 has been increasing steadily in the 1990s, and it is also subject to marked seasonal traffic peaks as people use the highway to get to Cape Cod in the summer. Widening Route 3 might cause more congestion at Norwell's two access points, Assinippi and Queen Anne's Corners. The state has not made a final decision on whether to proceed with this project, which is currently on hold.

Route 53 is an Urban Minor

Arterial with the dual function of carrying high traffic volumes and allowing access to adjacent commercial and residential land uses. Limited information is available on traffic counts for Route 53. Estimates based on projecting older data and site-specific traffic counts for particular projects range

from 15,000 vehicles per day south of Jacobs Trail to nearly 35,000 vehicles per day at Queen Anne's Corner. Norwell's only traffic signals are on Route 53 – at Queen Anne's Corner, at the intersection of Grove Street, and at the access to Stop 'n' Shop near Assinippi Corner. A Route 53 corridor study by the transportation planning organization for the metropolitan Boston area is underway. Norwell's preferred scenario for Route 53 should be part of the region's discussions on Route 53.

The majority of Norwell's 4,825 workers commute to work by car, with 78 percent driving alone, according to the 2000 Census. Between 1990 and 2000 there was a significant increase in the percentage of Norwell residents using public transportation to get to work (an absolute increase of 199 people). The only public transportation service near Norwell is the Plymouth & Brockton (P & B) bus line with a commuter route to Boston that stops in Rockland and a bus to the Braintree T station that stops at Hanover mall. Norwell commuters may also be driving to the Hingham-Boston ferry or the T Red Line at Braintree. About 23 percent of Norwell workers are employed in Boston or Cambridge, slightly above the 20 percent of all work trips with a Boston or Cambridge destination that the MBTA found in its studies for the revival of the Greenbush commuter rail line. The Scituate terminus of the new Greenbush commuter rail line will be located approximately two miles east of Norwell. The MBTA, in the Final Environmental Impact Statement (FEIR), forecast that 900 riders would be using the Greenbush station in 2010. The new station may change traffic patterns if some commuters in Norwell or Scituate decide to take the train rather than drive to Route 3 on the west side of town. The MBTA FEIR projected a decrease of 40 vehicles on Route 123 during the morning peak hour in 2010 resulting from commuters changing from cars to transit.

In many suburban communities, commuter trips are no longer the only source of traffic congestion as trips for children's activities, shopping and by service providers become more commonplace. It is common to see an increasing number of vehicles per household and traffic growth throughout the day, not just at traditional commuter peak hours. Eighty-one percent of Norwell households have at least two vehicles available.

C. Transportation Map

The transportation map shows major traffic patterns and identifies the locations where operational or safety deficiencies can be remedied by traffic calming.

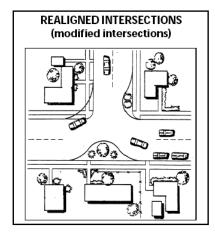
D. Action Plan

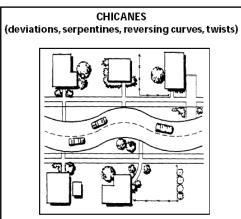
• Promote access to and improvement of regional public transportation through participation in the regional transportation planning process. Since Norwell residents are dependent on transportation gateways in other towns and an increasing percentage of commuters are using public transportation in part of their trips to work, Norwell should participate in regional transportation organizations to promote Norwell's access to public transportation. The South Shore Coalition (SSC), of which Norwell is a member, participates in transportation planning for the metropolitan Boston region. Norwell should give strong support to SSC proposals to increase access to public transportation in the sub-region including bus service to the Greenbush

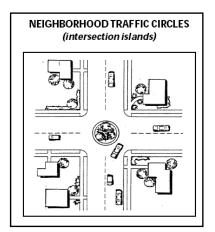
- commuter rail station, a bikeway along the Greenbush corridor, and expansion of ferry service and parking at the Hingham ferry dock.
- Mitigate traffic congestion on Route 53 by rezoning and promoting common regulatory strategies through the Route 53 Corridor Master Plan (See the Economic Development Areas section for more detail). Route 53 is the most congested of Norwell's roads. Improvements to Queen Anne's corner and Route 53 to the Grove Street intersection are underway and partially completed. The regional Route 53 corridor study has also been assessing the land use and transportation interactions along the corridor. The study provides Norwell with a clear opportunity to bring proposals for common development standards to be instituted as much as possible along the length of the corridor. The recommendations for Route 53 made in the Economic Development section of this Plan are intended not only to improve the appearance of the road but to enhance its function by reducing the number of curb cuts in order to reduce the number of vehicles entering and exiting the traffic flow.
- Preserve the character of Route 123/Main Street through inclusion in MassHighway's Community Roads Program. The Massachusetts Highway Department has begun design on a road improvement project for Main Street east of the town center. Conceptually, the design incorporated several elements that Norwell citizens have requested in Master Plan meetings: traffic calming at selected intersections, a safe pedestrian route along the road, and a shoulder usable as a bicycle path. However, the design also included elements that many town residents found destructive of the road's character: elimination of many curves, excessive widening with accompanying elimination of trees, and a curbed sidewalk directly adjacent to the roadway. Through the efforts of a citizen committee, the town requested that the project be included in the Community Roads Program, which exempts roads like Main Street that pass through historic and conservation areas from certain stringent engineering requirements that would result in loss of character. Residents are concerned that road straightening will increase traffic speeds and that a curbed sidewalk is out of character with Norwell. Since land acquisitions and permanent or temporary easements are required in various locations, the project is not likely to begin for several years. Continuing contact with the MassHighway designers will be needed to insure that the design will meet the goals of the Master Plan.
- Implement enforcement and traffic calming strategies to reduce speeding and enhance safety on identified routes through town. Norwell residents are concerned about increasing traffic volumes and speeding on cross-town roads. Enforcement actions can help reduce speeding when motorists become aware of enforcement, but drivers will tend to return to the speeds that they see as appropriate for the road conditions. Installation of stop signs may provide only limited benefit. In contrast, traffic calming elements at strategic locations can moderate speeding and discourage high-speed cut-through traffic without constant enforcement, stop signs, or traffic signals and at limited expense. Traffic calming strategies can include narrowing of wide intersections, small traffic circles, raised crosswalks or speed tables, chicanes and other elements. The typical cost for installation of a traffic calming element ranges from \$5,000 to \$20,000. The appropriate traffic calming strategies for specific roads and intersections require analysis of each location.

An effective traffic calming strategy has the following characteristics:

- The prevailing speed becomes the desired speed for the road.
- Drivers tend to choose speeds within a narrow speed distribution.
- A constant speed is possible over the entire project length.
- It is compatible with all transportation modes.
- It is effective 24 hours a day.
- It is inexpensive to build and maintain.
- There are no parking impacts.
- Convenient access to adjacent streets and properties is maintained.
- There are no negative emergency response impacts.







Traffic Calming Strategies

Source: Reid Ewing, *Traffic Calming: State of the Practice* (Washington, DC, 1999).

- Provide safe pedestrian and bicycle paths on busy roadways. Norwell residents want to be able to walk and bike safely in town. The Green Network element of the Implementation Plan provides detail on action items to create pedestrian and bicycle networks. These networks should include safe pedestrian and bike access on existing roadways and the town should ensure that in any road redesign there is provision for a safe pedestrian path and sufficient room for safe bicycle travel.
- Establish a public works asset management system to support a program of regular road maintenance and improvements. Norwell's management of its public works assets is under the responsibility of the Highway Surveyor and divided between two divisions at separate locations: the Highway Department and Trees and Grounds. Public works assets include roads, sidewalks, storm drains and drainage systems, water systems, signs and signals, bridges and dams, guard rails and street trees. Currently Norwell has no formal asset management system and maintenance decisions depend on resident requests and the knowledge and experience of individuals

who have a long history in the town, rather than systematic record keeping. A modern public works asset management system is a cost-effective way to keep roads and other assets in good repair. Communities similar in size to Norwell are increasingly adopting asset management systems. The system would allow Norwell to predict maintenance needs, set priorities, and program funds accurately. Implementation of an asset management system includes the following steps:

- o Develop an electronic database of assets.
- o Select appropriate software from among the varied systems available.
- o Assess the condition of the assets.
- o Map the assets in a GIS (Geographic Information System).
- o Develop a capital improvement plan.
- o Implement the system with regular maintenance and feedback.

VIII. Community Facilities and Services



GOAL:

Provide residents with high-quality government facilities and services

A. Community Agenda – Survey and Public Meeting Results

Norwell residents are pleased with the quality of many important community services according to the Master Plan Survey. The Fire Department, the school system, and the Police Department were all rated Good to Excellent. Trash collection and recycling, and the Water Department were also rated Good. Recreation areas and programs, road maintenance, regulation of septic systems, and activities and facilities for youth and for seniors were all rated as better than Adequate. A number of residents expressed particular interest in creation of a community center to host activities and to provide more opportunities for residents to get to know one another and a build a sense of community identity.

B. Trends and Challenges

For a town of its size, Norwell provides its residents with a generally high level of services. The Town has been making a substantial investment in its physical facilities, notably the new middle school and renovation of the high school, Cole School and Vinal School, and construction of a new fire department. A decision on the reuse of the Sparrell School building is yet to be made. The Police Department currently has the least modern quarters, lacking handicap-accessibility, facilities for women, and updated communications technology. The Highway Department and Tree and Grounds Division are in separate locations. Water supply and water quality are the most important infrastructure concerns for the town.

1. Public Water Supply.

Norwell is served almost entirely by a municipal water supply system. The system serves over 3,200 customers who use an average of 1 million gallons of water per day. In total the system pumps approximately 337 million gallons per year, with peak demand coming in June, when daily demand doubles on average to 2 million gallons per day. The water system is managed by a superintendent who reports to an elected three member Board of Water Commissioners.

The town's water supply system is currently made up of eleven groundwater wells with five active well fields. The town has a permit from the state Department of Environmental Protection to pump a maximum of 1.35 million gallons per day from the Boston Harbor and South Coastal Aquifers. Water is pumped from the wells to a central treatment facility. Three storage tanks and 83 miles of pipe make up the distribution system.

The town's wells are located in relatively shallow aquifers that are susceptible to contamination. The town has mapped its wells and associated wellhead protection areas. An Aquifer Protection overlay district bylaw is in place that restricts uses over Zone 2 and Zone 3 of the Aquifer. Nitrates have been found in the town's water, indicating areas of failed septic systems or fertilizer runoff.

Water Supply Issues. Four wells draw from the Weir River watershed, which is taxed as a water supply source and an aquatic habitat. Norwell is currently withdrawing less than its permitted volume from the Weir River sub-basin but the lack of conservation or improvement in water recovery efforts by other users could have an adverse impact on Norwell's ability to use the Weir River watershed as a water supply. The Town's recently prepared Water System Master Plan found that without improvements to the system, including water conservation measures and identification of new water sources, the water supply would be inadequate by 2020 based on an average buildout of 35 single family homes a year and assuming a somewhat higher average household size than recorded in the 2000 census.

2. Public Works

The Highway Department, which has an elected Director, is responsible for town roads, drainage, cemeteries, dams, bridges, trees and grounds. The department has a staff of ten, evenly divided between highway and the tree and grounds departments, each at a separate location. The Trees and Grounds Department is

responsible for the maintenance of one active, one closed and one new cemetery, all recreation fields and all public building grounds including schools. As noted in the previous chapter, there is no comprehensive asset management system in place.

The Norwell Highway Department is responsible for maintenance of approximately 90 miles of roadway, street sweeping, catch basin cleaning, and sign maintenance. Most road maintenance is funded by state Chapter 90 monies and there is no formal pavement management program used by the department. Roadways are selected for maintenance based upon the Highway Supervisor's knowledge of the town and the condition of its roadway system. No recent evaluations of roads, drainage, dams or bridges (including culverts) have been undertaken. The limited amount of funding provided for asset protection will diminish the condition and limit the length of service for these systems. Ultimately, without sufficient support for ongoing maintenance, substantial funds will be necessary to either replace or improve these systems.

The Permanent Drainage Committee has identified drainage issues town-wide and is assisting the Highway Supervisor in the identification of projects to be completed with a \$125,000 town-funded budget. The Committee has also established regulations regarding drainage calculation methodologies and design standards. The town has numerous culvert structures, which are considered part of its drainage system, one bridge, and two dams (one at Jacobs Pond and one at Bound Brook Pond).

The Highway Department is working with the Permanent Drainage Committee, the Water Department, the Conservation Commission and the Groundwater Study Committee on implementation of the EPA Phase II Stormwater regulations. As part of this program, the Town must, at minimum, map its outfalls for testing under the illicit discharge elimination program. No map of the system exists although the town does own recent aerial photos.

The General Accounting Standards Board now requires, for the first time, that communities value their infrastructure assets such as roads, bridges, dams, drainage and water systems. Communities can use either a straight line or modified approach to asset management. The compliance schedule depends on the size of the community, which is based on total tax revenue. Norwell will have to comply with this rule.

3. Facilities and Services

Police Department

The Police Department houses all police functions in addition to the Emergency Communications staff made up civilian dispatchers responsible for the implementation of the 911 system in Norwell. With twenty-four professional staff including the chief, sergeants and patrolmen, the town meets and slightly exceeds the national standard. Police activity in Norwell is typical for a community of its size, location and demographics. Traffic violations and accidents tend to be the most significant activity due to increased traffic volumes associated with employment centers and commercial activity, particularly in the western end of town and along the Route 53 corridor. There are few incidents of serious crime in Norwell and of all the categories of incidents recorded each year, the largest number tends to be for investigations of protective alarms.

The Norwell Police Department has undertaken several major initiatives to increase community education and awareness of the department. These include the establishment of a comprehensive web site at

www.norwellpolice.com, a Community Policing program, a Citizen Police Academy, a Bike Patrol and the D.A.R.E. program to fight drug abuse in teens. The police department also has initiated a professional development program for its officers.

The existing police station does not meet the current needs of the department. Its size, age and organization do not allow for the proper organization of functions, it is not handicapped accessible and has no facilities for women. The department's radio system needs upgrading and it would be beneficial to have laptop computers available in police cruisers so that patrolmen can enter accident data on line as well as other crime information for easier and more accurate record keeping.

Fire Department

With a relatively new fire station headquarters on Washington Street, a full staff, and equipment in good to excellent condition, Norwell's fire department has no major problems. The Town has been following its capital improvement program to maintain and replace equipment as required. Because Norwell has responsibility to provide fire and ambulance service along seven miles of Route 3, the wide variety of materials that are transported along this highway and the potential for severe accidents can put stress on the department.

Public Library

The Public Library provides a wide array of services and is open six days a week, including three days with evening hours. Support from a Friends of the Norwell Library group helps the Library keep its excellent standard of service.

4. Public School System

Norwell's \$54 million school construction and rehabilitation program is nearly complete, the first major school renovation project in Norwell in twenty-five years. Major components of the program include renovations to the Cole and Vinal elementary schools, the construction of a new middle school, and the demolition of the Goldman School and the 1954 Sparrell School addition. At the completion of the construction program, the four school buildings -- two elementary schools, one middle school and one high school—will have a total enrollment capacity of 2,290 students, 227 more seats than required by the 2,063 students enrolled in the 2003-2004 academic year. Enrollment is expected to peak around 2006 before entering another cyclical decline.

5. Town Property

Norwell has been considering for some time how best to use the Sparrell Building and the Osborne Building. The preferred direction at this time is to consolidate town offices, school department offices, and the recreation department in the Sparrell Building. The Osborne Building will then be available for other uses. The town also owns some vacant lands that may be suitable for uses that meet public goals. The two most pressing needs identified during the Master Plan process were town contributions to creation of affordable housing and a community center. The town needs a detailed and comprehensive evaluation of its service and facilities needs and the potential for meeting those needs with town property.

C. Action Plan

Water System

- Implement the recommendations of the Water System Master Plan
 The recent Water System Master Plan prepared by Coler and Colantonio recommended improvements in the water supply and distribution system and in facility maintenance.⁹
 - Water supply. The Water Master Plan states that current sources are inadequate to meet present and projected demands through 2020. Major recommendations include development of Well No. 11 (which is underway); water audit and conservation programs; and identification of new water supplies and development of wells and pumping stations. The population projections used by the Plan are higher than those by state and regional agencies and do not take into account development capacity or population characteristics. They are based on a linear projection of an average of 35 new connections per year between 1982 and 2000 and an average household size slightly higher than in the 2000 Census data. They may therefore somewhat overstate future demand.
 - Water distribution. The Plan recommended distribution system improvements to eliminate lowpressure problems, improve fire-flows, eliminate bottlenecks and reduce headloss within the system.
 - <u>Facility maintenance</u>. The Plan details a set of preventive maintenance, routine maintenance, and water conservation programs.
- Regularly review the aquifer protection ordinance. Aquifers in Norwell are relatively shallow and susceptible to contamination. The town's aquifer protection ordinance should be reviewed regularly to evaluate the level of effectiveness it provides with respect to groundwater protection.
- Prioritize parcels for acquisition of land or conservation restrictions within the Zone II for wells.
- Pursue neighborhood master plans for septic system trouble spots and funding for mitigation projects.
- Improve maintenance of catch basins and roadside swales draining into nearby streams.
- Explore comprehensive management of septic systems, starting with GIS mapping and record keeping tied to the parcel database.
- Support use of package treatment plants to reduce groundwater contamination in Zone II's of public wells.

Public Works

- Adopt a public works asset management system. As described in the previous section, asset management would
 include not only roads but other assets that currently receive no systematic evaluation for maintenance needs
 such as the town's culverts, dams, and bridge.
- Consolidate responsibility for maintenance of all town property and infrastructure (excluding the Water Department) in one Public Works Department and consider changing the Public Works Director job from elected to appointed. Norwell's public works responsibilities are divided among several administrative divisions and locations. The Highway Department and Lands & Natural Resources (also known as the Tree and Cemetery

⁹ Water System Master Plan, Draft, March 2002.

Department) are both headed by the same elected official. Public works administrative staff is located at the Town Offices, while the highway maintenance facility and the Tree Department are at separate locations. In addition, several committees are concerned with public works: the Drainage Committee, the Cemetery Committee, the Permanent Building and Maintenance Committee, and the Recycling Committee. Combined with adoption of a public works asset management program, consolidation of the public works maintenance responsibilities in one Department of Public Works would provide more efficient services. This consolidation would put roads, drainage, trees and grounds, trash and recycling, snow removal, cemetery work, and bridges and dams under the authority of one departmental director. If possible, maintenance facilities should be consolidated in one location. The Town may also wish to consider making the director's job an appointed, staff position rather than an elected position.

Town Facilities and Property

- Prepare a comprehensive study and evaluation of all town facilities needs and town-owned property for appropriate uses.
 - Inventory and evaluate town lands for current or future use or for disposition. The Town owns
 parcels of land scattered around town. Many are not buildable because of wetlands or are
 inholdings, but other parcels may be suitable for town facilities, recreational uses, or scattered site
 affordable housing.
 - Study potential uses for the Osborne Building and site, including affordable housing and a community center. If consolidation of town offices, school department offices and the recreation department occurs, then the Osborne Building would become available for other town uses. Although there has been some discussion of selling the building, there are potential uses for the property that should be considered. In the Master Plan survey and the community meetings, there was considerable interest expressed in creating a community center. Meeting space for community events is at a premium. Another possible use of the property is for affordable housing. The Town does not own many buildings and sale of the Osborne Building would diminish the Town's flexibility in providing new services or contributing to the creation of affordable housing
 - O Plan for a future new police station and technology. The police station needs upgrading to meet modern requirements for handicap accessibility, restrooms, and space. Police communications equipment could benefit from improvements. Purchase of a speed monitoring trailer for the department to be placed at critical locations throughout the community would help enforcement of speeding limits.

Planning Management

Provide administrative support for the Town Planner. Because more proactive policies and regulations require more professional guidance, allowing the Planner to spend more time on complex issues while assigning routine administrative work to a staff person would benefit the town and enhance implementation of the Master Plan.

IX. Land Use and Growth Management II



Norwell is now a maturing suburban community, trying to preserve its community character while accommodating changes and new opportunities. This is not the first time the town has been transformed while trying to remain true to a core sense of identity. During the postwar suburban boom, Norwell experienced much more drastic change than it has in recent years. Drawn closer into the orbit of Boston by the construction of Route 3, Norwell became a bedroom suburb. New residents were attracted by the rural ambiance and a landscape of woods and fields threaded by streams, ponds and wetlands. As many of the newcomers built houses or moved into new developments, they appreciated the scattering of historic homes reflecting the Town's history of shipbuilders, merchants and farmers and the simple New England calm of the village center. Two generations of Norwell residents created a community with a strong school system and municipal services and worked to preserve the natural resources and natural beauty of the Town that contribute so much to its quality of life.

Now Norwell faces different challenges. Much of the Town is already developed along major roads and in subdivisions. Remaining developable lands are scattered throughout the Town, not concentrated in a particular area. Although the pace of development is still lower than during earlier waves of suburbanization, residents experience this development as more threatening because open space becomes more precious as it diminishes. Each new house filling in a frontage lot and each new subdivision has a greater relative impact on remaining open space than was the case some years ago. Newer houses often are more noticeable to the public as a whole because they tend to be much larger and construction results in greater destruction of natural landscape. As the Town moves closer to buildout, the cumulative impacts of houses, pavement, lawns, and septic systems on the Town's network of wetlands and other environmentally sensitive areas must be managed more carefully. Families and individuals live different lives than they did thirty or forty years ago, driving more and putting greater demands on town government.

At the same time, Norwell's attractiveness as a community has resulted in rising housing prices. The town has become aware of a deficit in permanently affordable housing as well as a lack of enough diversity in housing types. There are few options for elderly residents who might want to downsize their housing while staying in Norwell or for young people starting out in life. Because Norwell does not meet the Chapter 40B goal of 10 percent permanently affordable housing, developers have proposed five new 40B projects with ownership units to add to the

two already constructed. This approach to creating affordable housing produces three market rate units for every affordable unit, adding to resident concerns about the impacts of housing development.

A. Future Land Use Plan

The Future Land Use Plan is designed to implement conservation and management of the natural, cultural and recreational priorities identified by the Green Network planning process, while identifying areas that can accommodate development. Because most of Norwell is residential, the impacts of housing development are of most concern, and there is no expectation that additional areas will be zoned for non-residential development, the Future Land Use Plan focuses on the majority of the town that is residentially zoned. In each of the three Green Network resource categories, important areas and connecting corridors were identified. The Composite Priorities Map shows overlays of these areas to identify where the highest concentration of priority resources occurs. The Future Land Use Map groups residential parcels into four basic categories:

- Lands that are already permanently protected
- Lands that are built out according to zoning or are unlikely to be further developed because of parcel configuration or other site constraints
- Lands that are environmentally sensitive and should be protected or managed for environmental purposes
- Lands that are suitable for development, through conservation subdivisions, flexible development or through conventional subdivisions.

Lands that are already protected or built out need relatively little attention from the town. It is in the last two categories, environmentally sensitive lands and lands suitable for development, that the town needs to have oversight or take appropriate action to attain the town's land use goals.

Environmentally Sensitive Lands to be Protected

Sensitive parcels proposed for permanent protection cannot be developed without unacceptable impacts to sensitive resources. Many are parcels with extensive wetlands or are key links between or extensions of existing protected lands. Another group of environmentally sensitive lands are unlikely to be further developed, but private landscape practices on these lands, such as clearing trees, could have negative impacts on the critical Green Network resources. Many of these areas are long, thin parcels that extend from their road frontage to back up on wetland areas or to the marshes along the North River. Ideally, property owners would establish a permanent conservation easement or a type of voluntary commons though a management agreement governing these parcels. The easements or management agreements would have appropriate guidelines to protect the particular resource at hand. The lots remain in private ownership, but the town would maintain some level of oversight on future alteration. Since most of these areas could not be developed anyway, due to wetlands, protected river setbacks, or other constraints, the landowner does not give up anything in the way of value, and stands to gain considerably from the stability and protection of resources that result from a group of neighbors agreeing on a common management plan. The Conservation Commission could assist neighbors in setting up these agreements and deciding on the appropriate management guidelines for particular areas.

Lands Suitable for Development

Parcels that are suitable for development are divided into two categories. Some parcels are appropriate for one-acre, conventional development as provided for in the town's current zoning bylaw. Parcels of 5 acres or more are designated for Conservation Subdivision Development, as recommended in the chapter on residential development. Some smaller parcels are recommended for Flexible Development because they are located near sensitive resources and more flexible site planning would be beneficial.

B. Composite Priorities Map

The Composite Priorities Map shows the areas in Norwell that should be managed with particular interest and care because of the overlap of important environmental, cultural and recreational resources. These include natural corridors along the rivers and streams, important cultural landscapes that are woven among them, and opportunities for trails and recreational access that connect people to these unique landscapes.

C. Future Land Use Map

This map is based on the previous Buildout Status Map in which each parcel was color-coded to represent its current and potential level of development under existing zoning. The foundation of this map is the set of parcels that cannot be further developed. There are 3,655 protected or built-out parcels for which the future is fairly clear. Absent a wholesale rezoning of the town, they are not likely to change very much, other than small houses being replaced by larger ones and new businesses coming in to replace old ones. Existing Protected Lands, shown in light green, include municipal conservation and water department lands, private conservation parcels, and Wompatuck State Park. Shown in light or dark gray are parcels in industrial and commercial use, mostly in the western part of town. For the purposes of this map, these nonresidential parcels are treated as largely built-out, though they could have more intense development if sewer connections or other wastewater solutions are pursued, as discussed in the economic development chapter of this Plan. School department and miscellaneous town-owned lands are shown in brown and purple, to indicate that they could conceivably be further developed for municipal facilities or affordable housing.

Residential parcels that cannot be further developed are shown in red. These built out parcels have a house on less than two acres, and thus cannot be further subdivided under current zoning. Shown in orange are those parcels larger than two acres with a house, but not likely to be further subdivided due to limited access or lot width, development constraints such as wetlands, existing development such as an "estate-style" home, or some combination of the above.

There are some 608 parcels where the future is not yet decided and they are proposed for protection, environmental management, or are deemed suitable for development:

- Permanent Protection. The Proposed Permanent Protection category, colored dark green on the map
 and where development is not advisable because of sensitive resources or linkages, includes 195 parcels
 totaling 1296 acres, of which nearly half are wetlands.
- Conservation Easements or Agreements. The category of Proposed Easements or Voluntary Agreements includes 566 parcels, totaling 2264 acres, colored blue on the map.
- Conventional Development. Parcels that can be developed under current zoning with little or no impact to sensitive resources were placed in the category of suitability for Conventional Development and colored light orange on the map. These include infill properties within existing developed neighborhoods, and some frontage and subdivision lots on the outskirts of town. With 199 lots totaling some 271 acres, these are primarily small building lots, not likely to be further subdivided.
- Conservation Subdivision/Flexible Development. In areas where standard development practices would tend to destroy or erode the quality of natural or cultural resources, parcels were placed into the category of Conservation Subdivision/Flexible Development, shown in yellow. The Conservation Subdivision /Flexible Development category includes 214 parcels, of which 37 already have a house but which are large enough to be further subdivided.

Parcels under five acres would be appropriate for Flexible Development. Some are relatively small: 55 are between ¾ acre and two acres. (Parcels less than one acre are included because there is the possibility that small lots may be consolidated into larger parcels. The smaller lots could also be considered for scattered-site affordable housing, as discussed in the housing chapter.) On these smaller parcels, the house and driveway could be located to minimize impacts on sensitive resources or to allow a trail connection across a portion of the property. Another 45 parcels are between two and five acres. Even for these relatively small parcels, flexibility in setback and frontage requirements and the use of common driveways could go a long way in helping to preserve and enhance a townwide Green Network.

Parcels over 5 acres are proposed for Conservation Subdivisions. This category includes 61 parcels between 5 and 10 acres, 39 between 10 and 20 acres, 11 between 20 and 30 acres, one at 44 and one of 50 acres. Assuming that conservation subdivision techniques were applied to all the parcels in this category, about half of the total 1500 acres in this category would be preserved as open space, all without public expenditure or loss of tax base.

D. Managing growth to preserve community character

In order to preserve, Norwell needs to innovate. Continuing the same ways of doing things as in the past will not help Norwell protect the quality of life and community character so important to residents because the conditions have changed and the town has entered a new stage. This Master Plan provides the elements of an integrated growth management approach that will help Norwell achieve the goals enshrined in the Vision Statement. Norwell needs to pursue a balanced combination of strategies that support the town's environmental and historic character while accommodating changes. Focusing just on protection of water resources, or on open space

protection, or on building up the nonresidential tax base, or on zoning changes will not meet the community's multifaceted needs. Elements of an integrated growth management strategy that have emerged through the planning process include:

- Identification of a Green Network of natural, cultural and recreational resources. The Green Network is the foundation of an environmental and open space preservation and management system. It should be used not only by boards and commissions charged with resource protection or open space planning, but also to guide development, so that it complements the assets that make Norwell such an attractive place to live.
- Tools for shaping development to conserve open space and be compatible with community character. Norwell will still see some additional development. As the Town gets closer to the final increments of development, it needs to establish new ways of to accommodate it in order to preserve the character established by older settlement patterns. Conservation Subdivision development is much more likely to help Norwell retain its remaining semi-rural character than a continuation until buildout of conventional development patterns.
- Tools for meeting affordable housing goals in ways compatible with town character. By taking on a proactive affordable housing policy, rather than reacting to Chapter 40B proposals, Norwell can shape affordable housing to fit its own needs and patterns while still meeting state goals. Appropriately sited and designed rental projects and small-scale scattered-site affordable housing, as well as a range of other approaches, can help the town integrate affordable housing harmoniously into the community. The existing housing stock and neighborhood patterns mean that housing in Norwell will continue to be overwhelmingly characterized by substantial, single-family homes on their own lots. By including some diversity of housing types and permanent affordability, Norwell's residential character will not change.
- Economic development strategies to increase the tax base. Norwell is lucky to have the industrial and commercial parks located at the northern end of Route 3 and Route 53. If the Town is to increase non-residential tax revenues, this is where the opportunity lies. As a long-term strategy, the Town can allow additional density, contingent on sewer or other wastewater improvements, in order to attract higher value development.
- Economic development strategies to enhance quality of life. Route 53 and Norwell Center can better serve Norwell residents if more attention is paid to site design, traffic and parking management, pedestrian needs, and creating a climate that attracts desired businesses.
- Strategies to enhance mobility throughout the Town. Although management of traffic congestion, enhanced enforcement, and installation of traffic calming measures are all important, creation of a town-wide network that allows residents of all ages to move around town safely on foot and bicycle as well as in a vehicle will improve everyone's quality of life.

X. Ideas into Action: Implementation and Monitoring

GOALS:

- Use the Master Plan vision and goals to guide town decision-making
- Develop specific bylaws to implement Master Plan recommendations and achieve the goals
- Review and update the Master Plan regularly

A. Stewardship of the Master Plan

A Master Plan is a guidance document for town decision-makers. Because it is a long-term blueprint, it cannot anticipate all future conditions. It is important that a designated group of residents be given the responsibility to be stewards of the Master Plan. A Master Plan Committee appointed by the Board of Selectmen or the Planning Board and made up of residents who do not have other responsibilities can monitor progress on implementation of the Plan, identify obstacles to implementation or changed circumstances that may require a change in the Plan, and report annually to the Planning Board, Board of Selectmen, and Town Meeting.

Every five years, the Master Plan Committee should sponsor public meetings on the Master Plan to present the Plan and progress towards implementation to residents and ask for review, confirmation, or revision of the vision, goals, policies and major implementation directions. If major changes to the plan are deemed advisable, then the Committee should present the proposed changes to the Planning Board, Board of Selectmen and the boards or commissions that are most affected for their advice and review, and to Town Meeting for discussion and, if needed, a vote.

ACTION PLAN

- Create a Master Plan Implementation Committee. The Planning Board should appoint or seek appointment by
 the Board of Selectmen of a Master Plan Implementation Committee made up of seven residents to serve for
 three-year renewable terms.
- Provide staff support for the Master Plan Implementation Committee. The Town Planner should staff the Committee to assist the members in their work.
- Make annual reports on implementation progress. Each year the Master Plan Implementation Committee should
 prepare a report to the Planning Board, Board of Selectmen and Town Meeting on implementation progress and
 base that report on a survey of relevant town staff, decision-makers and boards and commissions.
- Organize a public review of the Plan from time to time. Every five years the Master Plan Implementation
 Committee should prepare a simple presentation on the Plan's vision, goals, and policies, as well as
 implementation progress, for discussion at two public meetings. The Committee should then report on the
 results of those meetings to the Planning Board, Board of Selectmen and Town Meeting.

Based on the public review, make any needed changes. Changes to the Plan after the five-year review should be
made by Town Meeting with the advisory opinions of the Planning Board, Board of Selectmen and relevant
boards

B. Action and Implementation Plan by Topic Area

Natural and Cultural Heritage, Open Space and Recreation: The Green Network			
Objective	Task	Implementers	Cost H = High M = Medium L = Low
SHORT TERM ACTIONS (up to 2	? years)		
Permanently protect critical ecological systems	Prioritize parcels for acquisition of land or conservation restrictions to buffer sensitive ecological resources	Conservation Commission (Con Comm): Planning Board, Volunteers	None to Low
	Consolidate data on local ecological systems and continue GIS mapping in greater detail.	Conservation Commission	None (Volunteers) or M (consultant)
Protect the quality of subsurface water supplies and surface streams and water bodies.	Prioritize parcels for acquisition of land or conservation restrictions within Zone II for wells.	Water Dept.	L (Staff)
	Promote environmentally-sensitive landscaping, particularly planting of smaller lawns with diverse, drought-tolerant grass species, and reduced use of fertilizers.	Con. Com	L (Volunteers)
	Support use of package treatment plants to reduce groundwater contamination in Zone IIs	Planning Board; Board of Health	None
	Establish conservation Subdivision zoning to reduce overall impervious surfaces	Planning Board; Town Meeting	None
Protect the quantity of water supplies by managing withdrawals and preserving surface flows and recharge of groundwater	Monitor the potential for increased water supply demand from future residential development and implement the measures recommended in the Water Supply Master Plan	Water Dept.	М

Natural and Cultural Heritage, Open Space and Recreation: The Green Network			
Objective	Task	Implementers	Cost H = High M = Medium L = Low
Promote public education and outreach to build understanding of natural resource values and enhance support for protection and stewardship activities	Work with local, regional and statewide environmental organizations on public education about natural resources and conservation restrictions	Con. Com	None (Volunteers)
	Consider formation of a Third Herring Brook Watershed Associations	Volunteers; North and South Rivers Watershed Association	None (Volunteers)
Pursue coordinated planning, conservation and management of cultural resources.	Develop historical maps to better define historic patterns of development.	Historic Commission	L (Volunteers, possible consultant)
	Design and install signage for historic buildings, sites, districts and roads	Historic Commission	L (Volunteers, possible consultant, fabricator)
	Explore creating a Local Historic District or a Neighborhood Conservation District in the Village National Historic District area to provide regulation of external changes to properties.	Historic Commission	L
	Explore enactment of a local historic landmark bylaw (including a requirement for agreement by property owners) to regulate external changes to especially important individual properties.	Historic Commission	L
	Transfer the Demolition Delay Bylaw from the Zoning Bylaw to the General Bylaws	Historic Commission	L
	Continue working with private owners to prepare house histories and historic plaques	Historic Commission	L
	Promote Preservation Restrictions for buildings and sites of exceptional historic value.	Historic Commission	L
	Continue a systematic inventory of historic resources.	Historic Commission	L
	Promote private restoration and conservation of historic structures and surrounding landscapes.	Historic Commission	None (Volunteers)

Objective	Task	Implementers	Cost H = High M = Medium L = Low
	Review status of existing scenic roads and consider others for designation.	Planning Board	None (Volunteers)
Create a master plan for recreational development.	Review and improve access, parking and signage for North River access points	Recreation Commission, Planning Board	L (Staff, possible consultant)
Develop a detailed master plan for pedestrian circulation, including sidewalks, paths, and trails.	Revive the pathways committee and seek grant funding for plan development	Joint Boards and Commissions; Recreation Staff	L Staff time with volunteer assistance.
	Continue to incorporate sidewalk installation and improvements into ongoing roadway maintenance and private development projects.	Planning Board	None
Pursue detailed design and construction for the Norwell Bike path, with bike lane extensions to neighboring towns.	Work with pathways committee to identify funding for plan development, acquisition of land and/or easements.	Planning Board, Recreation Commission	L (Staff and Volunteers)
	Form Bikeway Boosters organization to build citizen support and oversee plan development; possible expert help with outreach and education for landowners and taxpayers.	Planning Board, Recreation Commission	L (Staff and Volunteers)
	Establish policy to coordinate bike lane development with design and construction of roadway improvements.	Board of Selectmen	None
MEDIUM TERM ACTIONS (2 year	rs - 5 years)		
Permanently protect critical ecological systems	Complete town-wide survey and certification process for vernal pools	Conservation Commission	None (Volunteers)
	Pursue education and outreach for ecological resources, especially with neighborhood involvement in stream and swamp conservation.	Con. Com., South Shore Natural Science Center	L to M (Science Center; Volunteers)

Natural and Cultural Heritage, Open Space and Recreation: The Green Network			
Objective	Task	Implementers	Cost H = High M = Medium L = Low
Protect the quality of subsurface water supplies and surface streams and water bodies.	Pursue neighborhood master plans for septic system trouble spots, and funding for mitigation projects.	Board of Health	L to M
	Establish stream teams for brooks and creeks	Conservation Commission	L
Protect the quantity of water supplies by managing withdrawals and preserving surface flows and recharge of groundwater	Manage potential use conflicts with private wells in Zones II and III of municipal wells	Water Dept.	L
Promote public education and outreach to build understanding of natural resource values and enhance support for protection and stewardship activities	Develop signage program for local streams, swamps and hills; labeling of catch basins, etc.	Conservation Commission	None to L (Volunteers)
Pursue coordinated planning, conservation and management of cultural resources.	Expand inventory of historic properties to include sites over 50 years old, historic landscapes and roadways.	Historic Commission	L (Volunteers, possible consultant)
	Develop management program and outreach materials for scenic roads and their residents.	Planning Board	L (Volunteers, possible consultant)
Create a master plan for recreational development.	Inventory parking areas and plan for development of new parking.	Recreation Commission	L (Staff, possible consultant)
	Prepare inventory of potential sport field sites, based on construction suitability, with preliminary cost/benefit analysis.	Recreation Commission	L to M (Staff, possible consultant)
	Promote neighborhood involvement in planning for playgrounds and pathways in each area of town.	Recreation staff and Commission	L to M (Staff time with volunteer assistance, and/or consultant.)

Natural and Cu	Itural Heritage, Open Space and Recreation	on: The Green	Network
Objective	Task	Implementers	Cost H = High M = Medium L = Low
Develop a detailed master plan for pedestrian circulation, including sidewalks, paths, and trails.	Develop temporary on-road bicycle routes, with signage, maps of existing routes and future bikeway alignment, and guidance for safe use	Trails Committee	L (Volunteers)
	Develop detailed layouts for major trail spines, including North River Trail, 3rd Herring Brook-Wompatuck trail, and 2nd Herring Brook-1st Herring Brook Trail.	Con. Com and Recreation Dept.	L (Volunteers)
	Coordinate planning for major trails with neighboring towns, especially connections to Wompatuck, Hanover Greenway, and First Herring Brook Watershed Initiative trail plans.	Joint Boards and Commissions; Recreation Staff	L (Volunteers)
Pursue detailed design and construction for the Norwell Bike path, with bike lane extensions to neighboring towns.	Coordinate planning and application for funding with neighboring towns, especially Hanover Greenway, Scituate Bike Path, and development of commuter rail station at Greenbush.	Planning Board, Recreation Commission	L (Volunteers)
LONG TERM ACTIONS (5+ years)		
Protect the quality of subsurface water supplies and surface streams and water bodies.	Explore comprehensive management of septic systems, starting with GIS mapping and record keeping tied to parcel database.	Board of Health	М
Protect the quantity of water supplies by managing withdrawals and preserving surface flows and recharge of groundwater	Protect First Herring Brook as the headwaters of Scituate's water supply	Con Comm	L
	Protect Bound Brook Pond and the headwaters of Cohasset's water supply	Con Comm	L

Natural and Cultural Heritage, Open Space and Recreation: The Green Network			
Objective	Task	Implementers	Cost H = High M = Medium L = Low
	Protect the east end of Route 123 as it affects Scituate's water supply.	Con Comm	L
Promote public education and outreach to build understanding of natural resource values and enhance support for protection and stewardship activities	Update Cap'n Bill Vinal's materials about the natural history of Norwell	South Shore Natural Science Center	L to M (Foundation Grant; Graduate Student)
Pursue coordinated planning, conservation and management of cultural resources.	Explore historic district designation for Ridge Hill, Church Hill, Mt. Blue neighborhoods.	Historic Commission	None (Volunteers)
	Develop interpretive program and guidebook for North River and each of the historic neighborhoods.	Historic Commission	L (Volunteers, possible consultant)
	Secure conservation of remaining farms and heritage landscapes; work with landowners on long-term maintenance and conservation/restoration of historic elements.	Historic Commission, Con. Com., Planning Board	L (Volunteers)
	Map scenic viewpoints and reestablish historic overlooks with judicious tree pruning and plans for public access.	Planning Board	L (Volunteers)
Create a master plan for recreational development.	Develop consistent site signage and outreach materials	Recreation Commission	L (Staff, possible consultant)
Develop a detailed master plan for pedestrian circulation, including sidewalks, paths, and trails.	Continue to Incorporate sidewalk installation and improvements into ongoing roadway maintenance and private development projects.	Planning Board	None
	Develop maps and interpretive materials describing natural history along major trails.	Con. Com., South Shore Science Center, Volunteers	L (Volunteers or consultant)

Natural and Cultural Heritage, Open Space and Recreation: The Green Network			
Objective	Task	Implementers	Cost H = High M = Medium L = Low
	Develop maps and interpretive materials describing cultural features and historic sites along major trails.	Historic Commission	L (Volunteers or consultant)
Pursue detailed design and construction for the Norwell Bike path, with bike lane extensions to neighboring towns.	Develop temporary on-road routes, with signage, maps of existing routes and future bikeway alignment, and guidance for safe use.	Planning Board	L (Volunteers, possible consultant)

Residential Development: Community Character			
Objective	Task	Implementers	Cost H = High M = Medium L = Low
SHORT TERM ACTIONS (up to 2	years)		
Improve site design requirements and review for new housing to minimize visually and environmentally intrusive site infrastructure and clearing of vegetation.	Require that developers include a landscape architect on the development team.	Planning Board	None required.
	Encourage mounded septic systems to be preferably located away from public view, and require that they be graded to have gentle slopes that fit into the landscape or be appropriately screened.	Planning Board, Board of Health	None required.
	Create a scenic corridor overlay district for designated roads to protect roadside vegetation in a 25 foot buffer	Planning Board petition; Town Meeting	None or consultant assistance.
	Establish detailed landscape standards in subdivision regulations	Planning Board	None or legal consultant
Coordinate review of all new development (including ANR lots)	Create a system and a form for building permit applicants to obtain a plan check from all relevant boards, commissions and town departments before issuance of a building permit	Coordinate through Town Planner and Planning Board	Minimal
MEDIUM TERM ACTIONS (2 years	s - 5 years)		
Improve site design requirements and review for new housing to minimize visually and environmentally intrusive site infrastructure and clearing of vegetation.	Establish Conservation Subdivision zoning for parcels of 5 or more acres	Planning Board petition; Town Meeting	None or consultant assistance.
	Establish a Flexible Development Special Permit option for all residential districts allowing exemptions from dimensional requirements without an increase in density	Planning Board petition; Town Meeting	None or consultant assistance.

Residential Development: Community Character				
Objective	Task	Implementers	Cost H = High M = Medium L = Low	
Review large house impacts	Define a "replacement" single family dwelling to include substantial renovations	Planning Board petition; Town Meeting	None or consultant assistance.	
	Adopt a special permit process for Large Home Site Plan Review	Planning Board petition; Town Meeting	None or consultant assistance.	
LONG TERM ACTIONS (5+ years)				
	Monitor implementation of new bylaws to see if they are having the desired effects and make revisions as needed	Town Planner	None	

Residential Development: Affordable Housing			
Objective	Task	Implementers	Cost H = High M = Medium L = Low
SHORT TERM ACTIONS (up to 2	? years)		
Provide a mix of housing options affordable to seniors, town	Reactivate the Norwell Housing Partnership, with new appointments, if needed. Officially communicate the BoS support for the Housing Partnership goals to other boards and commissions.	Board of Selectmen	None required. Seek assistance of the Massachusetts Housing Partnership
employees, and young families sufficient to meet town needs and state guidelines.	Review and revise the mission statement and management structure (officers, meetings, subcommittees) of the Housing Partnership.	Board of Selectmen; Housing Partnership members	None required.
	Pursue EO 418 housing certification	Town Planner	None required.
	Seek technical assistance from nonprofit groups and explore relationships with nonprofit developers and funding sources	Housing Partnership	L
	Continue the agreement with the Norwell Housing Authority used in previous Ch. 40B projects to screen potential affordable housing occupants for eligibility	Housing Authority	L
	Develop design and affordability guidelines for Comprehensive Permit (CH 40B) projects, e.g., permanent affordability, and establish guidelines for "friendly" 40Bs	Town Planner working with Planning Board and Housing Partnership	None required.
	Explore creation of a nonprofit housing developer by the Norwell Housing Authority	Housing Partnership; Housing Authority	Legal advice
	Work towards creation of a Local Initiative Program project	Housing Partnership	None required.
	Work with the Community Preservation Committee on potential projects that combine affordable housing with historic preservation or open space preservation	Housing Partnership; Community Preservation Committee	None required.

	Residential Development: Affordable H	lousing	
Objective	Task	Implementers	Cost H = High M = Medium L = Low
	Explore relationships with the South Shore HOME Consortium with neighboring towns, perhaps through MAPC's South Shore Coalition	Housing Partnership	None required.
	Explore the housing potential of the Osborne Building through a feasibility study.	Board of Selectmen	Consultant for feasibility study.
	Identify town-owned sites and review suitability for scattered - site housing such as duplexes that would fit in with existing character.	Housing Partnership	Volunteer or consultant for detailed feasibility study.
	Seek funding for creation of affordable units and appropriate environmental protections on the Housing Authority's vacant parcel	Housing Authority; Conservation Commission	L
	Consider adopting inclusionary/incentive zoning for subdivisions	Planning Board petition; Town Meeting decision.	None
	File a home rule petition to create an Affordable Housing Trust to hold funds for local affordable housing creation.	Board of Selectmen; Town Meeting	None
	Adopt the state law on tax title properties that provides for forgiveness of taxes owed to developers of affordable housing	Planning Board; Town Meeting	None
MEDIUM TERM ACTIONS (2 yea	rs - 5 years)		
Provide for a fair share of housing options available across a range of	Capitalize the Norwell Affordable Housing Trust	Board of Selectmen, Town Meeting	CPA funds
incomes	Explore funding from banks, church groups, donors, annual appeals for the Affordable Housing Trust	Housing Partnership	None
	Consider a "friendly 40B" on town-owned property through an RFP process for developers	Housing Partnership	None
	Revise zoning to permit deed-restricted affordable accessory apartments by right and do not limit them to family members	Planning Board petition; Town Meeting decision.	None

Residential Development: Affordable Housing			
Objective	Task	Implementers	Cost H = High M = Medium L = Low
	Consider allowing by right small-scale affordable single family homes and duplexes with one affordable unit on substandard, non-conforming lots, subject to site plan review	Planning Board	None
	Consider allowing affordable upper-story apartments above ground floor retail in the Town Center by right	Planning Board	None
	Consider zoning for mixed-use development on Route 53 with incentives for affordable housing	Planning Board	None
	Study the feasibility of tax abatements on existing homes occupied by income-eligible households in return for affordability agreements in deed restrictions.	Housing Partnership	L
LONG TERM ACTIONS (5+ years	s)		
Continue creating affordable units through local and friendly 40B or inclusionary projects.	Monitor existing affordable units to insure continued affordability.	Norwell Housing Authority	L
	Recapitalize the Affordable Housing Trust	Board of Selectmen, Town Meeting	CPA funds; additional appropriation if possible
	Repeat earlier steps to create new units	As earlier	As earlier

Economic Development			
Objective	Task	Implementers	Cost H = High M = Medium L = Low
SHORT TERM ACTIONS (up to 2 y	ears)		
INDUSTRIAL PARKS AND ROUTE 53			
Maximize non-residential tax revenue from existing industrial and commercial areas while protecting town character and quality of life.	Study feasibility and cost of tying industrial parks into the Rockland sewer system.	BoS; BoH; Water Commissioners; consultant	L
	Study feasibility and cost of sewering Route 53 commercial area and residential area west of Route 53.	BoS; BoH; Water Commissioners; consultant	L
	Study potential for and potential impacts of shifting the tax levy burden to nonresidential uses through a split tax rate	Board of Assessors; BoS; possible consultant	L
Improve appearance and function of Route 53 to make it more attractive to business and to residents	Create a Route 53 Committee made up of residents and representatives of Route 53 businesses to advise potential changes and spearhead attention to Route 53 improvements in local and state planning	BoS: Planning Board; Highway Dept.	None
	Work with Hingham and Hanover on establishing common standards for Route 53 redevelopment in the Route 53 Corridor Study. Include reduced number of curb cuts, streetscape improvements, continuous sidewalks, safe pedestrian crossings.	BoS: Town Administrator; Highway Dept.; Central Transportation Planning Staff	None

	Economic Development		
Objective	Task	Implementers	Cost H = High M = Medium L = Low
	Request signal improvements at Queen Anne's Corner, coordinating with Hingham.	BoS; Town Administrator; Highway Dept.	None
Concentrate commercial development and redevelopment in pedestrian- friendly and village-like settings, with internal circulation, parking buffered from the road and adjoining residential areas, and limited curb cuts	Develop a streetscape plan for Route 53 with continuous sidewalks, with marked crossing and pedestrian-activated signals; street trees; improved lighting; landscape standards for the sidewalk edge	Planning Board; Highway Dept.; consultant	L
	Review parking ratios for Route 53 and the industrial parks and improve parking lot design standards. Require screening, parking in rear, smaller parking fields with more trees, shared parking where feasible. Require phasing of large parking fields based on evidence of need for maximum parking, in order to minimize impervious surfaces.	Planning Board; possible consultant	L
VILLAGE CENTER IMPROVEMENTS			
Focus attention on Norwell Village revitalization	Appoint a Vibrant Village Committee made up of business owners, property owners, and neighborhood residents to focus on Village improvements	BoS	None
	Explore a comprehensive wastewater management plan for the town center	BoS	М
Create a sense of arrival in the Village Center and slow traffic approaching the Center	Seek conservation restrictions to protect open fields at Lincoln and Main Streets	Conservation Commission; CPC; Vibrant Village Committee	L-M: donation or purchase; minor tax revenue impact
	Install "Norwell Village" signs on Main Street at Central Street and at Dover Street	Vibrant Village Committee	L; Town funds or donations

Economic Development			
Objective	Task	Implementers	Cost H = High M = Medium L = Low
Improve Village Center appearance.	Develop Village Center design guidelines including signage standards.	Planning Board; grad student or consultant assistance	L
HOME BUSINESSES			
Regulate external signs of home businesses	Revise the home occupations section of the zoning by-law.	Planning Board; Town Meeting	None
MEDIUM TERM ACTIONS (2 years	- 5 years)		
INDUSTRIAL PARKS AND ROUTE 53			
Concentrate commercial development and redevelopment in pedestrian- friendly and village-like settings, with internal circulation, parking buffered from the road and adjoining residential areas, and limited curb cuts	Develop a Route 53 overlay district to promote objectives	Planning Board; Route 53 Committee; town counsel, possible consultant	None to L
Maximize non-residential tax revenue from existing industrial and commercial areas while protecting town character and quality of life.	If tax burden shift (split tax rate) study is favorable, try a split tax rate.	Board of Assessors; BoS	None
	Rezone the industrial parks for higher densities contingent on sufficient sewer or other wastewater capacity	Planning Board; town counsel or consultant; Town Meeting	None to L
	Rezone Route 53 for higher density in village nodes, contingent on sufficient sewer or other wastewater capacity.	Planning Board; town counsel or consultant; Town Meeting	None to L

Economic Development			
Objective	Task	Implementers	Cost H = High M = Medium L = Low
Concentrate commercial development and redevelopment in pedestrian- friendly and village-like settings, with internal circulation, parking buffered from the road and adjoining residential areas, and limited curb cuts	Amend zoning by-law with Route 53 overlay district	Town Meeting	None
Improve appearance and function of Route 53 to make it more attractive to business and to residents	Develop traffic impact project review standards for potential higher-density projects in the industrial parks and Route 53.	Planning Board; Traffic Study Committee; Highway Dept.; possible engineer consultant	L
VILLAGE CENTER IMPROVEMENTS			
Create a sense of arrival in the Village Center and slow traffic approaching the Center	Plant trees in a closely planted allee to the degree that is feasible along the road on both sides of Main Street from Lincoln Street to Center Street and from Bridge Street to Dover Street.	BoS and Planning Board direction to consultant designers; MassHighway or DPW planting	L; Chapter 90 funds; MassReLeaf grant
	Narrow the Main Street/Central Street intersection. Minimize paving by narrowing the roadways as they approach the intersection, reducing the turning radius, and defining the road edges.	Planning Board and Highway Dept direction to consultant designers; oversight from Village Committee	M; Chapter 90
	Connect Norwell Center to neighborhoods and open spaces with safe bike and pedestrian routes.	Trails Committee; BoS	L to M
Improve Village Center appearance and attractiveness to business.	Amend base zoning in Business A to allow for by-right development of small-scale retail as well as professional offices.	Planning Board; town counsel or legal consultant; Town Meeting	L

Economic Development			
Objective	Task	Implementers	Cost H = High M = Medium L = Low
	Develop a Village Center overlay district to provide incentives for two-story, mixed use development that meets design guidelines	Planning Board; town counsel or legal consultant; Town Meeting	L
	Adopt zoning for the Post Office site to promote better appearance and connection with the rest of the Village when the site is redeveloped.	Planning Board; town counsel or legal consultant; Town Meeting	L
	Redesign the Village streetscape: upgrade and widen existing sidewalks and create new ones to connect the entire Village; reduce and consolidate existing curb cuts; join existing parking lots internally; install pedestrian scale lighting; change head in parking to parallel at new curb line; consider speed table at pedestrian crossing to calm traffic and enhance safety	Planning Board and Highway Dept. direction to consultant designers; oversight from Village Committee	M; Chapter 90
	Improve the River Street edge of the Village with a sidewalk, curbing, and street trees.	Planning Board and Highway Dept. direction to consultant designers; oversight from Village Committee	L; Chapter 90 funds
LONG TERM ACTIONS (5+ years)			
INDUSTRIAL PARKS AND ROUTE 53			
Maximize non-residential tax revenue from existing industrial and commercial areas while protecting town character and quality of life.	Monitor effects of split tax rates if they are implemented	Board of Assessors; BoS	None
	Tie Assinippi Industrial Park to the Rockland sewer system and possibly Accord Park, Route 53 and residential areas to the west of Route 53	BoS	Н

Economic Development			
Objective	Task	Implementers	Cost H = High M = Medium L = Low
Concentrate commercial development and redevelopment in pedestrian- friendly and village-like settings, with internal circulation, parking buffered from the road and adjoining residential areas, and limited curb cuts	Apply new standards as businesses redevelop along Route 53.	Planning Board	None
VILLAGE CENTER IMPROVEMENTS			
Improve Village Center appearance and attractiveness to business.	Implement Village Center streetscape redesign	Planning Board and Highway Dept. direction to consultant designers; oversight from Village Committee	M; state funds
Enhance business mix	Encourage existing or new business owners to provide new, family-oriented retail or services such as an ice cream shop, etc.	Village Committee	None
	Apply new standards as businesses redevelop in Norwell Village.	Planning Board	None

Transportation and Infrastructure				
Objective	Task	Implementers	Cost H = High M = Medium L = Low	
SHORT TERM ACTIONS (up to 2 years)				
Improve speeding enforcement on identified routes	Enforce speed limits on the east-west route of Grove Street, Norwell Avenue and Old Oaken Bucket Road with radar or other methods	Police Department	M	

Transportation and Infrastructure			
Objective	Task	Implementers	Cost H = High M = Medium L = Low
	Enforce speed limits on Main Street, especially east of Winter Street	Police Department	М
	Enforce speed limits on Pleasant Street	Police Department	М
Improve safety at dangerous intersections with traffic calming :Grove Street and Prospect Street; Central Street and Old Oaken Bucket Road;	Prioritize intersections for traffic calming	Police Department; DPW	L
Main Street and Grount Street and Main Street and Circuit Street; Norwell Village Center; Main Street and Winter Street	Design traffic calming improvements and test them with moveable barriers	DPW; Police Dept; BoS; consultants	М
Mitigate traffic congestion on Route 53	Work with neighboring towns to promote a common Route 53 overlay district to reduce curb cuts and improve functionality to the Route 53 Corridor Master Plan committee	Planning Board; BoS; Town Manager	L
Support improved access to public transportation gateways	Give support to South Shore Coalition request for bus service serving Norwell to connect with the Greenbush station; for expansion of parking at the Hingham ferry	SSC representative; BoS	L
Improve the pedestrian-friendliness of Main Street and Route 53	Design streetscape (sidewalks and trees) for Main Street reconstruction and for future Route 53 improvements	BoS; DPW	М
Establish a public works asset management system	Develop an electronic database of assets linked to the town's GIS parcel map; select appropriate software; assess the condition of assets; develop a capital improvement plan; train staff	DPW; Mapping Committee; possible consultants	М
Preserve the character of Route 123/Main Street	Achieve preservation through inclusion in MassHighway's Community Roads Program	BoS	None

MEDIUM TERM ACTIONS (2 years - 5 years)

Transportation and Infrastructure			
Objective	Task	Implementers	Cost H = High M = Medium L = Low
Improve speeding enforcement on identified routes	Continue enforcement as needed	Police Department	L
Improve safety at dangerous intersections with traffic calming	Construct one traffic calming project a year		\$5,000 to \$20,000 each; town or Chapter 90 funds
Implement the public works asset management system	Implement the asset management system	DPW	L
Enhance circulation within town	Provide safe pedestrian and bicycle paths on busy roadways	Trails Committee; DPW	М
LONG TERM ACTIONS (5+ years			
Improve speeding enforcement on identified routes	Continue enforcement as needed	Police Department	L
Improve safety at dangerous intersections with traffic calming	Continue constructing traffic calming projects until all appropriate locations have been served		\$5,000 to \$20,000 each; town or Chapter 90 funds

Community Services and Facilities			
Objective	Task	Implementers	Cost H = High M = Medium L = Low
SHORT TERM ACTIONS (up to 2 ye	ears)		
Maintain excellent public safety services	Plan for future police station improvements and new technology	BoS	L
Modernize maintenance programs	Consolidate responsibility for maintenance of all town property and infrastructure in one Public Works Department	BoS	L
	Consider creating an appointed, rather than elected, public works director positions	Town Meeting	L
Protect and monitor the water supply	Implement the short term recommendations of the Water System Master Plan	Water Department; Water Commissioners	М
	Regularly review the aquifer protection ordinance	Water Commission; Planning Board	None
	Prioritize parcels for acquisition of land or conservation restrictions within the Zone II for wells	Water Commission	None
	Improve maintenance of catch basins and roadside swales draining into nearby streams	DPW	L
	Support use of package treatment plants to reduce groundwater contamination in Zone IIs	Water Commission; Planning Board	L
Plan for potential new uses of town facilities and properties	Prepare a comprehensive study and evaluation of all town facilities needs and town-owned property, including needs for a community center and affordable housing	Permanent Building Committee	М
Provide sufficient staff to support new planning and development work	Provide administrative support for the Town Planner, so that the Planner can concentrate on complex issues while assigning routine work to administrative staff	Planning Board; Town Meeting	М
Maintain an excellent Council on Aging program and facilities to serve seniors	Continue support to the program	COA Director	L

MEDIUM TERM ACTIONS (2 years	- 5 years)		
Protect and monitor the water supply	Implement the medium term recommendations of the Water System Master Plan	Water Department; Water Commissioners	М
	Pursue neighborhood master plans for septic system trouble spots and funding for mitigation projects	Board of Health	М
	Explore comprehensive management of septic systems, starting with GIS mapping and record keeping tied to the parcel database	Board of Health	М
LONG TERM ACTIONS (5+ years)			
Protect and monitor the water supply	Implement the long term recommendations of the Water System Master Plan	Water Department; Water Commissioners	М

Stewardship of the Master Plan					
Objective	Task	Implementers	Cost H = High M = Medium L = Low		
SHORT TERM ACTIONS (up to 2 years)					
Use the Master Plan to guide decision- making	Create a Master Plan Implementation Committee	Planning Board or BoS	None		
	Provide staff support for the Master Plan Implementation Committee by the Town Planner	Planning Board	None		
	Make annual reports on implementation progress.	Master Plan Committee	None		
MEDIUM TERM ACTIONS (2 years-	5 years)				

Stewardship of the Master Plan					
Objective	Task	Implementers	Cost H = High M = Medium L = Low		
Use the Master Plan to guide decision- making	From time to time (at least every five years) the Master Plan Committee should prepare a simple presentation on the Plan's vision, goals, and policies, as well as implementation progress, for discussion at two public meetings	Master Plan Committee	None		
	Based on the public review, make any needed changes	Master Plan Committee	None		
LONG TERM ACTIONS (5+ years)					
Use the Master Plan to guide decision- making	Update the Master Plan every 20 years	Master Plan Committee	None		