

Town of West Newbury Comprehensive Plan



Photography by Barry S. Kaplan

September 1999

*Town of West Newbury
Comprehensive Plan*

September 1999

West Newbury Comprehensive Plan Committee
Community Opportunities Group, Inc. and Connery Associates

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A CALL TO ACTION

To the People of West Newbury,

This Comprehensive Plan for West Newbury is the culmination of three years of effort by the Comprehensive Master Plan Committee and its consultant, Community Opportunities Group, Inc. (COG). As a snapshot at the turn of the twenty-first century, this Plan speaks to all the key elements that define life in West Newbury – land use, natural and cultural resources, open space and recreation, housing, economic development, community facilities and services, traffic and circulation, and fiscal policy. It is a work in process that addresses short-term planning as well as planning over the next two decades to the year 2020. Most importantly, it reflects numerous suggestions and ideas from the Town – those from individual residents as well as those from all Town committees, boards, and departments. These have been blended with the expertise and experience of COG and the invaluable assistance of the Merrimack Valley Planning Commission.

Our town is a very special place. What Wallace Nutting wrote about West Newbury in 1923, in *Massachusetts Beautiful*, still holds true today: *“Going from Newburyport through West Newbury to Haverhill, one passes a great many very early houses and mounts the crest of lofty ridges and crosses fine water reaches, so that all together this drive may be commended as among the best in the country.”* In keeping with these words, West Newbury residents kept telling us again and again throughout the development of this Plan that preserving rural character was their foremost desire. Acting on this, we have made the preservation of rural character, both country landscapes and small-town social fabric, the core of the Plan.

Trying to preserve our rural character is not an insignificant challenge. What we have learned from extensive research and discussion with our consultants and others expert in planning is unsettling. Without deliberate and coordinated action, we will find ourselves in a suburb with little resemblance to the West Newbury where we make our homes today. And this can happen in only a few short years. This Comprehensive Master Plan, then, is intended to guide our Town toward the future it wants.

The Comprehensive Master Plan Committee and the Planning Board offer this Plan to the people of West Newbury. We hope that Town Meeting along with all officials, departments, boards, and committees will use this Plan to inform and guide their discussions and decisions in this decade and the next.

We have only a very limited slice of time in which to shape our Town as we want it to be. In the words of a Chinese proverb, "If we don't change our direction, we are likely to end up where we are headed."

Respectfully Submitted,

The Comprehensive Master Plan Committee

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The West Newbury Comprehensive Plan establishes a twenty-year blueprint for directing the type, style and intensity of development while protecting the Town's natural, cultural and scenic resources. By the end of the period covered by this Plan, West Newbury's population and housing units will have nearly doubled from today's baseline of approximately 1,325 houses and 3,794 people.

Executive Summary

Depending on the Town's ability to take charge of its development future, the estimated 2,500 homes in the Plan's build-out forecast would affect the perceived image of West Newbury in one of two ways.

They may be large, spacious buildings on traditional lots that surround pod-style subdivisions, meaning a continuation of current trends. Alternatively, they could consist of a mix of sizes and styles, sensitively placed in developments that yield, by design, to the natural landscape. Tomorrow's homes may act as a magnet for families with school-age children or attract a diverse population that includes families, elders, and individuals or young couples launching their careers. Each of these scenarios will culminate not only in different visual impacts on the Town, but also in different fiscal, traffic, water usage and open space impacts.

The Comprehensive Plan gives preference to diversifying the Town's housing stock and population over replicating the pattern of development that has emerged throughout

West Newbury over the past decade. The Plan's underlying principles are simple and straightforward.

Goals and objectives of the comprehensive plan¹

Land Use Goal

Plan and manage both residential and commercial growth to enhance the rural character of West Newbury.

Land Use Policies

- Plan and manage growth, taking into account the impacts on services and infrastructure.
- Preserve and protect the remaining semi-rural character of the Town through land use policies, procedures, and regulations that do not promote suburban-style development.

Natural and Cultural Resources Goal

Preserve the rural character of West Newbury, which includes historic buildings and a mix of farms, forests, wetlands, water bodies and winding country roads.

Natural and Cultural Resource Policies

- Encourage agricultural uses.
- Encourage uses that preserve open space and natural resources for recreation or other purposes.
- Maintain and improve semi-rural roadway aesthetics including trees, stone walls, and underground utilities.

¹ Adopted by West Newbury Comprehensive Plan Committee, 1997.

Open Space and Recreation Goal

Preserve large tracts of open space, link these tracts by greenways, and develop an interconnected multi-use trail system.

Open Space and Recreation Policies

- Maintain farms as an economic use and include as part of the open space system.
- Establish a land bank so the Town can purchase land or development rights.
- Increase public access to the Merrimack River and public open spaces along the river.
- Protect, preserve and enhance views of open spaces from roadways.

Housing Goal

Encourage housing diversity as a way to maintain the perception of semi-rural character through development process in order to avoid suburbanization.

Housing Policies

- Consider ways to stimulate the creation of smaller dwellings that increase the diversity of housing choices for young families, and for seniors who want to remain in West Newbury, but not necessarily in the home where they raised their family.
- Address affordable housing as defined by the Commonwealth.
- Achieve consistency between housing development and the Town's desire to preserve its semi-rural character, thereby avoiding suburbanization.

Community Facilities and Services Goal

Provide residents with a wide range of governmental facilities and services and the necessary public utilities.

Community Facilities and Services Policies

- Maintain a high degree of public safety within the Town, including provisions for police, fire and emergency services.
- Build school spaces to keep pace with demand and to provide a high quality education.
- Increase active recreation facilities to keep pace with growing needs.

Water Supply Goal

Secure a reliable, protected long-term water supply for the needs of the Town.

Water Supply Policies

- Encourage water conservation and employ use restrictions as necessary.
- Explore new sources of water supply.
- Protect aquifers and groundwater recharge areas.
- Limit future development in designated Zone II areas.

Economic Development Goal

Broaden the economic base of the Town while maintaining its basic rural and residential character.

Economic Development Policies

- Encourage environmentally conscious businesses.
- Protect the Town Center as the only area of concentrated commercial services, preventing strip development.

Town Center Commercial Area Goal

Maintain a compact Town Center area as the Town focus and meeting place that provides a range of commercial services in a pedestrian friendly environment.

Town Center Commercial Area Policies

- Beautify the Town Center area.
- Expand the quantity and choice of shops and services in the Town Center, including a variety of restaurants.
- Encourage additional public parking for Town Center businesses that does not separate business and create an auto-oriented strip.
- Consider use of a sanitary sewer system or package treatment plant to enhance the functioning and long-term viability of the Town Center area.
- Protect and preserve existing adjacent neighborhoods.

Traffic & Circulation Goal

Construct and maintain a safe road system that is consistent with the desired rural character of the Town.

Traffic & Circulation Policies

- Enact standards to minimize road widths while at the same time providing for safe non-car use (bicycle, equestrian, pedestrian)
- Explore public transportation options, especially for use by elders
- Provide safe/environmentally sound control of water borne traffic on the Merrimack River
- Improve provisions for parking in the Town Center
- Provide safe, comfortable facilities for pedestrians in the Town Center

The main points of the Comprehensive Plan

- Emphasize public benefits and greater land use diversity over "less growth"

If present trends continue, the Town will adopt the character of a low-density suburb and relinquish nearly all of its ties to the past. This is because West Newbury's zoning bylaw creates a suburban blueprint. The Comprehensive Plan Committee believes that most residents want to retain the Town's essential beauty and semi-rural ambience. Toward that end, the majority of the Plan's recommendations involve ways to preserve West Newbury's image by promoting quality development techniques and implementing the 1997 Open Space and Recreation Plan.

- Alter the mix of residential uses to reduce growth in service and capital costs, keeping tax rate increases manageable

Imagery would be superficial and difficult to sustain, however, if it were accomplished without regard to the consequences for town finances. Land use decisions drive community facility and service needs, which in turn determine the tax rate. The reality is that West Newbury is and will remain a primarily residential community. If current land use policies go unchanged, single-family homeowners will absorb virtually all of the anticipated school, water, open space and recreation, public safety, and transportation improvement costs that will be incurred over the next twenty years.

The Town's anticipated growth rate means that after 2020, most of the debt incurred to rehabilitate existing or build new public facilities ought to decline. Since the overall rate of growth will

slow markedly after 2020, the need for new capital improvements will change as “must do” projects finally give way to local discretion.

By any measure, however, West Newbury will most likely be in the top 5-10% of Massachusetts communities in terms of property taxes paid per household. There is simply no one else to help pay the costs of community expansion unless the Town can accept alternatives to single-family homes without sacrificing West Newbury's semi-rural character.

- Place the highest possible priority on developing new water supplies and reducing the Town's dependence on Newburyport water.

West Newbury's water supply and distribution system problems are complicated, but they are among the Town's most serious issues -- for financial and growth management reasons. Annual consumption has risen steadily since 1995, and the Town's reliance on one local well site creates a highly undesirable situation. Every time West Newbury's water withdrawal rises above local capacity or there are mechanical problems at the Main Street well site, the Town has no choice but to purchase water from the City of Newburyport. Indeed, pumping volumes have varied significantly since the Main Street well came on line at the end of 1990. Since Newburyport charges the Town an extraordinarily high rate for its water, West Newbury has been unable to establish and build a sufficient capital reserve to develop its own system. Thus, attempts to bring two new wells on line have been slow. Meanwhile, Newburyport is considering a request to furnish Plum Island with water even though the Artichoke Reservoir system's safe yield is uncertain. This makes West Newbury's

water future all the more precarious unless it develops additional water supplies of its own.

- Change the zoning bylaw to encourage low-impact, high revenue- yield non-residential land uses, and adopt protective regulations to ensure their compatibility with West Newbury's semi-rural character.

The Town has choices to reduce the fiscal impact of future development, but they may be difficult because they require townspeople to make compromises and take certain risks. With approximately 3,500 developable acres currently dedicated to single-family use, West Newbury could allocate a portion of the available land for other purposes and mitigate tax rate increases by reducing service and capital costs. For example, aggressive public intervention to acquire or otherwise protect open space reduces the number of potential residential units. Policies designed to attract private elderly housing, research and office parks or low-density village housing alternatives will reduce anticipated increases in total population and school-age children, thereby slowing down growth of the residential tax rate.

Relieving a municipality's fiscal burden comes from strategies that lower the number of school-age children and do not have countervailing service needs. Thus, land uses like research and office parks and privately run continuing care facilities for the elderly are almost always a "fiscal positive," meaning they cost less to service than they pay in property taxes. In fact, they pay significant taxes, broaden the tax base and cushion the tax impact on private homeowners.

- Aggressively implement the Town's Open Space and Recreation Plan.

Publicly financed open space acquisition almost always produces long-term town finance benefits. This is particularly true when organizations such as Essex County Greenbelt Association and the Trustees of Reservations absorb a portion of the initial cost or the Town obtains grants and private donations.

The Comprehensive Plan's Vision Statement identifies the importance of farms, open spaces and rural views to West Newbury's physical structure and character. To accomplish what residents say they want for their community, it is critical that every facet of public administration be reviewed and synchronized toward preserving the most viable agricultural operations. Continued advocacy efforts to facilitate successful agricultural business development should be encouraged. The Town needs to undertake a comprehensive review of its existing agricultural and horticultural businesses, including their long-term economic viability, in order to determine the most appropriate and effective forms of municipal support.

- Plan now to acquire a future elementary school site, secure the property as soon as possible, and begin considering reuse possibilities for the John C. Page School.

Given the time, energy and cost involved in locating and constructing new schools, West Newbury needs to select a new elementary school site that can accommodate the build-out projection of 250 additional elementary school-age children. Further, the Town should locate and purchase a future school site while there is enough vacant

developable land to offer real choices to the Town.

If West Newbury and the Pentucket Regional School Committee were to agree that one, spacious elementary building is preferable, the Town would need to conduct a feasibility study for future uses of the Page School once it is decommissioned. Many communities have converted former school sites to such uses as elderly housing and affordable condominiums, but making these decisions wisely requires site-specific planning along with architectural evaluations, schematic drawings and cost estimates, a market assessment for potential projects and a preliminary development and operating pro forma.

Key proposals advanced by the comprehensive plan committee

- 1) Develop and implement strategies to work effectively with landowners so the Town of West Newbury, its Conservation Commission and/or a land trust can acquire an interest in critical sites before they are sold to developers.
- 2) Compile a detailed inventory of land temporarily protected from development by the Chapter 61, 61A and 61B programs, and rank all sites in the inventory for their public open space importance.
- 3) Create a comprehensive Community Protection Map that integrates the Chapter 61 inventory with the location of critical natural resource areas, the Open Space and Recreation Plan's priority acquisitions list, existing inventories of historic and archaeological resources and other information relevant to West Newbury's preservation interests. The Community Protection Map should be used to guide the process of designating certain areas

for the types of zoning changes described below.

- 4) Enact zoning amendments to meet the aims of this Comprehensive Plan, as follows:
 - (a) Establish "Flexible Development" regulations that would apply in all residential districts. Flexible residential development grants developers the opportunity to modify lot size (without increasing overall density), setbacks, street widths and slope requirements in small subdivisions in exchange for public benefits: dedicated open space, preserved street views, buffers, trail easements.
 - (b) Establish a Rural-Agricultural Overlay District that would allow two forms of residential development design flexibility by special permit, each form geared to achieving certain public benefits: large amounts of preserved open space on one hand, and a combination of affordable housing and preserved open space on the other. One permit option would be called "Rural Agricultural/Open Space Development," and the other, "Rural Housing Opportunity Development."
 - (c) Establish "Assisted Living Facilities" and "Independent Elderly Housing" as allowed uses by special permit in residential districts with high open space value. Create appropriate design guidelines and site plan standards. The public benefits achieved by these uses include a continuum of housing choices for elderly people, and a revenue source for the Town.
 - (d) Establish Planned Unit Development (PUD) as an allowed use by special permit in some or all residential districts in order to diversify West Newbury's mix of residential use types (e.g., single-family attached and detached, townhouse and multi-family). The additional public benefits achieved by PUDs include: reducing the number of single-family homes, increasing the Town's opportunities to preserve open space, and promoting projects that cause the least amount of overall site disturbance.
 - (e) Simplify and broaden the zoning bylaw's provisions for legal home occupations in order to encourage community-based economic development, disperse small business-destined traffic and restore the once-common practice of working at home.
 - (f) Revise and strengthen the zoning bylaw's site plan review standards and process.
 - (g) For environmental protection, site plan and aesthetic benefits, establish lot coverage and floor area ratio (FAR) requirements in all districts.
 - (h) Revise dimensional regulations to eliminate "pork-chop" lots.
- 5) Raise and appropriate sufficient funds to acquire land and complete all permitting requirements so the Water Department can quickly develop two new water supplies. The Town of West Newbury has an urgent need to reduce its dependence on Newburyport water. If current water revenues are insufficient to finance the development of new wells, the Town needs to contribute a portion of the cost from general revenues. In this regard, the Town also needs to resolve disagreements over the legality of using funds from the tax levy to develop and operate the water system.
- 6) Create a special Town Center District by increasing the depth of the existing business district along Elwell Square,

setting appropriate design and site development guidelines, and promoting off-street parking and pedestrian safety. To secure the long-term viability of small-town commercial development in this location, the Town also needs to appropriate funds for a limited sewer district or package treatment plant feasibility study.

- 7) Develop and adopt road maintenance and road reconstruction guidelines for scenic roads and by-ways.
- 8) Revise the Planning Board's Subdivision Rules and Regulations to promote rural roadway and sidewalk design, limit site disturbance and maximize public safety.
- 9) Conduct a street classification study so that local boards and commissions have an acceptable methodology for gauging and controlling the traffic and circulation impacts of new development.
- 10) Establish bylaws and regulations to protect shade trees, viewsheds and view corridors.
- 11) Increase the amount of non-residential land available for development in order to strengthen West Newbury's long-term fiscal condition, protect open space and natural resources, and reduce the number of new homes. This should be achieved by establishing a Professional Office/Research & Development Park District on land west of the Scotland Road/I-95 interchange.
- 12) Within next 5 years, acquire a 40 to 50-acre site that can support a future elementary school and supply valuable open space. Ideally, site selection should capitalize on opportunities to link existing and proposed future open space, i.e., lands identified on the Community Protection Map.
- 13) Explore the desirability of "estate lot zoning," that is, areas that ought to be zoned for larger minimum lot sizes because they are unlikely to be served

by the Town's public water system, they contain contiguous or extensive isolated wetlands, or they are part of an identified wildlife corridor.

- 14) Develop comprehensive management plans for properties owned by the Town of West Newbury or West Newbury Conservation Commission. Consider centralizing all open space management responsibilities in order to achieve cost and operating efficiencies. Establish and enforce appropriate public access regulations on a site-by-site basis.
- 15) Explore the legality and benefits of adopting a Scenic Upland Bylaw in order to preserve views and encourage development designs that protect hillsides.
- 16) Work with regional and state authorities to initiate a Route I-495/I-95 Interchange Study so that non-local traffic burdens on West Newbury's rural roads can be redirected to the interstate highway system.

The Vision for West Newbury²

The Town of West Newbury will continue to be a scenic small community with rural character...

where all residents enjoy a quality of life resulting from:

- farms being an integral part of the physical structure and character of the town, preserving open spaces and rural views
- tree-lined roads and stone walls
- the Town Center, aesthetically enhanced with a greater variety of services provided, and

² From West Newbury's "Visioning Day," 14 June 1997.

- historic Main Street, Training Field and other architectural resources preserved and enhanced;

where an extensive connective network of open spaces provides a multi-use trail system for public use;

where greater public access to the Merrimack River exists from riverside open spaces for citizen use and enjoyment;

where the town is pro-actively directing its development through a planning approach which is supported by the actions of public officials, citizen boards and town citizens;

where different types of housing choices are available and remain affordable for all including senior citizens and young adults;

where the school system supports a superior education; and

where the necessary social services and recreational opportunities are available to residents of all ages.

The West Newbury Comprehensive Plan was developed between 1997-1999 and is effective as of the date of Planning Board approval.

Throughout the two-year planning process, the Comprehensive Plan Committee worked in earnest to involve Town officials, staff and residents in shaping both the Plan's philosophy and policy framework.

The Committee also directed the work of the Town's planning consultants, Community Opportunities Group, Inc. (COG) and Connery Associates. In turn, the consultants gathered, analyzed and reported as much information as possible about West Newbury past and present, and advised the Committee on ways to carry out a set of previously adopted development goals and policies.

As local residents realize, West Newbury enjoys advantages that many communities have lost to irrevocable changes caused by unplanned and inadequately managed growth. West Newbury's historic agricultural roots retain a powerful presence. The colonial road network that linked Newburyport and Newbury to West Newbury is strikingly intact, imprinting today's community form with old cultural and economic antecedents. Scenic hills, water bodies and fine, well preserved examples of 17th and 18th century New England architecture contribute to West Newbury's unmatched beauty. The Town has the look and feel of a well-kept secret, a "special place" by any standard.

Local residents also realize, however, that West Newbury is on the threshold of transforming from hamlet to suburb. New-home construction has become a constant while open land slowly declines. As new households settle in, the number of school-age children increases. Understandably, families that can afford to buy or build a home in West Newbury want not only high-quality schools, but also good town services and an array of recreational, social and

cultural opportunities. Residential market pressures drive the cost of housing upward, leaving the elderly and people of modest means unable to call West Newbury their hometown.

Introduction

The availability of developable land throughout West Newbury means that few areas will be buffered from the visible impacts of new

development. As long as growth is comprised of traditional subdivisions with single-family homes, the Town's operating and capital budgets will climb, open space will dwindle, traffic will change the character of rural roadways, and West Newbury will come face-to-face with the realities of suburbanization. Assuredly, the Town's overall size, developable land constraints, lack of public improvements and zoning regulations will act together as barriers to substantial growth -- at least when measured by such conventional statistics as housing starts, population change, household counts and roadway miles.

West Newbury's growth problem has less to do with *data*, however, than with a loss of "town character," or the constitutive visual, physical and cultural traits that differentiate West Newbury from other communities in its regional setting. While growth and change can be quantified, the kinds of changes that siphon a sense of place from small towns are qualitative ones. For example, taking down a very old, hard-to-renovate building for a new, spacious home with modern amenities yields no net increase in a community's housing units, but the replacement structure never substitutes for lost history. Another example: the owners of a long-standing family farm need capital to modernize operations and they decide to sell a small amount of land for development. The number of new homes may be small, perhaps five to seven, but to keep as much land as possible while maximizing their return the owners convey

an easily developable portion of their property. Is the community's problem the nominal increase in houses, or the scenic view lost to homes on "Form A" lots along the street?

The Comprehensive Plan concerns itself *primarily* with preserving West Newbury's town character over the next twenty years, during which the vast majority of open developable land will be more vulnerable than ever to changes in use and therefore, in appearance. While the Plan does not ignore issues triggered by rising numbers of homes and people, it weighs such compelling public policy concerns as town finances, traffic, and adequate community facilities with the Town's overriding interest in keeping what is left of its rural, historic appeal. In effect, the Plan acknowledges that West Newbury is no longer a "rural" community, for already evident changes have nudged the Town into the transitional realm of "semi-rural," meaning a place that retains vestiges of the rural past amidst forceful pressures toward suburbanization.

This is not a "no-growth" Comprehensive Plan. Rather, it advocates for the kind of "quality development" that becomes possible when a community engages *actively* in the development process. Quality development happens by choice, not chance, and only because local authorities act as designers of an overall growth outcome that achieves equity for private development rights and the public interest. In short, the Comprehensive Plan de-emphasizes some traditional concepts of growth control, such as larger lot sizes to reduce density, and promotes managed (or directed) growth instead. The distinction is not one of semantics: managing growth to preserve a town's individuality requires a qualitative perspective about growth that should be differentiated from controlling the rate and amount of growth, which calls for a quantitative perspective.

By taking charge of its development future now, West Newbury will have the means to

make a significant difference in the kind of place it becomes tomorrow. Simply stated, the Town can choose to:

1. Develop along the same suburban model that scores of Massachusetts communities have followed, *or*
2. Join the handful of forward-looking towns that have opted for strategies of "smart growth" instead of "stop growth" -- such as Lincoln, Carlisle, Harvard or Westport -- and follow an alternative development path.

Although the first option is the easier one (it represents the norm), the Town's challenge is to build public support for the second of these possibilities. Adopting and implementing the rules, policies and practices of quality development requires sustained effort over a long period of time, yet the potential gains for West Newbury remind one of Robert Frost's wisdom:

The Road Not Taken

(1916)

Two roads diverged in a yellow wood,
And sorry I could not travel both
And be one traveler, long I stood
And looked down one as far as I could
To where it bent in the undergrowth;

Then took the other, as just as fair,
And having perhaps the better claim,
Because it was grassy and wanted wear;
Though as for that, the passing there
Had worn them really about the same,

And both that morning equally lay
In leaves no step had trodden black.
Oh, I kept the first for another day!
Yet knowing how way leads on to way,
I doubted if I should ever come back.

I shall be telling this with a sigh
Somewhere ages and ages hence:
Two roads diverged in a wood, and I -
I took the one less traveled by,
And that has made all the difference.

The Comprehensive Plan Committee is pleased to submit a plan for retaining West Newbury's individuality and managing growth in qualitative terms. The most crucial recommendations to preserve the Town's sense of place are outlined in the Executive Summary. They are explained in the chapters that analyze each planning element separately, synthesized to form a coherent growth strategy in the chapter on Integration, and organized in the Five-Year Action Plan at the end of this report the chapters that analyze each planning element separately, synthesized to form a coherent growth strategy in the chapter on Integration, and organized in the Five-Year Action Plan at the end of this report.

The West Newbury Comprehensive Plan Committee

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Consultants

Community Opportunities Group, Inc.
Connery Associates

SEPTEMBER 1999

From the beginning of the process that has culminated in a new Comprehensive Plan for West Newbury, local officials recognized

the need to examine the growing gap between the kind of community residents want and the kind of community that is growing around them. A town that by any measure was "rural" not long ago, West Newbury is slowly giving way to a more suburban physical form and the change is evident at nearly every turn. If new homes and more people have taken the most obvious toll on West Newbury's simple agrarian past, so too have the added cars and higher demands on town and school services that come with growth.

The reasons for the gap are complex and interdependent, and some involve forces beyond West Newbury's immediate control. The Town is not an island, shielded from regional growth trends, transportation improvements and economic change. Thus, outside factors will continue to exert pressure on West Newbury especially because it is such a desirable place to live. One of the ironies of community development is that people searching for unspoiled places to call home end up unintentionally producing the very conditions that "spoil" what attracted them to the town they chose.

There is no universal formula that forecasts the precise number of new homes it takes to cause irrevocable change. The place that loses its identity when it gains population cannot point to a particular subdivision as the straw that broke the camel's back. Rather, the problem lies in what several subdivisions reveal about the misfit between

local development regulations -- the community's blueprint -- and the earlier character of the town, the ingredients that made it special.

Land Use

Such is a master plan's concern with land use, for how land is used in the collective pervasively influences every facet of a town's character. The issue is not simply whether land is "used" for homes,

stores or public buildings, but how the accumulation of *uses* and the community's *land* work together. Thus, a "land use analysis" considers how all uses intersect and their resulting effects -- whether they mutually support one another, create specific conflicts or worst of all, deplete a community of its once-distinctive qualities.

The ongoing interaction of land, water, population, transportation, market forces, social and cultural traditions, development regulations, political decisions and environmental constraints perpetually remake the pattern of local land use and the fabric of the community as a whole. Day-to-day land use change is rarely apparent, but residents nonetheless experience land use outcomes in terms of visible appearance, landmarks, traffic generation and fiscal impact. In most communities, residents correctly interpret "land use impacts" as "quality of life impacts." A failure to understand the dynamics of land use change can lead to planning in a vacuum and produce the very growth blueprint that breaks the metaphorical camel's back.

There are periods in the life of every community when the nature and scale of change induce fundamental shifts in character. Under its existing blueprint West

Newbury will not only grow, but it will transform into a low-density suburb. Housing market characteristics guarantee that West Newbury will still be "attractive" and the Town will keep random pockets of its agricultural heritage, yet irrevocable land use change is imminent. Retaining West Newbury's rural character is not the same as having scattered evidence of a rural past. One is a living history; the other is a submerged one. West Newbury sees that it still has the opportunity shape the way growth occurs here, and recognizes that a vital town is not stagnant. This Comprehensive Plan defines the important land use decisions West Newbury needs to make and provides recommendations to manage growth in ways that can achieve the Town's goals.

Existing Conditions

West Newbury of the 1990s is "semi-rural," or a country village with telltale signs of an emerging suburban form. While significant new residential development is apparent throughout the community, agricultural uses and imagery remain strong components of the overall land use pattern. Indeed, agriculture has been West Newbury's land use constant since the Town's settlement in the 17th century. Even in the 19th and 20th centuries when the manufacturing of combs, shoes and carriages employed hundreds of area residents, agriculture remained West Newbury's primary land use.

Most people describe their hometown in terms of its unique qualities -- qualities that make a community visually and operationally different from others in the same general region. West Newbury draws its uniqueness

Comprehensive Plan Goals and Objectives: Land Use

Land Use Goal

Plan and manage both residential and commercial growth to enhance the rural character of West Newbury.

Land Use Policies

- Plan and manage growth, taking into account the impacts on services and infrastructure.
- Preserve and protect the remaining semi-rural character of the Town through land use policies, procedures, and regulations that do not promote suburban development.

from a juxtaposition of two attributes. One is physical: the collage of rural vistas, colonial roads, rolling topography, scenic riverfront and substantial inventory of historic buildings that express West Newbury's identity. The other is locational: the Town's instant access to modern highways in the metropolitan area. Both increase West Newbury's desirability for existing residents and when coupled with the dwindling land supply elsewhere, they form the basis for the strong and sustained residential development pressure that is being exerted on the Town today.

West Newbury has entered a period in which fundamental change in character is an all but foregone conclusion. The rate of residential development will cycle with the real estate market, but it will continue nonetheless throughout the coming decades. Most importantly, as residential development increases it will dwarf the Town's historic "land use constant," agricultural land.

A Working Definition of "Rural" for West Newbury

Much has been said about West Newbury's "rural" character and indeed, preserving that character is the organizing principle of this Comprehensive Plan. Communities define their rural heritage in somewhat different terms, however. Even within the same small town residents can disagree about the meaning of "rural" when they lament the loss of their rural traditions.

The Comprehensive Plan Committee spent considerable time coming to terms with a unified concept of "rural," an effort that was crucial to integrating the various pieces that have to come together as a master plan. Table LU-1 summarizes the Committee's ideas about rural character and ways to retain it in West Newbury, using themes of "social fabric," "physical plan" and "appearance," or what planners call the traits of a community's physical and functional form. How West Newbury interprets its rural-agrarian heritage has to be considered in any development framework that seeks to exalt the past and simultaneously adapt to the future. Thus, the Committee's ideas reflect both the "literal" past -- what the Town was and in many ways still is -- and a future they would call "consistent" with West Newbury's rural character.

Table LU-1: Considerations for Retaining West Newbury's Semi-Rural Image and Sense of Community

Agriculture is West Newbury's most important scenic feature. It expresses the Town's past economic structure. The Town needs a multi-faceted strategy to retain its agricultural and horticultural economic base.

Home-based businesses will keep residents in town during the day, and they help to disperse traffic by distributing customers throughout the community. The Town should encourage home occupations.

Cluster housing can preserve open space, counter neighborhood isolation and foster a sense of community. The Town should strengthen the current cluster bylaw to encourage more developments of this type.

A range of housing types -- conventional single-family, townhouses, small homes appropriate for young couples, empty nesters and the elderly -- will encourage a diverse population and enhance West Newbury's visual appeal. The Town should encourage housing diversity.

Rural roadway design standards will preserve and enhance West Newbury's beauty and prevent local streets from becoming speedways. The Town needs to adopt and implement road design standards that are conscious of both aesthetics and public safety.

Connected local streets will lend to the charm and feel of West Newbury because they support better internal traffic circulation and make neighborhoods more accessible to each other. The Town should amend the zoning bylaw and subdivision regulations to encourage connected streets wherever appropriate.

Bicycle and pedestrian access will make West Newbury a better place to live. By reducing dependence on cars, the Town can also manage traffic pressure placed on its rural circulation system.

West Newbury's scenic, tree-lined ways contribute significantly to the Town's timeless beauty. Adopting the Scenic Road Act and enforcing protecting shade tree laws will help West Newbury retain its semi-rural character.

Architectural design standards are crucial to retaining West Newbury's semi-rural appearance. Establishing and enforcing clear design controls can help achieve visual harmony and ensure that non-residential development is carried out thoughtfully.

Current Land Use Characteristics

Open land, residential and agricultural uses are West Newbury's dominant visual images. Indeed, more than 60% of the Town is used for either public, institutional, open space or farming purposes. In conjunction with large-lot, low-density residential development, the sheer quantity of open land resurrects images of Merrimack Valley in the early 20th century.

The "built" or "man-made" environment is comprised primarily of single-family dwellings. Of the approximately 1,286 residential buildings in Town, 1,162 or 90% are single-family homes. This places West Newbury 80% above the statewide average of 51% for single-family housing as a percentage of all housing in a city or town; other types of housing use (duplex, multi-unit) make up the Town's remaining 124 residential buildings. In terms of its functional and physical forms, West Newbury most closely fits the standard planning definition of a semi-rural community or an early emerging suburb. Table LU-2 classifies the residential land use scheme in West Newbury.

The small amount of commercial development that West Newbury allows is focused along Elwell Square. Bradford Road, now Route 113, defined the earliest settled parts of the community and remains the location of many historic structures, public and religious buildings today, e.g., the Town Hall, Training Field and Public Library area. West Newbury has never had a traditional New England town center,

Table LU-2:

Residential Land Uses in West Newbury Today

<u>TYPE</u>	<u>NUMBER OF PARCELS</u>	<u>TOTAL ACRES</u>
Single Family	1,162	3,277.00
Condominium	3	3.70
Mobile Home	0	0.00
Two Family	56	156.00
Three Family	3	12.50
More than one on lot	6	25.39
Mixed use/Residential ¹	56	194.00
TOTAL	1,286 ¹	3,668.59

Source: West Newbury Assessors Office, 1997.

perhaps because it seceded from Newbury and incorporated as a separate town relatively late in its development history. The visual and functional elements of a town center are conspicuously missing. Thus, West Newbury is the quintessential New England low-density residential community except for its lack of an identifiable community center.

The Town's primary agent of development control is a system of three residential zoning districts with minimum lot sizes ranging from 20,000 to 80,000 square feet. In all districts, however, the existing residential density is lower than what the bylaw allows. Even in the Residential C district (RC) where the minimum lot size is 20,000 square feet, existing lot sizes average 1.63 acres for lots with a single-family house and 5.58 acres for all lots. Table LU-3 shows the level of development intensity per zoning district and West Newbury's low overall density. That

residential lots are considerably larger than the minimum lot size established for each district adds to the open image of West Newbury and may have some impact on future development patterns.

The Town's oldest settled area coincides with the Residence C District and is also the most densely settled area in the community. Still, it is important to note that development is distributed fairly evenly throughout West Newbury. While much of the established residential development correlates with a surprisingly intact colonial road pattern, new development is occurring on hillsides and in former agricultural areas. The visual change associated with the incremental spread of growth into these areas is an early indicator of land use change from rural-agricultural to what might be classified as "country-suburban."

Land Use Analysis Using GIS

Figure LU-1 is a Geographic Information System (GIS) composite of all residential and commercial lots and the extent of public and open space holdings in West Newbury.¹ It also illustrates the current development pattern: some areas are more densely developed than others, but Figure LU-1 clearly shows the dispersed nature of development in West Newbury. Although it

indicates the general location of development, Figure LU-1 does not suggest development potential or sites where development will most likely occur in the short-term. Its purpose is simply to present a snapshot of existing land use conditions.

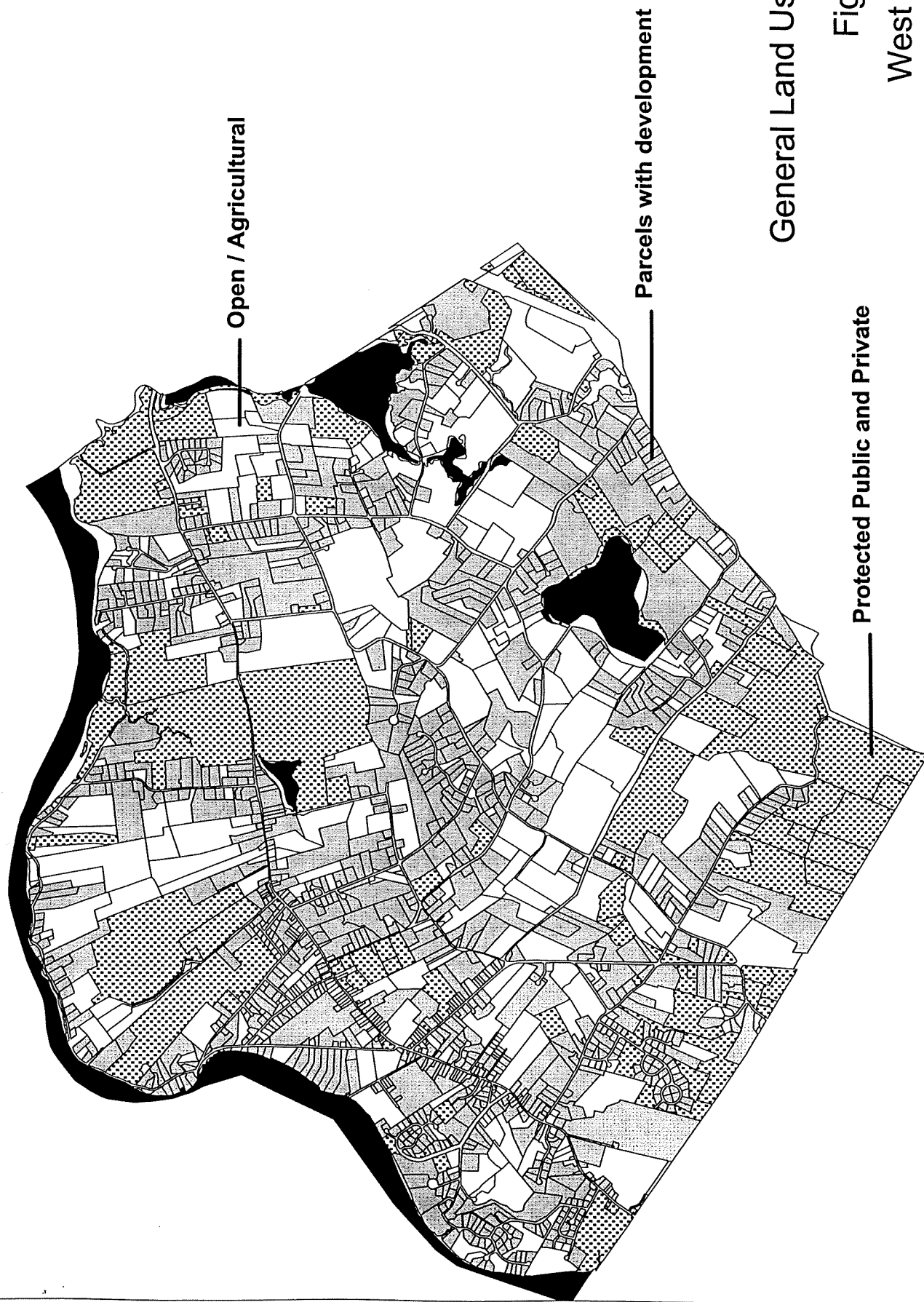
Table LU-3: Comparative Residential Development by Zoning District

	RESIDENTIAL ZONING DISTRICT		
	A	B	C
Total Parcels	502	547	653
Single-Family Houses	318	373	471
Median House Lot (in acres)	4.60	2.81	1.63
Median All Lots (in acres)	7.40	5.58	1.18
Minimum Lot Area under Zoning Bylaw	80,000 s/f	40,000 s/f	20,000 s/f

Source: West Newbury Assessors Office, 1997.

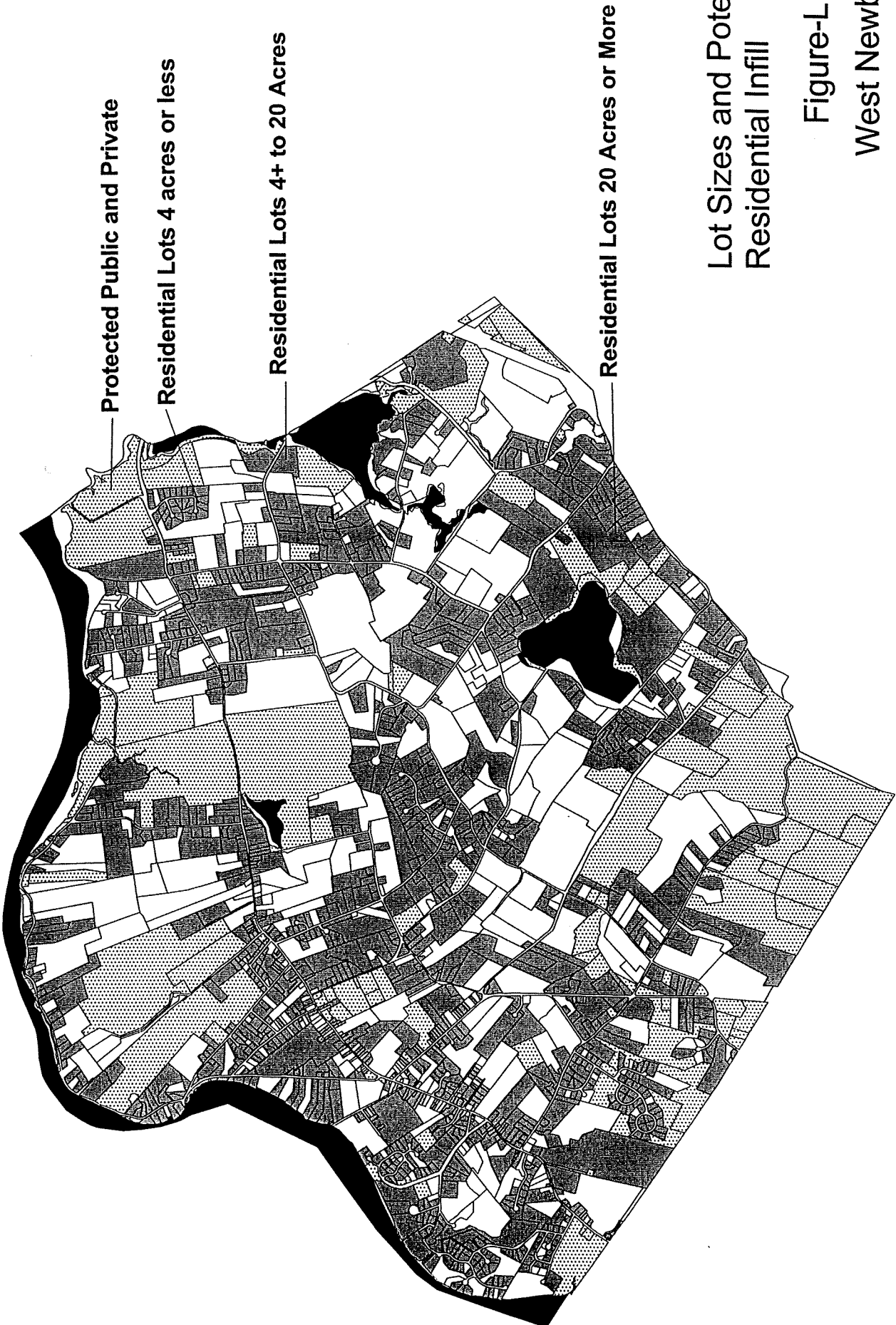
At first glance, Figures LU-2 and LU-1 are quite similar. Figure LU-2 is a composite of public and open space land, parcels of more than four acres in use by one single-family home, all other residential lots, all undeveloped lots and all commercial uses. It confirms West Newbury's overall development pattern, but Figure LU-2 is distinct because it offers insight into *future* development potential. Specifically, it shows that of the 1,162 single-family home sites in West Newbury today, 196 are located on

¹ Data for all maps obtained from West Newbury Assessors Office and Merrimack Valley Planning Commission, 1998. Data analysis and maps created in MapInfo Professional 4.0.



General Land Use Pattern

Figure LU-1
West Newbury



Protected Public and Private

Residential Lots 4 acres or less

Residential Lots 4+ to 20 Acres

Residential Lots 20 Acres or More

Lot Sizes and Potential Residential Infill

Figure-LU-2
West Newbury

parcels of four or more acres of land. While “developed,” each of these sites has *additional* development potential. They represent an aggregate of 1,553 acres, or approximately 16% of the Town.

Further analysis shows that 16 of the 196 lots range from 20 to 74 acres, with a mean size of 36 acres and an aggregate of 448 acres; see Figure LU-3. Barring the unknowns of landowner interests and needs, these 16 lots should be considered as strong candidates for additional development within the next five years. Their combined development potential is approximately 200 new homes. Although the remaining 180 lots will not yield large subdivisions, many will host “infill” subdivisions of between four and eight houses -- a scale comparable to many West Newbury projects put before the Planning Board during the 1990s.²

Collectively, the 196 parcels highlighted on Figures LU-2 and LU-3 lots *could* produce as many as 500 single-family homes. They, and most particularly the 16 larger parcels in the group, will be one of the major generators of growth and change in the coming decades. Further, the potential growth emanating from these parcels is relatively dispersed. This means that the impact of future development will be experienced throughout West Newbury. The presence of so many large single-family lots reflects the Town’s rural traditions and character, but it also shows that the suburban land use phenomenon of maximizing land development by minimizing lot size has not fully materialized in West Newbury -- yet. These “underdeveloped residential parcels” constitute one of the most important elements of a build-out projection

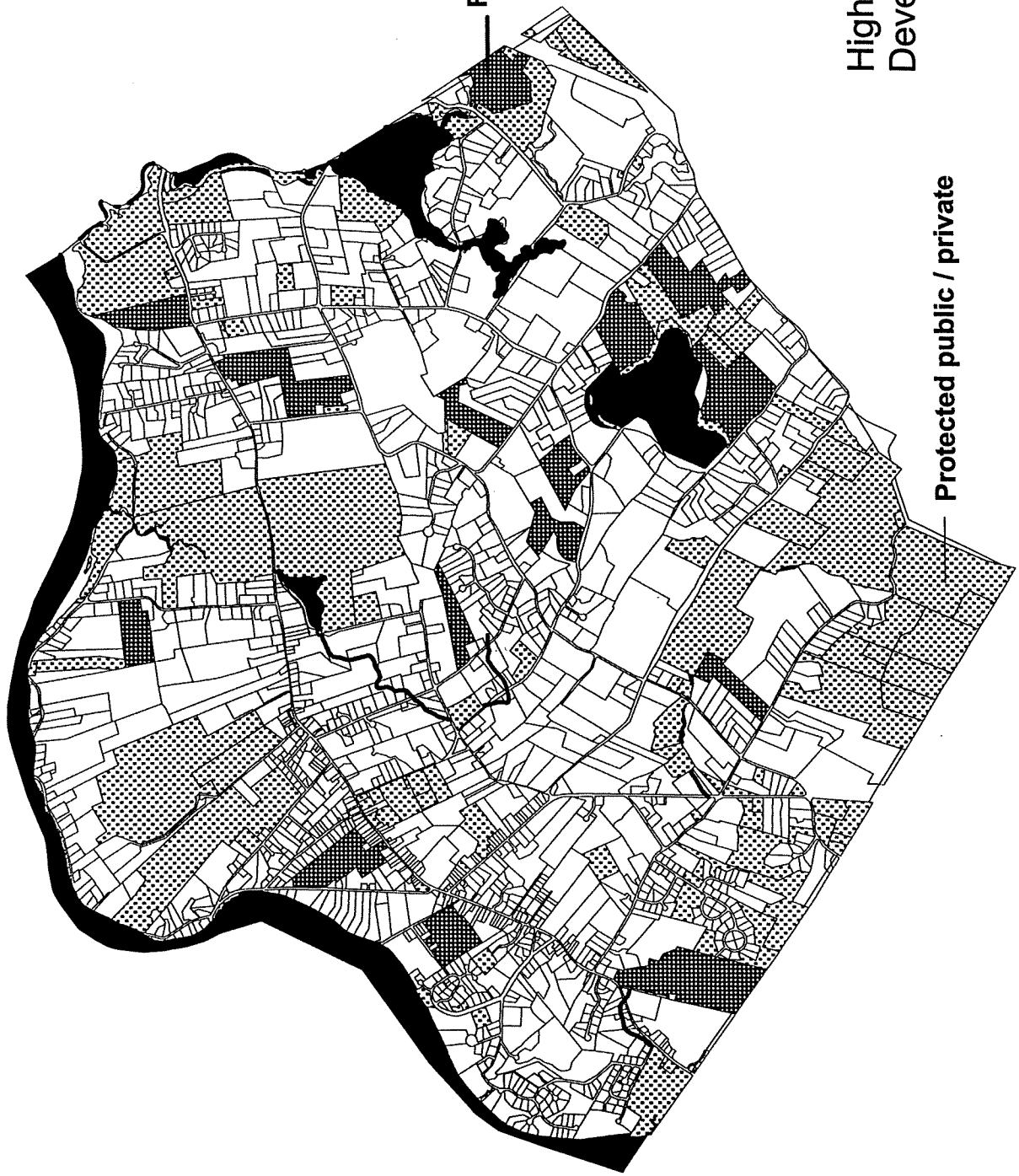
for West Newbury. The other critical element is assessing the availability of open and agricultural land.

Undeveloped land in West Newbury generally falls into two broad categories: open land with no legal or environmental restrictions, and open land restricted by MGL c. 61, 61A and 61B (forest, agriculture and recreation land tax reduction programs). Of the two categories found in West Newbury, Chapter 61 lands are by far the more prevalent.

The conversion of Chapter 61 land from forests to homes has fueled a significant amount of new residential development since 1990. The 1996 West Newbury Open Space and Recreation Plan lists 115 Chapter 61 parcels totaling 2,306 acres or 24% of the Town. Excluding the 571 acres now contained within three large properties that are subject to an Agricultural Preservation Restriction (APR), the adjusted total of “available” Chapter 61 land is 112 sites with an aggregate of 1,735 acres. Table LU-3 shows only 1,562 acres of Chapter 61 land in West Newbury as of 1998, however, and further analysis indicates that the total number of parcels under agreements through this program has declined to 87.

In the past three years, 173 acres of Chapter 61 land have been withdrawn for development purposes, for a rate of about 60 acres per year. While Chapter 61 provides some level of protection from immediate development, rising property values essentially offset the financial disincentives associated with the statute’s tax payback requirements. West Newbury’s experience reinforces what many communities have come to realize: Chapter 61 does not preserve open space, but it *does* give cities

² West Newbury Planning Board, 1998.



High Potential Infill Residential
Development parcels

Figure LU-3

and towns a chance to do advance planning. As most high-growth areas of the state have already seen, when confronted with increasing land values Chapter 61 land converts fairly easily into new development because under the right market conditions, the return from lot sales far surpasses the cost of "roll-back" taxes.

The category of land known as "open non-restricted" consists of approximately 365 acres today. While these sites could be developed sooner rather than later and they are included in the Town's build-out scenario, the actual pattern of change in West Newbury argues that near-term future growth will be generated by the 196 "underdeveloped" residential parcels discussed earlier and the remaining Chapter 61 land.

Table LU-4 provides a summary profile of current land use in West Newbury, in acres and percent. It draws from current tax records that are now nine months old due to normal assessing practices, but the estimate is consistent with other recent land use data.³ Where possible, each category has been updated based on available information. Two issues become immediately apparent in Table LU-4: the overwhelming force of single-family residential use, and the fact that significant development restrictions (and outright prohibitions) shape the use of land use in about 25% of West Newbury. The

³ For example, GIS land use data layer (1991) from the Merrimack Valley Planning Commission.

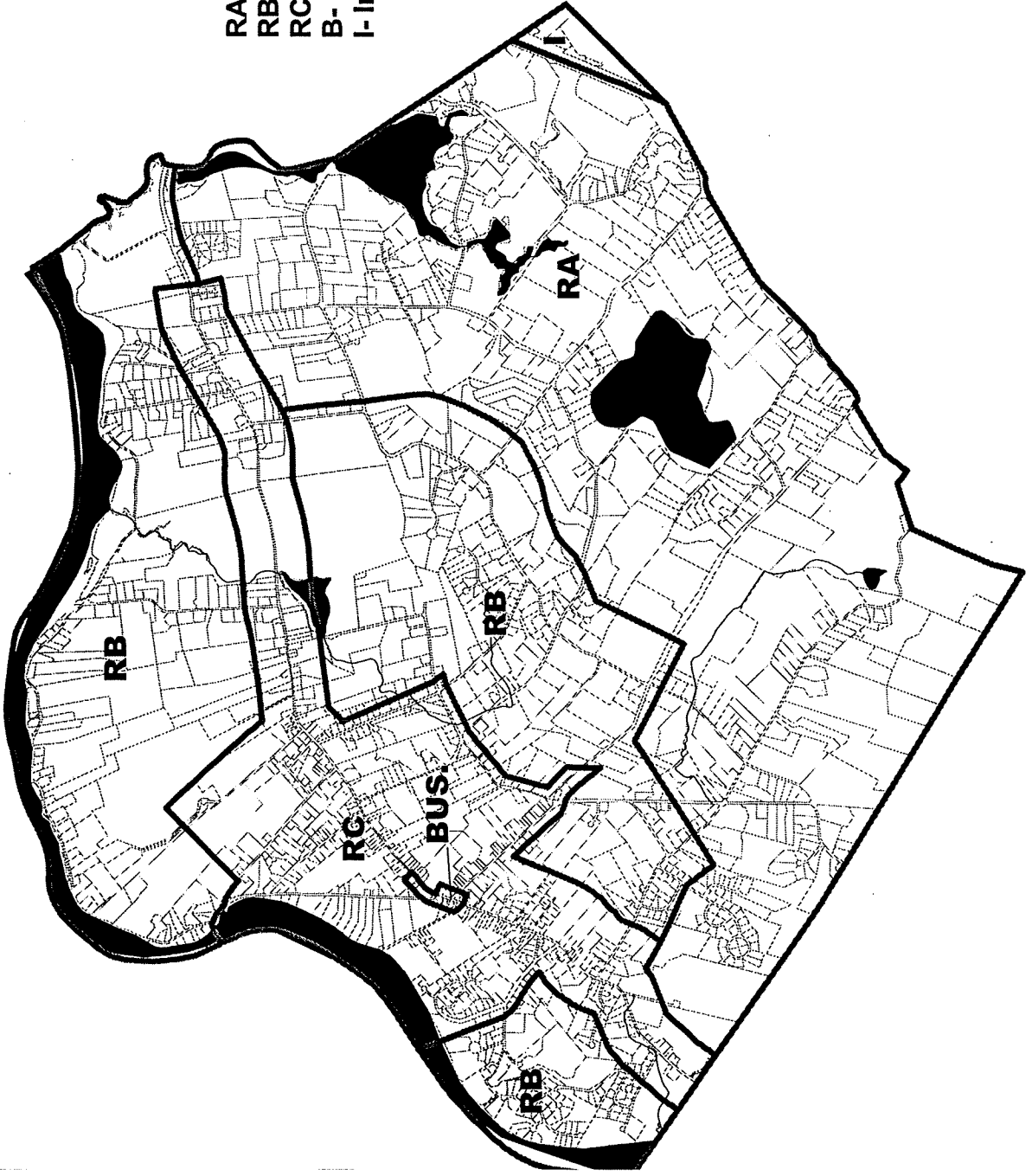
Table LU-4: Land Use By Percent of Total Area

<u>LAND USE</u>	<u>TOTAL ACRES</u>	<u>% OF TOTAL</u>
Single-Family	3,277.00	34.920
Other Residential	391.00	4.170
Business Uses	20.00	0.002
Industrial ¹	40.00	0.004
APR's	517.00	6.100
Chapter 61	1,562.00	16.600
All Public & Institutional ¹	2,310.00	24.600
Ponds, Rivers, Streams	850.00	9.050
Open and developable ¹	365.00	3.890

Sources: Merrimack Valley Planning Commission, West Newbury Assessors Office (1997); data analysis conducted in 1998.

combination of public land, Chapter 61 and 61A parcels, APR land and water area represents almost 60% of West Newbury's total area.

At first glance, most of West Newbury seems off limits to development -- but the apparent "safety nets" in Table LU-4 belie the Town's hidden development potential. First, the Town already knows that as a long-term open space preservation tool, Chapter 61's value is limited. Second, of the 3,277 acres in single-family land use today, 1,553 acres (47%) have *significant* additional development potential, meaning that they are "under-developed" by today's standards. Given current zoning regulations, this yet-to-be-tapped development potential is almost exclusively residential. Third, publicly held



RA- Residential 80,000 sq. ft.
RB- Residential 40,000 sq. ft.
RC- Residential 20,000 sq. ft.
B- Business
I- Industrial

Existing Zoning

Figure LU-4

West Newbury

land is not permanently protected land, even though the risk of future development is very low. Rather, the land is shielded from changes in use as long as the owner, meaning a public agency or non-profit preservation group, retains title *or* places restrictions on the deed before the land is sold. Seen this way, the West Newbury properties with the greatest open space security include those for which some or all development rights have been acquired through the APR Program, and land controlled by the Conservation Commission.

To shape an adequate response to development pressure, the most valuable information is the *source* and *general location* of future growth, which in West Newbury's case involves Chapter 61 parcels and the large-lot single-family holdings that will eventually give way to multiple single-family lots (however generously sized by

most standards). Development will also emanate from open and currently available sites, that is, parcels of unrestricted open land, but as a percentage of future build-out they account for less than 10% of the new residential structures of the future. Table LU-5 summarizes the sources and the scale of West Newbury's probable build-out scenario.

The experience of many Boston metropolitan area communities and West Newbury's own development pattern suggest that within the next 20-25 years, the Town will approximate the build-out scenario outlined in Table LU-5. Moreover, like other towns that have confronted the shift from rural to suburban development, West Newbury will probably experience an accelerated rate of development as suburbanization gathers momentum. Absent abrupt changes in the housing market, annual average residential development should expand from the current rate of 25-40 units per year to 40-60 units per year during the next 10-20 years.

While these projections reflect a nearly 100% increase in the number of single-family homes over current levels and a commensurate increase in population, they are conservative when compared to earlier projections that used a straightforward mathematical formula to yield an estimate of 5,000-6,000 additional new housing units. For example, a 1961 land use study projected a build-out of 6,621 single-family houses in West Newbury. The estimate on which this 20-year Comprehensive Plan is based, however, is 2,500. Since 1961, West Newbury has had the

Table LU-5: Sources of Future Development and Associated Build-Out Estimates

<u>DEVELOPMENT GENERATOR</u>	<u>TOTAL AREA</u>	<u>NUMBER OF HOMES</u>	<u>POPULATION</u>
Single Family Lots, 4+ ac.	1,553	500	1,550
Chapter 61 Parcels	1,562	600	1,850
Other Open Land	365	100	300
TOTALS	3,480	1,200	3,700

Estimates derived from GIS analysis of West Newbury Assessors Data (1997).

benefit of almost 40 years of actual development history, local preservation actions and state environmental regulations that have collectively reduced development potential. Further, the application of mathematics to zoning regulations almost always yields a high estimate because it ignores the individuality of land development decisions and does not account for numerous physical constraints to new growth. In West Newbury, some of the factors that escape mathematical analysis include the irregular shape of many remaining lots, surrounding development patterns, access issues, the zoning bylaw's large frontage requirements, the high cost of housing and certain "intangibles" -- e.g., land owners who choose to preserve their property or retain an extra lot for themselves.

West Newbury must also give considerable weight to the fact that many of the currently developed residential lots (see Table LU-2) are well above the lot area minimum for the zoning districts in which they are located. Oversized lots may not always be the normative mode here, but to some degree the existence of high quality precedents will influence the character of future development proposals. Typically, developers seek to protect their investments by being consistent with or better than the established level of residential value. Another consideration imbedded in the Comprehensive Plan's build-out estimate is that in the next 20 years, the Town or Conservation Commission will probably purchase or otherwise control at least 200 acres of open space and further reduce the use potential of the 3,480 acres in West Newbury's developable land inventory.⁴

⁴ This estimate is admittedly arbitrary, but it is informed by the goals and recommendations of

While any number of parcel assembly permutations can alter a build-out projection, it is an important to anticipate *probabilities* and a realistic range of outcomes in community planning so that local officials and residents can understand the magnitude of change that coming decades are most likely to bring.

West Newbury should anticipate that *on average*, 40 to 60 new houses will be built per year for the next 20-25 years. The resulting changes will be profound not because of the number of new houses (which is relatively low for the region), a doubling of the population or the associated fiscal and school implications, but because of the prospect of irrevocable change to the traditional character of West Newbury. Under the Town's current development regulations, build-out will create a conventional low-density suburb at the expense of the agricultural form and image that are so central to West Newbury's identity. Natural landmarks such as undeveloped hills and open vistas will decline, since much of the new growth will occur on sites with these features: they are among the Town's most beautiful and thus highly marketable, even though they are sometimes more difficult to develop.

It is important to emphasize that build-out under existing rules will not result in an "overdeveloped" community, but they will alter West Newbury's landscape dramatically -- to the monotony of suburban "pods," degrading or extinguishing the very qualities that distinguish West Newbury. This is

the *West Newbury Open Space and Recreation Plan* (1996) and the existence of numerous public land holdings (local or otherwise).

because the Town's current development rules do not inspire the land use future that many residents say they want to provide for later generations (let alone the present that they would like to enjoy as well). Rather, the rules control quantitative growth without regard for the qualitative ingredients of small-town form. Given the scale and location of foreseeable land use change, the physical character West Newbury will have tomorrow bears no resemblance to its caliber today.

To demonstrate where new development is likely to be felt with the greatest force, Table LU-6 estimates the number of potential new homes by zoning district. While Residence Districts A and B will host most of the new development, it is also true that growth will be dispersed throughout West Newbury. The number of potential residential lots in the Residence C district is restricted primarily by regulation, that is, a 150-foot lot frontage requirement for a lot of 20,000 square feet. If the frontage requirement were the standard of 100 feet per lot, somewhat more development would occur on 182 available acres in Residence C.

Projected future growth will create major visual and land use changes in West Newbury, but it also promises associated operational impacts that will challenge the Town's ability to maintain high-quality public services. For example, the cumulative impact of 1,200 new single-family homes in West Newbury translates into approximately 12,800 additional vehicle trips per day on local roads and between 500-550 more school-age children by the year 2020. Further, assuming that tomorrow's homes follow that pattern of today's in terms of their size and amenities, the estimated water

**Table LU-6:
Build-out Scenario by Zoning District**

<u>RESIDENTIAL ZONING DISTRICT</u>	<u>ESTIMATED NUMBER OF NEW LOTS</u>
Residence A	600
Residence B	500
Residence C	100

Based on GIS analysis of West Newbury Assessors Data, 1997.

supply needs created by future users is an additional 260,000 to 310,000 gallons per day (gpd).

Traffic increases will be experienced most directly on Route 113 during morning and evening peak-hour flows. West Newbury's internal roadway system has changed relatively little since the early 18th century, a fact strikingly apparent in the 1729 Plan of West Parish (West Newbury). Given the propensity of recent development to occur on long dead-end streets ("pods"), the Town needs to anticipate that its old roadway network will be stressed beyond capacity -- in some cases *far* beyond -- once existing streets transform into collector roads by default.

If West Newbury continues to limit access points for new development, rising traffic volumes are virtually guaranteed to produce internal a.m. and p.m. peak congestion. While the level of service on West Newbury streets may never fully reach the suburban gridlock experienced in some communities, traffic will become a serious burden here. A likely effect will be increased demands for "improvements" to collector roads with



Protected Land and
Underlying Topography

Protected Land and Topography

Figure LU-5

West Newbury

design requirements that are incompatible with rural character. In fact, the impact of traffic exceeding design capacity on several local streets are already evident to most West Newbury residents.⁵

Assuming that regional patterns hold, the total number of school-age children will range from .4 and .5 per household in any given year. Over a period of 20 years, West Newbury can expect its school-age population to expand by 500 students or 25 students each year, with possibly 10% attending private school.⁶ While the cost of maintaining municipal services will increase as the rate of growth accelerates, it is the financing of essentially one new classroom per year that will create the most evident (if not contentious) fiscal pressure. Because the build-out scenario envisions no measurable commercial growth, it is reasonable to assume that West Newbury homeowners will carry nearly the entire burden of rising property taxes.

Under West Newbury regulations, new developments shall connect to the Town's water supply if they are within 1,000 feet of the public water distribution system. This standard will become easier to meet as development proceeds, and the incremental extension of Town water will improve development prospects for some outlying areas. Although this is a natural progression, the need to provide up to an additional 310,000 gpd will pose significant capital and operating challenges for local government.

⁵ See "Traffic and Circulation" for additional data and analysis.

⁶ See "Community Facilities" for additional information and analysis.

The impacts outlined above are consistent with the challenges that confront every growing community. West Newbury's task is made more formidable, however, by the fact that many townspeople oppose expanding their tax base because they are concerned about the possibility of adverse impacts from commercial and industrial development.

Land Use and the Physical Environment

Conservation and other protected lands

West Newbury's supply of open land is divided into a various public ownership categories, as carefully detailed in the 1996 Open Space and Recreation Plan. The land use analysis for this Comprehensive Plan includes such other restricted parcels as parcels owned by other communities for water supply purposes, land owned by the Commonwealth or private non-profit conservation trusts and school sites, which add significantly to the open space character of the Town. Thus, Figure LU-5 represents a composite of all protected lands and their underlying topographic features. It shows that the total amount of open land in West Newbury is significant. With surface water areas, open land accounts for almost 33% of all acreage in West Newbury. The amount of open and protected land is a strong foundation upon which to base future land use policies, particularly if one of the objectives is to maintain traditional views and open space characteristics as much as possible.

Accommodating future growth in a manner consistent with expressed public opinion will require additional open space acquisitions and protective strategies. Most specifically,

it requires linking West Newbury's key open space holdings. The 1996 Open Space and Recreation Plan's linkage and trail proposals need to be given West Newbury's utmost attention. Connecting large open land holdings in a timely manner is critical because all connections will traverse areas of major development potential. From a land use perspective, the sooner West Newbury takes action the higher the likelihood of success with a linkage strategy, for "greenbelt" or linkage acquisitions will be much more difficult to achieve when the Town becomes more developed. Moreover, a linked open space system helps define the overall land use framework and provides a context for land use decisions and policies.

Wetlands, Rivers and Water Bodies

Figure LU-6 shows the general location and extent of wetlands, water bodies, streams and rivers in West Newbury. These natural features play an influential role in the visual and environmental attributes of the community. From a land use perspective, however, and particularly from a *future* land use perspective, they will not be determining factors in local growth. While the new Rivers Protection Act prohibits development 100 feet from rivers, perennial stream courses and water bodies, the net impact on development was already considered in build-out estimates for this Comprehensive Plan. In some instances the affected areas are already protected by law, regulation or form of

ownership, e.g. the Moulton Street and Artichoke Reservoirs. Significantly, West Newbury does not have a high percentage of contiguous wetlands and many of the major wetland areas are already under local or state control. Thus, while vital for wildlife habitat, managing storm water runoff, pollution control and preserving natural landscapes, wetlands have not and will not play a major role in future land use decisions.

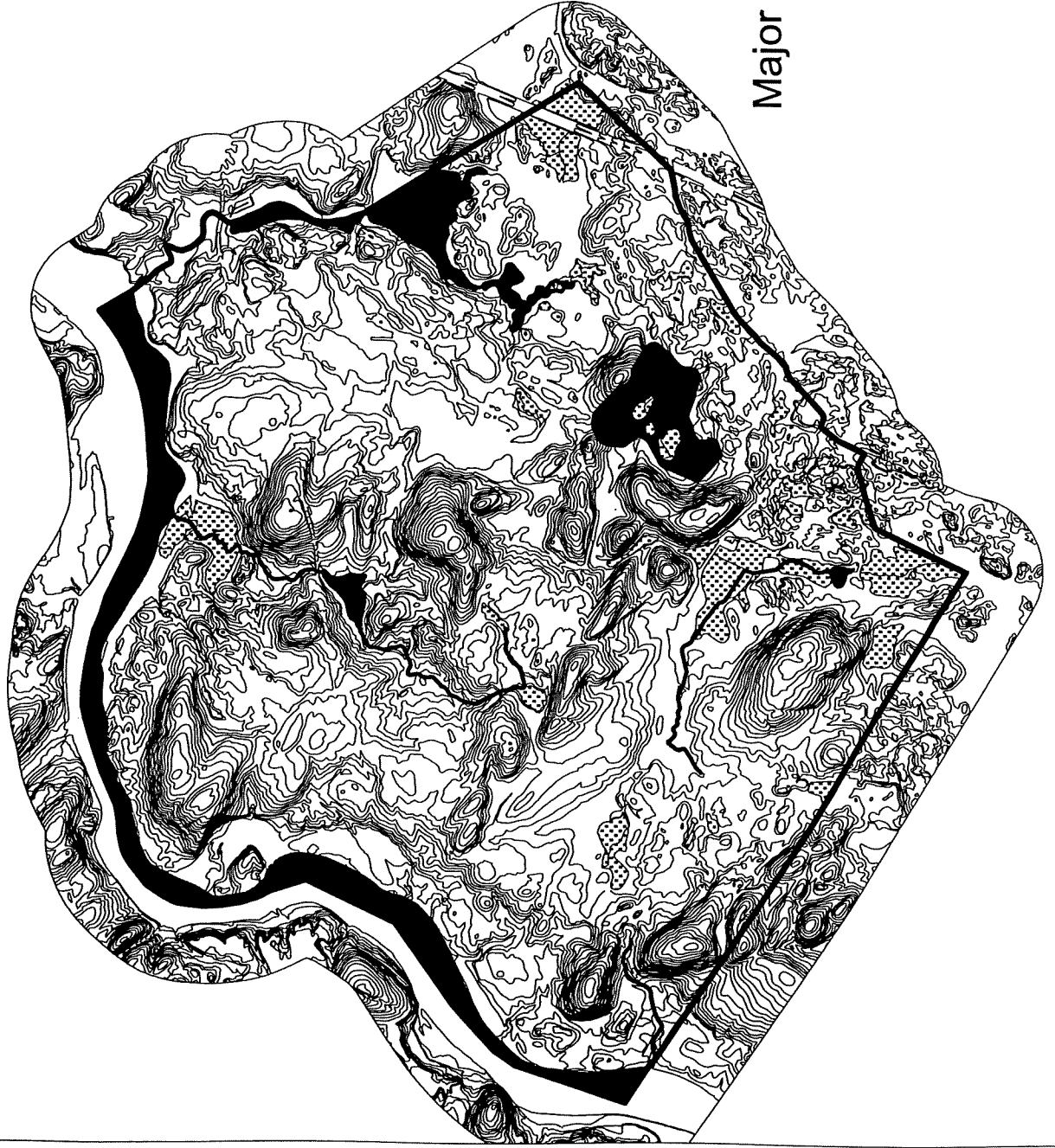
Topography and Soils

West Newbury has a gently rolling terrain interspersed by a series of elongated hills and wide valleys. The highest point in Town is Archelaus Hill (250 feet), dutifully located in the center of West Newbury. The terrain and its vegetative cover are one of the most strikingly attractive features of the entire community. From many vantage points, sweeping views to the surrounding countryside are still the norm in West Newbury. The soil types associated with this rolling topography are typical of the Merrimack Valley region. While sometimes difficult for residential development, they pose no significant deterrent to West Newbury's continued growth.

For the most part, the zoning bylaw's low development allowances are consistent with the Town's soil types and availability of public water. Similarly, the terrain itself is not a growth obstacle. While hills are more difficult and costly to develop, West Newbury can see from its own recent

West Newbury needs to take immediate steps to protect its scenic hillsides from development

As the unspoiled image of West Newbury's enviable landscape succumbs to subdivision roads and new expansive homes, the result will be major change in the visual character of the Town. In terms of protecting the community's rural-agricultural form, the remaining hills of West Newbury must receive the highest priority.



Major Waterbodies, Streams, Wetlands

Figure LU-6

West Newbury

experience with hillside development that the topography here will not interfere with local growth. Given the views that these sites offer and the Town's high-end housing market, the gentle hills of West Newbury are actually a development incentive and they will likely receive the most near-term development pressure. As the unspoiled image of West Newbury's enviable landscape succumbs to subdivision roads and new expansive homes, the result will be major change in the visual character of the Town. In terms of protecting the community's rural-agricultural form, the remaining hills of West Newbury must receive the highest priority.

Zoning Regulations

The current zoning regulations are relatively clear and well organized. They consist of three residential zones -- Residence A, B, and C -- and a Business and an Industrial zone. The residential districts are designed to produce single-family homes on lots of 20,000, 40,000 and 80,000 square feet respectively.

Ostensibly, the bylaw allows for multi-family housing and cluster developments, but the conditions and design standards so impede the desirability of using either alternative that West Newbury's zoning effectively encourages what it is getting: conventional subdivision pods with single-family dwelling units.

The business zone is very small and confined to one portion of West Newbury, near the intersection of Maple Street and Route 113. It is too small and restrictive to spawn a traditional New England town center and it will have a very minor influence on future development of the West Newbury. Similarly, the Industrial District is small and while located appropriately near the Rte. I-95 interchange, most of the district is a wetland.

West Newbury's land use regulations need to:

Direct residential development away from the traditional suburban form

Encourage -- not simply allow -- cluster residential development opportunities

Make all forms of development, whether residential or non-residential, preserve open space and achieve design compatibility with the semi-rural ambience of the Town

Encourage the development of several housing types

Modestly expand the tax base without detracting from the Town's semi-rural character

West Newbury's zoning bylaw is well suited for creating a low-density suburb, which would be fine if that is what the community envisioned for its future. In addition to earlier comments on the zoning bylaw's business and industrial districts and the dubious viability of its multi-family and cluster provision, there are two other issues that the Town needs to consider. First, the bylaw's site plan requirements at Section 8.2 are exceptionally weak and vague, and they are not at all useful for protecting traditional landscapes.

Second, the lot frontage requirement of 150 feet in the Residence C District (RC) is very high in relation to lot area. In essence, the frontage standard requires building lots that are either square, wide rather than deep, or larger than the required 20,000 square feet. Thus, it is lot frontage that serves to minimize RC development potential and not the availability of developable land. While this fact may

reduce short-term development pressure, in the long term it may spawn a series of dimensional variance requests and in any case, it ensures monotony.

The interaction of West Newbury's zoning bylaw, zoning map and subdivision regulations will continue to produce an overwhelmingly single-family residential community. In the next 20 years, they will produce a low-density suburb without a town center. *They will not protect the current landscape or the semi-rural land use pattern that exists today because they are not designed to do so.*

Zoning regulations represent the one element in the development equation where a town can have significant input. They cannot be designed to stop growth or reduce property values, but bylaws can encourage the kind of growth pattern that would be more consistent with what today's residents say they want for West Newbury's land use future.

It is possible to maintain property values and landowner rights while preserving more of the traditional open space character of the Town. To accomplish what West Newbury has expressed as its ultimate desire -- retaining its rural-agrarian form and scenic open space -- the Town needs to adopt more responsive development rules and it must also become an *agent* in its own growth future.

Key Findings and Recommendations

Summary

Market forces, good regional access and land availability dictate that residential development pressures on West Newbury will continue and most likely accelerate in the

next 10-20 years. Whether the Town becomes pro-active about shaping its development future or maintains the passive stance that makes land use boards recipients of proposals put forth by others, West Newbury is going to have more homes, people, school-age children, cars and competition for the revenue that its narrow tax base yields.

More growth, however, is less significant than *quality* growth. Vital communities have learned that trying to stop development altogether is not only ineffective, but it misses the point. Balanced growth celebrates the past and accommodates the future with equal success. If West Newbury concentrates its efforts exclusively or even primarily on blocking new-home development, the Town may end up with somewhat fewer houses but its victory will come at the expense of the physical and functional appearance that gives West Newbury its identity.

While the present West Newbury Zoning Bylaw has some technical problems, it is clear and functional. As written, however, it is a blueprint for a low-density suburb and will ultimately remove most of the open, agricultural character of West Newbury because the remaining hills and farm areas will host new development. *If local zoning is to play a meaningful role in shaping new growth without depleting the Town's essential character, every feature of the zoning bylaw has to support development of a rural form.* Moreover, the bylaw needs to provide for greater diversity of land use options so that West Newbury can broaden its tax base modestly without detracting from the character that it wants so badly to preserve.

Remaining primarily residential is clearly appropriate given the Town's past, its present values and political culture and the scale it should strive for at build-out. Regardless, as the rate of growth escalates there will be moderate to severe municipal and school cost impacts. If West Newbury aspires to be a rural-residential community that is also diverse, the Town needs to plan for how best to accommodate the costs of growth without unwittingly homogenizing the community's social composition -- an outcome that is virtually guaranteed without non-residential sources of tax revenue.

Development potential is distributed throughout West Newbury, which means that no one area is immune from additional growth. The projected build-out profile is almost exclusively for residential uses and it assumes an additional 1,200 new single-family homes, 3,700 new residents, 500 new school-age children and 12,800 new vehicular trips per day by the year 2020.

Forests and agricultural lands, specifically Chapter 61 and Chapter 61A parcels, will continue to be converted for development purposes. Approximately 40% of all new development will occur, however, on existing residential properties with four acres or more of land, that is, in the form of subdivision in-fill development. Further, the Town's 16 residential parcels with 20 or more acres will be the most likely source of development in the near term (five years). Policies to manage growth must address both sources of development pressure if the overall effort to manage growth is to be successful. Natural features such as wetlands, streams, and hills will not significantly shape or deter the anticipated development pressure.

Vigorous implementation of the 1996 Open Space and Recreation Plan, most notably its recommendations pertaining to open space linkage, will be a key element in any successful effort to preserve traditional land use characteristics. Development regulations, such as those that will be proposed as zoning bylaw and subdivision amendments and a local wetlands protection bylaw, will form the principal tools for West Newbury officials to direct growth through non-acquisition means.

Recommendations

West Newbury should consider the following recommendations, which place land use at the center of a preservation-based community development strategy:

1. Create a *Rural-Agricultural Overlay District* that targets the highest-priority open space areas in West Newbury, and encourages preservation and rural design by either of two means at the developer's option: *Rural Housing Opportunity Development* (see also, Housing Chapter) or *Rural-Agricultural Development*, which would:
 - a) Offer a density bonus in exchange for maximizing the amount of undisturbed, usable *public* open space (minimum: 50%). Eligible sites should be limited to 20 or more acres.
 - b) Site development to preserve rural scenic views from the street.
 - c) Mandate architectural design and site plan review, preservation of stone walls and other attributes consistent with the Town's rural character

- d) Significantly reduce minimum frontage requirement and impose controls for lot width at the building line.
 - e) Encourage common driveways.
 - f) Design local roads for travel speeds of 20 mph.
 - g) Discourage cul-de-sac unless topography and/or lot line configurations leave no other viable option. (In any case, provide ROW so that road can be connected to neighboring roads in the future.)
 - h) Transfer open space to Town of West Newbury or West Newbury Conservation Commission, or a non-profit land trust and provide a public access easement.
2. Establish a use allowed in all residential districts known as *Flexible Development*, for residential developments of 10 or fewer single-family homes on newly created private ways, that would encourage developers to minimize site disturbance, preserve the maximum amount of existing vegetation and reduce overall density by:
- a) Allowing road construction at less than customary Town road standards while requiring the new road to be owned and maintained at the expense of the development's homeowners.
 - b) Tailoring subdivision design standards (roadway width, slope, curb) to the site's natural characteristics and encouraging natural drainage to the maximum extent practical.
- c) Reducing frontage and setback requirements in exchange for larger-than-minimum lot area required for conventional subdivisions, e.g., a minimum lot size of 6 acres.
 - d) Placing deed restriction over undeveloped land so that excess lot areas cannot be subdivided further in the future.
3. Establish a *Town Center District* that enhances the existing Business District at Maple Street and Route 113, sets design standards and requires site plan review.⁷
4. Establish a *Research and Office Park (R/ORP) District* west of the I-95 interchange.⁸
5. Replace existing Site Plan Standards with a new, protective set of *Site Plan Design Standards* and a coordinated Site Plan Review process.
6. Establish a *Design Review Board* and mandate *Architectural Design Review* for all non-residential projects and certain residential projects requiring a special permit.
7. Appropriate funds for and commission a feasibility study for a municipally operated package treatment plant to serve the Town Center area.
8. Designate all appropriate rural ways as Scenic Roads under the Scenic Road Act.
9. Enforce the Shade Tree Act.

⁷ For additional information, see Economic Development Element.

⁸ See also, Economic Development Element.

10. Identify (map) and define criteria for scenic viewsheds and adopt a scenic viewshed ordinance.⁹
11. Revise the Town's land use regulations as needed to align requirements with the Comprehensive Plan.
12. Adopt a demolition delay ordinance.¹⁰
13. Explore the potential usefulness and legal permissibility of a Scenic Upland Bylaw in order to protect views of and from important vistas, and prevent erosion.
14. The Open Space Committee or another local body should evaluate the entire inventory of Chapter 61, 61A and 61B parcels for their relative desirability as public open space. The Town would be able to respond more quickly to land owner notifications of intent to withdraw property from a Chapter 61 agreement if each parcel had been studied and "ranked" in advance.¹¹

⁹ For additional information, see Natural and Cultural Resources Element.

¹⁰ See Natural and Cultural Resources chapter.

¹¹ For additional information, see Open Space and Recreation Element.

West Newbury's most enviable quality is its stunning landscape, an intricate tapestry of scenic, historic,

cultural and ecological resources that collectively bespeak the Town's rural-agrarian heritage.

Historic structures spanning four centuries of development -- First Period farmhouses, 19th-century agricultural outbuildings and 20th-century municipal buildings designed in the Classical Revival style -- contribute significantly to West Newbury's sense of

place. In concert with such pastoral features as stone walls, agricultural fields, historic burying grounds and scenic roads, West Newbury's historic building fabric endows the Town with a unique record of its rural past.

The inextricable relationship between cultural and natural resources in West Newbury history is evident throughout the Town. The regionally important freshwater of the Merrimack River, the 600 wetland acres of Ash Swamp and the extensive groves of woodlands at the Crane Pond Wildlife area are as central to West Newbury's identity as the preserved evidence of its agricultural roots. West Newbury depends on all of these resources for their scenic qualities and also their ecological significance, including the purity of public water supplies and the preservation of wildlife habitat.

While the Town has no known environmental problems, the limitations of its water supply combined with potential hazards such as erosion from poor development design and agricultural runoff,

non-point source pollution from deteriorating septic systems and storm water runoff could threaten the community's critical environmental areas and public resources. As development pressures increase and less desirable lands are targeted

for subdivision (areas close to wetlands, on slopes, or with poor soils) these threats could become a reality.

West Newbury's simple beauty and charm attest to another ingredient of its character, however: a sustained commitment from dedicated residents

who have created the kind of community they want to call home. This commitment is evident in local festivities, the continuous work of volunteer organizations that devote their energy to beautifying and maintaining public spaces throughout the Town, and the community's interest in children.

Between such groups as the Garden Club, the Riding and Driving Club, the Laurel Grange and citizens who work tirelessly on each year's Memorial Day celebration, West Newbury's human resources have as much to do with the Town's unspoiled character as the historic structures, hillsides and water bodies that normally define "sense of place." It must be understood, then, that the Comprehensive Plan is more than a manifesto about saving an image: it is *also* about saving the close-knit social fabric of this unique community as it grows and makes room for others.

Natural and Cultural Resources

Summary of Existing Conditions

Natural Resources

Within West Newbury's approximately 14 square miles are vast tracts of undeveloped land containing some of the most significant and fragile natural resources in the Commonwealth. Water bodies such as the Merrimack River, the Artichoke Reservoir Systems, Mill Pond and Little Crane Pond along with numerous streams and pools supply the community with scenic and recreational opportunities, but they are also home to significant wildlife populations.

In addition, West Newbury has a rich array of freshwater and tidal estuarine marshes, wooded swamps, wet meadows and vernal pools,¹ making wetland and water resources one of the Town's most important assets. For example, the tidal marshes along the Merrimack River and the woodlands of the Crane Pond Wildlife Area provide natural habitat for both native and rare animal and plant species. Furthermore, the Artichoke Reservoir serves as the City of Newburyport's public water supply and its watershed covers approximately one-third of West Newbury. This same water supply also serves West Newbury during peak consumption periods.

¹ Information about the Town's natural resources has been drawn almost entirely from the West Newbury *Open Space and Recreation Plan* (1996). The *Open Space Plan* includes an extensive natural resources inventory that has not been duplicated here. Rather, the *Comprehensive Plan* highlights the resources that are placed at the greatest risk by the Town's future development.

Comprehensive Plan Goals and Objectives: Natural and Cultural Resources

Rural Character Goal

Preserve the rural character of West Newbury, which includes historic buildings and a mix of farms, forests, wetlands, water bodies and winding country roads.

Policies

- Encourage agricultural uses.
- Encourage uses that preserve open space and natural resources for recreation or other purposes.
- Maintain and improve rural roadway aesthetics including trees, stone walls, and underground utilities.
- Encourage preservation of town's historic resources, including residential, commercial, institutional and agricultural structures as well as cemeteries and bridges.

Some of West Newbury's most significant natural resources are showing "early warning signs" of degradation today. Non-native plant species such as loosestrife are overpopulating smaller ponds and wetlands, destroying indigenous plant communities as they migrate. Decades of silt accumulations at Mill Pond have contributed to a proliferation of nuisance aquatic plant species and decreased the pond's water depth by two to four feet in some locations.² Further, West Newbury's mature tree

² Based on cross-sections showing the difference between silt-layer and hard-bottom depths. See Baystate Environmental Consultants, *Dredging Feasibility Evaluation Regarding Mill Pond* (1998). The Town has appropriated \$600,000 to dredge Mill Pond in order to address this problem.

population is contending not only with the stresses associated with natural aging, but the environmental harm caused by road salt.

Through local planning and regulatory efforts, West Newbury has sought to protect its unique resources from the adverse consequences of development. The town's Zoning Bylaw establishes a Flood Plain District on land within the 100-year flood boundary set by the U.S. Army Corps of Engineers. While the Bylaw does not prohibit development outright, the allowed uses are limited and all proposals must comply with a special review and permitting process. Moreover, efforts are currently underway to protect public water supplies through a proposed Watershed Protection District Bylaw that may be presented at the 1999 Annual Town Meeting. Using the Massachusetts Department of Environmental Protection's (DEP) model bylaw, West Newbury's ordinance will encompass the recharge areas for existing and proposed groundwater supplies.

West Newbury currently draws from a well field on Main Street to supply residents with public water. Approximately one-half of the community's geographic area, which encompasses two-thirds of all households, is served by the public system -- primarily in the western quarter of Town and along Main Street. The Water Department's five-year capital improvements plan calls for distribution system extensions in areas concentrated southeast of Main Street. All new development located within 1,000 feet of an existing water main must be connected to the system, meaning that wherever possible private development shoulders responsibility for extending the distribution system.

The Water Department has been operating based on a projected 2% annual growth rate for water usage in the community, but recent installation requests indicate that

development is beginning to surpass the Department's projections. The escalating rate of consumption appears to stem not only from new tie-ins but also the water-intensive amenities of new residential developments, e.g. automatic lawn sprinkler systems, which place additional pressures on a system that is already pushed to the limit on a regular basis.

The capacity of the existing well field is defined by what it can yield, or in the parlance of water experts, a safe yield of approximately 160,000 gallons per day (gpd) and a maximum yield of 210,000 gpd. During peak consumption periods, West Newbury exceeds the maximum yield potential of its lone well field and purchases water from Newburyport. The Town is exploring the possibility of entering into a new contract with Newburyport for supplemental water because the need will continue for the foreseeable future, even if the Water Department's plan to open two new small well fields proceeds.³

It is important to point out that West Newbury maintains a source of superior water quality. DEP recently commended the Town and waived its requirements for frequent extensive testing because West Newbury consistently meets high quality standards. After witnessing the contamination of Groveland's public water system, which supplied West Newbury before the local well field came on line in 1990, the Town realizes the importance of protecting this vital resource. As such, West Newbury is already taking precautions to safeguard against future contamination. According to the West Newbury Fire Department, the Town has pursued an active campaign to have all non-compliant

³ See Community Facilities and Services for a more extensive analysis of West Newbury's drinking water issues.

underground tanks removed. To date, all underground tanks on public property have been removed or replaced with modern structures. West Newbury's single gasoline service station also complies with current environmental regulations.

That West Newbury has no public sewer system means all properties rely on private septic systems for wastewater disposal, which raises concern that some (if not many) systems may not comply with current Title V standards. Furthermore, as West Newbury's more marginal land is targeted for development (meaning areas close to wetlands, with slopes of more than 20% or poor soils), the potential for non-point source pollution is increased by the possibility of septic failures, construction runoff and erosion.

Currently, the Planning Board does not have an erosion/ sedimentation bylaw. Although the Conservation Commission requires an erosion/sedimentation plan when it reviews proposals affecting wetlands, the Commission generally lacks jurisdiction over projects beyond 100' of wetland resource areas. The exceptions include riverfronts and cases where a project will affect nearby wetlands even when they are located outside the 100' buffer zone.

A review of potential contamination impacts cannot be focused solely on *existing* water resources, for West Newbury has to address the inadequacy of its public water supply by developing additional well fields. They, too, must be protected by appropriate policies and land use controls. The Water Department is currently testing two potential well sites, both of which are on privately owned land. Assuming capacity and volume are adequate, these sites must then be reviewed through a rigorous environmental permitting process and would not be expected to come on line for about five years. According to the Water Department, even if

both new sites become operational, seasonal dependency on supplemental water from Newburyport will probably continue.

Several state regulations also serve as local tools for natural resource protection. The 1997 Rivers Protection Act limits development within 200 feet from all perennial rivers and streams. Some affected areas are already protected by local control, including Moulton Street and Artichoke Reservoirs. However, the law does not protect water resources or their surrounding embankments from overuse, as is evident on the Merrimack River where River Road is experiencing erosion from increased boating activity. Most of the land along this road is privately owned, which complicates the Town's ability to undertake remedial actions such as landscaping, retaining walls, and so forth.

Currently, West Newbury has no local bylaw to control wetlands development beyond the 100-foot buffer zone that is regulated by the Massachusetts Wetlands Protection Act, MGL c. 131 §40. The Town's ability to use the full powers available to it through a local wetlands bylaw would be reduced, however, by the lack of a comprehensive wetlands inventory, which in turn stems from budgetary and staffing constraints. The Town hopes to complete Geographic Information System (GIS) mapping for each municipal department, including the Conservation Commission. The results should help local officials detect wetland locations more easily.⁴ West Newbury has been only

⁴ Even with sophisticated GIS technology, fieldwork will remain a vital part of the Conservation Commission's duties. If the experience of the few towns with full GIS installations holds true in West Newbury, however, GIS ought to enrich the Town's land use planning and resource protection capacity.

partially successful in documenting its vernal pools. The Conservation Commission recently certified two vernal pools on publicly owned land, including the pool at Action Cove. However, documenting these critical environmental resources on private parcels has proven difficult if not impossible due to the inability to access the sites.

Several areas of ecological significance are owned and managed by public or non-profit entities such as the Department of Environmental Management, the Essex County Greenbelt, the Department of Fisheries and Wildlife and the Town of West Newbury. Their holdings contain some of the plant and animal species that state and federal authorities classify as rare, endangered or threatened. However, other significant sites, such as portions of the Gulf of Maine Freshwater Tidal Marsh along the Merrimack River, have no such ownership protection.

Cultural Resources

The role of cultural resources in defining a community's sense of place is as influential as natural and scenic resources. In West Newbury, the built environment provides a clear picture of the community's rural heritage. From the historic residences of the Training Field Historic District to the barns and stone walls of rural farmsteads, West Newbury is fortunate to retain significant vestiges of its history. The Town's cultural identity is enhanced by its vibrant arts community, local repositories of historic and contemporary ephemera found in the G.A.R. Library and active local community groups, which contribute to a unique atmosphere of social, agrarian, and architectural history and culture.

West Newbury has both a historical commission and local historic district commission, and the Town is included in the Essex National Heritage Corridor. Neither

of the local public organizations nor the private Historical Society is currently active in preservation outreach activities, a common situation in very small communities like West Newbury. The Historic District Commission, with powers to approve or deny visible building alterations within the Training Field Historic District, typically reviews one to three applications annually. Lack of funds and staff resources have interfered with efforts by the Historical Commission to update the Town's historic inventory. Although the Historical Commission does not meet regularly and convenes mainly to respond to specific circumstances, it does serve as liaison to several other municipal boards for preservation issues. The Historical Commission also operates a historical museum, which is opened for tours during the summer months.

West Newbury's inventory of historic sites is more than 20 years old, but several First Period homes were surveyed in the 1980's as part of a Thematic National Register Nomination for 17th century homes in Massachusetts. While this more recent survey is recorded on newer forms that include historic and architectural documentation, they do not assess the buildings within the local context of West Newbury. The original inventory forms are located in the G.A.R. Library and at the Massachusetts Historical Commission (where photographs are also located). The Town's inventory, which dates from the 1970's, consists primarily of residential structures constructed prior to 1900. Due to the age of the survey forms and the information required when the survey was completed, minimal historic information is included.

The Town of West Newbury has several buildings listed on the National Register of Historic Places, a federal listing of historic buildings, sites and objects. The Newall

Farm at 243 Main Street was individually listed on the National Register in 1978. Four other properties were listed when the thematic nomination of 113 First Period Houses in Eastern Massachusetts was approved in 1990. These 17th-century structures are listed in the chart to the right.

17 th Century National Register Properties in West Newbury		
PROPERTY NAME	ADDRESS	# OF BUILDINGS
Samuel Chase House	154 Main Street	One building
Timothy Morse House	628 Main Street	Two buildings
Rev. John Tufts House	750 Main Street	Three buildings
Samuel March House	444 Main Street	Three buildings

Due to the Town's incomplete inventory status, however, no future nominations can proceed without a comprehensive revision of the earlier inventory. West Newbury is fortunate to have one local historic district, the Training Field Historic District. Located along Main Street and Training Field Road, the historic district contains 13 properties and comes under the jurisdiction of the Town's Historic District Commission. A limited number of other properties have also been granted local historic district status, including the G.A.R. Memorial Library at 490 Main Street and the Joseph Zebulon Gordon House, 511 Main Street.

Historic buildings are more than just residential structures. Particularly in West Newbury, building remnants of early architectural traditions also serve as physical reminders of a community's past. Early industrial structures such as the remaining comb factory buildings and outbuildings from the shoe trade also provide documentary evidence of West Newbury's history. As West Newbury continues its evolution from an agricultural economy to a residential enclave, the physical components of the community's early farmsteads will be threatened by new development. The loss of agricultural outbuildings will permanently alter the landscape and begin to eclipse the visual qualities of "place" that make West Newbury special. While new development

often preserves and reuses agricultural residences during redevelopment, the farm's outbuildings are usually demolished. Deferred maintenance and inactivity further contribute to the demise of these structures, as does their lack of flexibility in redevelopment. West Newbury's existing building inventory does not include descriptions or photos of outbuildings for historic farms. Furthermore, while several agricultural landscapes are preserved through Agricultural Preservation Restrictions, the structures have no comparable protection.

It is not only buildings that define a town's sense of place, but the open spaces and scenic landscapes as well. As discussed in the Open Space Chapter, West Newbury has a wealth of existing landscapes that have retained their agricultural character and natural and scenic qualities. These sites have not been surveyed as part of the Town's historic inventory and other than a partial listing in the Open Space Plan, they have not been fully documented. While many of these sites are unprotected from adverse development, several parcels have been afforded permanent protection through Agricultural Preservation Restrictions.

In addition, West Newbury has acquired several significant sites and other governmental and non-profit agencies have also secured ownership of parcels with ecological and scenic qualities. Future

acquisitions at the local level may be difficult for fiscal and political reasons. The Town has an acquisition fund specifically reserved for open space protection, but some officials believe it is not adequately funded.⁵ A recent proposal to support statewide enabling legislation for local land bank initiatives was defeated at last year's Town Meeting.

The relatively undisturbed record of four centuries of settlement in West Newbury explains the presence of archaeologically significant sites, particularly along riverbeds and streams where Native American settlements were common. The 1996 Open Space and Recreation Plan notes two sites of archaeological interest, including remnants of a commercial wharf and ferry landing along the Merrimack River and an old stone cellar on River Road, which is believed to date to pre-colonial times and is attributed by some to Nordic explorers. The Massachusetts Historical Commission has identified several sites within West Newbury where artifacts and remnants are believed to exist.

Other less obvious resources that contribute to West Newbury's cultural environment include cemeteries, stone walls and historic bridges. Five local burial grounds within West Newbury contribute to the community's character and historical perspective. A Quaker burying ground off Turkey Hill Road as well as a potter's field and three other "old" burying grounds provide a glimpse into the Town's 19th-century past.

As physical evidence of the Town's agricultural legacy, stone walls delineate the

historical development pattern of land ownership and agricultural use. Many of these 18th- and 19th-century structures remain throughout West Newbury, often on land now privately owned for residential use. Deferred maintenance and natural erosion are believed to have caused many stone walls to deteriorate, and development pressures have contributed to the outright loss of these irreplaceable resources. A proposal to designate scenic roadways, which would protect such scenic qualities such as adjoining stonewalls and important trees within the public right-of-way, was never acted on at last year's Town Meeting. West Newbury's Zoning Bylaws does not specifically require protection of these walls during residential development. However, it is the Board's policy to require the retention of the existing stone walls on site, either through preservation of the original wall or through the reuse of the stones elsewhere for landscaping. Without an inventory of the community's stone wall locations, though, successful implementation of this policy is difficult.

West Newbury's historic development pattern of transportation routes still exists, and it is one of the most influential elements of the Town's rural form. Many roadways retain such rural attributes as narrow pavement, winding routes and adjoining vegetation, and they provide unmatched views to scenic rural vistas. Like all communities in the Commonwealth, West Newbury receives Chapter 90 funds for roadway improvements. Several of the Town's roads are currently being repaired and repaved, often smoothing and enlarging the road surface and eliminating some of the surrounding vegetation. Without passage of the scenic roadway proposal, West Newbury's ability to preserve the trees, vegetation, and stone walls that make its rural public ways unique will be undermined.

⁵ Like most communities, West Newbury also has a conservation fund as provided by existing state law, for filing fees, hiring experts and similar expenses.

In 1994, West Newbury commissioned a Local Roads Inventory Project that examined public and private streets in order to determine eligibility for Chapter 90 reimbursement. The Report does not describe the quality or characteristics of roads, nor does it provide suggested design/maintenance guidelines. Existing public ways are targeted for improvements based upon the West Newbury Road Committee's prioritized list for roadway repairs. A Road Improvement Plan was created in 1995, but it was based upon anticipated funding through the Intermodal Surface Transportation Efficiency Act (ISTEA). Since the Town did not receive additional funding beyond its state Chapter 90 allocation, the Plan was never implemented. Today, then, West Newbury public works personnel identify roads for reconstruction based upon recommendations from the Town's Roads Committee. Design standards for these projects are based on the standards set forth in the Town's Subdivision Regulations for *new* construction.⁶

West Newbury has several bridges within its boundaries and remarkably, they have retained their historic appeal. While many of the Commonwealth's historic bridges have been replaced by modern structures, West Newbury's transportation routes still have the bridge scale and massing characteristic of rural areas. Many of the Town's bridges are simple concrete spans such as the Rogers Street Bridge over the Artichoke and span at Turkey Hill over Brown's Brook.⁷ Curzon's Mill Bridge and Rocks Village Bridge are more substantial in construction and span and retain their historic quality.

⁶ Interview with Bert Knowles, February 25, 1999.

⁷ *Ibid.*

The City of Newburyport began design hearings several years ago to restore the Curzon's Mill Bridge over the Artichoke River so that it can be used for foot, bike and horse traffic. The City planned to seek State funding for the restoration, but problems with an abutter have slowed the project.⁸ Presently, the bridge is closed and partially dismantled. Reconstructing the bridge would set the stage for future development of a path connecting the two communities.

The Rocks Village Bridge, originally constructed in 1868, has been modified substantially over the years. Spanning the Merrimack River to Haverhill, the Rocks Village Bridge is scheduled for renovations by the Commonwealth in order to increase the allowable ton limit and incorporate bicycle and pedestrian access. Plans for the redesign of this bridge to meet a myriad of demands are a local issue, and may become a regional issue as well. The Merrimack Valley Planning Commission is currently working with West Newbury and the City of Haverhill to determine appropriate traffic exclusions once the bridge is repaired. Proposals to limit truck access to the bridge after construction may restrict agricultural businesses from utilizing this popular route, while proposals to enlarge the structure to incorporate walkways may alter the character of the bridge and surrounding residential areas.

Analysis of Significant Issues

Natural resources

West Newbury is fortunate that past development practices have respected the community's environmental and cultural resources -- for the most part. Many design decisions were made independently,

⁸ *Ibid.*

however, without local regulations that would guarantee resource protection. To rely on the belief that development will continue in this manner may prove shortsighted and produce serious consequences, especially as development pressures focus on more sensitive landscapes and structures. Without protective regulations to restrict development on ecologically sensitive land, the potential for adverse impacts on the community's public water supply and its natural resources is very strong, and the results will be irreversible.

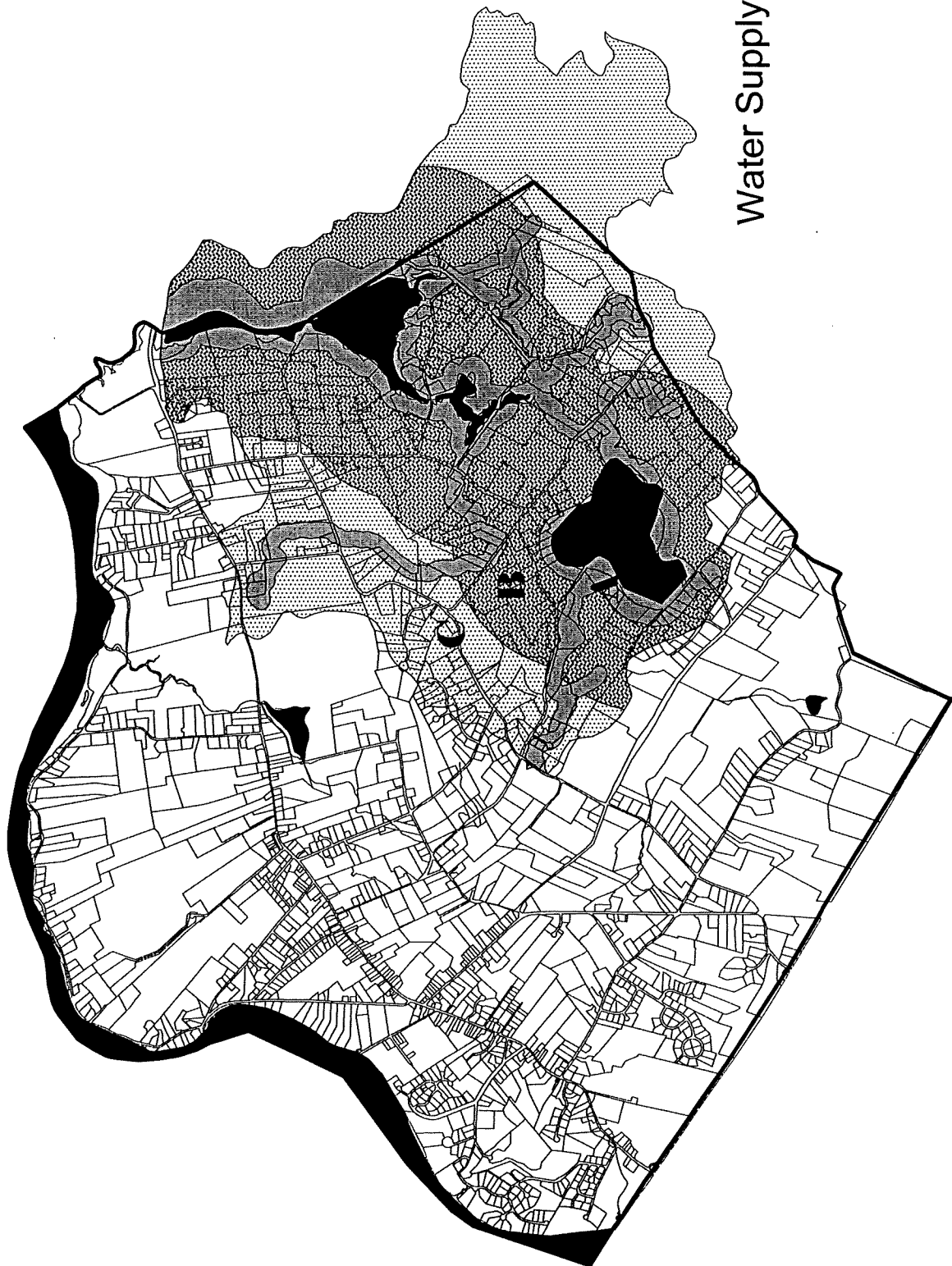
West Newbury continues to face a seasonal drinking water shortage that will only be exacerbated if development continues at its current pace without more protective regulations. While proposed new well fields and water purchased from Newburyport will help to alleviate the shortage, West Newbury needs to examine the financial ramifications of these options. Because the West Newbury Water Department operates with a special revenue fund, revenues for capital improvements and operations come entirely from water rate payers, who will bear the entire cost of testing, developing and constructing new water supply sites. In a community that is almost exclusively residential, the "cost" and "benefit" equation has to account for the reality that individual homeowners have essentially no commercial or industrial users with which to share the expense of water system maintenance, improvement and development.

West Newbury's dependence on the Massachusetts Wetlands Protection Bylaw for development restrictions provides a basic enforcement tool against hazards to wetland areas within 100' of construction sites. Countless cities and towns across the Commonwealth have adopted local wetland protection bylaws that supplement the state law, thereby accomplishing three objectives. First, they gain the ability to tailor wetland

regulations to the unique needs of their community. Second, they create an alternate path of appeal, because if DEP amends or vacates a Conservation Commission decision under MGL c.131 Section 40, the decision still "stands" under the local ordinance unless it is overturned in Superior Court. Third, a properly written local ordinance gives communities a powerful enforcement mechanism to ensure that projects comply with a Conservation Commission permit (known as an Order of Conditions), because they can impose fees and fines against violators in addition to issuing cease and desist orders. To make the best use of a local wetlands bylaw, however, West Newbury needs a comprehensive, accurate wetlands map. This is an essential requirement for administering any kind of development regulation: communities cannot adequately protect what they have never identified.

The proposed Watershed Protection Bylaw should provide West Newbury with additional measures to protect its public drinking water supply. The delineation and protection of zones of contribution to existing and proposed public water supplies is critical to ensure that inappropriate development is prohibited and that allowed uses are kept to the lowest possible density.

West Newbury's lack of an erosion and sedimentation bylaw for new development proposals that are not within the jurisdiction of the wetlands protection bylaw is of great concern, particularly for projects on hillside settings. Impacts on watersheds and other ecological systems from runoff, non-point source pollution and other contamination concerns are costly to cure and sometimes irreversible. Currently, development submittals undergo erosion review if they trigger the filing of a Notice of Intent with the Conservation Commission, but there are no published standards, mitigation requirements or review procedures for



Water Supply Resource Zones

Figure N&CR-1

West Newbury

projects that fall outside the Commission's jurisdiction. For development of marginal land, particularly sites with slopes greater than 20%, the lack of an erosion control ordinance creates serious risks that sedimentation will damage downgradient wetland and water resource areas.

West Newbury is in the advantageous position of having many of its fragile and sensitive natural areas under public or private non-profit ownership. Still, the lack of comprehensive management plans for Town-owned parcels may result in the loss of the very resources for which these sites were protected. The Conservation Commission has been unable to develop a management plan for parcels under its jurisdiction due to staffing constraints and the large volume of proposals requiring review.

Even with the best regulatory enforcement tools available, West Newbury's fragile ecological resources will still degenerate to some degree. Without a comprehensive review of these resources and strategic planning for their protection, many of the community's resources -- namely mature trees and small ponds -- will be degraded over time, perhaps imperceptibly at first. A comprehensive inventory of the mature trees at the Training Field was completed in the 1970's. Until an update and expansion of the Town's heritage trees inventory is completed, it will not be possible to devise a maintenance and management plan beyond the level of generalities. Clearly, West Newbury's first step is to complete an inventory process that will provide enough quantitative and qualitative data to enable the development of a resource management plan. A similar issue exists with the Town's cultural resources, as discussed below.

Cultural Resources

Public recognition of a community's architectural and historical resources is the

first step in preserving West Newbury's historic and cultural artifacts. Outreach activities such as local history curricula within the school system and special events like the annual Christmas House Tour all go a long way toward fostering community pride and historical interest. West Newbury needs to encourage participation in its historical commission beyond the organization's advisory capacity in local policy and regulatory activities.

Updating the community's historic resource inventory is a *critical* step toward ensuring long-term preservation. A community must be familiar with its historical resources in order to preserve them. West Newbury's historic resource inventory is more than 20 years old, and it needs to be updated and expanded. Cultural resources such as landscapes, agricultural outbuildings and stone walls should be surveyed and documented. These resources are fragile and cannot be replaced once they have been lost.

Current development pressures threaten the physical characteristics of West Newbury's agricultural heritage. Stone walls, which delineate historic land parcel patterns, often conflict with the realities of subdivision design. The West Newbury Zoning Bylaw does not require developers to preserve these valuable structures but by Planning Board policy, projects are expected either to preserve stone walls or to reuse the materials elsewhere on the site. Whether protected through regulation or Planning Board diligence, however, it is very difficult to enforce local standards without a suitable inventory. In some cases landowners are simply unaware of the Town's intent, but an equally compelling concern is that many of the Town's old stone wall systems are deteriorating because of deferred maintenance.

Owners of historic properties in West Newbury appear to be preserving their buildings voluntarily, that is, without policy or legislative intervention. This is unsurprising given that so many West Newbury residents recognize the significance of the Town's historic building fabric. Regardless, West Newbury should not rely on private, personal decisions for the future preservation of an entire community's architectural heritage. These buildings, including not only 18th- and 19th-century residences, but some 20th-century structures as well, shape West Newbury's rural appearance and sense of place. Public education is the first step in fostering a continuing appreciation of these resources. Comprehensive surveying of structures, seeking National Register designations and ultimately expanding the existing local historic district will all contribute to the preservation of West Newbury's historic properties.

At present, West Newbury cannot carry out any National Register activity due to the incomplete status of its existing building inventory. Only five local properties are listed on the National Register, a mere fraction of the significant properties in West Newbury. Portions of Main Street and its unique collection of historic structures, including public buildings such as the Soldiers and Sailors Building and G.A.R. Memorial Hall, several ecclesiastical structures and remaining comb factory structures are all worthy of National Register designations.

According to the Massachusetts Historical Commission (MHC), comprehensive surveys of historical sites in a community like West Newbury cost approximately \$110 per property. Since the extensive documentation required to meet survey standards often exceeds the capacity of most communities, MHC provides matching grant funds through its Survey and Planning Grant

program, which pays 60% of the cost for an inventory project if the municipality contributes the remaining 40%. With these funds, the Town could retain qualified consulting services to complete the new inventories.

Aside from the lack of documentation on the community's historic structures, West Newbury could take better advantage of other means to recognize the Town's heritage. Local residents can provide first-person accounts of the town's historical development and often have historic photographs and other documentation materials. Oral history projects, historic photographic exhibits, and other community-based preservation initiatives will not only ensure a record for future generations but also increase public consciousness of the Town's past.

West Newbury's scenic roadways play a significant role in defining the community's character and rural ambiance. The narrow pavement, gently curving designs and the surrounding vegetation all play a part in establishing West Newbury's sense of place. Currently, there is no inventory that documents scenic roads and their particular qualities. Deferring action of the proposal to designate scenic roads puts these resources at further risk. While balancing public safety concerns with rural design is difficult, the Town needs locally tailored design standards to preserve as many scenic road qualities as possible when repaving and reconstruction projects occur. Research of existing rural design standards in other communities and States, including those developed by the State of Vermont in 1997,⁹ would provide a framework for creating

⁹ *The Vermont State Standards for the Design of Transportation Construction, Reconstruction and Rehabilitation on Freeways, Roads, and Streets*, May 9, 1997.

appropriate standards for West Newbury. Continued review of the proposed reconstruction plans for Rocks Village Bridge and the Curzon's Mill Bridge is another important task toward protecting West Newbury's character. The Town should review other bridges to determine future repair needs and to develop advance plans for their protection. Many of these bridges, while simpler in design than the Rocks Village Bridge, may have unique design features worthy of preservation.

Key Findings and Recommendations

Natural Resources

West Newbury should undertake the following activities, projects and planning studies to protect and enhance its important natural resources:

1. Create an *Area-Wide Conservation and Development Map*, identifying key parcels for preservation (particularly those of ecological significance). The map should become a tool for West Newbury's land use boards to use as part of the development review and regulatory process and the parcels identified on it ought to be candidates for inclusion in the proposed Rural-Agricultural Overlay District.

Moreover, the map will be crucial to undertaking the following additional protective actions:

- a) Develop management plans for Town-owned parcels.
- b) Conduct effective public education programs.
- c) Negotiate effectively with applicants during the development review process.

- d) Maintain a usable inventory of street trees.
 - e) Enact a tree planting and management program.
2. Investigate the costs and benefits of additional wetland protection restrictions beyond those provided by MGL c.131, Section 40. The Town should consider the following:
 - a) Does the Conservation Commission have adequate financial resources to review Notices of Intent and prepare appropriate, enforceable Orders of Conditions?
 - b) Does the Conservation Commission have the capacity to monitor projects during construction?
 - c) How frequently do wetland violations occur in West Newbury? (Violation means an unauthorized deviation from an Order of Conditions or any other wetlands encroachment.)
 - d) Has the cease and desist order under MGL c.131 Section 40 been an effective enforcement tool?
 - e) How frequently has DEP overturned or modified a local Order of Conditions?
 - f) Does the Town comply with "no salt" Orders of Conditions from the Conservation Commission?
 3. Complete wetlands mapping and vernal pool certification to provide pro-active tool for resource protection.
 4. Identify and enact protective strategies for zones of contribution to the Town's existing and future well fields.
 5. Amend the town's Zoning Bylaw to incorporate erosion and sedimentation regulations.

6. Adopt the provisions of the Scenic Road Act and designate all appropriate rural ways as scenic roads.
7. Enforce the Shade Tree Act.
8. Establish a comprehensive inventory and map critical natural resource elements including mature trees, wildlife habitats and corridors, wetlands, vernal pools, scenic views and view sheds, stone walls, and existing trails. West Newbury needs an accurate inventory in order to:
 - a) Prepare site-by-site management plans for parcels owned by the Town and West Newbury Conservation Commission. Management systems for public property in very small towns do not have to be complicated, costly or labor-intensive, although some of the most important or large parcels demand greater human and financial resources than others do.
 - b) When the Town completes the inventories recommended above, it should agree on sites that need priority attention. These are the sites for which comprehensive management plans should be developed first. Basic property management plans ought to account for:
 - i. Range of allowed public uses, including seasonal restrictions that may apply in deference to wildlife, special vegetation or other factors.
 - ii. Conditions under which permits or licenses for public use should apply, including fees.
 - iii. Responsibility for annual walk-through inspections and

clean-up. It may be possible to organize these tasks into a clear protocol for a community service project that high school students could undertake for science credits, but this would require collaboration with the regional school district.

- iv. Maintenance and care of trees and vegetative cover. Some communities sponsor periodic resident tree-cutting programs as a means of forest management, or they lease open fields for farming.¹⁰
- v. Maintenance and care of trails for walking, hiking and cross-country skiing.
- vi. Establish hunting policies.

Cultural Resources

West Newbury should undertake the following activities and projects to protect its most important historic and cultural resources:

1. Increase public interest in historic buildings and sites. The Town should apply for a Survey and Planning Grant from the Massachusetts Historical Commission to complete its local inventory. For approximately \$30,000 (total project cost, of which about \$12,000 would be the Town's responsibility), the Town could update its existing inventory, complete additional property surveys and pursue further phases of the National Register nomination process. Moreover, the Historical Commission should conduct a

¹⁰ See Open Space element for additional discussion.

- review of the location and condition of the Town's 10 historic markers.
2. Involve schoolchildren in local history appreciation through history courses and field projects (particularly, local history component of the fourth grade curriculum).
 3. Complete an inventory of the Town's stone walls and review existing zoning bylaws to ensure that this resource is protected from insensitive or uninformed development plans. (See also, Natural Resources Recommendations.)
 4. Town boards and commissions should enact and enforce policies consistent with the Natural and Cultural Resource goals of the Comprehensive Plan.
 5. Continue working with the Commonwealth to advocate for sensitive reconstruction of Rocks Village Bridge. Review other bridges in town to determine needed repairs and protection strategies.
 6. Adopt design standards for roadway repairs to ensure protection of scenic qualities.
 7. Create a local listing of all community groups in West Newbury by updating the West Newbury listing in the regional phone directory. Include address and contact telephone number as well as scheduled meeting times. This would encourage participation and recognition of existing organizations.
 8. Continue pursuits to develop the annex of the 1910 Building for community use.

Panoramic vistas of wooded hillsides...open fields of cultivated land and grazing horses. These vestiges of West Newbury's rural past hold the key to the future appearance, form and character of this small Merrimack Valley community.

Over the past several decades, West Newbury has come to experience the internal

struggles faced by other semi-rural communities seeking to retain the features and qualities that make them special. Residential development pressures and changing agricultural practices threaten not only open space but also the quality of life in small towns. How a town handles these challenges depends on both *individual* and *collective* decisions about the future of land development. Since responsible growth contributes to a community's vitality, it is crucial to identify and implement planning techniques that encourage respectful development while preserving important landscapes. In effect, towns that manage their development futures are the ones that grow responsibly: quality growth does not happen by accident, but rather by design.

West Newbury initiated a "quality development" planning effort by preparing an *Open Space and Recreational Plan* in 1996. The *Plan* identifies specific goals and objectives to preserve West Newbury's rural landscapes and to address passive and active recreational needs. The recent purchase and dedication of the Riverbend Recreation Area serves these purposes by preserving a vital undeveloped parcel along the Merrimack River for passive recreation. Pending the location of a suitable site and approval of funds, West Newbury wants to build a recreational complex that officials and

residents believe will serve the community's long-term active recreation needs.

The townspeople who joined for the research and development of the new *Open Space and Recreation Plan* conceived of

West Newbury's future in small-town, rural preservation terms and envisioned several means by which to achieve these

Open Space and Recreation

ends. Since the *Plan* was written almost three years ago, however, 173 acres of agricultural land have been removed from the protected status afforded by M.G.L. c. 61 or 61A. Without proactive techniques in place to identify key parcels and implement preservation strategies *before* an owner makes the difficult decision to sell a parcel, West Newbury's rural landscapes will remain at risk. Accordingly, this section of the Comprehensive Plan provides a 1998 baseline of West Newbury's protected open space and analyzes the continued relevance of earlier open space planning recommendations, identifying appropriate conservation strategies for the successful implementation of these goals.

Summary of Existing Conditions

West Newbury's physical character is comprised of a varied array of scenic landscapes, ranging from the natural scenery of woodlands and wetlands to the man-made vistas of open hayfields, orchards and century-old cemeteries. Many of these sites are identified in the partial list of West Newbury's most significant scenic

landscapes in the 1996 *Open Space and Recreation Plan*.² The list includes scenic roads with river and panoramic views, hilltops and pastoral settings. As noted in the *Plan*, most of the sites are held in private ownership with no development restrictions. Moreover, Town Meeting's recent rejection of a proposal to designate certain local ways under the Scenic Roads Act leaves many of these areas vulnerable to an irrevocable loss of character.

Preserving West Newbury's remaining open land is not a new priority. For example, the 1986 *Master Plan* lists preservation of natural resources and rural character as one of the community's priority goals. Ten years ago, the Conservation Commission created a preliminary list of important parcels by examining three categories: open space/agriculture, watershed protection, and centrally located open space parcels.

The Commission then examined the West Newbury Zoning Map to identify sites that qualified for protection under each of these categories. Efforts to catalog special sites were expanded further in the 1996 *Open Space Plan*,³ which highlights focal areas for open space conservation and proposes a town-wide trail system to link existing trails and pathways. Recently, the Town's Open Space Committee held a public meeting to review these earlier studies and to discuss formulating a new, updated list of priority sites.

As development pressures continue to intensify and West Newbury's agricultural and horticultural economy weakens further,

² *West Newbury Open Space and Recreation Plan* (1996), PP. 4-19.

³ *Ibid*, see Fig. 9, Desired Action Plan Results.

Comprehensive Plan Goals and Objectives: Open Space and Passive Recreation

Open Space and Passive Recreation Goal

Preserve large tracts of open space, link these tracts by greenways, and develop an interconnected multi-use trail system.

Open Space and Passive Recreation Policies

- Maintain farms as an economic use and include as part of the open space system.
- Establish a land bank so the Town can purchase land or development rights.
- Increase public access to the Merrimack River and public open spaces along the river.
- Protect, preserve and enhance views of open spaces from roadways.

the goal of preserving undeveloped land becomes more critical -- and ever more difficult to meet. How to preserve these sites and thereby continue West Newbury's traditions is a significant problem that the Town needs to solve. By concentrating on selected areas for protection and building alliances with conservation agencies, property owners and developers, West Newbury can create a comprehensive network of rural vistas and recreational trails for the enjoyment of all residents, today and tomorrow.

Protected parcels

West Newbury is fortunate because numerous important open space parcels are already protected through ownership or development restrictions. Government agencies, non-profit organizations and concerned private citizens have joined forces to conserve more than 2,881 acres, representing 30% West Newbury's of land area, as permanent open space.

Protected Land under Government or Non-Profit Ownership			
PARCEL NAME	LOCATION	TOTAL ACREAGE	OWNER
Riverbend Conservation Area	Along Merrimack River	68 acres	Town of West Newbury
Mill Pond Recreation Area	Main Street	213 acres	Town of West Newbury
Cammet Park and Action Cove	Main Street behind the Town Office Building		Town of West Newbury
Ferry Park	Between Bridge and Church Streets	.25 acres	Town of West Newbury
Training Field	Main Street	1.5 acres	Town of West Newbury
Dr. John C. Page Elementary School	Pipestave Hill	130 acres	Town of West Newbury
Crane Pond Wildlife Management Area	Southern end of Crane Neck Street adjacent to Town of Newbury	350 acres in West Newbury	MA Department of Fisheries and Wildlife
Unnamed	Along Merrimack River south of Rocks Village Bridge	.49 acres	MA Department of Environmental Management
Unnamed	Three parcels at southeastern corner of West Newbury	Approx. 30 acres	MA Department of Public Works
Unnamed	Crane Neck Street and Georgetown Road	6.5 acres	United States Fish and Wildlife Service
Unnamed	Moulton Street	10 acres	Essex County Greenbelt Assoc.
Unnamed	Garden Street	6 acres	Essex County Greenbelt Assoc.
Unnamed	Turkey Hill	19 acres	Essex County Greenbelt Assoc.
Unnamed	Middle Street	12 acres	Essex County Greenbelt Assoc.
Unnamed	Pikes Bridge	19 acres	Essex County Greenbelt Assoc.
Artichoke Reservoir holdings	Parcels along the Upper and Lower Artichoke, Moulton Street, and Artichoke River reservoirs	Approx. 200 acres	City of Newburyport
Unnamed	Eastern end of Town along Merrimack River	42 acres	Society of St. John the Evangelist
Unnamed	Adjacent to Town well field	26 acres	Society of St. John the Evangelist
Unnamed	Along utility lines	12.1 acres	New England Power

*Town of West Newbury & West
Newbury Conservation Commission
Holdings*

The 1996 *Open Space Plan* identifies parcels owned by the Town of West Newbury and describes their current use and recreation potential. In some classification systems, many Town-owned sites might not qualify as "traditional" open space, e.g., school grounds or cemeteries, but each one contributes in its own way to the public's perception of West Newbury as a semi-rural community with large land masses and open vistas. Many of the municipal sites also provide vital recreational opportunities, from passive activities such as birding and hiking to more active recreation such as equestrian trails and ball fields. West Newbury has made concerted efforts to develop extensive pedestrian and horse trails on public sites throughout the community. However, the trails are often fragmented or interrupted because they cross private property that is not open to resident use, meaning there is no unifying link between them or to other trails in adjoining communities.

During the past two years, West Newbury acquired one new open space parcel and has begun to address concerns raised by facility patrons at several other sites. Without duplicating the more extensive inventory that appears in the 1996 *Open Space Plan*, below is a list of key Town-owned properties and an informational summary on recent acquisitions, improvements to certain sites or potential issues associated with various categories of land.

- Dr. John C. Page Elementary School, a 130-acre parcel on Pipestave Hill with active recreation facilities.
- Riverbend Conservation Area, a 68-acre parcel between Rt. 113 and the

Merrimack River. It was acquired in 1997.

- Mill Pond Recreation Area, a 213-acre passive and active recreation facility.
- Cammett Park and Action Cove
- Pentucket Regional Middle and High Schools, a 31-acre complex bordering the Town of Groveland, with ball fields and track facilities.
- Ferry Park, a one-quarter-acre parcel between Bridge and Church Streets.
- Training Field, a historically significant 1.5-acre public common.
- Lands managed by Conservation Commission and Water Department
- Cemeteries
- Other miscellaneous parcels

Riverbend Conservation Area (Mingo Property)

The Town purchased the 68-acre Riverbend Conservation Area in 1997 with local funds, a \$274,400 Self-Help grant from the Commonwealth's Division of Conservation Services and financial assistance from various non-profit entities. The availability of this site was the catalyst for preparing the *Open Space and Recreation Plan* in 1996. As a large undeveloped parcel of woodlands on the Merrimack River, Riverbend offers scenic features and the potential to increase recreational access to the water. Activities are currently underway to develop the parcel into a passive recreation facility with marked trails, a new pedestrian and equestrian bridge at Indian River, and public access to the Merrimack River for non-motorized boating.

Mill Pond Recreational Area

The 213-acre Mill Pond recreation facility provides both passive and active recreational opportunities for West Newbury residents. Hiking, cross-country skiing and biking trails as well as equestrian facilities are found throughout the area. The Pond is also utilized for boating, fishing and skating. Some of the undeveloped land here is leased for private agricultural use. New soccer and baseball fields have been constructed at this site but a proposal to include facilities for younger children was withdrawn because of safety considerations. Opponents were concerned about sidewalk and access inadequacies.

West Newbury recently commissioned a feasibility study to determine dredging options for Mill Pond, a 16.8-acre water body originally created as a farm pond when a dam was built across Sawmill Brook. According to the report, Mill Pond has "accumulated significant amounts of sediment, resulting in a reduction of the pond's maximum depth to less than seven feet and a mean depth of less than four feet. This change...has resulted in a loss of aesthetic value and recreational usage. The present water volume is less than 75% of its potential volume."⁴

In response to the report's recommendations, West Newbury officials are pursuing plans to remove 37,500 cubic yards of material from Mill Pond, thereby increasing the depth to a mean of 5.3 feet. The estimated project cost is \$600,000, which includes final design and permitting. West Newbury's Conservation Commission has already granted approvals to dredge the pond and as of spring 1999, an Environmental

Notification Form (ENF) had been submitted to the Department of Environmental Protection (DEP) for review. It is important to note that the Mill Pond report forecasts continued sediment and nutrient loading after the dredging occurs and advocates for an aggressive watershed management program to protect this important resource.

Cammett Park and Action Cove

As part of the recent modifications to the 1910 Town Office Building, Cammett Park has been made accessible to persons with disabilities. Facility upgrades include newly paved sidewalks, improved access to ball fields, new lighting, landscaping and improved parking.

Ferry Park

Located between Church and Bridge Streets, this one-quarter acre grassy park was recently the subject of a proposed parking facility for users of a public boat launch on the Merrimack River. After much public discussion and review of potential safety problems, residents rejected the proposal and parking will continue along the street.

Conservation Land

Through donations and subdivision development set-asides, the Conservation Commission has acquired jurisdiction over 21 parcels located throughout West Newbury, for combined holdings of approximately 175 acres. The Commission is currently documenting the location of each site and installing identification markers. Many of the donated parcels are comprised of wetlands or land that is otherwise unsuitable for development. While public ownership will ensure

⁴ Baystate Environmental Consultants for Town of West Newbury, *Dredging Feasibility Evaluation Regarding Mill Pond* (1998).

protection of any fragile ecosystems found on these sites, it will not provide land solely for open space or conservation, for intensive use or for active recreation. To date, the Commission has not yet created a formal management plan for these parcels.

Miscellaneous Town-Owned Parcels

The Town of West Newbury owns seven small parcels scattered throughout the community, including the landlocked nine-acre Town Forest off Poor House Lane as well as several parcels associated with subdivision set-asides. These sites have not been placed under any specific agency's jurisdiction and as general municipal property, their management is left to the Board of Selectmen's discretion.

Non-Profit or Government-Owned Parcels

West Newbury benefits from the fact that several governmental and non-profit agencies have acquired ownership of or development rights to many of the community's most sensitive parcels, thereby preserving significant ecological and scenic resources without creating any management liability for the Town. These sites are protected from adverse development outcomes and they offer West Newbury's residents opportunities for passive recreational use. Furthermore, withdrawing the parcels from the inventory of developable land means West Newbury will continuously avoid the cost of providing municipal and school services to the families that would have moved to the community had the land been developed residentially.

West Newbury parcels that are owned by non-profit conservation groups or non-local government agencies include:

- The City of Newburyport owns approximately 200 acres surrounding the Upper and Lower Artichoke Reservoirs, the Moulton Street Reservoir and the Artichoke River.
- The Massachusetts Department of Fisheries and Wildlife manages the state-owned, regionally situated Crane Pond Wildlife Management Area, 350 acres of which are in West Newbury and utilized for active and passive recreational activities.
- The Massachusetts Department of Environmental Management owns the .49 acre parcel that runs almost 1,000 feet along the Merrimack River just south of the Rocks Village Bridge. The lot is suitable for passive use.
- The Massachusetts Department of Public Works owns three parcels totaling just less than 30 acres, containing public works buildings and parking areas.
- The United States Fish and Wildlife Service owns a 6.5 acre landlocked parcel near Crane Neck Street and Georgetown Road, traversing Beaver Brook, which could be used for passive recreation activities such as fishing.
- The Essex County Greenbelt Association owns just less than 80 acres of land in West Newbury (described below).
- The Society of St. John the Evangelist owns a 42-acre parcel at the eastern end of West Newbury and also owns 26 acres across Route 113. The latter tract of land is under a 99-year lease to the Town of West Newbury and adjoins the Town's well field. Within the Society's holding is the Curzon Mill Bridge, for which there are repair plans pending that would allow travel by foot, bicycle and horse to the adjacent Maudsley State

Park in Newburyport. However, the Society's land is private and there is no formal agreement for public use.

No additional acreage has been added to these sites over the past several years, meaning the inventory of non-profit and other governmental open space has remained essentially static. The exception is the Essex County Greenbelt Association's continued conservation efforts in West Newbury. The Greenbelt Association is a regional, non-profit land trust dedicated to preserving land with scenic, ecological and agricultural significance. To maximize the benefits of conservation, the Association places special emphasis on protecting corridors or "greenbelts" and its portfolio consists of more than 8,000 acres of land in Essex County. The organization owns land outright and holds land conservation easements in several communities. It also has a strong land management program.

The Essex County Greenbelt Association has acquired several local parcels and secured development or acquisition rights to three more. Its current holdings in West Newbury total 79.7 acres. The Association also contributed \$10,000 toward the purchase of the Mingo Property, which is now the Riverbend Conservation Area. In 1997, the group acquired parcels on Pikes Bridge Road and Middle Street and is working now with three landowners to purchase additional parcels and acquire conservation restrictions. Consistent with its greenbelt philosophy, the Association is concentrating on protective strategies along Pikes Bridge Road because the area has been identified as critical for birding, wetlands and farmland. Accordingly, its holdings include about 19 acres of Pikes Bridge Road land, including a recent 10-acre purchase.

Besides financial capacity, the Essex County Greenbelt Association provides technical

assistance to cities and towns and held a public meeting in West Newbury during the spring of 1999. Recently, the Association worked with the Towns of Hamilton and Manchester to protect the 113-acre Gordon Woods property. Working with the nationally recognized Trust for Public Land, the Association knit together a broad coalition of organizations and individuals to raise the capital necessary to purchase the parcel.

Private land with permanent and temporary development restrictions

Agricultural Preservation Restrictions (APR)

In West Newbury, 489 acres of open land (or 6.1% of West Newbury's total land area) are protected from development with Agricultural Preservation Restrictions (APR).⁵ Through the APR Program, development rights have been jointly purchased by the Town of West Newbury and the Commonwealth and will be held in perpetuity, permanently restricting the land to use for agricultural purposes only. APR-covered parcels are identified on the next page.

Chapters 61, 61A and 61B

M.G.L. Chapters 61, 61A and 61B provide limited tax relief to property owners who agree to use their land for forest, agricultural, or recreational purposes respectively. While the statutes offer property tax relief by means of a 10-year renewable agreement between the landowner and the Town's assessors, they do not prevent parcels from being developed

⁵ Source: Massachusetts Department of Food and Agriculture.

after an agreement expires or if the owner decides to withdraw property from an agreement before the expiration date. The laws require participating owners to give local officials advance notice if a parcel will be sold and communities have a statutory right of first refusal. Nonetheless, it is very difficult for towns to step in and acquire Chapter 61 land once an owner has decided to sell property to a developer. The "window of opportunity" is only 120 days, which is inadequate for most communities because it takes considerable time to build consensus about a major land acquisition, negotiate with the owner and call a special town meeting for acquisition financing.

The inadequacy of Chapter 61 as a long-term protection mechanism is no more evident than in West Newbury's own statistics. In 1996, 2,306 acres within 115 parcels or 24% of the entire community was under Chapter 61 or 61A agreements. Only two years later, the number had declined to 1,562 acres distributed among 87 parcels, for a loss of 173 acres or almost 60 acres a year. These parcels have been or are being developed as residential subdivisions. As the demand for West Newbury housing intensifies and the market makes land more valuable, the reduction in Chapter 61-restricted land promises to escalate. Although the land owners have to pay a portion of their deferred taxes when they remove land from Chapter 61 agreements, the cost is more than offset by the land's increased value for development. Many of the areas identified for conservation purposes in the *Open Space and Recreation Plan* are under Chapter 61 agreements. The Town cannot rely on Chapter 61 for permanent protection, but it *can* capitalize on the advantages of temporary protection and the right of first refusal in order to plan a realistic preservation strategy.

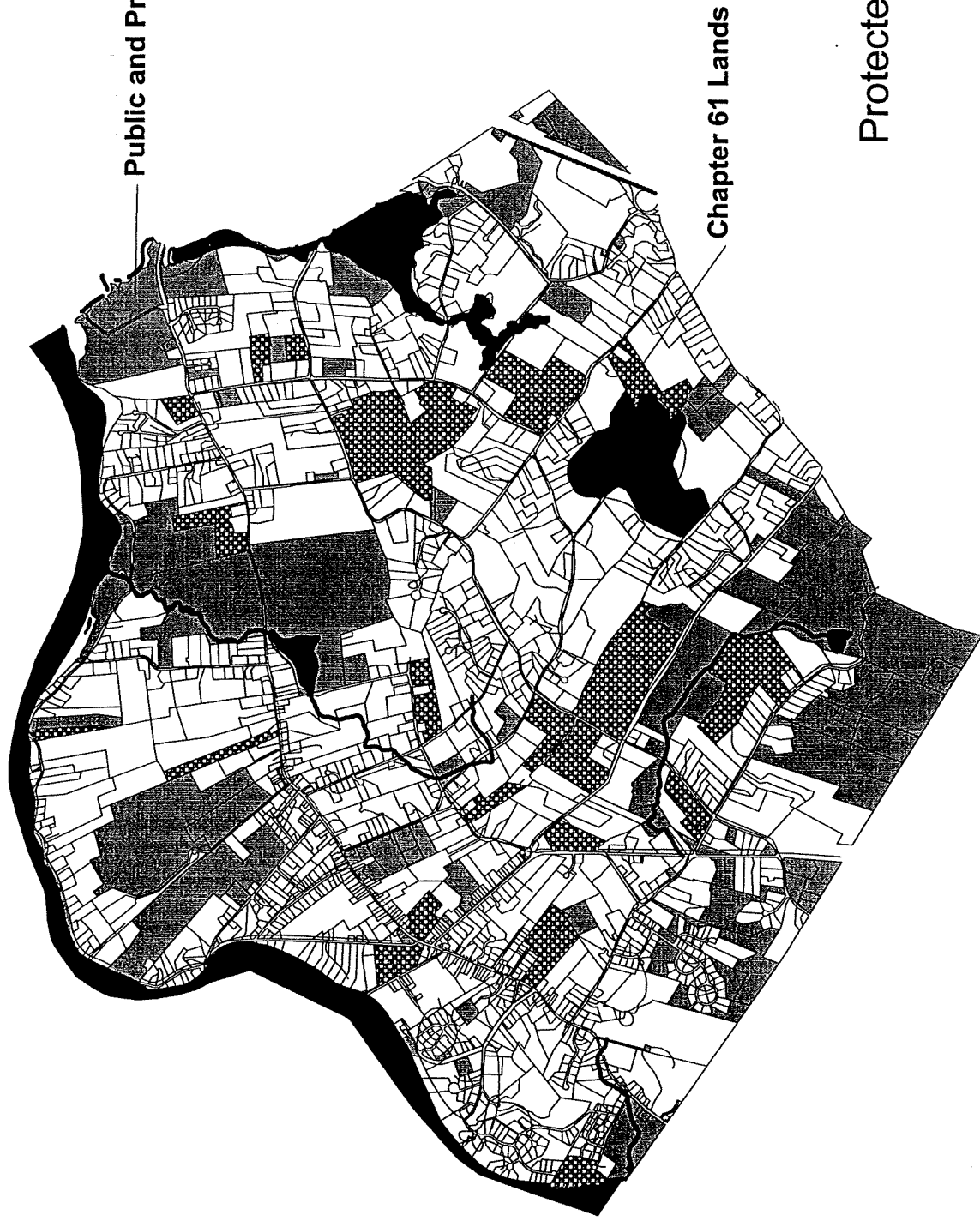
Lands with Agricultural Preservation Restrictions (APR's)

Property	Total Acres Under Restriction
Long Hill Farm	137 acres
MLCT*/Colby	30 acres
MLCT*/Gift	20 acres
Merrill	108 acres
Orcutt	194 acres
TOTAL	489 acres

* Massachusetts Land Conservation Trust/Trustees of Reservations

Protected Land in Cluster Subdivisions

As part of the Town's zoning regulations, West Newbury requires at least 10% of land within a proposed subdivision to be set aside as permanent open space and for cluster developments, the requirement is at least 30% of a site. Within the 30% guideline, at least three acres plus one acre per 25 dwelling units must be land suitable for active recreation, thereby curtailing a developer's ability to count non-buildable land, e.g., wetlands, toward the open space set-aside. A developer can donate the open space to the Town or a non-profit organization, or he can place the land under common ownership of the residents of the project. While sites under common ownership are not accessible to the public, they have the potential to afford scenic vistas from public roadways and protect valuable wildlife habitats.



Public and Private Protected Land

Chapter 61 Lands

Protected and Chapter 61 Lands

Figure OS-1

West Newbury

Analysis of Significant Issues

To maintain its unique community character, West Newbury needs to begin a comprehensive approach to preserving its most significant remaining open space and undeveloped land. Ongoing development will continue to detract from the community's landscape if preservation strategies are not enacted. Residential development pressure is being exerted on all unprotected lands, including land under Chapter 61 agreements. The declining agricultural and horticultural industries, together with the growing popularity of West Newbury to family homebuyers, create an area ripe for more development. Without concerted local initiatives to protect West Newbury's most important scenic and natural resources, the last remaining evidence of the Town's rural history will be lost.

Over the past half-century, the agricultural and horticultural industries in West Newbury have declined continuously. The reasons vary, but they center on the lack of available, affordable land, increased operating costs and capital investment requirements, the value of land for highest and best use, and rising tax burdens. The Town faces a significant cultural loss in the demise of one of its longest operating establishments, Cherry Hill Nursery, which the Thurlow family has operated since the 1840s but has decided reluctantly to liquidate.

The Comprehensive Plan's Vision Statement identifies the importance of farms, open spaces and rural views to West Newbury's physical structure and character. To accomplish what residents say they want for their community, it is *critical* that every facet of public administration be reviewed and synchronized toward preserving the most viable agricultural operations. Continued advocacy efforts to facilitate

successful agricultural business development should be encouraged. The Town needs to undertake a comprehensive review of its existing agricultural and horticultural businesses, including their long-term economic viability, in order to determine the most appropriate and effective forms of municipal support.

Commercial activities such as greenhouses may be more economically sustainable within a rising real estate market than the traditional agricultural related industries such as dairy farming. These uses may not preserve the community's rural character in the same fashion as traditional farming, however. West Newbury should investigate potential marketing tools to enhance the viability of its remaining farmsteads.

Promoting farm stands that can sell not only local and regional produce but also handcrafted items from the Town's art and crafts community is one avenue for potentially successful collaborative ventures. Creating a cooperative commercial kitchen for "value-added" production may provide another incentive opportunity. Comprehensive strategies such as limited taxation through a local agricultural preservation program, shared public and private marketing efforts, relaxed controls on commercial signage so that farmers can advertise their location and products more effectively, could provide these businesses with the assistance they need to remain economically viable.

West Newbury should also review current efforts to lease surplus municipal land to local farmers for agricultural use. While private use of these otherwise underutilized parcels is, at first glance, beneficial for both the Town and farmers, there are several issues to consider. First, municipally owned land is no longer available for public access. Second, and perhaps most importantly in terms of the community's stated goals, the

standard lease period for these sites may be inadequate for farmers to realize a return on their investments.

The West Newbury Open Space Committee's present efforts to identify public open space with markers is an important first step in a comprehensive open space initiative. Town-owned parcels offer a unique opportunity for local residents. Many of these sites are obscure and some may not be suitable for intensive use. The lack of a management plan for Town-owned parcels⁶ could threaten the very qualities for which they are being preserved, however. Upon a careful review of each parcel's resources and limitations, the Town would probably decide that some sites or portions thereof are inappropriate for public use because they are fragile.

The creation and marking of hiking and horse trail systems to connect public parcels and ultimately connect to a regional trail system would increase the recreation potential of West Newbury's public land holdings. The Merrimack Valley Planning Commission (MVPC) is awaiting grant funds for a region-wide mapping project that would include trails in West Newbury. Trails already exist at Mill Pond and efforts are underway to create new ones at Riverbend, which would then provide a network of trails connecting Mill Pond/Pipestave Hill to the Page School property and onto Riverbend and the Merrimack River. When construction begins next spring, the Indian River Bridge in Riverbend will provide greater access to the site. The regional "Friends of Our Trails" group in Newburyport hopes to tie Riverbend with Maudsley Park in the future.

⁶ The Town has created a management plan for the Riverbend Conservation Area.

The necessary trail network is not entirely on public land, however. West Newbury's 1996 *Open Space and Recreation Plan* identifies additional trail systems on private parcels but at a minimum, easements are required for their use. It is very important to identify existing and potential locations for additional trails on private land and to work with property owners to expand the system. Easements, land donations and subdivision requirements are all possible means to obtain public access to new trail areas. Identifying trails as part of a comprehensive community protection map to be used in conjunction with community planning efforts would be a proactive step toward securing the necessary sites.

The creation of pathways for bicycle users is another priority that local residents have identified. Although most notably true for Rte. 113, many West Newbury roadways are heavily traveled and lack safe access for bicyclists. For the Town's youngest residents who often rely on bicycles for transportation, the lack of defined bicycle paths limits their ability to travel safely throughout the community. Developing these types of path systems either alongside existing roadways or in "off-road" locations would greatly enhance the transportation and recreation options available for residents. A path with access from the Page School to other areas of West Newbury may be a particularly viable alternative. On occasion, funding sources become available to help communities develop and construct these types of trails.

The community protection map should also be expanded to identify open space parcels for acquisition. The Open Space Committee's effort to create a priority list serves an important function by determining the sites that are most critical for long-term or permanent protection. Once a list of sites is agreed upon and members have familiarized themselves with conservation

techniques, the Open Space Committee should select key sites and initiate discussions with the landowners. Utilizing existing knowledge and experience within the community will help make this effort successful. By building partnerships with landowners who have already taken preservation steps, non-profit agencies such as the Essex County Greenbelt Association and other communities that have succeeded at preserving their open space, West Newbury will be able to obtain valuable resources to ensure the success of its own conservation initiatives.

When open space parcels are offered for sale, communities typically have only a limited period of time in which to make an offer to purchase a site. It is extremely important to create a local land acquisition fund early and continue to build a reserve *before a crisis occurs*. Small but systematic annual appropriations into a land conservation fund, development fees where permissible, or a one-time referendum to borrow acquisition funds and finance the debt with property taxes, all mean that West Newbury will have ready capital to purchase threatened parcels. Currently, West Newbury is asked to allocate a small annual appropriation (\$5,000.00) to the Town's Conservation Fund.

It is important to realize that fee simple ownership of an entire parcel is not always the most beneficial option for municipalities. Management concerns, fiscal limitations, loss of tax revenues and other considerations *must* be factored into every community's choice of the best conservation alternative. In order to minimize the Town's responsibilities, West Newbury should work closely and constantly with landowners to place development restrictions on critical sites, whether permanent or temporary. For example, the Town can seek minimally restrictive agreements with landowners to protect land in the short-term. Non-binding

and temporary binding agreements preserve land from development for a specified period of time. Conservation easements and the purchase of development rights are just a few of the permanent techniques available. Agricultural preservation restrictions are another viable option for land conservation, for they present the advantages of maintaining private ownership and continuing the use of land for agricultural purposes. Furthermore, West Newbury should continue to encourage cluster developments over conventional subdivisions in order to limit development impacts on parcels that cannot be acquired or otherwise protected.

Varied conservation strategies are available to municipalities and non-profit land trusts seeking to preserve open space. Publications of the Essex County Greenbelt Association and the Massachusetts Executive Office of Environmental Affairs (EOEA) describe these options in detail, and West Newbury officials ought to establish a working library of land conservation resources so that community activists can locate information and technical assistance quickly and continuously. In addition, working closely with an existing land trust will help educate local officials and citizens on all of the available options.

Nearly every community that has established and maintained an effective open space agenda works with one or more non-profit land trusts to realize their objectives. The reality is that many real estate transactions are very complicated and time-consuming. Depending on a landowner's particular circumstances, the process of negotiating and executing a preservation plan may require specialized knowledge and often, it demands the ability to act quickly -- in other words, within a timeframe that defies calling and organizing special town meetings.

West Newbury may want to enlist the services of a regional land trust or investigate the possibility of creating its own trust. A land trust can operate more independently than a municipality in complex property acquisitions and often provides the most successful vehicle for landowner education and community outreach. While a local land trust would focus solely on the needs of West Newbury, operating a trust can be an onerous undertaking for a small town. Utilizing the technical expertise and financial resources of an existing land trust or creating a regional trust between adjoining communities may provide a better, more effective solution.

Whether West Newbury acts alone or with a land trust organization, it is important to contact owners of priority sites to determine and understand *their* interests. At minimum, the Town should seek to convince owners to enter into an agreement that provides adequate notice when they decide to sell their property, even for those parcels currently under Chapter 61 agreements. By receiving adequate notice that a property will be sold, the Town can evaluate local interest and funding capacity for an acquisition and it will have the ability to solicit technical and financial assistance from government and non-profit agencies.

In addition to preserving open space for scenic enjoyment, West Newbury is actively pursuing additional recreational opportunities on the community's undeveloped land. Public access to the Merrimack River for recreational purposes, particularly for boating activities, has been controversial recently. A recently drafted proposal to encourage formal access through a paved parking area at the Town's only public access point on Church and Bridge Streets was soundly defeated. Neighbors and other local citizens expressed strong concerns about the loss of a public park for a

parking lot. This means that limited parking will continue along the street in this area.

Launching of non-motorized boats will occur at the Riverbend Conservation Area as the facility develops its recreational potential. West Newbury should identify other appropriate sites for river access, but the more pressing concern is whether there is enough public support to address this issue at all. The Town already owns several points of access to the Merrimack River, including a parcel of land surrounding the private dock at the River Meadow residential development. The remote location of some of these sites and their close proximity to private development explain their under-utilization by the general public.

The Open Space Committee has been discussing possible access opportunities, including locations on Whetstone Street, Coffin Street, River Meadow, Pleasant Street extension and Emory Lane. Private parcels that are deemed most appropriate for public use ought to be included on the community protection map for future planning and acquisition.

West Newbury has a critical need for recreational facilities to serve the needs of its growing (and changing) population. The Town has limited access to the playing fields at the Middle and High School for community sports because the fields are primarily for regional school district athletic programs, and also because they have to be shared with surrounding communities.

Key Findings and Recommendations

To meet open space and passive recreation needs and preserve the rural character of the Town, West Newbury should undertake the following:

1. Create a *comprehensive Community Protection Map*. The process required to develop this type of planning device is time-consuming and it demands a considerable amount of work to build local consensus. For a town with so much at risk and so little institutional capacity, however, there is no substitute for strategic conservation planning. *A Community Protection Map will enable West Newbury to focus attention on its most critical priority sites, including open space parcels and trail locations.*
 - a) Volunteer boards and committees cannot afford to treat every development project as though each one is equally significant to the long-term preservation objectives of the Town. The reality is that certain highly important parcels will determine the physical character and aesthetics of tomorrow's West Newbury. *These parcels should demand utmost attention from town government.* Further, the attention they receive during the development process must be planned and calibrated.
 - b) *The Community Protection Map should be a routine part of West Newbury's community development procedures* because synchronizing the decisions of various land use boards will encourage preservation. Without consistency and cooperation from every permitting authority, West Newbury *cannot* accomplish the preservation ambitions of its Open Space Plan or this Comprehensive Plan.
2. Once West Newbury completes a Community Protection Map that *identifies existing and proposed pedestrian, horse and bike trails on private land*, officials need to begin outreach efforts by contacting affected property owners to determine their interest in preserving and developing these *trails by donation, easements or other permanent means.*
3. Officials must also work with affected landowners and real estate brokers to *identify key open space parcels at risk of being sold for development.* A risk assessment will help the Town set action priorities and focus its limited staff and volunteer resources in the most effective way possible. Generalized efforts to encourage preservation are important for "getting the word out," but they cannot be relied upon to produce tangible results. West Newbury has to approach the process of land preservation strategically. *A key aspect of an effective strategy for very small towns is the wisdom to take what is feasible and then build incrementally on each success.*
4. Participate in the community meetings with the Essex County Greenbelt Association (such as the one held during spring 1999). Among other outcomes, these kinds of meetings can help inform local landowners about options for preserving their properties. *West Newbury needs to consult with the Essex County Greenbelt Association about financial and technical assistance opportunities and determine whether the Town would benefit from establishing a local land trust.*
5. In order to become proactive about land conservation, West Newbury must prepare for future acquisitions by developing a local acquisition fund. Systematic annual appropriations and development fees where appropriate and permissible are among the options for raising land acquisition dollars. *West Newbury should continue to place a*

routine "housekeeping" article on the Annual Town Meeting warrant to appropriate or transfer funds to a Conservation Fund, and increase the amount allocated. Efforts should be initiated and sustained to encourage public support for other, more effective means to raise land acquisition funds. For example, when enabling legislation becomes available for cities and towns to collect "transfer fees" on real property transactions, *West Newbury needs to adopt the provisions of the law and institute a "land bank."* Further, local officials ought to engage in discussions with such communities as Boxford, Hamilton and Dartmouth, where successful open space financing campaigns have been implemented.

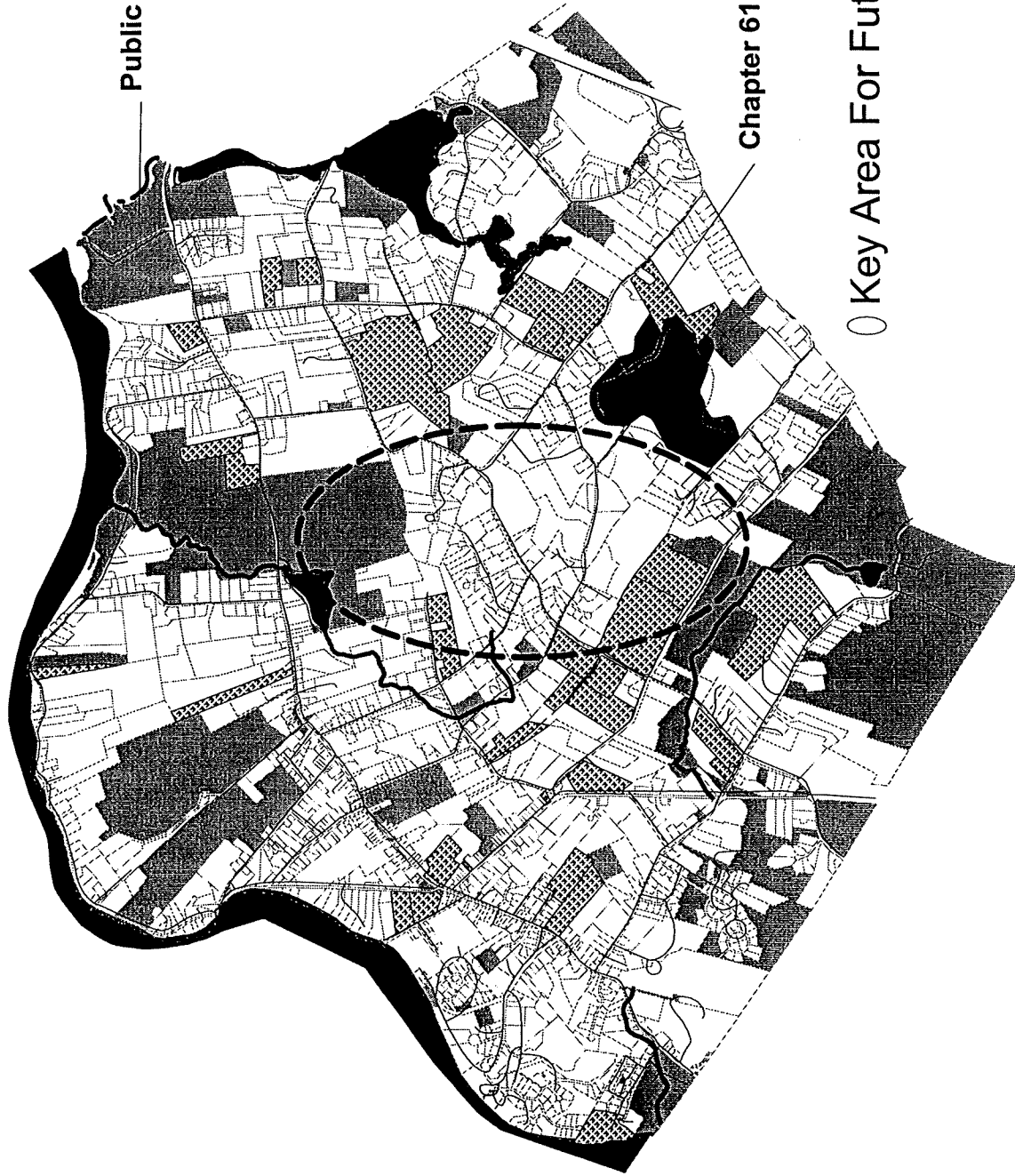
6. Appropriate funds for a *feasibility study and phased construction plan to develop a bicycle path from the Page School to other sections of West Newbury.* This requires that the Town identify potential access opportunities and funding sources to design and build bicycle paths. A critical part of the process is determining whether there is enough public support to not only initiate but also to sustain and complete a community-wide bicycle path network. It makes little sense to launch such a major capital project without a reasonable likelihood that the project can ever be finished.
7. Support the West Newbury Open Space Committee's efforts to implement the goals of the 1996 *Open Space and Recreation Plan.* Several outreach initiatives are already in progress to promote the use of Town-owned open space parcels.
8. To protect fragile ecological resources, West Newbury must identify and implement appropriate *land*

management procedures for existing (and future) open space properties owned by the Town and its various departments, including the Conservation Commission. The Town needs a comprehensive property management plan for its public holdings. (See recommendations under Natural and Cultural Resources.)

9. For financial, property management and public liability reasons, *West Newbury needs to encourage alternatives to Town acquisition of threatened parcels.* Strategies such as cluster and planned development of critical open space areas can be very effective because they provide ways to preserve important vistas while steering development in directions desired by the Town. The effectiveness of these strategies depends on clear design standards, realistic trade-offs that will attract developers to use cluster rather than conventional subdivision development procedures, and coordination among land use boards and commissions.
10. *Hold one-on-one discussions with owners of high-priority open space properties to discuss conservation options and negotiate notification agreements* so the Town can anticipate when one of these sites will become available for purchase. The Town should *utilize assistance from landowners who have already taken steps to protect their land, as well as non-profit organizations and other cities and towns with successful open space initiatives.* The Town should also contact government agencies and organizations, and stay apprised of ongoing statewide efforts to promote the preservation of open space.
11. *Continue advocacy efforts to secure state funds for acquisition of the Daley*

Property. While the Town expects that developing this site for playing fields and related facilities will meet West Newbury's foreseeable recreation needs, it is important that all public recreation sites be utilized to their full potential. Developing fields, playgrounds and other amenities is capital-intensive and requires a sustained commitment to maintenance. *A complete assessment of local recreation facilities for physical and programmatic deficiencies should be undertaken soon, and the results included in a capital improvement plan.*

12. *Work closely with local farmers to address their concerns about the continued economic viability of agriculture in West Newbury.* The Town needs to evaluate its agricultural land taxation policies and review the lease procedures for publicly owned land. Moreover, West Newbury should investigate such strategies such as regional farm stands, local and private promotional activities, revised signage requirements to strengthen the effectiveness of marketing locally grown products, and opportunities to engage in "value-added" agricultural business activities. Whether agricultural land is pleasing to view and its loss offends the sensibilities of people who admire rural character, farming is a business and farmers need to be able to make a living. *If West Newbury cannot adopt and carry out policies that enhance the profitability of agriculture, farmland will be developed.*



Public and Private Protected Lands

Chapter 61 Lands

○ Key Area For Future Open Space Acquisitions

Figure OS-2

West Newbury

As West Newbury's dominant land use today, housing plays a pivotal role in shaping the community's image and character. Its direct impact on all other aspects of local planning makes housing a public policy issue of primary importance, for the choices made about residential development today will affect the abundance and quality of environmental, community and fiscal resources tomorrow. Through housing type, architectural style, size, quality and price, a community like West Newbury expresses its physical and social identity. By controlling housing development, a community also engineers, to a certain degree, the make-up of its population. Accordingly, housing characteristics suggest a great deal about a town's past and present population and its socio-economic structure.

To meet the overall goals of the Comprehensive Plan, West Newbury needs to think strategically about its housing development options. For example, the Town wants population diversity and recognizes that a range of housing costs is crucial to achieving that end. Today, West Newbury's housing stock is comprised primarily of large homes -- old and new -- that appeal to a high-end market. Introducing affordable housing to the political culture of an affluent community is always difficult, and West Newbury will be no exception. The conflicts usually stem from two sources: social value judgments, and concerns about derogating from the custom of single-family homes by introducing the higher densities required by lower-cost housing development.

At the same time, the Town also wants and needs to control against fiscal stress, which raises questions about the rate, type and overall amount of housing growth that West Newbury can sustain. The fact that continued residential development promises to exacerbate strains on municipal and school services is a challenge for towns that try to

plan and implement *any* kind of housing strategy. Although homes designed for elderly residents or young couples almost always cost less in community services than large single-family residences do, they do not

generate a net gain in property tax revenue unless they sell (and are assessed) as luxury housing. For the most part, however, these homes compete in the modestly priced market because they are small, and this in turn means higher densities per acre. Thus, housing developed for small households often attracts community resistance similar to that triggered by affordable housing proposals.

As this chapter demonstrates, West Newbury needs a comprehensive housing strategy if it wants to intervene successfully against suburbanization and achieve diversity of both housing types and affordability. The Town has enough undeveloped land that creative solutions might be feasible here -- provided they achieve harmony with West Newbury's semi-rural character and minimize or improve upon the fiscal impacts of traditional housing growth.

One of the issues the Town needs to explore further is the impact of a public sewer system on development opportunities generally, and housing opportunities in particular. If West Newbury were to install public sewers, land that is now unusable would be easier to develop.

Housing

Summary of Existing Conditions

Population

West Newbury is a rapidly growing, small, semi-rural community located 45 miles north of Boston. Its 1995 population of 3,794 persons¹ represents a 92.3% percent increase since 1960. During the same period, Merrimack Valley's population as a whole grew 33.6%.² Clearly, West Newbury is growing at a much faster rate than the surrounding region. Considering West Newbury's decreasing household size, which dropped from 3.31 persons per household in 1980 to 3.04 persons per household in 1990,³ the surge in

¹ MISER/State Data Center, U-Mass Amherst, "1996 Population Estimates from the U.S. Census Bureau: Massachusetts Cities and Towns," from U.S. Bureau of the Census, Population Division (November 18, 1997). Note that 1995 population data rely on estimates, not field counts.

² Merrimack Valley Planning Commission at <http://www.mvpc.org/> (Internet). "Merrimack Valley" region means MVPC's geographic catchment area, which includes Amesbury, Andover, Boxford, Georgetown, Groveland, Haverhill, Lawrence, Merrimac, Methuen, Newbury, Newburyport, North Andover, Rowley, Salisbury, and West Newbury. Even when compared to Essex County as a whole, West Newbury's 1990-1996 population growth rate of 13.2% outstrips the average of 2.5% for all of the County's 34 cities and towns. Indeed, only Boxford (36.5%) and Middleton (14.3%) surpass West Newbury in rate of population growth during the current decade. Source: MISER/State Data Center, "1996 Population Estimates."

³ Massachusetts Department of Revenue "'At-A-Glance Series:' West Newbury," derived from U.S. Census Bureau, 1990 Census of Population

Comprehensive Plan Goals and Policies: Housing

Housing Goal

Encourage housing diversity as a way to maintain the perception of semi-rural character through development process in order to avoid suburbanization.

Housing Policies

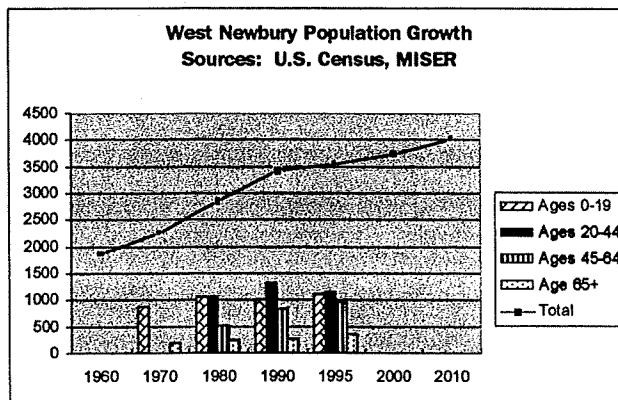
- Consider ways to stimulate the creation of smaller dwellings that increase the diversity of housing choices for young families, and for seniors who want to remain in West Newbury, but not necessarily in the home where they raised their family.
- Address affordable housing as defined by the Commonwealth.
- Achieve consistency between housing development and the Town's desire to preserve its semi-rural character, thereby avoiding suburbanization.

population is not from growing families but rather, from new households moving into the community. This conclusion is underscored by a comparison of growth in total population to total households in the same period. Between 1980-1990, West Newbury's population increased 19.6% but the number of households swelled from 864 to 1,126, or 30%.

West Newbury's population growth has been accompanied by changes in age group distribution as well. As shown on the next page, there has been a significant increase in 45-64 year old individuals and a steady rise

and Housing.

in the elderly population (65+) as well. From 1980 to 1995, the number of West Newbury residents between 45-64 years of age grew by 85.3 percent. At the same time, the number of elderly individuals increased 42.7 percent.⁴ The sharp increase in 45-64 year olds appears to be driven by the overall increase in population as new households moved to West Newbury. Growth among these age groups suggests that West Newbury should assess the suitability of its housing stock to accommodate an aging population.



An informed housing strategy accounts not only for a community's population growth, but also the social and economic attributes of that population. In 1990, the median household income in West Newbury was \$56,591, well above the region's median income of \$34,390.⁵ Although government sources have not published more recent

⁴ MISER/State Data Center, "STF-3: West Newbury," from the U.S. Bureau of the Census, 1990 Census of Population and Housing.

⁵ West Newbury's median household income ranks 36 out of 351 cities and towns in the Commonwealth. Source: Massachusetts Department of Housing and Community Development, "Community Profiles: West Newbury," (1995).

figures, it is reasonable to assume that West Newbury's median household income remains disproportionately high, if for no other reason than the steady movement of wealthier households into the community.

Furthermore, poverty here is almost non-existent, at 2.1% of all persons, and the town's unemployment rate (1997, annualized) of 2.7% was well below the statewide average of 4.3%.⁶

Racially, West Newbury's population is comprised almost exclusively of white, non-Hispanic persons (99%). About three percent of persons between the ages of 16-64 classify themselves as disabled and approximately eight percent of the elderly have a mobility and/or self-care limitation. As for household characteristics, there are 1,120 households in West Newbury, including 866 married-couple families, approximately half with children under 18 and half without; 17 male-headed and 86 female-headed households; and 151 non-family households.⁷

Housing Supply

West Newbury's housing stock is largely homogenous: single-family homes dominate an inventory in which two-family and larger multi-family structures are rare. The total housing inventory consists of an estimated 1,325 housing units (June 1997).⁸ Of the 1,148 single-family homes in West Newbury, more than half have been built since 1970. Strikingly little new home construction

⁶ Massachusetts Department of Employment and Training (DET), (1997).

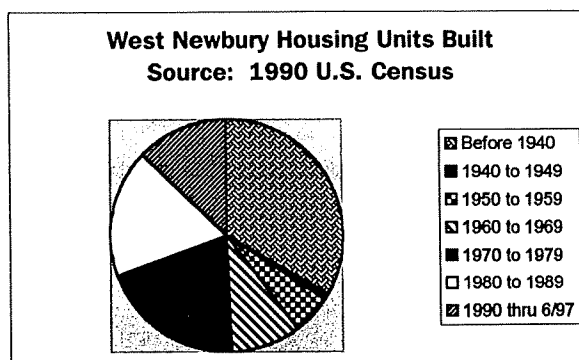
⁷ MISER/State Data Center, "STF-3: West Newbury."

⁸ Estimate derived from West Newbury Assessor's Office and U.S. Census data.

occurred between 1940 and 1969, when only 209 units were added to the community's house base. The remaining 434 units pre-date 1940, but it is important to point out that they constitute more than one third of today's housing inventory.⁹

West Newbury homes contain an average of 2,000-2,999 square feet of gross living area and they are situated on lots averaging somewhat more than two acres per unit. The majority of houses (66%) built before 1970 are smaller, with less than 2,000 square feet of gross living area.¹⁰ Since 1970 the average house size has increased significantly, especially among those built after 1990. More than half of the Town's post-1990 homes are in the 2,000-2,999 range and 21% offer 3,000 or more square feet of living area. By comparison, only 12% of all homes built between 1970-1990 are so generously sized. Thus, in scale and style, what West Newbury is building today is an indicator of change in community character.

Since 1990, local authorities have issued 224 residential building permits -- about half for homes in new subdivisions. Between 1990 and 1998, the Planning Board approved 17 subdivisions representing an eventual 132 units of new housing. On average, West Newbury's typical subdivision is small. Nine of the 17 recently approved subdivisions have fewer than five house lots while seven of them range from 7-15 lots. The remaining subdivision of 40 house lots is large by comparison. Collectively, these 17 projects



have produced 96 homes so far, meaning that an additional 36 await construction.¹¹

Measuring housing change in terms of sheer growth belies the more important community development issues of occupancy and tenure, affordability, and sense of place. West Newbury's housing is primarily owner-occupied (91%), which differs significantly from Essex County as a whole (61%), and is even more dramatic when compared to owner-occupancy in the geographic area used by federal officials to profile regional housing and income needs, the Lawrence-Haverhill Metropolitan Statistical Area, or MSA (54.8%).¹²

High levels of homeownership are a distinct advantage of wealthy villages and suburbs because owner-occupancy typically represents a community investment as well as a financial one. Cities and less affluent towns yearn for homeowners, yet communities like West Newbury face a different kind of challenge: population diversity, which directly correlates with the

⁹ MISER/State Data Center, "STF-3: West Newbury."

¹⁰ West Newbury Assessor's Office (1998).

¹¹ Data obtained from West Newbury Planning Board (1998).

¹² U.S. Bureau of the Census, Summary Social, Economic and Housing Characteristics: CPH-5-23 (1992); MISER/State Data Center, "STF-3: West Newbury"; and U.S. Department of Housing and Urban Development (1993).



Single Family Development
Lots of all sizes

Figure H-1

West Newbury

breadth of housing choices by type, price and tenure. There is a very limited supply of rental housing in West Newbury, and the occasional single-family home that is leased to tenants typically commands a rent level far above what lower-income households can afford to pay.

At the opposite end of the spectrum, West Newbury has but a nominal amount of "traditional" affordable housing, or housing that is subsidized by a state or federal program. The West Newbury Housing Authority owns and manages a total of 24 units —12 for the elderly and persons with disabilities, and 12 for families, two of which are also handicapped accessible. These 24 units represent 1.8% of the town's housing stock, well below the 10% "fair share" standard set by the state's Anti-Snob Zoning Act.¹³ As of December 1997, the Housing Authority's waiting lists included 16 elderly households and 31 non-elderly or family households.¹⁴

Housing Market

The steady demand for housing here comes from an upper-income market of homebuyers who want the rural aesthetic and lifestyle that West Newbury offers. Recreational and sports facilities, a horse-friendly

environment, quality schools, playgrounds and small-town ambience all contribute to West Newbury's appeal. Its homebuyers tend to be well educated, professionally employed couples with dual incomes. Many have children, and they want spacious family housing in a peaceful setting that is accessible to (but not spoiled by) urban areas.

A considerable number of West Newbury homebuyers are people who already live locally and want to trade up to a larger, more luxurious home. Equally if not more frequent are the sales to people "moving up" from elsewhere in Merrimack Valley. Buyers relocating from outside Massachusetts or the New England area represent a relatively small share of the West Newbury market.¹⁵ An advantage of an essentially "in-bred" market is that people who choose West Newbury are "informed" buyers: they know enough about the Town to appreciate the quality of life it offers. When the market is comprised predominantly of one end of the income spectrum, however, there are consequences for community character -- both visible and implicit. The visible consequences involve the kinds of housing stock change described earlier. The implicit consequences touch the social and political fabric of the community.

Both newly constructed homes and resale properties sell competitively in West Newbury. The older homes along Main Street tend to stay on the market longer than new ones, but most houses in West Newbury sell within 90 days. Many buyers of older buildings here appreciate the town's historic architecture and share the preservationist culture of the community as a whole. Still,

¹³ "Fair Share" refers to the percentage of housing that should be available for low- and moderate-income persons in each city and town. The standard of 10% per community derives from MGL c.40B (Chapter 774 of the Acts of 1969) and is calculated by dividing the number of housing units developed under the auspices of a state or federal housing subsidy program by the town's total housing inventory. Thus, a privately owned home occupied by persons who pay a low monthly cost is not included in a community's "fair share" determination.

¹⁴ Interview, West Newbury Housing Authority.

¹⁵ Anecdotal information obtained from local realtors.



Location of Residential Units
Three Families and Above

Figure H-2

West Newbury

there are housing market barriers in West Newbury. Commonly cited objections include the distance to Boston (some prospective buyers find West Newbury too rural or the commute too long), and the lack of housing affordability, especially for young families and people of moderate means.

After the decline that pervaded New England's real estate market from the late 1980's to the early 1990's, housing prices in West Newbury grew steadily and continue to grow today. In 1993, the median sales price was \$150,000. Only four years later, it had climbed to \$246,250, for a 64% increase during this period. Although West Newbury has experienced a dramatic rise in housing costs since 1993, the number of properties sold annually has declined. A comparison of median sales price and sales volume for the past five years appears below.¹⁶

West Newbury Housing Sale Prices: Five-Year Trends		
Year	Median Sales Price	Number of Sales
1993	\$150,000	100
1994	\$151,000	93
1995	\$218,000	71
1996	\$205,500	80
1997	\$246,250	72
1998 (thru 7/98)	\$265,000	51

Source: Banker and Tradesman.

The U.S. Department of Housing and Urban Development (HUD) defines "housing

¹⁶ Banker and Tradesman (July 1998)

affordability" as a total housing cost—principal, interest, taxes and insurance (PITI)—that is equal to or less than 30% of gross household income.¹⁷ Using this definition, a \$265,000 home is affordable only to households whose annual income is at least \$80,000.¹⁸ This exceeds West Newbury's 1990 median household income by more than \$23,000, but of far greater importance, it surpasses today's estimated median family income and the low- and moderate-income levels established by HUD for the Lawrence-Haverhill MSA.¹⁹

The current (1998) median family income for the Lawrence-Haverhill area, which includes West Newbury, is \$56,700 -- that is, only \$109 per year higher than what the U.S. Census Bureau calculated for West Newbury alone in 1990.²⁰ A four-person household

¹⁷ A comparable standard governs most conventional mortgage lending decisions as well.

¹⁸ This calculation assumes a 5% downpayment, 7% 30-year, fixed-rate mortgage, \$75 per month for homeowner's insurance, and \$3,000 in property taxes.

¹⁹ The U.S. Census Bureau measures and reports income according to three definitions: all households, family households, and non-family households. The 1990 median for West Newbury referred to throughout the Comprehensive Plan is the "all household" measure, or \$56,591. West Newbury's median family income in 1990 was slightly higher, at \$60,381.

²⁰ Congress requires HUD to update annual household and family income data across the nation, by urban and non-urban geographic areas, so agencies that administer the Section 8 Existing Housing Program can determine eligibility for rental certificates and vouchers. To qualify for federal rental assistance, a household's total income must be less than 80% of the median for the area in which the

earning \$28,350 or less is considered "low-income" and a four-person household with a total income of \$28,351-\$45,300 qualifies as "moderate-income." Using HUD's affordable housing cost criteria of 30% or less of annual gross income, a property selling for \$85,000 would be affordable to a low-income, four-person household. A property with a selling price of approximately \$150,000 would be considered affordable to a moderate-income, four-person household.²¹ As for the region's "typical" family -- the household earning \$56,700 per year -- an affordable home translates into a sale price of about \$185,000.

Clearly, the high cost of housing in West Newbury is a key indicator of population demographics. Only 6% of the community's owner-occupant households are headed by someone 25-34 years of age, whereas 39% are headed by 35-44 year-olds and 43%, by persons 45-64 years old. Elderly persons represent just 11% of West Newbury's homeowners. Of those who own property in West Newbury, 20% of the households (or 168) pay more than 30% of their income on housing and 2% of elderly households (19)

household lives, and those with incomes below 50% of the median receive priority. Thus, HUD first computes an estimate of median family income, using U.S. Census data as the decade's baseline and adjusting each year by an annual factor that varies according to national income growth and economic conditions. From these annually adjusted estimates, HUD then sets the 50% and 80% thresholds for Section 8 rental assistance.

²¹ This calculation assumes a 5% downpayment, a 7% 30-year, fixed-rate mortgage, \$50 per month for homeowner's insurance, and \$1,500 in property taxes.

pay more than 35% of their income on housing costs.²²

Home values affect not only the sales market, but also the cost of rental housing. Current monthly rents in West Newbury range from \$1,200-1,800 for a three- or four- bedroom single-family home, and \$800-1,000 for a one- to two- bedroom apartment.²³ The virtual absence of rental opportunities in West Newbury exacerbates the problem of high rents, and leaves the community with no homes or apartments that meet the "fair market rent" standard set by the federal government. Without some kind of community initiative, the likelihood of increasing the supply of rental housing here is extremely low. The high cost of land, zoning constraints and lack of sewers make rental development impossible, and the market cost of West Newbury's existing homes acts as a disincentive against investors looking to purchase property for rental income.

An affordable rent for a four-person, low-income household is about \$710 per month, including utilities. The unit would have to be sized appropriately for the number of occupants, i.e., a two- or three- bedroom unit, depending on family composition. For a four-person, moderate-income household, an affordable rent would approximate \$1,130 per month, including utilities. Clearly, West Newbury's market rents are beyond the reach of low-income households. Although a moderate-income family might be able to afford a two-bedroom apartment here, the rental supply is so limited that it does not function as a base for income diversity.

²² MISER/State Data Center, "STF-3: West Newbury."

²³ Interview with Deborah Hamilton, DeWolfe New England Realty.

In fact, West Newbury's mainstay housing attracts upper-class homebuyers and it will continue to foster exclusivity. Market preferences, land costs and local regulations effectively leave developers with one viable option or, in any case, the path of least resistance: large single-family homes in suburban-style subdivisions.

Analysis of significant issues

At least two important housing issues exist in West Newbury: town character, and affordability. Both can be addressed proactively by establishing and carrying out effective community development policies, but it takes an undivided will, initiative and strategic thinking to change the one-dimensional style of residential development in any town.

New-home construction has not altered West Newbury's semi-rural character to an irreversible extent. Most subdivisions are small, and taken individually they seem insignificant. Still, as only local residents could know, the cumulative effects of existing and future change are neither small nor will they be camouflaged well as West Newbury's still-prevalent hills, farms and woodlands disappear.

When the Comprehensive Plan Committee conducted a public opinion survey in 1997, townspeople said almost unanimously that their first attraction to West Newbury was its "small/rural town qualities," which most respondents defined as "open spaces." In the same survey, a plurality of those answering a

multiple-choice question about West Newbury's most serious issues cited these three: "over building/ unplanned/rapid development," "schools," and "growth and demand on [town] services." Not surprisingly, residents insisted on maintaining the town's "rural character" -- using such terms as "pastoral," "country" and "peaceful" -- and of the 52 possible answers to a question about characteristics of West Newbury that should be eliminated, the one that scored highest was "housing developments."²⁴

In the world of planning, the term "town character" suffers from so much use that its

meaning has lost precision. A town is a place distinguishable from all other places, and its character derives from "...having parts which interact: homes, workplaces, shops and open space which depend on each other...It means having a recognizable physical form reflecting a functional form."²⁵ That West Newbury's tax base is 96% residential²⁶ dictates an interaction that is and will continue to be

West Newbury's land values limit the options for achieving housing affordability.

The key barrier to producing affordable housing in West Newbury is the extremely high cost of land...but West Newbury could make effective use of the comprehensive permit to address affordable housing and simultaneously control the size, scale and type of housing by having a clear strategy and becoming pro-active in the development process.

²⁴ Thomas Planning Services to West Newbury Comprehensive Plan Committee, "West Newbury 1997 Community Survey Results by Question," (undated transmittal).

²⁵ Philip B. Herr, for National Trust for Historic Preservation, Saving Place: A Guide and Report Card for Protecting Community Character, (Boston, MA: Northeast Regional Office, 1991).

²⁶ West Newbury Fiscal Year 1998 Tax Recapitulation, as summarized in DOR, "At-A-Glance: West Newbury."

influenced more by what happens with residential development than any other land use.

In truth, a small industrial complex adjacent to the highway or a large assisted living complex concealed by trees would not change West Newbury the way that "Form A" lots and the incremental development of small and moderately sized subdivisions have already begun to suburbanize the Town. Several factors inform this conclusion. First, soils in many parts of West Newbury deter the kinds of creative development options that combat the physical form of large-lot suburban subdivisions. Second, the historic balance of physical and functional forms is becoming distorted by architecture that is not always in character with West Newbury's traditions. Third, the Town's current development rules are inadvertently producing a homogenized landscape.

As for affordability, the selling price of new homes is driving up the cost of older housing as well. For those who can pay, West Newbury is clearly in demand. For those who cannot pay, West Newbury is at best a dream. Many who grew up here and are now starting out on their own, along with those who work locally as teachers and municipal employees, often find it impossible to enter the West Newbury housing market because of their income.

West Newbury's expanding base of elders creates additional needs for affordable housing. As people age and become dependent on fixed incomes, many cannot afford to maintain their own homes, particularly those who still occupy the same house where they raised their families; the homes are older and large, and thus more difficult to maintain. Government data show that a significant number of West Newbury elderly households allocate an excessive

portion of their income to housing costs, e.g., 19 households pay more than 35% of their income on housing. Further, as people age they often require social and health care services in order to live independently. Persons with mobility or self-care impairments need services in a supportive or "assisted" housing environment, which West Newbury does not offer at this time.

In light of West Newbury's growing elderly population and its very large group of middle-aged households, the Town will benefit from carefully considering the relationship between population and housing characteristics. One way to meet the needs of a maturing population is to provide for a continuum of housing alternatives such as smaller homes and congregate housing, or the more institutional, service-oriented assisted living facility. Another way is to make accessory apartments easy to create, especially if the unit can be "developed" entirely within the existing footprint of a building.

The key barrier to producing affordable housing in West Newbury is the extremely high cost of land. Without a financial subsidy or some other means to write down the cost of land acquisition, developers will not build affordable housing in West Newbury because bluntly, they cannot. To reduce land costs to the level that would allow new housing units to be sold in the \$85,000-\$150,000 range referred to earlier in this chapter, West Newbury would have to offer such generous unit-per-acre density increases that at least two results are all but guaranteed:

1. Most projects would be rendered infeasible by environmental regulations governing on-site wastewater disposal. This is because parcels would have to accommodate too many units for

conventional septic systems. The oft-cited alternative of a "small" package plant complicates both the permitting process and project economics to the point that only large developments (by West Newbury standards) can yield enough return on investment to make the extra burdens worthwhile.

2. A project developed under a density-bonus affordable housing bylaw, usually called "inclusionary zoning," is apt to be so large and out-of-character with the rest of West Newbury that residents will object, and for understandable reasons. Once an inclusionary project sours townspeople against affordable housing, it will be much more difficult to meet the long-term needs embraced by a comprehensive housing strategy.

Inclusionary zoning ordinances have worked reasonably well in areas with moderate-range land costs and adequate public facilities, meaning public water and sewers. They offer the advantage of mixed-income development "by design," for as a rule, inclusionary bylaws mandate between 10-20% "affordable" housing units in exchange for a density bonus. Although the definition of "affordable" varies, the objective of most inclusionary zoning bylaws is housing affordable to families between 80-125% of a community's median income, not households at or below 80%.²⁷ The reason is simple: since these projects rarely obtain more than a modest density bonus in exchange for housing affordability, the homes have to sell at a high enough price to make the project

²⁷ In Massachusetts, this generally results in homes that can be acquired by first-time homebuyers with below-market mortgage loans from the Massachusetts Housing Finance Agency (MHFA).

profitable overall. A more accurate way to describe the results of inclusionary zoning is "low-end market housing" rather than "affordable housing."²⁸

A housing strategy that targets middle-income families is reasonable, and West Newbury may want to consider offering inclusionary zoning as a development opportunity by special permit because anything that produces alternatives to the very large, single-family homes being built today would help the Town diversify its housing stock. What the Town cannot do is mandate long-term affordability in conventional subdivisions developed as of right.

One process that could yield lasting affordable housing benefits is the "comprehensive permit," or a permit that grants "comprehensive" development rights for projects eligible under MGL c.40B, the Anti-Snob Zoning Act. The comprehensive permit is available to a housing development approved by a state or federal housing subsidy program.²⁹ In Massachusetts, cities and towns in which less than 10% of the total housing inventory is "affordable" (using

²⁸ The results differ when developers and/or the sponsoring communities obtain some kind of financial subsidy for a project, however. In theory, an inclusionary housing project is supposed to provide an "internal subsidy" by increasing the number of units (i.e., the density bonus), thereby increasing the developer's gross revenue from home sales.

²⁹ This does not include market rental housing that is occupied by tenants with "mobile" federal or state rental certificates, meaning certificates they can use to rent any moderate-cost unit that meets federal housing quality standards on the private market. Regulations for c.40B distinguish "housing subsidy" from "tenant subsidy."

HUD's definition) fall under a mandate to waive development regulations that would render a subsidized housing proposal "economically infeasible." Unless the community can prove that a compelling local planning need outweighs the need for affordable housing (meaning less than the 10% "fair share" standard), the Zoning Board of Appeals has to grant a comprehensive permit. When a town denies or puts excessive restrictions on a permit, developers can file for review with the state's Housing Appeals Committee (HAC).

This mandatory feature of the statute produced 20 years of hostility between local officials, affordable housing developers and state government, largely because the narrow language of the law forced HAC to vacate most comprehensive permit denials. At the end of the 1980s, new tools for managing the contentious affordable housing development process became available to communities across the state. Since then, comprehensive permits have tended to become "friendly" rather than "unfriendly" proceedings.

West Newbury could make effective use of the comprehensive permit to address affordable housing and simultaneously control the size, scale and type of housing by having a clear strategy and becoming proactive in the development process. The state's "Local Initiative Program" (LIP) offers communities the opportunity to sponsor affordable housing by applying on a developer's behalf for what amounts to project eligibility for a comprehensive permit. Since LIP carries no financial subsidy, the state has to find that a proposal meets certain requirements (mainly, an affordability ratio and housing quality standards). Once the state grants approval, the developer can apply for a comprehensive permit from the local Zoning Board of Appeals. Because developers cannot obtain

LIP approval without local sponsorship, these projects usually go forward with a limited amount of community protest.

Whether West Newbury uses LIP or an inclusionary zoning bylaw to address affordable housing need, neither avenue is going to be attractive to developers without a significant increase in permissible housing unit density -- an option that carries a potential for significant deviation from the perception of semi-rural character here. It also raises fiscal concerns. Thus, land value remains a huge barrier to affordable housing production, one that must be resolved either by building (and selling) more homes or reducing the cost of land. It seems that achieving the Town's goal of housing diversity and affordability will require more than flexible regulations and cooperative local boards. A recurring theme in the Comprehensive Plan is that West Newbury needs to become actively engaged in its own development future, and not rely solely on rules and private initiative to achieve the desired end.

Key Findings and Recommendations

West Newbury needs to reach agreement about a comprehensive housing development strategy. Attempting to address different types of housing need on a piecemeal basis may produce a few successes, but the factors that contribute to West Newbury's housing situation are complicated and interwoven. Because housing is and will remain West Newbury's dominant land use, planning for housing diversity demands concurrent attention to rural character preservation if the Town is to succeed at building the kind of community residents want. Further, West Newbury needs to consider its own internal

capacity to carry out a housing agenda. This is particularly true for affordable housing, which triggers a complex development and permitting process requiring a talented developer, a skillful, dedicated group of community leaders and on some occasions, outside help.

The Town of West Newbury should consider the following recommendations, which attempt to synchronize housing affordability and diversity with rural-historic preservation.

1. *Achieving Housing Diversity by Preserving Rural Character.* On the assumption that West Newbury cannot afford to acquire all of the most desirable open space parcels in Town, adopt overlay zoning to target these properties for *Rural Housing Opportunity Development* of single-family and duplex clusters by Planning Board special permit. The rules and regulations for the overlay district should be different from the Town's existing cluster housing standards in order to induce developer cooperation. Depending on the location of targeted sites, the overlay regulations would apply to properties in (portions of) Residence Districts A-B-C.
 - a) Overlay district would apply *only* to areas identified for strong open space and rural character importance.
 - b) District regulations should provide for a *negotiated density increase* (based on minimum-maximum prescribed in performance standards) in exchange for *minimum site disturbance, mix of residential use types and amount of usable open space* preserved by a proposed project, the minimum being 50%.
 - c) District regulations could encourage:
 - i. Variable lot sizes, lot widths and setbacks to increase the likelihood that projects will respect natural site features.
 - ii. Common driveways wherever practical, safe and appropriate.
 - iii. Waivers of strict adherence to Town's subdivision rules and regulations for paved width of streets, sidewalks and other site disturbances whenever the interests of aesthetics and the environment would be served.
 - d) District regulations could also require:
 - i. Architectural design and site plan review.
 - ii. Evidence of a site's "by right" development potential.
 - iii. Transfer of preserved open space to the Town of West Newbury, the West Newbury Conservation Commission or a non-profit land trust that agrees to allow public access.
 - iv. To leverage fiscal benefits from these projects, ownership and maintenance responsibility of roads and amenities could be made the permanent responsibility of a homeowner's association, not the Town.
 - v. Sizeable buffers between developments and adjoining properties.
 - vi. Provision for possibility of future connection to nearby streets, e.g., by deeding a

right-of-way to the Town in cases where preserved open space will be conveyed to a non-profit organization or to the West Newbury Conservation Commission.

- vii. A maximum impervious coverage ratio for the project as a whole.
- e) District regulations should prohibit:
 - i. Plans that obstruct or inalterably degrade important scenic vistas and view sheds.
 - ii. Construction of homes on or within a specified distance from the top of hills and ridges.
 - iii. Destruction of historic features such as stone walls.
- 2. *Preservation and Reuse of Old Properties to Produce Affordable Housing Without Creating New Units.* Adopt a housing policy statement that emphasizes housing cost diversity with a minimum of new construction and maximum use/reuse of existing properties for affordable rental and homeownership opportunities.
 - a) Identify older, existing homes that would be suitable for conversion to two- to four-unit buildings with a limited or no increase in footprint.
 - b) Acquire, rehabilitate, convert and use existing structures for affordable housing as defined by MGL c.40B, using the Local Initiatives Program (LIP) permitting process to redevelop selected properties. Use public funds to fill the gap between full and fair cash market value and affordable housing value. Use LIP

to ensure that the affordable units contribute to West Newbury's "10% fair share" allocation.

- i. To finance acquisition, the Town may opt for one or any combination of the following:
- ii. Appropriate funds to pay for appraisals and to purchase options on identified properties, and then act as a broker between owners and developers that the Town would choose through a competitive proposal process.
- iii. Authorize short-term borrowing in anticipation of income from the proceeds of selling sites to developers selected through a competitive proposal process,³⁰ and convert the balance of notes to long-term debt (i.e., the amount subsidized by the Town).³¹
- iv. Apply for housing development funds from one or more state/federal

³⁰ Town can (and should) solicit proposals from both non-profit and for-profit developers, although rental production would probably be more successful if carried out by a non-profit entity.

³¹ MGL c.30B, the Uniform Procurement Act, applies to real property acquired by the Town. Whether any purchases can be classified as a "sole-source transactions" depends on unique circumstances and must be determined on a case-by-case basis. The sale to a developer also triggers c.30B. Note that Town Meeting can approve an expenditure of funds on the condition of receiving state or federal grants in support of these projects.

programs for which cities and towns are eligible grant recipients, and use grant proceeds for acquisition and rehabilitation costs. (Grants could be used to make up the difference between income from selling property to a developer and the Town's initial acquisition cost, thereby avoiding any long-term debt.)

- c) Establish 10-year target for production of affordable rental and ownership housing and range-of-affordability goals for "new" units created by rehabilitation/reuse.³²
3. *"Limited Development" as a Strategy for Developing Small Affordable Homes.* Adopt a policy that encourages selling a percentage of new public open space for affordable housing production, using the proceeds to help defray the Town's land acquisition costs or to establish and maintain a West Newbury Affordable Housing Trust Fund.³³ The policy should exempt parcels of critical environmental importance (e.g., wetlands, public water supply Zone IIs).

³² One federal program requires a minimum of 51% of assisted units to be occupied by low- and moderate-income persons; another requires an "income targeting" approach. If the Town plans to seek housing development support from any of the state or federal programs available to cities and towns, projects have to be structured to comply with applicable eligibility rules. For purposes of a working estimate, the Town should think in terms of 10% of all housing units as an 10-year goal.

³³ A trust fund for this purpose requires a special act of the legislature.

The percentage of land should be no more than 10% or 10 acres, whichever is less, in order to keep individual projects at a scale that West Newbury can absorb. These should be *small* projects, comparable in size to the average standard subdivision.

- a) Offer the affordable housing land at a price sufficiently below market to make projects economically feasible. Do not transfer ownership of the property until permits are in place, and put affordable housing use restrictions on the deed.³⁴
 - b) Use the LIP permitting process rather than local regulations so that:
 - i. New units contribute to the Town's 10% fair share under MGL c.40B, and
 - ii. Projects can be negotiated for maximum sensitivity to the site. (As owner, the Town can exercise more control through the LIP process than it can through zoning regulations.)
 - c) Use "limited development" as a strategy of first resort to produce smaller homes that would be affordable to and appropriate for first-time homebuyers and elderly West Newbury residents who want to "down size."
4. *Incentives for Accessory Apartments.* The Town should amend the zoning bylaw to allow for accessory apartments as of right in Residence Districts A-B-C, provided that:

³⁴ Again, sale to developer triggers MGL c.30B.

- a) One additional unit can be created within the existing footprint of the principal residence or a lawful accessory building, resulting in no exterior change except for stairways or means of egress required by the Building Code.
- b) The property for which an accessory apartment permit is sought conforms to the current requirements of the bylaw, that is, a conforming use that meets all of the dimensional rules for the district in which the property is located.
- c) The Board of Health determines that the property will comply with Title V of the State Environmental Code once the unit is developed.
- d) The property is owner-occupied.

It is unsurprising that West Newbury residents lack unity on the subject of economic development. The common images of strip malls, bulky office buildings and the ultimate proof of suburbanization -- a sprawling, low-rise industrial complex -- are so antithetical to everything West Newbury cherishes about itself that the mere mention of economic development seems incongruous. Thus, when asked in 1997 how they felt about the types of development that West Newbury should discourage, a plurality of the respondents opposed "any" business whatsoever and in particular, industry and manufacturing. Moreover, nearly 70% of them cited West Newbury's absolute lack of commercial character as an important factor in their decision to move (or stay) here in the first place.

That the same survey population expressed grave concerns about the impacts of "over-development" on school and municipal service costs is also unsurprising, however. In a town where the tax base is 96% residential and the average homeowner's tax bill is \$3,630 -- making West Newbury's the 37th highest in the state -- residents *ought* to be concerned about the future well being of their community. While the Town lives within its means today, West Newbury has not had to contend yet with the full array of fiscal consequences that accrue from steadily climbing or rapid residential growth.

Still, West Newbury's time is coming: its 1990-1996 population growth rate ranks third highest of all Essex County communities, following only Boxford and Rowley.¹ Whether citizens would like to

blunt the inevitable consequences of growth by curtailing the rate and amount of new development forever, the legacy of zoning case law in America and private property rights effectively limit the growth control

choices that cities and towns can make. Given the impossibility of stopping growth altogether, citizens and town officials everywhere have had to learn ways to

harmonize the development future they want with the imperatives of sound fiscal management.

Community economic development provides a key link to sustainable fiscal solutions, but like any other aspect of local planning, its success lies in how well an economic development strategy helps to build the town people want for their future. In this regard, it is a mistake to limit the concept of (and discussions about) economic development to revenue-generating land uses alone. Economic development is also about quality of life, diversity and a community's capacity to meet the needs of its residents. At the risk of oversimplifying, to make quality of life a slave to tax revenue is to build strip malls and office parks in the absence of design review.

In order to conceive of economic development in West Newbury terms, one must deconstruct traditional assumptions about the meaning of "economic development" and replace them with a more precise definition. *Developing* a local economy involves creating systems of exchange by which imported capital is

Economic Development

Estimates for Massachusetts Cities and Towns, November 1997, compiled and reported by the Massachusetts State Data Center, University of Massachusetts at Amherst.

¹ U.S. Bureau of the Census, 1996 Population

invested or recycled within a community. "Imported capital" can be as simple as household earnings spent on goods and services sold by community businesses, or as complex as a large industry that markets its product globally, invests its income in community jobs and public benefits, and causes "spin-off" small ventures to grow around it. Through a process of successively expanding the sources of imported capital, communities build and diversify an economic base.

The simple community economies of yesteryear -- revolving around agriculture, merchants and household-based production -- depended heavily on internal equilibrium, meaning that each town essentially consumed what it produced, relying on only limited exchange with markets outside its own borders. These small self-reliant systems revolved around completely different expectations from those people have today about "quality of life" and the size, cost and responsibilities of local government.

Because municipal finance is driven by property taxes, the usual products of an economic development strategy are commercial and industrial uses that increase the value of land and provide a stream of revenue to the treasury of a city or town. Together, smart zoning and pro-active local officials can translate their community character ambitions to developers and they can negotiate high-tax-yield development with public and private benefits.

More often than not, however, poorly written regulations or adversarial local officials (sometimes both) invite the hostile development climate that abounds in many communities. In turn, they create self-fulfilling prophecies: bad blueprints (zoning regulations) produce bad projects in the form of negative aesthetic impacts that

Comprehensive Plan Goals and Objectives: Economic Development

Economic Development Goal

Broaden the economic base of the Town while maintaining its basic rural and residential character.

Economic Development Policies

- Encourage environmentally conscious businesses.
- Protect the Town Center as the only area of concentrated commercial services preventing strip development.

Town Center Commercial Area Goal

Beautify and maintain a compact Town Center area as the Town focus and meeting place that provides a range of commercial services in a pedestrian-friendly environment.

Town Center Commercial Area Policies

- Expand the quantity and choice of shops and services in the Town Center, including a variety of restaurants.
- Encourage additional public parking for Town Center businesses that does not separate business and create an auto-oriented strip.
- Consider use of a small, package wastewater treatment system to enhance the functioning and long-term viability of the Town Center area.
- Protect and preserve existing adjacent neighborhoods.

outweigh fiscal positives. "Developing a local economy" in West Newbury thus begs the following types of questions:

1. How long can the Town afford to live on a tax base that is overwhelmingly residential?
2. Who is "the Town"?
3. What is the Town willing to change in order to retain a predominantly residential tax base?

4. If the Town wants to preserve some of its agricultural tradition, what policies, programs, zoning or regulatory strategies and community investments need to be made in order to make farming a viable part of the local economy?
5. To diversify the businesses located in and to beautify the Town Center require incentive rules that maximize the efficient (and profitable) use of land, strong design guidelines and a Town government that believes in design review, public investment and adequate trade area characteristics to support each type of business. If West Newbury seeks to remain small, with rural development land use features, how can the Town Center economy be restructured to any significant degree?
6. How much -- if any -- infrastructure development needs to occur in order to facilitate business diversification and new investment in Town Center properties? How should the Town finance the improvements so that Town Center business enterprises can survive and grow?
7. What are "environmentally conscious" businesses, and how does West Newbury go about encouraging them?
8. What economic development alternatives might enhance the Town's ability to preserve its rural ambience more effectively than ongoing residential development?

Summary of Existing Conditions

West Newbury's economic base is small and uncomplicated, much like the Town as a whole. Still, employment and industry data maintained by state agencies indicate that over the past 10 years, the number of local business establishments has

doubled. West Newbury's employers represent a total annual payroll of \$15,790,000 and a combined workforce of about 630 people, although more than half of the jobs depend on public-sector spending, i.e., town or regional school district employment.

In descending order by size of workforce, the remaining sources of employment here include personal services, trade, construction and an assortment of real estate, finance and insurance concerns. For the past several years, state authorities have suppressed employment statistics in such areas as agriculture, forestry, transportation and public utilities, making it impossible to specify the number of West Newbury jobs that are produced by these sectors today. When agricultural, forestry and fishing employment was last reported in 1990, however, West Newbury's job count had declined from 36 to 22,² matching statewide trends that spell doom for the economic underpinnings of rural Massachusetts.³

By far, the vast majority of West Newbury workers commute elsewhere for employment. Typical household earnings of \$56,591 rank West Newbury's median household income at the 36th highest of all 351 cities and towns in Massachusetts,⁴ and

² Commonwealth of Massachusetts, Department of Employment and Training (DET) ES202 Series, 1997. DET reported agricultural, forestry and fishing employment statistics from 1986-1990 and has since classified the data as confidential.

³ It is noteworthy, however, that two of the Town's largest employers -- Cherry Hill Nurseries and Long Hill Orchard -- employ a combined total of 27 workers. Source: Massachusetts Department of Housing and Community Development (DHCD), "Community Profile: West Newbury" (1995 update).

⁴ Massachusetts Department of Revenue (DOR), Division of Local Services, "At-A-Glance"

the representative family does not make its living locally. Most of West Newbury's labor force consists of well-educated people who hold management, professional and technical jobs located nearby, in New Hampshire or the Boston area. Table ED-1 summarizes the occupational characteristics of West Newbury's labor force.

Because West Newbury residents tend to be educated, experienced and qualified within their fields, they are highly competitive. More than 40% of all adult residents hold at least a bachelor's degree and many have graduate or professional degrees as well.

Given the strong correlation between educational attainment and employability, it is unsurprising that the unemployment rate among West Newbury workers was only 2.7% in 1996, compared to a statewide rate of 4.3%.⁵ The mid-1990's

Massachusetts economic upswing was enjoyed disproportionately in this small community and for economic development planning, the overall high quality of life among West Newbury households has certain consequences.

If 1990 U.S. Census data remain substantially valid today, about 17% of the West Newbury labor force works in town and the balance travels each day with commute times ranging from 30 to 60 minutes. As is the case in most affluent towns, West Newbury residents prefer to

drive their own vehicles to and from their place of employment; about 90% of the Town's working population commutes by private car. Only a fraction uses public transportation and about 10% take advantage of carpooling arrangements. Ten years ago, federal census takers also recorded a fairly small number of residents (about 6%) employed in home occupations, but general consensus today is that home-based businesses enjoy far greater popularity in West Newbury.

Table ED-1: Occupational Characteristics of West Newbury Labor Force

<u>Occupation Categories</u>	<u>Persons</u>	<u>Percent</u>
Management & professional	768	39.7%
Technical, sales & administrative support	631	32.6%
Services	130	6.7%
Farming, forestry & fishing	68	3.5%
Precision production, craft and repair	200	10.4%
Operators, fabricators, laborers	140	7.2%
TOTAL	1,937	100%

Source: Mass. Department of Employment and Training (DET), 1997.

The commuter-mode characteristics of West Newbury residents are a function of two issues: the economic well-being of most householders here means universal access to the private car, and until Newburyport's commuter rail station opened, the region's public transportation system was not particularly sophisticated. In short, people had no choice but to travel back and forth to work by car, and those who work in the immediate region -- Haverhill, Lawrence or Newburyport, or one of the larger suburbs nearby -- rather than Boston still have no choice.

West Newbury is home to a predominantly white-collar society that also happens to be characterized by traditional family units -- meaning households with school-age

Series: West Newbury, 1998 (update).

⁵ DET, 1997.

children. While the total population here grew 19.6% between 1980-1990, the number of individual households swelled by more than 30%. Nearly half the town is comprised of persons between the ages of 15-44, and 77% of all households consist of married-couple families.⁶ The economic and fiscal implications of West Newbury's demographic profile cannot be overlooked, for on the one hand these families create housing demands and attendant impacts on school and town services but on the other hand, they work and spend most of their disposable income outside of town.

Town information supplied to state officials a few years ago shows that the five largest private employers in West Newbury include the Women's Health Care Center with 49 employees; The Children's Castle, 20; Cherry Hill Nurseries, 15; West Newbury Food Mart, 15; and Long Hill Orchard, 12.⁷ Arguably, neither the size nor type of business in any of these cases is sufficient to employ many West Newbury residents or command a significant share of disposable household income. Indeed, the viability of agricultural and horticultural operations depends on reaching wide market areas beyond the borders of West Newbury.

To the extent that the Town's 1997 community survey respondents reflect the population at large, then 89% of West Newbury residents do their food shopping in neighboring Newburyport. They also make their remaining essential and non-essential purchases in Newburyport, Peabody and a cluster of New Hampshire communities just over the border. Although some respondents echoed support for more

restaurants or office development in West Newbury, the survey produced no overwhelming interest in economic expansion or diversification; if anything, it reveals objections to growth and change that might commercialize this rural enclave that many pay dearly to call their home. Reconciling resident passion for West Newbury's rural charm with the cost of retaining the town character is a challenge for which economic development planning is ideally suited. Making economic development a credible feature of Town growth policies, however, is a challenge that can be met only by convincing leadership to adopt a fresh perspective on the meaning and role of economic development in a place like West Newbury.

Analysis of Significant Issues

West Newbury has articulated clearly its desire to remain residential. The Town's 1997 community survey identified strong public support for preserving the rural and agricultural character of West Newbury. Further, the Comprehensive Plan Committee has reaffirmed this as an umbrella development policy direction for the Town. Even if West Newbury wanted to expand commercial and industrial activity in any significant way, the Town's location relative to existing employment centers, the regional highway network and other factors would make it difficult to initiate wholesale economic development without altering the land use fabric of the Town. Working within the context of West Newbury's vision for the future and transportation and infrastructure realities, economic development has important land use implications -- particularly for "gateway" visual characteristics such as those along Route 113 and the I-95 interchange.

Historic Route 113 has always played a role in West Newbury commerce. Still, trying to transform Route 113 into a more prominent commercial corridor would run counter to

⁶ U.S. Census of Population and Housing, 1990, STF-3, compiled and reported by the Massachusetts State Data Center.

⁷ Massachusetts Department of Housing and Community Development Community (DHCD) Profile Series: West Newbury, 1995 (update).

every local objective expressed during the Comprehensive Plan process, and for good reason. The non-residential uses that pepper Route 113 are largely unplanned. Their somewhat random placement, the age, architectural style and setback of the buildings they occupy, and the lack of modern site plan standards collectively bespeak pre-zoning days and as such, they bespeak local history. To alter this condition in any fundamental way might achieve good zoning compliance but it will rob West Newbury of archetypal small-town features that cannot be replaced.

That said, the Town Center is a distinct commercial node that can accommodate additional development. Marginally expanding the current business zone and improving business development regulations might increase the area's potential, but while greater business diversity would enhance the quality of life for West Newbury residents the economic impact will be minimal. Given the market area, abutting non-commercial uses and local public policy, new commercial growth would produce buildings in the 5,000-10,000 square foot range and yield minimal economic or fiscal gain. In truth, the rationale for changing zoning and regulatory practices in the Town Center area has little to do with West Newbury's employment base or municipal revenue, and everything to do with image.

Commercial issues in the Town Center involve reorganization and design first, and small increments of expansion second. To achieve the community's goal of a Town Center that is "...the Town focus and meeting place [with] a range of commercial services in a pedestrian friendly

environment," West Newbury must determine whether its current zoning regulations can support such policies as "beautify the Town Center" or "expand the quality and choice of shops...including a variety of restaurants," and "protect and preserve adjacent residential areas." The Town also needs to be concerned about retaining the presence of such essential "downtown" institutions as the post office because services that draw residents into the

Town Center will enhance the viability of nearby businesses.

To implement these and other policies requires that Town Center development regulations provide for design, neighborhood compatibility and operational efficiency. The West Newbury Town Center is one of the Town's least attractive areas in that it belies the high quality landscape and residential character of the Town as a whole. While a number of

small businesses are located here, the area lacks operational and visual unity.

In aesthetic terms, the Town Center's "sense of place" is diminished considerably by what is now a haphazard relationship between vehicles and pedestrians. Improving the Town Center's visual characteristics will likely improve the scale and value of business activity and would certainly improve the value of the abutting residential areas.

Specifically, the Town Center needs a unified image relative to signs, sidewalk and pedestrian areas, and more defined curb and access points. The existence of large utility poles and wires, out-of-scale lighting fixtures and the lack of an organized streetscape plan minimize the quality of the

The Town Center

Trying to transform Route 113 into a more prominent commercial corridor would run counter to every local objective expressed during the Comprehensive Plan process...the rationale for changing zoning and regulatory practices in the Town Center area has little to do with West Newbury's employment base or municipal revenue, and everything to do with image.

area in both community and business terms. The fact that the area is relatively small is an asset, for major improvements can be achieved without considerable public or private expense. Moreover, the compact quality of the Town Center means that simple design solutions can have a significant impact. An exception to the design simplicity and low-cost nature of most improvements at the Town Center, however, involves removing utility poles and burying utility wires. No aspect of the Town Center and the Route 113 corridor generally is more out of character with and demeaning to West Newbury's aesthetic than the jarring images created by extremely "low-tech" utility services.

The Town's interest in preserving its traditional agricultural base demands unique kinds of economic development intervention, and techniques beyond limiting the re-sale value of farmland or reducing the tax burden on land in active farm use. In this regard, West Newbury can benefit from strategies that have been put to use in some western Massachusetts communities where preserving agriculture and horticulture is an economic imperative. Still, it is important to underscore that throughout New England, the economic viability of agriculture is extremely fragile and the opportunities for saving farms in perpetuity are both limited and complex.

Today, West Newbury has eight parcels under Agricultural Preservation Restrictions (APR's) and several more under tax assessment agreements that limit what

property owners must pay to the Town. These devices are important because they help to keep land values low enough to support farming and horticultural activity -- at least in theory. However, the larger problems associated with New England agriculture are the adequacy of wholesale and retail markets and the cost of reaching

them, competition with much larger, more efficient farming operations in other parts of the country, the need for efficient and affordable ways to create and sell value-added farm products, and the overall cost of living in the region.

To keep agricultural and horticultural land "open" requires buying the development rights or transferring them to locations that can accommodate more intensive land uses. To keep "agriculture" and "horticulture" as vital community elements, however, is an economic development problem. One example of the use, development and incentive opportunities that could

anchor agriculture in the economic and cultural milieu of West Newbury is a cooperative commercial kitchen for "value-added" production.

New England lacks a regional commercial kitchen facility for small farmers to engage in value-added production, a term that involves a variety of food processing and preparation techniques to increase the market value of locally grown crops. Although state authorities are exploring ways to develop such a facility, the process has been plagued by political and other problems and the result is that New England

Agriculture and Horticulture

Throughout New England, the economic viability of agriculture is extremely fragile.

Strategies that can help preserve active farming:

- Agricultural Preservation Restriction (APR) Program
- M.G.L. c.61 and 61A -- tax incentives to preserve forests and farms
- Zoning that encourages processing, sale and distribution of locally grown farm products
- Clear, appropriate sign bylaws that permit off-site advertising of local agricultural and horticultural businesses

farmers seeking to increase their profitability through value-added enterprise must travel as far as a rural New Jersey community (and they do).

Value-added kitchen operations can be costly to develop and manage; they require cheap land on the one hand, and a building or buildings suitable for cooperative production on the other. West Newbury has farms with land and structures adequate for developing an agricultural commercial kitchen, but the zoning bylaw would have to allow the use and relevant regulations need to be adopted.

Further, the Town owns open space and could offer a portion of an existing public parcel to an enterprise that would develop and operate a commercial kitchen for the exclusive use of small farmers throughout the region. Obviously, the market for this operation cannot be limited to West Newbury farms but the objective of preserving and supporting the Town's agricultural tradition would be served. Whether current owners of active farms in West Newbury would use a cooperative commercial kitchen is less important than whether the availability of one can help secure ongoing farming activity in the future.

Another strategy that West Newbury ought to explore is relatively simple and requires little more from the Town than reasonable zoning. Current restrictions on commercial signage rob small farmers of the most inexpensive and basic marketing tool that every business needs, and that is the ability to advertise location and products with signs. Greater permissibility with signage does not have to detract from West Newbury's scenic landscape, although liberal sign bylaws often cause small communities to become concerned about "image commercialization." The solution lies in clear design standards more than size and placement constraints.

Any economic development strategy, regardless of its scope or community benefit objectives, has to account for the market realities of the city or town where property is available for non-residential development. Simply by virtue of its proximity to Boston, West Newbury is located in an area that serves regional, national and international markets. What West Newbury has to offer to the economic marketplace is *land* -- undeveloped, encased by scenic vistas, and accessible largely by local or rural roadways except for property near the highway.

One way of thinking about West Newbury's available land is how best to preserve its openness, for this is the overriding vision of the Town's future and in many ways, the community value that is at greatest risk. Herein lies room for reconstructing the meaning of "economic development" in ways that can work for West Newbury by meeting multiple local objectives and doing more to preserve the rural fabric of the Town than almost any other land use strategy.

Although West Newbury's share of elderly residents is quite low (8%) in relation to the surrounding region, in many ways the Town is poised to accommodate a type of development that meets needs for both elderly housing and diversification within the local economy. The "housing" element of this concept is alluded to in the chapter on Housing, but the economic ingredients of building assisted living communities are more persuasive to investors than meeting housing need alone. The same economic ingredients should be more persuasive to West Newbury because they mean fiscal benefits as well.

For a community that wants to preserve its rural residential image over the long term, West Newbury needs to think about several ways of increasing its sources and amounts of tax revenue so that residents can afford to maintain the quality of life they enjoy today

and protect the Town's most important landscapes. As such, West Newbury ought to consider how to translate its advantages into an economic development opportunity, and decide whether to become a contender for this class of development. The most obvious advantages are:

- Parcels, individual or easily assembled, with sufficient size, development suitability and buffering to support a mixed-use complex that includes housing units, on-site continuum of care facilities, developed grounds and resident amenities.
- Parcels that, by virtue of location and natural characteristics, can be developed with a limited amount of environmental impact study as a precursor to obtaining permits.
- Regional markets of aging upper-income homeowners in search of alternative housing and of middle- to upper-income homeowners seeking to house elderly parents nearby.
- Access within a 10-15 mile radius to significant consumer outlets: shopping, medical and personal services, entertainment, and a developed or developing hospitality industry.
- Close access to seasonal and year-round public amenities.
- Community name recognition as a place where upper-middle and upper-income households are dominant social and class forces.
- Favorable tax rate and property values.
- Access to essential infrastructure: public sewers or a site that can support a project-based treatment plant, and public water or a site that can accommodate a community water supply.
- Adequate public safety services, particularly local firefighting capacity.

- An available labor force that fits the needs of the project -- medical, professional, technical, service and unskilled workers.

West Newbury and the communities surrounding it create the kind of housing market that independent and assisted living

The Public Benefits of Assisted Living Facilities

- Produce favorable economic impacts
- Provide housing and medical services opportunities for the elderly and disabled
- Preserve large amounts of open space
- Avoid school costs
- Limit demands on municipal services -- when developed pursuant to a carefully negotiated special permit process
- Protect important sites from development as single-family homes
- Yield significant amounts of tax revenue

facility investors seek. Moreover, the Town's proximity to Newburyport equates favorably with many of the consumer and public amenity factors that weigh heavily in development location decisions. A key constraint is the lack of water and sewer. Some of West Newbury's available land has few development limitations, however, and a site with appropriate size, configuration and groundwater characteristics can offset the barriers of public water and sewer service *if* the development rules allow enough use intensity to finance these types of project costs.

Further, there are large parcels in West Newbury that ought to retain as much of their open space value as possible. Independent and assisted living facilities normally use considerably less than 50% of a site for buildings, roads and drainage because part of their market appeal to high-end households is landscaped grounds,

natural open space and scenic relief. Thus, the potential exists that West Newbury could market itself strategically to quality developers of such projects, preserve important parcels and block new single-family homes on a site that will otherwise be destroyed by the subdivision process.

The outcome will serve not only West Newbury's open space goals but contribute favorably to the Town's need for tax revenue, it will create a diverse spectrum of jobs and generate nominal traffic volumes. Whether the Town is interested in independent and assisted elderly living facilities for housing or open space reasons, zoning for and attracting this type of project is actually an economic development strategy because it achieves the following outcomes:

- Job creation and employment opportunities for both local residents and people from the immediate region
- Positive fiscal impacts, because independent elderly housing and assisted living facilities pay much more in property taxes than they cost in Town services
- Avoidance of school costs
- Enhancement of Town Center business activity by introducing a market of local consumers with considerable disposable income and little desire to travel long distances for personal services and convenience items -- in other words, an independent/assisted elderly living facility could help West Newbury meet its Town Center goal
- Although not insignificant, the environmental impacts are manageable

and can be mitigated by project design safeguards.

One location that could play a critical role in West Newbury's economic future lies at the Route I-95 interchange. Land east of the interchange is currently zoned for industrial uses, but more than 75% of the site is comprised of wetlands or wetland buffers. As such, it is useless for economic development. The West Newbury Comprehensive Plan Committee wanted to review land immediately west of the interchange, however, and the Town's planning consultants have done so. Their

conclusion is that two parcels of approximately 94 acres combined offer a potentially significant location for non-residential development (see attached map).

This site offers the following possible advantages:

- Size, which means enough land to develop and sustain viable commercial activity and to incorporate quality buffers and

vegetation screening into the development planning process.

- The potential that traffic *could* be primarily contained within the confines of the interchange with I-95.

Its disadvantages include:

- Lack of adequate infrastructure, namely water supply and wastewater disposal (unless it becomes possible to connect development here to Newburyport's sewer system).
- Existing zoning.

To achieve this site's economic development and positive fiscal impact potential, it must

Professional Office and Research Park Development

Encouraging professional offices and research & development uses on land west of I-95 could enhance West Newbury's fiscal future, but...the zoning rules have to be written in a way that secures the profitability of non-residential development and enhances the rural quality of this critical gateway location.



Economic Development Option

Figure ED-1

West Newbury

be rezoned. For various reasons, West Newbury's existing business and industrial zoning districts are inappropriate for this purpose and neither of the districts should be extended or applied to the land west of I-95. As written, the West Newbury zoning rules for non-residential development do not offer effective protections to abutting residential areas, nor do they address the type, scale, site plan, environmental standards, traffic mitigation and use requirements for developing a large site adjacent to a highway interchange.

An Office and Research Park District (ORP) that permits offices, research facilities, hotel and conference centers and traditional accessory uses would offer West Newbury development opportunities it does not have today. An ORP overlay district would offer similar outcomes but in a different way. In either case, the new zone's objective would be to create a medium-density business district that addresses West Newbury's desire to preserve the open and rural character of the Town. Whether the Town adopts a traditional or an overlay district approach, the rules have to be written in a way that secures the profitability of non-residential development and enhances the rural quality of this critical gateway location.

If West Newbury pursues a traditional rezoning approach, there may be short-term non-conforming use problems or conflicts with the plans of current owners. Regardless, the traditional approach is the method by which West Newbury can most directly alter its land use and economic development policies. Using an overlay approach can result in the same economic development outcome but the difference is "can," not "will." Overlay zoning gives landowners a choice about pursuing their underlying development rights (in this case, residential) or the possibilities allowed in the overlay district. Thus, overlay zoning leaves the final land use decision in private

hands rather than absolute Town control; at the very least, it leaves land use disposition decisions to market and market timing factors. As a rule, when overlay uses create considerably more economic value for property owners, the issue of underlying development rights becomes moot.

To designate the site at the I-95 interchange for economic development, West Newbury will need to write and adopt development and use intensity rules that make non-residential development viable while minimizing surrounding area impacts. For example, the floor-area ratio should not exceed 0.35, a standard that is somewhat less than the regional norm. Additional rulemaking issues should account for a minimum open space requirement of 50% of the total lot area, architectural standards that limit building height to 40 feet and 3 stories, and strong site plan guidelines that ensure effective screening and traffic access design.

For discussion purposes, if an ORP were approved under these types of guidelines (given traditional parking requirements), the economic and fiscal gains for West Newbury may be substantial. About 1.4 million square feet of commercial development will be achieved at build-out, which would be realized over a 10-year period under favorable market conditions. Assuming that regional norms hold, for every two tax dollars paid by non-residential property owners the Town of West Newbury will expend approximately one dollar in service costs. Thus, the net annual fiscal return from developing these parcels will range between \$500,000 to \$1,000,000 depending on property valuations and other factors. Even if the Town opted for a somewhat smaller scale of development here, clearly the return would be advantageous.

Commercial development at this scale would also produce about 3,780 jobs and generate 1,000 vehicular trips per day,

primarily but not exclusively using the I-95 interchange. If only the smaller (24-acre) parcel at this location were rezoned, the outcome would be 300,000 to 350,000 sq. ft., roughly the equivalent of a small regional office and research park. Such a facility would trigger 3,200 vehicular trips per day and it would produce a net fiscal return to the Town, but at a significantly lower level.

In short, West Newbury has available land for a regionally accessible office and research park. The key issue is whether development at this scale can be "contained," such that it does not detract from the character of the community as a whole. In fact, the size, shape and location of the site at I-95 allow for non-residential development opportunities without harming the surrounding area. The implementing rules must be written carefully, however, and town government must know how to work with developers and investors who would be interested in pursuing a project of this type. If they encounter too many local obstacles, which in most towns lie less with written regulations than with an adversarial process of project review and permit granting, developers will search elsewhere for quality land and a political climate that wants their investment.

In fact, it is to West Newbury's advantage to adopt ORP zoning regulations that are unambiguous *and* strict. Most high-quality firms and their development consultants do not object to such requirements as architectural design and site plan controls, dedicated open space and buffer areas, or environmental performance standards as long as the rules are clear and do not become an excuse for unreasonable delays in the permit process. Thus, West Newbury should recognize that expanding its economic base could be accomplished in ways that not only complement the Town's semi-rural character, but also protect it by

reducing the amount of land absorbed by suburban residential development.

It is important to emphasize that although the land west of I-95 offers a unique opportunity for West Newbury, zoning and traffic mitigation methodologies have to be addressed through policies that acknowledge issues associated with this site. It would be an error to assume that community benefit and neighborhood protection will simply "happen" without clear, appropriate regulations and a development policy that can synchronize decision making among the many town boards and commissions that operate within their own separate jurisdictions.

Key Findings & Recommendations

To achieve the dual aims of a balanced fiscal future and rural character preservation, West Newbury should:

1. Establish an *Assisted Living Facilities Overlay District* on a limited number of large, important open space parcels (to be designated by the Town).
2. Establish an *Office and Research Park (ORP) District* west of the I-95 interchange. The essential features of the R/ORP District should include:
 - a) Allowed overlay uses: professional offices, research facilities, hotel and conference centers, and traditional accessory uses
 - b) Considerations to be addressed in design criteria: floor-area ratio of <0.35, 50% of total lot area to be preserved as open space, building height maximum 40' / 3 stories, architectural design review and site plan requirements to establish appropriate buffering, screening and traffic circulation standards

3. Establish a *Town Center District*, but only after undertaking a comprehensive design, market and feasibility study of the existing area. The parameters of the study should include:

- a) Architectural design guidelines for design review and approval of future new construction, substantial reconstruction or rehabilitation of existing buildings.
- b) Analysis of the feasibility and impact of expanding the size and depth of the existing business district.
- c) Cost-benefit analysis of wastewater disposal options.
- d) Intensive review of business district zoning regulations for their impact on the feasibility of new development or reinvestment in existing properties.
- e) A comprehensive center design and streetscape plan that addresses methods of financing such needed improvements as the burial of utility wires.
- f) Business development feasibility assessment in order to identify the types and mix of businesses that would be most sustainable in West Newbury's Town Center, including an analysis of options for retaining the US Post Office in the Town Center area.

4. Establish and implement a comprehensive program for farmland preservation that includes explicit economic development ingredients:
- a) Community marketing initiatives, e.g., a marketing cooperative
 - b) Zoning that explicitly allows "value-added" production facilities as a business use on West Newbury farms.

- c) A more liberal sign bylaw with respect to location, number and size of signs but with clear, appropriate design standards.
- d) Acquisition of farms in the Town's Chapter 61/61A inventory and leasing publicly owned farm properties for agricultural purposes.

The order of these four basic recommendations is not indicative of relative priority. In fact, the Town may be more comfortable with introducing economic development concepts that bear the closest relationship to West Newbury's political culture, e.g., a comprehensive strategy to preserve active farmland. The choice to press for some ideas over others has much to do with the Town's sense of need. If the community felt strongly that economic development should supply fiscal benefits, then recommendations #1-2 and #4 are the most obvious candidates for early action. Preserving farmland reduces the potential for additional single-family homes, while assisted living facilities and an Office/Research Park promise a net revenue gain to pay for community services and schools. A sense that the appropriateness of economic development lies overwhelmingly in "quality of life" advantages would argue for giving primacy to recommendations #3-4. In truth, all four recommendations can meet both community character *and* municipal finance interests as long as programs, policies and regulations work toward the same end: preserving the aesthetics of West Newbury in ways that can be sustained over a long period of time.

Community facilities and services constitute the civic infrastructure that supports a particular land use pattern and enhances the quality of life for local residents. A

community facility is any piece of municipal property that has been developed for public purposes. By definition, it is paid for, available to and used by "the community."

Although all municipalities expect to provide "the basics" – a town hall, school buildings, a library, paved and suitably maintained streets – sometimes they cannot offer more. Environmental and geophysical

constraints, fiscal conditions, local politics and other factors complicate local capacity to build, operate and maintain the types of facilities that residents need or want.

Growth and development create special impacts on community facilities and services. Changing demographics may lead one community to build a senior center when the church hall that housed senior citizen programs becomes inadequate, while another community needs more playgrounds and soccer fields to serve a swelling population of families with young children. Demands for new facilities come with needs created by a change in age-group dynamics, but they also echo through the halls of town meeting when too many people need access to the same small, outdated spaces for basic public business. Even without growth-induced needs for space to meet a variety of needs, public building inadequacies sometimes stem from deferred maintenance when communities cannot afford the cost of

upkeep. At some point, too many years of postponed roof work, window repairs or exterior painting can transform a beautiful old building into one that needs major capital improvements.

It is important to remember that

"community facilities" encompasses more than buildings.

Drinking water usually comes by way of a public water system, which is a key part of any community facilities inventory. Boat landings, soccer fields, municipal parking lots and bike paths also fall in this category

Community Facilities and Services

because they enable towns to offer public services. Since all municipal programs are supported by tax revenue or special user charges (sometimes both), the reality is that civic infrastructure and fiscal impact are mutually dependent public policy issues. Each is driven by land use choices made at the local level. West Newbury's land use practices will shape important public facility and fiscal debates in the near future and in some instances, they already are.

Summary of Existing Conditions

West Newbury's civic infrastructure encompasses several buildings, a small water supply and distribution system and an assortment of parks, fields and public amenities. Table CF-1 lists the Town's inventory of public facilities. Below is a description of the primary buildings and sites in the inventory,

including basic information about their use and condition.

1910 Town Office Building

The centerpiece of West Newbury's public building portfolio is the recently renovated 1910 Town Office Building at 381 Main Street, which also dominates the municipal complex known as the West Newbury Civic Center. The Town Office Building appears adequate for the long-term requirements of local government business, although expanded parking may be needed in order to accommodate such factors as population growth or a significant increase (or change) in use of the Community Room. A space needs assessment that was commissioned for the 1997-98 capital improvements project assumed a resident population of 6,000 people by 2020,¹ which is less than this 20-year Comprehensive Plan's anticipated *build-out* population of 7,500. (The population estimate of 6,000 by 2020 does not assume build-out conditions.)

The needs assessment also assumed somewhat generous, but not excessive, office space requirements for each Town department. For this reason, West Newbury should feel confident about its Town Office Building's capacity to absorb a considerable amount of population growth without substantial building alterations. If the Town were to add uses beyond those housed on the property today, however, the adequacy of existing interior space for traditional municipal services may need to be reassessed. "Traditional" means such functions as the Selectmen, Town Clerk, Planning Department, Conservation

¹ Thomas Planning Services, *West Newbury Civic Center Complex Space Needs Assessment*, January 25, 1995.

Comprehensive Plan Goals and Policies: Community Facilities and Services

Community Facilities and Services Goal

Provide residents with a wide range of governmental facilities and services and the necessary public utilities.

Community Facilities and Services Policies

- Maintain a high degree of public safety within the Town, including provisions for police, fire and emergency services.
- Build school spaces to keep pace with demand and to provide a high quality education.
- Increase active recreation facilities to keep pace with growing needs.

Water Supply Goal

Secure a reliable, protected long-term water supply for the needs of the Town.

Water Supply Policies

- Encourage water conservation and employ use restrictions as necessary.
- Explore new sources of water supply.
- Protect aquifers and groundwater recharge areas.
- Limit future development in designated Zone II areas.

Commission, Board of Health, Inspectional Services, Water Department, and Finance Offices (Accountant, Treasurer, Collector and Assessors).²

Originally built as a schoolhouse, the Town Office Building was put to use for local government operations in the early 1980's when municipal departments relocated from the Old Town Hall at 491 Main Street. In 1996, West Newbury voted to finance major improvements to the Town Office Building in order to comply with the Americans with Disabilities Act of 1990, increase parking, supply senior citizens with a drop-in center, refurbish and convert the former Central School Auditorium to a Community Room, and upgrade the electrical and heating systems throughout. The \$2.5 million project was completed in May 1998.³

The Civic Center complex is also comprised of several parcels that abut the 1910 Town Office Building. The Bachelor Street recreation area, the Fire Station and Emergency Operations Center, 12 units of public housing for the elderly, the

"Community Housing" that occupies the former Central School, the Central School gymnasium (now called the Community Room) and the West Newbury Historical Society collectively shape the Civic Center's form, functions and purposes.⁴

Public Safety Facilities

Three structures currently house essential public safety functions in West Newbury: the Central Fire Station at 403 Main Street, a satellite fire station on Garden Street, and the Emergency Operations Center located next to the Central Fire Station. Shortly after the 1910 Town Office Building renovations began in 1997, the Police Department moved into the Emergency Operations Center and has shared space with the Emergency Management Agency (EMA) since then. The Police Department's offices were previously located in the basement of the Town Office Building. According to local records, renovating the basement for Police Department re-occupancy would cost approximately \$585,000.⁵

During the past year, local officials, Fire and Police Department personnel and residents have disagreed about the best way to provide for West Newbury's long-term public safety facility needs. Some have argued that the Town needs a new public safety building for police, fire and dispatch functions and equipment while others believe the Police Department should return to its original

² In West Newbury, the Town Office Building also houses a drop-in center for senior citizens. Although nearly every community provides senior center space today, it is not necessarily the case that senior centers are part of a town hall complex. Quite often, they are separate, free standing facilities or located in surplus municipal buildings, e.g., a former town hall or school. Thus, the drop-in center is not included in the list of "traditional municipal functions" for a town office building, but its importance is not disputed or in any way minimized.

³ West Newbury Facility Space Needs Committee, *Final Report and Recommendations for the Renovation, Use and Expansion of the West Newbury Town Civic Center*, May 2, 1996; Advest, Inc., *Notice of Sale: West Newbury General Obligation Bonds* ("Bond Issue Prospectus"), October 14, 1998.

⁴ Thomas Planning Services, *Space Needs Assessment*.

⁵ Allen M. Lieb Architects, "West Newbury Police Facility Project Evaluation," 3 November 1998.

Table CF-1: West Newbury Community Facilities⁶

Public Facility	Location
1910 Town Office Building	381 Main Street
Old Town Hall	491 Main Street
GAR Memorial Library	490 Main Street
Main Fire Station	403 Main Street
Emergency Operations Center (EMA)	399 Main Street (Rear)
Garden Street Fire Station	Garden Street
John C. Page School	694 Main Street
Highway Department Garage	694 Main Street
Civil Defense Building (Parks & Recreation)	694 Main Street
Highway Department Salt & Sand Shed	393 Main Street
Bachelor Street Maintenance Shed	Bachelor Street
Water Department Pumping Station	1 Main Street
Water Department Brake Hill Standpipe	1 Main Street (Rear)
Pipestave Hill Standpipe	694 Main Street
Pipestave Hill Booster Pump Station	694 Main Street
Well Field	99 Main Street
Recreation Building at Mill Pond	Mill Pond Recreation Area
Action Cove Playground	Bachelor Street
Concession Stand	Cammett Field
Bandstand	Main Street (Rear Lot, Town Office Building)

⁶ Supplied by Comprehensive Plan Committee, March 1999. Source: MIAA Property & Casualty Group, "Town of West Newbury Buildings and Personal Property Statement of Values," 7/1/98. Other types of "community facilities," e.g. town-owned open space, are listed separately in the Open Space and Recreation Chapter. Table CF-1 does not include properties owned, operated and maintained by the Pentucket Regional School District.

space in the Town Office Building. Further options include rehabilitating the Central Fire Station and building an annex or a separate structure for the Police Department on the same site, or renovating the fire station for Police Department use and adding a new fire station onto the renovated building.⁷ To arrive at a workable solution, the Town appointed a Public Safety Facility Study Committee in 1998. The Committee has since retained consultants to examine several possibilities and was expected to make an interim report to the April 1999 Annual Town Meeting.

The Main Street Fire Station was built in 1960 and it needs substantial rehabilitation, e.g., structural, roof and cosmetic repairs. The building includes two drive-through apparatus bays that department personnel have characterized as cramped and inadequate for equipment storage and maintenance. Although the Fire Department consists of 56 people (that is, all members of the call force), the training room has capacity for only 25. There is no area for secure records storage and only limited office space for officers and inspectors.⁸

The Garden Street Fire Station is a 1,500 square foot building used as a satellite equipment facility. It is a simple, one-story structure with two apparatus bays. Whittier

Regional Vocational High School students built the Garden Street Station in 1975.⁹

When the Police Department vacated the basement of the 1910 Town Office Building, it left behind 4,000 square feet of developed space including a block of three cells, a dispatch center, a booking room, offices, storage and a training area. The Police Department was forced to move from the Town Office Building after the \$2.5 million construction project began in 1997, reportedly because dust and debris made remaining in the basement unsafe.¹⁰ The EMA agreed to share its small Emergency Operations Center for what was expected to be a short-term arrangement, but since then the 2,000 square foot building has continuously housed the part-time EMA, full-time Police Department and full-time E-911 dispatch. The EMA consists of a director and various officers, all of whom are volunteers. The Police Department includes a full-time Police Chief, who also serves as Harbormaster, and six full-time officers (two of whom are sergeants and one, a detective with corporal rank) along with a dozen reserve officers.¹¹ Further, the Police Department oversees E-911 dispatch, which involves six additional employees.

While cramped quarters and inconvenience have affected both departments, each has also encountered unique operating problems. For example, federal authorities annually evaluate the Emergency Operations Center and in 1998, West Newbury's EMA was deemed deficient because its building is not secure – a condition caused by police and dispatch personnel, along with civilians,

⁷ West Newbury Comprehensive Plan Committee, Public Facilities Subcommittee, "Memorandum to Community Opportunities Group, Inc.," March 3, 1999.

⁸ Police Chief Jonathan Dennis (for Police Department, Fire Department and Emergency Management Agency), "Memorandum to West Newbury Capital Improvement Committee," January 22, 1997.

⁹ O'Keefe Associates, *Town of West Newbury Public Safety Complex Report*, September 1998.

¹⁰ *West Newbury Annual Town Report*, 1997.

¹¹ *Ibid.*

entering and exiting the space.¹² Once it became clear that the Police Department would not be returning to the Town Office Building, its administrative offices were moved into a trailer next to the Fire Station while all other Police Department functions and dispatch remain in EMA space. Prisoners are booked in West Newbury, but the Town has an agreement with the Merrimac Police Department for cell space when needed.¹³ In January 1999, the West Newbury Selectmen authorized the rental of a cell block trailer so the Police Department would be able to hold prisoners locally until the Town finds a permanent solution to the public safety facility problem.¹⁴

Future growth and development will require not only adequate public safety facilities but potentially, additional police and fire services. The Town currently relies on call firefighters who work under a part-time (call) fire chief. Although many small communities have managed to retain the call firefighter system, its success and continued relevance depend on readily available people with proper training. Demographic, workplace and commute changes make it increasingly difficult for towns to meet fire protection demands with all-call personnel. There does not appear to be an immediate reason for West Newbury to address Fire Department staffing, but continued growth will increase the probability of fire calls. It is important to note that establishing permanent part-time or full-time firefighters would affect fire station space needs in the future.

¹² *West Newbury Annual Town Report*, 1998.

¹³ *Town Report*, 1997.

¹⁴ "Cell Block Trailer Approved by West Newbury Selectmen," *West Newbury News*, January 29, 1999.

Given the Town's geographic area, its current and projected population and the Police Department's activity statistics, a full-time force of seven appears adequate for the near-term. National norms for suburban communities call for two police officers per 1,000 residents.¹⁵ West Newbury is not a suburban community, however, and properly managed growth could prevent it from becoming one. Since the Town is no longer truly "rural" and it is located in a rapidly growing region, residents and local officials will have to rely on common sense more than published standards to gauge police force adequacy.

Factors such as a seven-mile waterfront to patrol and manage also creates public safety demands, but this is the kind of localized problem that national norms never specifically reflect. For planning purposes it is important to note that if the Town's population grows as expected, West Newbury might need an additional three or four police officers by the year 2020. The Police Chief has indicated that 4,000 square feet of usable area (or about the same space that the Town Office Building basement offered) would meet his department's needs, which corresponds reasonably with the number of police and dispatch employees he oversees.¹⁶ A larger police force coupled with any increase in dispatch personnel would argue for more space devoted to Police Department purposes in the future.

¹⁵ International City Management Association (ICMA), *Local Government Police Practice*, 2nd Ed., (ICMA Training Institute, 1989).

¹⁶ Based on sketch plans prepared for the Town in January 1997; and Dennis, "Memorandum," January 22, 1997. The plans assume a new public safety building that would include the Fire and Police Departments. See also, O'Keefe, *Public Safety Report*.

The Town's EMA is an all-volunteer organization that is responsible for coordinating emergency response to unusual or catastrophic hazards – floods, disasters and, of particular relevance to West Newbury, an incident at the nearby Seabrook Nuclear Power Plant. Its space requirements call for a minimum of 2,000 square feet, which had been available for EMA's use until the Police Department vacated the 1910 Town Office Building basement. There is no indication that EMA's space needs would exceed 2,000 square feet in the future, given the nature and scope of its responsibilities.¹⁷

Public Schools

Of all public facilities and services, none is more important to a community's image (and potentially, its property values) than the reputation of its public school system. Nationally, public education has become the yardstick for community desirability. While schools play a central role in the real and perceived quality of life in cities and towns, they also represent the most demanding "cost center" in local government budgets. West Newbury residents care deeply about the quality of their children's education, but they also care about the cost of public schools – both capital *and* annual operating costs. The fact that West Newbury is beginning to grow rapidly means that public school costs will create significant political and fiscal problems over the next decade. West Newbury is a member of the Pentucket Regional School District (PRSD), which

also includes Merrimac and Groveland.¹⁸ Until six years ago, each of the three communities was responsible for grades K-6 and participated in the regional district for grades 7-12 only. Today, the Pentucket Regional School Committee has K-12 jurisdiction in all three communities.

West Newbury's share of district-wide school enrollment is 27%. Of the region's \$9.1 million in FY98 assessments to participating towns, West Newbury paid \$2.3 million and also contributed \$190,538 for debt service and capital costs.¹⁹ Under an amended regional agreement, the communities are responsible for providing an elementary school *facility* but the school district operates all of the region's public schools.²⁰ The current and future adequacy of school buildings throughout PRSD is a source of controversy in West Newbury. Because the issues are very complex and the opinions of local and regional officials differ, the following profile addresses the John C. Page School first, and regional school buildings second.

West Newbury's one elementary school is the John C. Page School. It is the main building of a former private school complex on 36 acres overlooking Main Street. Eventually, the Page School will be under a lease agreement between the Town and the Pentucket Regional School Committee, but

¹⁷ West Newbury Emergency Management Agency, "West Newbury EMA: A Brief Overview," undated document, and *Town Report* 1998.

¹⁸ West Newbury is also part of the Whittier Regional Vocational Technical School District. The Town's enrolls an average of 8 students each year at the Vocational-Technical School in Haverhill. The FY98 cost to West Newbury was \$83,600. Sources: *Town Report*, 1998, and Mass. Department of Revenue "'At-A-Glance' Series: West Newbury," 1998.

¹⁹ *Town Report*, 1998.

²⁰ Pentucket Regional School District Regional Agreement (effective date: April 30, 1993).

as of February 1999 no lease had been executed. According to local records, the John C. Page School needs a considerable amount of work. Although estimates vary widely, the 70-year old building needs plumbing, electrical, heating system and assorted other interior improvements. When handicapped access, parking lot, playground and playing field enhancements are added to the list of capital needs, the estimated cost of all proposed rehabilitation and modernization work is \$2.5 million.²¹

As a recent \$150,000 appropriation for building repairs suggests, West Newbury is addressing Page School improvements incrementally. Through the Pentucket Regional School Committee, the Town hopes to receive partial state reimbursement for Page School renovations but Department of Education officials have made no commitment to this effect.²²

Like the elementary schools in neighboring Groveland and Merrimac, the John C. Page

School is a hometown K-6 facility.

Assuming a teacher-student ratio of 1:24, its capacity is 670 students.²³ The 100,000 square foot, three-story building contains a total of 28 classrooms, of which three are designated for kindergarten use and 25 for "interchangeable" use, that is, for any age group. In addition, the Page School has a number of auxiliary service areas, separate music and band rooms and a spacious art room. It also has a large library, a computer classroom and modest cafeteria. A portion of the building is leased to a private organization under an arrangement that precedes the transfer of K-6 educational responsibility to PRSD.²⁴

After West Newbury's elementary-age children finish grade 6, they transfer to the Pentucket Regional Middle School, also located in West Newbury. The Middle School is a one-story, 110,000 square foot facility that was built in 1967, with renovations and an expansion completed in 1996. It consists of 18 interchangeable classrooms and six devoted to science courses, as well as a variety of auxiliary and support areas, separate rooms for music and art and an auditorium with seating for 360 students. There are also classrooms assigned to non-middle school uses, such as a pre-school program, a class for students in the region's special education collaborative, and PRSD's central administrative offices.

²¹ An earlier estimate placed the total cost of all Page School improvements at \$3.8 million. Whether \$2.5 or \$3.8 million is used as the estimate, the figures include major capital improvements, extraordinary maintenance and repairs, and minor renovations and upgrades. Some of the work included in the original \$3.8 million estimate has already been done.

²² Sources: Tracy Blais Durkin, West Newbury Finance Director; February 17, 1999; Pentucket Regional School District, "Capital Asset Assessment: Page Elementary School," February 4, 1998; and "Dr. John C. Page School," (author/sponsor unknown), July 30, 1997. For approximately the past ten years, the state has not reimbursed local or regional school districts for the type of work needed at Page School; Memorandum, Sally Cookman (PR School Committee) to Jean Lambert and Judy Mizner (Comprehensive Plan Committee), May 13, 1999.

²³ "Capacity" is a function of school department *class size policies* and *not physical capacity* per se. School systems vary with regard to desirable class sizes, such that one town deems its middle school inadequate while another town accepts a middle school with the same number of classrooms and space for core facilities.

²⁴ New England School Development Council (NESDC), *School Facilities Master Plan: Pentucket Regional School District*, October 1997.

When the building was renovated three years ago, the former music room became a multimedia center and a new music room was created in the expansion wing. The Middle School's operating capacity is 624 students (at optimum class size conditions), although accommodating the maximum enrollment would require relocating two pre-school classes to local elementary school buildings.²⁵ As presently configured, the Middle School serves 7th and 8th grade children from all three communities.

Pentucket Regional High School is located in West Newbury at the Groveland town line and shares its 30-acre site with the Middle School. Built in 1958, the High School is a 159,000 square foot complex with multi-level classroom wings. In addition to 27 interchangeable classrooms and seven science classroom/ laboratories, the High School has a typical complement of core facilities – a cafeteria, gym, music and art rooms, media center, library and auditorium. Further, there are four resource rooms, space used for an alternative education program, and rooms equipped for home economics and technical education classes. The building serves grades 9-12 from the regional district's three participating communities along with "school choice" students from nearby towns.

In 1996, PRSD completed a nominal expansion at the High School and added a media center, conference and office space, computer labs, a mini-gym with lockers, and classrooms. The current operating capacity at Pentucket Regional High School has been estimated at 966 students, which is based on a formula that discounts a percentage of usable building space in order to reflect the

operating realities of high school programs.²⁶

In contrast to the Middle School, Pentucket Regional High School has a number of problems. Like many high schools built in the same period, Pentucket's is not handicapped accessible throughout. The auditorium has a seating shortage and its lighting and sound systems are deficient. Although the new science classrooms in the 1996 addition are spacious and suitably equipped, the older ones need to be modernized. The estimated cost of essential improvements at Pentucket Regional High School is \$1,594,447, of which nearly \$1 million represents high priority work.²⁷

Compounding the problems caused by capital improvement needs at the John C. Page School and the High School are factors occurring throughout the region. West Newbury is not alone with an upswing in new-home construction and the school enrollment consequences it brings. During the next ten years, elementary school enrollments in Groveland are expected to increase 20%; in Merrimac, 25%; and West Newbury, 20%. Although West Newbury's Page School is not operating at full capacity yet, Groveland's Bagnall School already exceeds design capacity by more than 90 students and the community's pre-school program has been moved to the Middle School, where there is a space surplus. To accommodate its current K-6 enrollment of 721 children, Groveland has had to install two portable classrooms at the Bagnall School site. Merrimac's Donaghue School

²⁵ *Ibid.*

²⁶ If all available spaces were in use continuously throughout the school day, the building's capacity would be 1,136 students. No high school operates on the basis of 100% physical capacity, however.

²⁷ NESDC, *PRSD Master Plan*.

(3-6) is at capacity, meaning there is no space to house any enrollment increase in the upper elementary grades.

In addition to elementary enrollment problems, the 7th and 8th grade population – i.e., the Middle School – is projected to rise by 44% (218 additional students). The most dramatic increase will be felt at Pentucket Regional High School, however, where as many as 415 additional students are expected in grades 9-12 by the year 2008.²⁸ October 1, 1999 enrollments in grades 7-12 illustrate what is happening throughout PRSD, and they underscore the seriousness of the school space problems that West Newbury voters will be asked to help solve in the immediate future.

Table CF-2: Pentucket High School and Middle School Enrollments²⁹

Grade	October 1, 1999
12	170
11	163
10	217
9	247
8	270
7	303

Table CF-2 shows increasingly large graduating classes moving up through the Pentucket schools. Moreover, all three of the region's communities are growing, which means that elementary enrollments

²⁸ Pentucket Regional School Committee, "Summary Report of the Long-Range Planning Committee," (undated document).

²⁹ "The State of Our Schools," *West Newbury News*, February 24, 1999.

will *also* continue to rise for at least the next ten years. Because system-wide capacity is significantly less than required for 10-year estimated enrollments, the Pentucket Regional School Committee is seeking grade reconfiguration authority in part to relieve elementary school overcrowding district-wide by transferring all of the district's fifth and sixth graders to the Middle School. If the reconfiguration plan is approved, the School Committee is expected to press forward with plans for a new, 1,200-student high school that could cost as much as \$42 million by the time it is constructed.³⁰ Thus, any local discussion about capital expenditures at the Page School is occurring against the backdrop of much larger, very costly solutions to a region-wide problem.

Based on the Comprehensive Plan's new growth projections, West Newbury can expect to produce about 400 additional school-age children by 2010.³¹ Assuming

³⁰ *West Newbury News*, "The State of Our Schools," February 24, 1999 and "Cost of new high school could reach \$42 million," March 17, 1999. See also, Tracy Blais Durkin, Memorandum to Board of Selectmen and Finance Committee, December 2, 1998. The West Newbury Finance Director estimates that the proposed high school project will result in tax bill increase of about \$395 per year for a typical single-family home, including development and construction costs plus an increase in annual Pentucket Regional High School operating expenses once the building is occupied. She also reports that the tax bill increase could reach \$546 per year if operating expenses exceed what PRSD estimates at this time and SBAB reimbursements are not received in the same fiscal year in which the Town has a debt service obligation to meet.

³¹ The Comprehensive Plan's school-age population estimates are slightly higher than NSEDC's.

that 10% of the Town's school-age population attends private school, West Newbury will send at least 360 additional students to PRSD schools and approximately 125 of them will be elementary school children. If less than 10% of all school-age children in West Newbury are educated in parochial, private day or boarding schools, then clearly the Town's contribution to PRSD's school enrollments will be greater. An estimate of 10% is reasonable because West Newbury's family households are among the most affluent in the region, and the figure is consistent with the experience of demographically similar communities.³²

At present, West Newbury averages .57 students per household, which significantly exceeds the regional average of .45. That West Newbury deviates from the regional average is not at all surprising, however, given the residential nature and quality of the community as a whole. Still, the *likely* profile of new families moving into West Newbury is apt to drive the student-per-household average up to .65, a rate consistent with other rapidly growing communities like Hopkinton, Southborough, Grafton and Georgetown.³³ The higher

estimate of school children per dwelling unit should not be ignored when making school enrollment projections because there is no indication that West Newbury's experience will be significantly different from that of towns with similar household income and residential growth rate characteristics.

Of West Newbury's 360 potential new students over the next decade, about half will probably be high school age and approximately 125 will attend elementary school, with 50 in the middle school grades.³⁴ Given PRSD's class size policies, the elementary school increase could translate into six or seven new classrooms. This is very important for West Newbury, because under the present regional agreement PRSD's member communities are responsible for providing their own elementary school buildings. For perhaps as long as the next ten years, the Town may be able to accommodate its elementary students at the Page School.

As enrollments continue to rise, however, West Newbury will have to confront the need for a new school. Whether the Town retains the Page School and builds a second elementary school *or* retires the Page School altogether and builds a new, larger elementary school could become a very difficult issue for voters. In either case, West Newbury will need a site that is suitable for elementary school use. This requires close collaboration with PRSD, because the regional agreement currently in effect calls upon the school district, not the individual communities, to finance and own new school buildings. This is because

³² Sources: Massachusetts Department of Education (DOE); Massachusetts Department of Revenue (DOR), Municipal Data Bank.

³³ Even though West Newbury differs from these towns in several respects, three key points argue that the number of students per household will be comparable as new-home construction continues. First, there is an essential equivalency in the size, character and cost of new housing units. Second, per capita incomes fall in the same range. Third, the dominant residential use type in each case is single-family detached housing, which invariably attracts family homebuyers who, in turn, reinforce and enhance demands for high quality schools. Source of income, new growth and

"comparable community" data: DOR Municipal Data Bank.

³⁴ This assumes no grade configuration change in PRSD's school buildings.

PRSD is the only eligible recipient of reimbursement funds from the School Building Assistance Bureau (SBAB).

School facility and space need studies commissioned by public schools rarely exceed a 10-year horizon. For the Comprehensive Plan's purposes, West Newbury should recognize that its available land and housing market characteristics will shape a development outcome that results in substantial school-age population growth *beyond* 2010. Indeed, West Newbury faces the likelihood of sending another 360 students into the public school system between 2010-2020. Given the student composition ratios in PRSD's recent space needs assessment, West Newbury could easily produce another 125 elementary school children for a total of 250 over the next 20 years. Thus, the likelihood that West Newbury will need a second elementary school or one larger elementary school is very strong.

Water Supply

West Newbury provides public water under a 1936 special act of the legislature that empowers the elected Board of Water Commissioners to set water rates, operate their department with a special revenue fund, and issue bonds for major capital improvement projects.³⁵ According to West Newbury Water Department records, the Town supplies water to approximately two-thirds of the residential structures in the community and all of the commercial buildings in the Town Center.³⁶ The area

least served is the Residence A zoning district, where the minimum lot size is two acres.

The Town's public water supply consists of one groundwater well with a safe yield of 160,000 gallons per day (gpd), and supplemental water purchased as necessary from the City of Newburyport. "Safe yield" means "the volume of water that a well is capable of yielding based on the available water" as defined by state authorities, in this case, the Department of Environmental Protection.³⁷ In simple terms, "safe yield" is a measure of equilibrium: the maximum amount of water that a well can produce for consumption in a 24-hour period and then recover from the surrounding aquifer in a reasonable period of time.

Because the method for determining safe yield assumes a limited risk of non-recovery, communities generally pump less than the upper limit that safe yield represents. Further, when issuing permits for new water supplies, DEP sometimes sets a lower "approved yield" in order to limit stress on the water resource and to assure that drinking water quality is sustained.³⁸ In fact, with few exceptions West Newbury's Water Department has pumped far less than 160,000 gpd from the Main Street well field since the supply came on line in mid-December 1990.

³⁵ Chapter 38 of the Acts of 1936.

³⁶ Cammett Engineering, Inc., "Water Distribution System for the Town of West Newbury," [Distribution System Map, undated copy].

³⁷ Department of Environmental Protection, Bureau of Resource Protection Drinking Water Program, *Guidelines and Policies for Public Water Systems, Vol. I: Guidelines*, (Rev. November 1996).

³⁸ *Ibid.*

Table CF-3: West Newbury Water Demand

Year	Total Annual Consumption	West Newbury	% Tot.	Newburyport	% Tot.	Average Consumption in Gallons Per Day
1998	79,900,600	41,770,700	52%	38,129,900	48%	219,900
1997	75,501,700	48,976,600	65%	25,525,100	35%	204,114
1996	75,155,600	42,600,500	57%	32,555,100	43%	205,906
1995	69,447,553	25,876,600	37%	43,570,953	63%	190,267
1994	70,608,200	11,653,300	17%	58,954,900	83%	193,447
1993	62,575,300	42,375,800	68%	20,199,500	32%	171,439
1992	60,678,600	46,683,000	77%	13,995,600	23%	166,243
1991	56,660,281	25,449,281	45%	32,211,000	55%	157,973
1990	63,689,116	0	0%	63,689,116	100%	174,490

Sources: Water Department "Memorandum" March 5, 1999; and Thomas Planning Services/Universal Engineering for Comprehensive Plan Committee, October 8, 1997

In 1998, West Newbury pumped and distributed 41,770,700 gallons of water from its municipal well site off Main Street and purchased an additional 38,129,900 gallons from the City of Newburyport.³⁹ As Table CF-3 shows, 1998 data are indicative of a pattern and can be used to support general assumptions about the community's overall water needs. The actual yearly demand from West Newbury's public water users is 79,900,600, or 219,900 gpd. This is significantly higher than the Main Street

water supply's safe yield of 160,000 gpd. Specifically, it means that under existing conditions, there is a gap of at least 58,900 gpd that can be filled only by buying water from the City of Newburyport. The irony in this arrangement is that Newburyport draws its water from the Artichoke Reservoir system, which exists because of a 1908 legislative act that gives the City exclusive water rights to the Artichoke River in West Newbury.⁴⁰

Before 1990, all of West Newbury's water came from one of two outside suppliers. Neighboring Groveland was the original source of public water for West Newbury households, an arrangement that lasted from the 1936 infancy of West Newbury's Water Department until the late 1970's when

³⁹ West Newbury Water Department, Memorandum to Comprehensive Plan Committee, March 5, 1999. Note: "pumped" means the volume of water recorded at the pumping station meter in West Newbury, and the meter Newburyport uses to gauge how much of its water is being transferred to the West Newbury system.

⁴⁰ Chapter 403 of the Acts of 1908.

environmental hazards forced Groveland to decommission its wells for several years. West Newbury found itself with an imminent water crisis and went from being at one community's mercy to another's.

In 1980, an emergency gate between the West Newbury and Newburyport distribution systems opened and for the next decade, the City supplied West Newbury's water. The Main Street well's activation in 1991 marked the first step in a long, gradual process of liberating West Newbury from non-local water sources.⁴¹ The historic profile of water consumption by source in Table CF-3 indicates that without additional well fields, West Newbury is fighting an uphill battle as annual growth in water demand dwarfs the capacity of the Town's one existing supply.

Table CF-3 suggests at least two problems. First, West Newbury's annual consumption has risen steadily since 1995, for an annualized increase of about 4% from 1995-1998. Second, the Town's reliance on one local well site creates a highly undesirable situation, because any equipment failures or other problems that reduce volume pumped from the Main Street well must be offset by water purchased from the City of Newburyport: there are no other options. Just as West Newbury's local water withdrawal has varied significantly since the Main Street well came on line at the end of 1990, so has the City of Newburyport's offset to meet demand. In light of the fact that Newburyport is considering a request to furnish Plum Island with water and that the Artichoke Reservoir system's safe yield is uncertain, West Newbury's water future is

precarious unless it develops additional water supplies of its own.

The West Newbury Water Department has been involved in a water supply search and exploration process for several years. According to local records, although five sites have undergone preliminary testing only two appear suitable for development – the so-called Knowles and Andreas Sites (see Figure CF-1). To date, the Water Department has spent nearly \$60,000 on basic technical and exploratory services but the formal process for obtaining DEP "source approval" under the Massachusetts Water Management Act has yet to begin. From preparing the required submittals for water supplies with expected yields of >100,000 gpd through pump station construction at each site, the estimated cost to bring the Knowles and Andreas bedrock wells on line could reach \$1.45 million, not including land acquisition.⁴²

Because DEP's water resource regulations demand a considerable amount of data, water quality testing, hazard assessments and aquifer modeling just to entertain an application for well site review, the Water Department has to plan for about \$50,000 in engineering services just to clear the first hurdles in the permitting process. By the time DEP receives all of the technical information required to grant source

⁴¹ Information supplied to Comprehensive Plan Committee by Thomas Planning Services/Universal Engineering, October 8, 1997.

⁴² Sources of cost data: West Newbury Water Department, "Preliminary Long Range Improvement Plan Specifically Addressing Bedrock Water Well Development 1998," and Memorandum, Mike Gootee, Water Superintendent, to Judy Mizner, Comprehensive Plan Committee, April 28, 1999. Source of regulatory framework: DEP *Guidelines*, together with Massachusetts Water Management Act regulations at 310 CMR 36.00 and Massachusetts Drinking Water Regulations at 310 CMR 22.00.

approval, the Water Department will have spent as much as \$170,000 on pre-development costs for bedrock wells on land that the Town does not even own yet. In short, the state's approval process is not only arduous under the best circumstances, but it is also very expensive.⁴³

For a small municipal water department with a limited capital reserve, the "best circumstances" do not exist. Concerned about the cost to West Newbury consumers, who pay extraordinarily high water rates, the Water Commissioners have taken a conservative approach to rate increases. In 1998, the Water Commissioners voted to increase the rate per 1,000 gallons from \$4.95 to \$5.25, a seemingly nominal change. However, in a community where the average residential water bill approximates \$525, rate increases of any magnitude can become controversial. Moreover, \$5.25 per 1,000 is among the highest rates in the Commonwealth.

Anticipating the need to purchase more water from Newburyport this year, the Water Commissioners budgeted an additional \$5,000 in Fiscal Year 1999 in order to handle the shortfall,⁴⁴ yet there is very little accumulating in the water revenue account for capital reserve use.

It is important to point out that for providing supplemental water to West Newbury, the City of Newburyport charges the same rate that its own retail customers pay – i.e., consumers in Newburyport who rely on the

City's distribution system to receive water at their homes and places of business. This means that West Newbury households are paying a rate that reflects the cost of maintaining Newburyport's water infrastructure even though they have no impact on it. Usually, water sold under these circumstances is billed at a "wholesale" rate, or a rate that accounts for the costs of producing and treating water at the source and transmitting it to the gate of the receiving community.⁴⁵ Of the \$2.00 per 1,000 gallons that Newburyport charges, the City's cost to treat and pump water to West Newbury's connecting gate probably ranges from .65 to .75 per 1000 gallons – assuming that wholesale averages elsewhere in Massachusetts apply.

The seeming inequities in the arrangement between West Newbury and Newburyport underscore two points. One is that despite West Newbury's efforts to secure a more favorable price from Newburyport, the Town lacks an "upper hand" in negotiations, which puts local officials in a poor negotiating position: the only available source outside of the Main Street well field is the Newburyport-controlled Artichoke Reservoir. (Indeed, an earlier written agreement between the two communities has lapsed and although negotiations have been underway for the past few years, West Newbury still lacks contractual protection against rate changes or unreasonable water charges.)⁴⁶ Another is that absorbing

VS
\$5.25/1000
cost to
residents?

⁴³ The 1999 Capital Improvements Committee report indicates that the Board of Water Commissioners has been advised to work with Selectmen on securing an option on both the Knowles and Andreas parcels.

⁴⁴ Tracy Blais Durkin, *Town of West Newbury Fiscal Year Budget 1999*, March 23, 1998.

⁴⁵ DEP; and Massachusetts Department of Public Utilities.

⁴⁶ West Newbury Water Department, "1998 Public Water Supply Annual Statistical Report," February 1999; and Thomas Planning Services/Universal Engineering for Comprehensive Plan Committee, October 8, 1997.

Newburyport's retail water rate into West Newbury's rate structure inflates the cost to local residents who, in effect, are subsidizing maintenance and capital improvements that benefit only the customers of Newburyport's water system. This makes it difficult for West Newbury's Water Commissioners to set a rate that would permit them to build a reserve for capital expenditures, and it contributes to the problem of very high water rates in West Newbury. Given that 14% of the water supplied throughout West Newbury was "unaccounted for" in 1998 – in other words, water "lost" through water main breaks, leaking mains and so forth⁴⁷ – West Newbury needs to build and maintain a facilities maintenance and capital reserve fund, meaning the equivalent of a Stabilization Fund.

Water use per "customer" – the private home or commercial establishment – is measured by metered consumption, or the amount of water that passes through the meter at each installation. In West Newbury, 77% of all water usage is attributable to residential customers. The Town's average consumption per *residential* installation is about 206 gallons per day (gpd), which is within the median range for other public water systems.⁴⁸ As the number

⁴⁷ Water Department, "Annual Statistical Report," February 1999. Of the 11,246,512 gallons lost (not accounted for in metered consumption), 89% is attributable to distribution system leaks and 5% to water main breaks. The remaining 6% represents water used in connection with new construction, filling swimming pools, hydrant flushing and fire protection drills.

⁴⁸ DEP Resource Protection Bureau. Note that the state's water consumption benchmark is demand *per-person*, not per household (or in water works parlance, per installation). Thus,

of new homes increases, the likelihood is that demand will rise. First, residential market forces are driving the production of very large, single-family homes throughout West Newbury. Second, because the majority of West Newbury's new homebuyers are fairly affluent, they expect amenities that developers and builders have to accommodate in order to compete.

An example of a water-intensive amenity is the automated sprinkler system for lawn and garden maintenance. These systems have a significant impact on total water consumption, and while desirable, they are not essential to the health, safety and welfare of a community's residents. Thus, when cities and towns impose water conservation restrictions during the peak (summer) season, the first tier of curtailed use is outdoor watering.⁴⁹ Future growth will bring not only new homes that require drinking water, but also new homes that demand water for non-drinking purposes.

West Newbury's peak demand occurred in May and again in July-August last year (1998). This pattern is consistent with the 1998 experience of other communities. While the July-August period is normally high everywhere, the fact that water consumption jumped by 44% between April-May 1998 is a function of unusually warm weather and an attending increase in outdoor watering. These are the types of episodes for which public and private water systems must be prepared, yet it is noteworthy that in West Newbury, the 1998

when DEP cites 70 gpd as the "average," the agency means 70 gpd person. Given that West Newbury's average household size is 3.1 people, the Town's water demand has been consistent with statewide norms.

⁴⁹ See also, DEP, "Model Water Conservation Bylaw" (1996).

Cost
5.25/1000 gal
1.05/200 gal
50
385/yr
VS
525 Nov 83
on pg 15

peak day demand of 511,100 outstripped the state-approved yield of the Main Street well by 351,100 gallons.⁵⁰ This represents more than double the 160,000 gallons per day that the Town is authorized to draw from its local water source.⁵¹

Under current circumstances, West Newbury is forced to buy a considerable amount of water not only for peak-day demand but off-season use as well. In 1998, Newburyport supplied more than half the water consumed in West Newbury during the months of January, May, and July through November. When this pattern finally reversed in December, Newburyport's share dropped only to 49%. Even though the Artichoke Reservoir was tapped for 48% of the Town's water *overall* last year, the reality is that West Newbury met 50% or more of its internal demand for five out of twelve months only, and barely exceeded the halfway point in a sixth month.⁵² Given the yield limitations of the Main Street well field and the rising volume of water consumed in West Newbury each year, it is reasonable to predict that in four

to five years, the Water Department will consistently produce less than half of the water its customers demand.

Public Library

The GAR Memorial Library was expanded approximately 10 years ago and it appears to be adequate for near-term future needs. According to library staff, however, the building has already surpassed the 20-year statistical projections that were used to compete for a library construction grant in 1988.⁵³ New computer and communication technologies have affected libraries significantly. They have become centers of information that are much more accessible than in the past. While the role of the West Newbury library has grown and will continue to grow, no conclusions about future space requirements can be made at this time because the Town lacks current, relevant data. Thus, although there is no evidence that library expansion is or should be a priority, communities with strong arts and education networks like West Newbury generally regard their public libraries as the mainstay of cultural activity.

The library building does have capital improvement needs that are independent of any space issues that may exist. Persistent problems with water collecting in the basement and around the foundation convinced West Newbury voters to appropriate funds for an engineering study in 1997. Local sources indicate that poor drainage around the library is a long-standing concern, but the 10-year-old addition may have exacerbated the problem. Last year, West Newbury's Capital

⁵⁰ Last year's maximum day consumption occurred on May 30, 1998. Source: Water Department, "Annual Statistical Report." The Water Department reports that the gap between peak demand and the safe yield of the Main Street well was filled by purchasing water from the City of Newburyport; Memorandum, Michael Gootee to Judy Mizner, April 28, 1999.

⁵¹ The Main Street well averaged 122,906 gpd in year-round production during 1998 and in some years the daily yield has been considerably less. Its 1998 maximum production months were April and May, when the Town withdrew about 176,000 gpd. If these months are removed from the equation, then the Main Street well's daily yield averaged 112,025 gpd.

⁵² Water Department, "Annual Statistical Report."

⁵³ Information supplied by Jean Lambert, Comprehensive Plan Committee, from Library Director Katherine Gove; March 9, 1999.

Improvements Committee recommended that the Town appropriate \$30,000 to install intercepting trenches in order to prevent water from reaching the basement of the library, thus implementing one phase of the recent engineering study.⁵⁴

Recent information shows that the GAR Memorial Library's average daily circulation is 332. On any given day, 151 people visit the building to take out or return books, read or conduct research. During FY98, total circulation was 91,518, of which 45% was attributed to adult use and 55%, to use by children and teenagers. This volume of activity makes West Newbury highest in the region and fourth statewide for libraries serving populations of 2,000-9,999. Further, the library actively engages in programs for West Newbury children. Last year, the children's librarian and volunteers ran 133 special programs that attracted a total of 2,936 participants.⁵⁵ In light of the GAR Memorial Library's successful track record, it was selected recently as one of the top 20 libraries in the nation.⁵⁶

The building consists of approximately 7,700 gross square feet, including its original (1939) size of 2,576 square feet plus the recent addition. After the expansion project was finished, the library's collection of volumes, recordings and other materials grew significantly. For example, in 1987 the library had only 50 audio recordings and no videotapes. By 1998, however, West Newbury's library was

logging a combined audio and video *circulation* of 5,160 per year. Further, total holdings today amount to 45,640 books, periodicals and recordings while the "existing condition" before expansion was slightly less than 20,000 holdings overall. Demand for public library resources has increased considerably in the past 10 years, but projected space needs during the expansion project's design were based on a total holdings estimate of 40,410 in the year 2005. This estimate has already been exceeded by 13%.⁵⁷

Other Facilities and Services

Active Recreation (Outdoor). Not surprisingly, there is a continuous demand for playground and playing field facilities in West Newbury. At present, the Town maintains fields at two locations – Cammett Park and Pipestave Hill. The Cammett Park facility, located behind the 1910 Town Office Building, includes three baseball/softball fields that double as soccer fields and a small concession stand. An adjoining playground known as Action Cove, which was built by community volunteers, supplies a centrally located play area that is popular among families with small children. At Pipestave Hill, there is one combined baseball/soccer field. Because a hoped-for land acquisition (Daley Property) for new recreation fields has become infeasible, the Town agreed last year to bond \$115,000 for additional fields at Pipestave Hill.⁵⁸ Although technically

⁵⁴ West Newbury Capital Improvements Committee, "FY 1999 Report," [recommendations for FY99 capital expenditures].

⁵⁵ *Town Report*, 1998.

⁵⁶ Jean Lambert, March 9, 1999.

⁵⁷ Jean Lambert, Comprehensive Plan Committee, from Library Director Katherine Gove; March 22, 1999.

⁵⁸ West Newbury Capital Improvements Committee *FY 1999 Report*; Advest, Inc., "Bond Issue Prospectus," October 15, 1998.

under the Pentucket Regional School Committee's jurisdiction, the John C. Page School property includes a playground, a small soccer field and a Little League baseball field.⁵⁹

Mill Pond Recreation Area. Among the Town's open space holdings is Mill Pond, a developed recreational facility for active and passive use. This 213-acre property includes Mill Pond and part of Mill Pond's watershed, and the scenic Pipestave Hill. Overseen by the Mill Pond Committee, the area provides opportunities for such outdoor sports as cross-country skiing, biking and hiking, as well as horseback riding, which is enhanced by a series of equestrian trails, arenas and jumps. Mill Pond is used throughout the year – by resident fishermen, boaters and skaters – and is maintained by the Town.⁶⁰ To address chronic sedimentation problems that have caused an overall loss of water depth, the Town recently awarded an engineering contract for services in connection with a dredging project that is scheduled to occur later in 1999.⁶¹ Environmental permits have been or are in the process of being issued, and the Massachusetts Environmental Policy Act (MEPA) Unit has decided not to require an Environmental Impact Report (EIR) for this project, the estimated cost of which is \$600,000.⁶²

⁵⁹ *West Newbury Open Space and Recreation Plan* (1996); together with information supplied by Chris Wile, Comprehensive Plan Committee, from Recreation Commissioner Larry O'Keefe, March 7, 1999, and *Annual Town Report* (1998).

⁶⁰ *Open Space and Recreation Plan* (1996).

⁶¹ Bay State Environmental Consultants, Inc., *Dredging Feasibility Evaluation Regarding Mill Pond, West Newbury Massachusetts* (January 1998).

⁶² Information supplied by Judy Mizner,

Senior Citizens Drop-In Center. On July 1, 1998, the new drop-in center opened in space that connects the 1910 Town Office Building with the Housing Authority's elderly housing at the rear of the Civic Center complex. At the drop-in center, the Council on Aging (COA) offers a variety of recreation, leisure and human service activities to West Newbury seniors. Its accomplishments on a very small budget – about \$9,000 per year – attest to both the vigorous efforts of COA's part-time staff and a corps of senior citizen volunteers who serve the Town in exchange for a partial property tax rebate. The Drop-In Center provides nominally priced lunches every weekday, craft and exercise classes, and health clinics in conjunction with regional health care providers.⁶³

Old Town Hall. This mid-19th century building originally served as West Newbury's Town Hall until the early 1980's, when municipal offices were transferred to the school house that is now called the 1910 Town Office Building. Old Town Hall is historically significant and like countless old municipal buildings, it is not fully accessible to persons with disabilities. Today, West Newbury uses the Old Town Hall for annual and special town

Comprehensive Plan Committee, March 12, 1999; and West Newbury Capital Improvements Committee *FY 1999 Report*. The necessary \$600,000 was appropriated at the April 1998 Annual Town Meeting (bonding authorization); see *Town Report* (1998).

⁶³ Information supplied by John Sarkis, Comprehensive Plan Committee, from Council on Aging Director Olive West, March 12, 1999. See also, Thomas Planning Services, *Space Needs Assessment* (1995) and *Town Report* (1998).

meetings, public meetings and occasionally, for private events. One of the drawbacks to this facility is its lack of parking. In order to participate in any well-attended activities at the Old Town Hall, residents must park across the street at the Library or the Training Field. The building recently benefited from a \$15,000 investment in interior renovations.⁶⁴

Analysis of Significant Issues

As explained at the beginning of this chapter, land use issues drive public facility and service needs and they, in turn, drive the tax rate. Because West Newbury is an overwhelmingly residential community, approximately 98% of the tax levy is residential. Assuming current land use policies go unchanged, single-family homeowners will absorb the vast share of the anticipated school, water, open space and recreation, public safety, and transportation improvement costs over the next 20 years.

After 2020, most of the debt incurred to rehabilitate existing or build new public facilities should decline, but debt service costs will remain with West Newbury for a period beyond the focus of the Comprehensive Plan. The impact on homeowners should also decline because

The cost of community services in a predominantly residential town.

By any measure, West Newbury will most likely be in the top 5-10% of Massachusetts communities in terms of property taxes paid per household. There is simply no one else to help pay the costs of community expansion... West Newbury has choices to reduce the fiscal impact of future development, but the choices require townspeople to compromise and take certain risks.

West Newbury's bonded indebtedness will have peaked and begun to drop. Moreover, the overall rate of growth will slow markedly after 2020, which means that the need for new capital improvement projects

will change as "must do" gives way to local discretion. By any measure, however, West Newbury will most likely be in the top 5-10% of Massachusetts communities in terms of property taxes paid per household. There is simply no one else to help pay the costs of community expansion.

It is critical that West Newbury understand its options. The Town *does* have choices to reduce the fiscal impact of future development, but they may be difficult because they require townspeople

to make compromises and take certain risks. With approximately 3,500 developable acres currently dedicated to single-family use, West Newbury could allocate a portion of the available land for other purposes and successfully reduce the anticipated impact on the residential tax rate. For example, aggressive public intervention for open space or public school purposes will reduce the number of potential residential units. Public policies designed to attract private elderly housing, research and office parks or low-density village housing alternatives will reduce anticipated increases in total population and school-age children, thereby slowing down growth of the residential tax rate.

⁶⁴ Thomas Planning Services, *Space Needs Assessment* (1995); *Town Report* (1998).

Relieving a municipality's fiscal burden comes from strategies that lower the number of school-age children and do not have countervailing service needs. Land uses like research and office parks and privately run continuing care facilities for the elderly are almost always a "fiscal positive," meaning that they cost less to service than they pay in property taxes. This is why so many communities vie for a share of the market for such projects, which pay significant taxes, broaden the tax base and cushion the tax impact on private homeowners.

Even publicly financed open space acquisition can be (and nearly always is) a tax benefit in the long term. This is particularly true when organizations such as Essex County Greenbelt Association and the Trustees of Reservations absorb a portion of the initial cost or the Town obtains grants and private donations. The problem for West Newbury is that land acquisition and immediate and near-term major capital improvement demands will compete for a limited supply of the funds that can be borrowed before the Town has to entertain a Proposition 2½ override.⁶⁵ The enormity of West Newbury's water supply and distribution system needs is a complex problem that may not affect the Town's levy limit, but when rising tax bills occur in tandem with rising water rates – given that the rates are already staggeringly high – the financial consequences for single-family homeowners become painfully clear.

⁶⁵ According to Finance Director Tracy Blais Durkin, at this time the Town can afford debt service on approximately \$2.5 million in additional borrowing. DOR reports that given current appropriation levels, West Newbury has slightly more than \$190,000 in unused levy capacity.

Water

Based on the Comprehensive Plan's estimate that an additional 1,200 housing units will be built in West Newbury by the year 2020, there is an identifiable long-term additional water supply need of between 260,000 to 310,000 gpd.⁶⁶ It appears that West Newbury does not have the capacity to provide public water service for the level of new development that is anticipated, however, because the Town is not endowed with many moderate- or high-yield well sites. Moreover, the distribution system master plan does not call for extending water mains throughout West Newbury. Rather, the goal appears to be looping some existing mains in a way that extends service to south-central parts of the community and at the same time improves domestic pressure and fire flows.

The Water Department is currently pursuing the development of two new groundwater supplies to meet current and a portion of future needs. These wells are expected to produce 110,000 to 115,000 gpd. Combined, the proposed well fields would yield 225,000 gpd if the Water Department's expectations prove valid. While this increase in daily volume represents an important shift toward locally controlled water supplies, the bedrock wells that the Water Department plans to bring on line *may* be the last sources of groundwater that the Town will be able to develop. Preliminary search and exploration studies indicate that West Newbury has no other municipal-grade well sites, although testing remains an ongoing process.

The water supply expansion efforts being undertaken today could address 60-65% of

⁶⁶ Assumes a marginal increase over existing residential consumption trends.

the foreseeable demand -- except that half of the Town's new growth will occur in areas that have little or no access to the water distribution system. Thus, private wells in the more rural areas of West Newbury will remain an important part of the water supply equation because half of the new growth stands to occur in the Residence A zoning district, which will not benefit from the planned expansion of the water distribution system. While accommodating wells and septic systems on a residential lot can be difficult, current practice shows that in most instances it can be done.

When West Newbury develops its proposed bedrock wells, total water production will reach approximately 340,000 gpd.⁶⁷ This means that except for peak season demand, the three wells ought to satisfy between 70-75% of the annual water demand generated by the Residence B and C zoning districts at build-out.⁶⁸ Local capacity derived from

⁶⁷ If the existing well site produced its approved yield most of the year, it would be reasonable to set the expected total capacity at 410,000 gpd. Because statistics show that the Main Street well averages 115,000 gpd over a 12-month period, prudence argues for a capacity estimate of 350,000 gpd for all three wells ($115,000 + 225,000 = 340,000$ gpd).

⁶⁸ The 70-75% estimate is conservative because it anticipates that West Newbury's average household size will increase as new, spacious homes come to dominate the Town's housing stock. Assuming a build-out population of 7,500, of which about 1,860 will live in new Residence A District dwelling units that are not supplied with public water, the projected daily demand from Residence Districts B and C is 394,800 ($5,640 \times 70$ gpd per person = 394,800). With no change in average household size and no increase in automated outdoor watering systems, the anticipated yield of 340,000 from all three wells could address 85% of daily demand. In light of rising per-household water consumption

these low- to moderate-yield public water supplies should not deter growth, although when marginal land becomes pressed for development the feasibility of co-locating individual wells and septic systems may require larger house lots.

If public water were provided to every new house, West Newbury would be in a *much stronger position* to utilize zoning and land use techniques that maximize the preservation of open space, particularly in the Residence A District. Without public water, the regulations and design standards associated with siting a septic system and a private well on one house lot limit residential development flexibility. At the same time, a policy of community-wide water service may require surface water sources if West Newbury cannot develop at least one additional groundwater well site, i.e., a fourth well to be developed in the future. While it is almost always more costly to develop and operate surface water systems due to the additional treatment and storage costs involved, it remains true that the Town should aim to provide public water wherever possible. Toward that end, the planned adoption of a water supply protection district makes good planning and resource management sense. It is also a requirement for obtaining water supply withdrawal permits under the Massachusetts Drinking Water and Water Management Acts.

To maximize West Newbury's ability to use groundwater as its primary source of supply, the Town could pursue land use options that reduce total water demand. For example, West Newbury can influence its land use

in other high-growth communities, however, relying on either a sustained household size of 3.1 persons or per-person water demand of 70 gpd is inadvisable.

future more effectively by purchasing additional open space and reducing overall development potential. Further, allowing a greater range of development choices such as private elderly housing, research and office parks and townhouse development will help to reduce future water demand below that caused by single-family use. If 700 of the estimated 3,500 developable acres can be redirected toward open space acquisitions, school sites, elderly housing and residential use types other than single-family, the Town's water supply system will be considerably less stressed by the year 2020.

As a matter of policy, West Newbury needs to extend public water service as much as possible and as soon as possible. This direction is necessary for West Newbury to succeed at creating new residential development opportunities that preserve more open space than traditional single-family subdivisions do. The design flexibility achieved with access to public water is key because it is very difficult to accommodate private wells and septic systems on the smaller lots that cluster developments require.

Two final points need to be explored. One involves the accuracy of the meter in the Main Street pumping station and the second is leak detection and repair. It is standard practice in the water works field to test, repair and/or calibrate pumping station meters from time to time. Either the Main

Street meter has not been calibrated since the pumping station opened in December 1990 or the Water Department was unable to cite a meter testing date in its 1998 Annual Statistical Report to DEP. It is possible but unlikely that the Town's actual water supply yield is registering at a lower rate than the well produces on any given day. "Possible" is informed speculation, *not*

a definitive conclusion; "unlikely" refers to the fact that on average, each West Newbury household consumes about 210 gpd -- which is very close to DEP's statewide demand estimate of 70 gpd per person. Furthermore, Newburyport's meter was calibrated as recently as 1996, which suggests that the Water Department's records of water purchased from the City are fairly reliable.⁶⁹

The more disconcerting issues are leak detection and water main breaks,

which explain more than 90% of all water unaccounted for in 1998. West Newbury is "losing" 14% of all water produced or purchased each year. Thus, the impact on the ratio of water supply to demand would be significant if the Town captured and distributed the 10,551,512 gallons that dissipate into soils and bedrock *primarily* because of water main leaks. This reduction alone would bring West Newbury's annual pumping requirements to slightly more than

Reducing single-family residential development could help West Newbury manage the demand placed on its water system.

...a greater range of development choices such as private elderly housing, research and office parks and townhouse development will help to reduce future water demand. If 700 of the estimated 3,500 developable acres can be redirected toward open space acquisitions, school sites, elderly housing and residential use types other than single-family, the Town's water supply system will be considerably less stressed by the year 2020

⁶⁹ Water Department, "Annual Statistical Report."

69,000,000 gallons instead of 79,830,200, which is the amount the Town pumped and bought from Newburyport in 1998.⁷⁰

Public Schools

Given the time, energy and cost involved in locating and constructing new schools, West Newbury needs to select a new elementary school site that can accommodate the build-out projection of 250 additional elementary school age children. Further, the Town should make locating and purchasing a future school site one of its top priorities over the next 18-24 months. The more rapidly West Newbury secures a new school site, the less costly this inevitable action will be. The need is apparent and the actions to address it should occur in the short-term while there is enough vacant developable land to offer real choices to the Town.

West Newbury should think strategically about siting criteria for a future elementary school. A tract of land suitable for a school, which can achieve simultaneously the Town's open space preservation, linkage and outdoor recreation interests, would meet multiple objectives. Especially in very small towns, it is important for all public actions to address compatible public policy and community development objectives. An elementary school site of about 40-50 acres, adjacent to existing or proposed public open space, is an example of a coordinated approach to public policy. The acquisition of future school site that also meets community open space and recreation needs could be the most important public action West Newbury takes within the next 12-18 months and it is among the most important community facilities recommendations of this Comprehensive Plan.

⁷⁰ *Ibid.*

During recent discussions between the Comprehensive Plan Committee and school officials, consideration was given to the possibility of decommissioning Page School and building one, larger elementary school. Page School's continued viability as a public school facility seems questionable, given that SBAB authorities have been reluctant to commit to a reimbursement plan that would buffer West Newbury from shouldering all of the costs of building renovations, modernization or expansion. The estimated improvement costs for which West Newbury believes it is responsible amount to about \$950,000.⁷¹

The Town should seriously consider the merits of an elementary system with two school facilities versus one. If West Newbury and the Pentucket Regional School Committee agreed on the desirability of one, spacious elementary building, the Town would need to conduct a feasibility study for future uses of the Page School once it is decommissioned. Many communities have converted former school sites to such uses as elderly housing and affordable condominiums, but making these decisions wisely requires site-specific planning along with architectural evaluations, schematic drawings and cost estimates, an market assessment for potential projects and a preliminary development and operating pro forma.

Public Safety

Consistent with land use policy that addresses public school and open space needs together, West Newbury should select one site for a public safety facility that accommodates the Police and Fire Departments and the EMA. West Newbury

⁷¹ West Newbury Finance Department, March 17, 1999.

is and will remain a small town, meaning that it will be costly and difficult to build, maintain and operate separate public safety facilities. This will be particularly apparent in the near future, as numerous valid demands compete for dwindling public resources. As part of the public safety building's design criteria, the facility should include a meeting room that can accommodate the combined personnel of all three departments. Although West Newbury has spacious meeting rooms in other buildings, public safety personnel training should be conducted at the station whenever possible so that emergency response can be coordinated effectively and efficiently.

Given its location on the Town's major arterial roadway and close proximity to other municipal facilities, the current Fire Station site is probably suitable for a single public safety complex. Thus, no additional land acquisition is anticipated for this use. If the Fire Station site proves deficient for a combined facility, however, Town officials should work closely with the Open Space Committee in order to select a site that meets both public safety and open space objectives.

Key Findings and Recommendations⁷²

West Newbury is experiencing significant growth, the rate of which will escalate over the next 10-15 years. Barring a national or regional economic catastrophe, the Town will

⁷² Recreation facility needs are addressed in the Open Space chapter. Further, recommendations concerning public road improvements are addressed in the Traffic and Circulation chapter.

continue to grow for the next two to three decades even though the annualized rate of growth should begin to decline by 2020. It is not surprising that pressure to improve or expand public facilities is occurring now, and West Newbury should anticipate competition for local resources from equally important, necessary community facility projects in the future. To manage the impact of debt service on the Town's annual outlay for operating expenditures, West Newbury needs to establish capital priorities -- meaning that some issues will be delayed while others go forward, all as a result of a rationale process.⁷³

The Town of West Newbury should consider each of the following recommendations, which attempt to synchronize capital facility demands with rural-historic preservation interests and the realities of cost.

Elementary School Planning.

1. Within the next 12-18 months, West Newbury should select and purchase a site of 40-50 acres that can accommodate an elementary school for at least 250 students and a maximum of 850 if Page School is to be decommissioned after the new school is built.⁷⁴ As part of the site selection

⁷³ West Newbury has an active Capital Improvements Committee that works very hard on project reviews and recommendations for Town Meeting. The kind of approach envisioned here would build upon the Town's existing process by increasing participation in capital priorities decision-making. See Fiscal chapter.

⁷⁴ The estimate of 850 assumes a baseline of 604, or Page School's current enrollment, and 250 additional elementary students entering the system by 2020. It is possible, however, that new growth will eventually witness a modest

criteria, the Town should give primacy to parcels that can meet a multiplicity of community open space and recreation needs.

2. If the Town and PRSD opt for a single elementary building, then about 18 months before scheduled construction begins West Newbury's local officials should purchase market and feasibility study services to identify the most viable future use of the John C. Page School. Given West Newbury town government's small compliment of professional staff, the Town should anticipate the need for project development assistance and incorporate the same in the Request for Proposals for a market and feasibility study.
3. The Town must successfully negotiate and execute a lease agreement with PRSD for use, occupancy and responsibility for the John C. Page School. This is especially important if PRSD acts as the vehicle for state reimbursement to the Town for renovation and modernization expenditures.

When PRSD functions as a pass-through for funds associated with Page School capital improvements, it also acts as the awarding authority for construction contracts. Given the complexities of municipal, school district and contractor insurances, West Newbury does not

decline in elementary-age children and a corresponding increase in middle and high school students -- which would reduce the optimum design capacity of a new elementary school. The Town and Pentucket Regional School Committee will need to update population and age cohort forecasts when the time comes to design and construct the proposed elementary school.

want to risk becoming a named defendant in a liability lawsuit should anything happen during the facility alterations work that lies ahead. Further, having no lease agreement today leaves the door open for an ambiguous municipal-school district relationship that could be very problematic if there are use and occupancy conflicts and no written contract to guide their resolution.

Water Supply and Distribution System

1. Within the next 12-24 months, the Town should appropriate the necessary funds to (a) complete all approval and permit requirements for the proposed bedrock well sites (Andreas and Knowles), (b) acquire the land and (c) proceed with design, construction drawings and bid specifications.
2. The Town and Water Commissioners need to negotiate and resolve issues surrounding project financing because cost-sharing pre-development expenditures will reduce the impact on water rates until such time as the wells are on line and water consumption can be billed. Given reported disagreements over responsibility for or control over water department funding, the respective boards may need Town Counsel's assistance to review the 1936 home rule legislation, subsequent general legislation and local bylaws that may have changed the reach, scope or effect of the 1936 enactment, and applicable municipal finance laws. In any case, a local (tax levy) contribution to well site development seems essential to moving these projects forward as

quickly as possible. Time is of the essence.

3. If they have not done so already, the Water Commissioners should consider retaining the services of an outside water works or rate setting professional to negotiate a new water agreement with the City of Newburyport.
4. The Water Department's distribution system master plan should be updated, giving particular consideration to the costs and benefits of extending public water into portions of the Residence C Zoning District.
5. The Water Department should expand its leak detection program in order to reduce the amount of water unaccounted for each year. It is critical that West Newbury curtail the impact of water main leaks on total water demand. As an operating principle, leakage ought to contribute 5% or less of all "lost water," meaning water not consumed by customers (as measured by metered use at each installation). This may be a difficult goal for West Newbury to reach because of the bedrock environment that characterizes much of the aquifer system, however.
6. During Fiscal Year 2000, the Water Department should arrange for meter testing and calibration at the Main Street pumping station.
7. The Water Commissioners may want to retain a professional rate setting consultant to examine the Department's overall rate structure and address two issues in particular. One is the challenge of building a capital reserve account that will be adequate to meet West Newbury's water supply and system improvement needs over the next 20 years. The second is whether

the Town would benefit from a two-tier rate structure -- that is, one with a base rate for "normal-range" consumption and an increased cost per 1,000 gallons if usage extends above the "normal-range" threshold.

In theory, this approach to rate setting encourages water conservation and discourages high-volume demand. Although available data suggest that West Newbury households are typical water consumers today, the Town should anticipate that per-unit demand from residential installations will probably increase as water-intensive amenities become commonplace in new construction and substantial renovation projects.

Public Safety Complex

1. West Newbury needs to resolve its internal disputes about the desirability of a consolidated public safety complex. For such a small town, there may not be any cost advantage to operating separate buildings for Fire, EMA and Police functions. At this point, it appears that the cost of renovating the basement of Town Hall for police use may be equal to the cost of either a new, freestanding building or a renovated fire station/EMA building enlarged to include space for police functions. Moreover, the Fire Station needs renovations for the variety of needs it has to accommodate in its own right, e.g., administration, personnel training, equipment storage, technology, and general security.

West Newbury should plan *either* to construct a new police and fire public safety building on an appropriate site, to renovate and enlarge the existing fire

station/EMA building on Main Street to include a police station, or to add a police station on the existing fire station/EMA building site on Main Street and renovate the fire station within the next three years.

federal library construction funds to support a building expansion project. A qualified library planner/architect will ensure that West Newbury has the requisite information to compete for future funds, and can give operational and renovations advice to the Library Trustees and staff so that existing space (a) is used as efficiently as possible and (b) meets current and near-term future patron demands.

Town Buildings and Facilities Inventory

1. The Town should commission professional services or create an ad hoc committee of qualified, available volunteers to develop a complete inventory of all municipal properties by location, size, uses, condition, prioritized maintenance and renovations needs and their estimated costs, fair market value and estimated replacement cost.
2. The inventory could build on the recent Civic Center Complex Space Needs Assessment by Thomas Planning Services (1995), updating relevant data for the sites included in that study and developing a comparable profile for all other municipally owned real estate. This work will be invaluable for establishing a long-term, comprehensive Capital Improvements Plan.⁷⁵

GAR Memorial Library

1. West Newbury should consider appropriating funds for an updated needs assessment of the GAR Memorial Library. The last formal assessment was undertaken in 1985, when the Town anticipated applying for state and

⁷⁵ Discussion of and recommendations pertaining to a comprehensive CIP appear in the Fiscal Planning and Management chapter.

As the basic element of community form, a circulation system profoundly influences the location and intensity of development. By defining the public space within which people can move freely, roadways serve to organize the flow of traffic from origin to destination points.

The ancestors of today's paved streets – the cart path, the ancient way and the Indian trail – were largely laid out

alongside, near or in order to bypass key natural resources features, the most influential being water. These systems primarily served local people who moved about on foot, by horse or by carriage between their farm lots and nearby commercial areas.

That West Newbury originated as a section of Newbury is not only an interesting historical sidebar, but also an enduring part in the Town's physical form. As the 1729 Map of West Parish shows (Fig. TC-1), the original roads that connected West Newbury's farmland to Newbury and Newburyport created an indelible imprint that remains remarkably in tact.

When technological advancements brought trains and interstate highways to the Merrimack Valley, nearly every community within reach of modern transportation corridors began to feel the pressure of growth. It is striking that West Newbury remained relatively isolated from this larger regional dynamic as long as it did.

By all measures West Newbury is a small residential community and it is destined to remain that way regardless of its future development pattern. To the extent that the Town's development regulations are

producing what amounts to a low-density *suburb*, they have also had a direct impact on traffic flow. As West Newbury is "discovered" and the demand for homes here increases, residents will see the results not only in terms of open fields lost to subdivisions, but also in increased numbers of cars and trips.

Traffic & Circulation

Local roads are fundamental to an economy. They supply the means of transit for exporting and importing materials, goods and supplies, for moving labor between home and

work, and for bringing the disposable income of consumers to the marketplace. When too many needs compete for a space in the travel lane, roads become congested and unsafe, and they hinder rather than attract development in areas that are otherwise suitable for growth. Moreover, congested streets can bring undesirable environmental consequences, the most obvious of which is reduced air quality.

The comprehensive definition of traffic is not what most people think of when they are asked about "traffic problems."

Communities have to concern themselves with all forms of traffic, or the means by which people travel along a defined route -- vehicles, bicycles, wheelchairs, horses, walking -- but reality is that what everyone worries about most is vehicles, namely cars and in many cases, trucks.

Coastal cities and towns and those with lakes and rivers within or along their borders also worry about water traffic. Invariably, traffic signifies public safety risk, but if public safety were the transportation planner's only concern the solutions would be relatively simple, however expensive -- and they would also be ugly.

Summary of Existing Conditions

West Newbury's location makes the community easily accessible to I-95, I-495 and US Rte. 1. Indeed, I-95 splices the eastern corner of the Town and supplies two points of access directly to West Newbury. The proximity of major federal highways has opened all of the Merrimack Valley to new economic opportunities and population growth. Recent data show that West Newbury has begun to feel the impact of these regional changes. The primary thoroughfare that ties West Newbury to neighboring communities is Route 113, which is also Main Street.¹ Of the Town's remaining streets, the vast majority consists of scenic rural roads, etched into the Town's rolling landscape many years ago.

Unsurprisingly, there is no public transportation service in West Newbury because the Town is so small. The exceptions are individual transportation by appointment and group trips for the elderly, sponsored or coordinated by the West Newbury Council on Aging, but even the Town's senior citizens have no regularly scheduled transit service.² Residents seeking to commute by bus can use one of two regional carriers that run fixed-route service between Boston and the communities of eastern Merrimack Valley, or they can now take the commuter rail from the

¹ Route 113 is a state road. This has important implications for the amount of control that West Newbury will have over roadway improvement decisions that may have to be made in the future.

² Information supplied by John Sarkis, Comprehensive Plan Committee, from Council on Aging Director Olive West, March 12, 1999.

Comprehensive Plan Goals and Policies: Traffic and Circulation

Traffic & Circulation Goal

Construct and maintain a safe road system that is consistent with the desired rural character of the Town.

Traffic & Circulation Policies

- Enact standards to minimize road widths while at the same time providing for safe non-car use (bicycle, equestrian, pedestrian)
- Explore public transportation options, especially for use by elders
- Provide safe/environmentally sound control of water borne traffic on the Merrimack River
- Improve provisions for parking in the Town Center
- Provide safe, comfortable facilities for pedestrians in the Town Center

Newburyport station. Taxi and limousine services are available from companies in Amesbury, Newburyport and Haverhill.³ In the absence of directly available public transportation anywhere in Town, residents depend completely on their own cars. Because virtually all new growth in West Newbury is spawning unconnected subdivision pods (what transportation planners classify as "place-level" streets), cars leaving and returning to private homes converge on an existing network of old roads that were designed to serve the limited travel needs of a farming community.

West Newbury illustrates how traffic can create problems that demand potentially

³ Merrimack Valley Planning Commission, 1998.

opposing solutions, particularly in very small towns. Safe travel and aesthetics vie for the top of the Town's traffic and circulation policy agenda. When asked about "major traffic problems in Town" in a 1997 community survey, residents overwhelmingly objected to "speeding," especially on Main Street (Route 113). Moreover, Main Street scored highest on the "problem" list for several traffic conditions -- truck volumes, passing vehicles, intersections and noise.⁴ Concern about cars, pedestrian safety and Route 113 is so uniformly expressed that the insistence upon sidewalks from survey respondents follows like an axiom. The problem: "improving" infrastructure to solve safety problems almost always means increasing the amount of land used for transportation purposes.

Widening a road to accommodate additional travel lanes may improve its "level of service" rating, but it does so at the risk of rural aesthetic. Installing sidewalks usually produces similar results. Thus, the same survey respondents who said West Newbury's rural character is its most important attribute would probably find widening Route 113 offensive. Depending on sidewalk design -- that is, width, materials and placement -- pedestrian safety may well be achieved at the price of degrading West Newbury's sense of place.

At the root of resident objections to traffic is anxiety about growth and its impact on the quality of life here. Although West Newbury stands to grow regardless of land use controls that may come about as a result of this Comprehensive Plan, the Town *can* intervene to address the all-but-guaranteed increase in traffic volume that will come with more people living here. The key is a

⁴ West Newbury Comprehensive Plan Committee, "1997 Community Survey."

circulation pattern that distributes traffic as safely and efficiently as possible. "Possible" has to be qualified, however. Much of the increasing burden on Route 113 derives less from internal than regional growth. Thus, what happens in nearby communities is going to affect (and may well constrain) West Newbury's choices.

As discussed in the Natural and Cultural Resources element, West Newbury lacks not only pedestrian sidewalks but bikeways and interconnected trail routes that could help to segregate modes of travel and reduce public safety hazards. Further, the existing sidewalks in Town do not appear to comply with Title II of the Americans with Disabilities Act (ADA, 1990), because of width, slope, ramp locations and design, and lack of appropriately marked and signed crosswalks.⁵

The inability to provide for pedestrian, bicycle and wheelchair-bound alternatives is a significant drawback to the community's overall quality of life, but in the case of handicapped access the existing, limited system of sidewalks exposes the Town to non-compliance citations from both state and federal authorities. At the same time, ADA compliance will become a factor -- perhaps but not necessarily a costly one -- as West Newbury develops and builds new pedestrian walkways in the future. Intelligent location choices and design standards, along with careful planning, almost always yield access for persons with disabilities without significant additional expense to the community.

⁵ See Americans with Disabilities Act Accessibility Guidelines (ADAAG), promulgated under Title II of the Act. The Commonwealth of Massachusetts also has sidewalk construction and reconstruction guidelines for cities and towns.

Analysis of Significant Issues

A sound circulation plan anticipates rather than reacts to the needs and demands placed upon local streets. The reality is that West Newbury currently lacks a circulation plan to guide such decisions as identifying desirable locations for connecting dead-end streets, siting and connecting bike paths, sidewalks and trails, implementing traffic-calming measures and improving the dispersal of vehicular traffic. Indeed, traffic and public safety problems detract from the quality of life in a community, as conditions on Route 113 have already begun to suggest.

Every community has a stake in the process of developing circulation patterns that work -- that is, ones that distribute and disperse traffic efficiently and safely through an interconnected network of major and minor streets. A critical tool for traffic and circulation planning is "functional street classification," which means that roadways are categorized and mapped according to their use and purpose. Traffic counts are helpful for establishing baseline use characteristics (daily traffic volume) and for measuring two types of growth and change in the future: what is the rate of increase or decrease in vehicular traffic on a given street, and what destination points are travelers trying to reach?

Taken alone, however, traffic counts are insufficient to categorize the function and capacity of a community's public ways. To engage in a meaningful, reasonably precise classification process, West Newbury needs to gather and analyze such data as the length, width, slope, layout and scenic features of its roads, surrounding land uses, an existing conditions assessment, future road improvement plans, and how residents perceive traffic volume and roadway use. Ultimately, the Town must also synchronize its classification choices with federal

standards if there is any interest in using the locally developed system to qualify for federal funding opportunities.

Still, it is important to underscore that street classification and transportation policy planning require *both* technical standards and public input. Outsiders might designate one street as a collector while residents who know better will argue that traffic volume, speed, origin and destination have conspired to change a pure collector into a minor arterial road. For this reason alone, West Newbury has to engage the public in the process of evaluating, classifying and mapping the community's unique street network. Otherwise, the process may have strong technical merit but little enduring value for land use decisions.

Because there is a direct correlation between land use and traffic of all types, classifying streets will help West Newbury understand at least three circulation system dynamics operating in the community. Not only does the process of street classification enable communities (and regions) to compete for federal funds to develop and improve collector and arterial roadways, but it also provides a distinct advantage to local officials who need to anticipate and plan for circulation and traffic impacts during development review.

These are the kinds of questions that West Newbury needs to explore in order to classify its existing circulation system and update its classification assumptions from time to time:

- 1) Does the existing system of arterial, collector and local streets take travelers where they want to go?
- If yes, will a proposed project fit within the existing system or change it? Is a road that currently functions as a collector apt to become an arterial as a direct result of a pending project along with other, foreseeable projects in the

area, given available land, zoning, development constraints and market forces? In other words, will a particular project change or adversely affect the surrounding neighborhood and the Town's street system as a whole, in light of the project's estimated average daily trips (ADT) and the use characteristics of the population it is designed to serve?⁶

- If no, to what degree is the project likely to worsen an undesirable traffic and circulation condition that already exists?
- 2) Have the community's standards for categorizing arterial and collector streets been developed accurately and applied consistently? Do they need to be updated in light of new conditions or information?
- 3) How well does the existing circulation network interconnect with surrounding communities and the interstate highway system?

Classification produces a hierarchy of roadways based on proportions of travel devoted toward different "service types" and to a large extent, on street length. Thus, an arterial street provides the greatest mobility between two points, yet the least amount of direct access to sub-areas and private property. Traffic also moves more rapidly along arterial roadways than on streets that

⁶ For example, traffic from a single-family housing development *tends* to be dispersed through peak and non-peak hours. A multi-family complex with small housing units designed for two-person occupancy *tends* to generate trips during peak rather than non-peak hours. For two projects with substantially the same total trips-per-day effect on overall traffic volume, one can produce a greater problem than the other simply because of differences in time-of-day and functional use of local, collector and eventually, arterial streets.

qualify for the lower tiers of a given classification scheme.

Arterial travel speeds are measured less by design factors than the 85th percentile speed of actual traffic, which means that 15% or more of all cars in transit on arterial roads move at a rate higher than the benchmark used by public safety officials to set a posted speed limit. In short, arterials function as feeders to a regional highway network -- and during peak hours, most people choose an arterial path to get to work in the morning or return home in the evening. With their minds already focused on one destination or the other, they tend to drive as fast as prevailing traffic conditions will permit.

The collector street mediates between an arterial system and the unique web of local roads and byways that shapes the physical form of every city and town. It does so by funneling work-bound commuters onto arterials where they can reach highways and travel at high speeds to distant destination points. Because most collector roads are flanked by developed land uses and parcels that will change or intensify in use at some future point, they afford varying degrees of property access while also providing higher-speed travel routes within a community.

Finally, local streets supply the primary mechanism of property access -- namely, to private homes. Although not always the case, local streets intersect with two other local streets or a collector road, meaning that short, dead-end stubs and cul-de-sacs are not truly "local" streets. Rather, they qualify as "places" unto themselves, akin to a common driveway shared by several individual homeowners. Because it provides only one means of access to the community's circulation system, the "place" or subdivision pod may be attractive to families with young children but it siphons character from older, local streets.

At some point, incremental cul-de-sac development directs too many vehicles onto local streets that lack the width and design speed to accommodate the pressure of excess traffic volume. Through a combination of community land use choices with unintended outcomes and regional growth trends, streets that once supplied intra-local access transform into collectors, and collectors into arterial corridors.

Along with outside influences, the future growth of West Newbury promises noticeable additional traffic volume on collector streets such as Maple Street, Church Street, Bachelor Street and Bridge Street. Moreover, Route 113 -- the Town's one arterial roadway -- will experience significant annual traffic increases into the first two or three decades of the 21st century. Due to locally and regionally generated traffic, Route 113 will be the focal point of West Newbury's traffic issues and frankly, its traffic problems. For related reasons, Bachelor Street will also experience increases in cross-town traffic from Route 113 to the Scotland Road/I-95 interchange, and it may well shift from functioning as a collector road to a minor arterial street in a very short period of time.

By 2020, internal development alone will generate approximately 12,000 additional trips per day.⁷ In terms of location, the increase in daily traffic volumes will be fairly evenly dispersed throughout the community since West Newbury's residential development potential is so diffuse. If allowed to continue, however, the proliferation of dead-end streets will reduce West Newbury's ability to distribute traffic

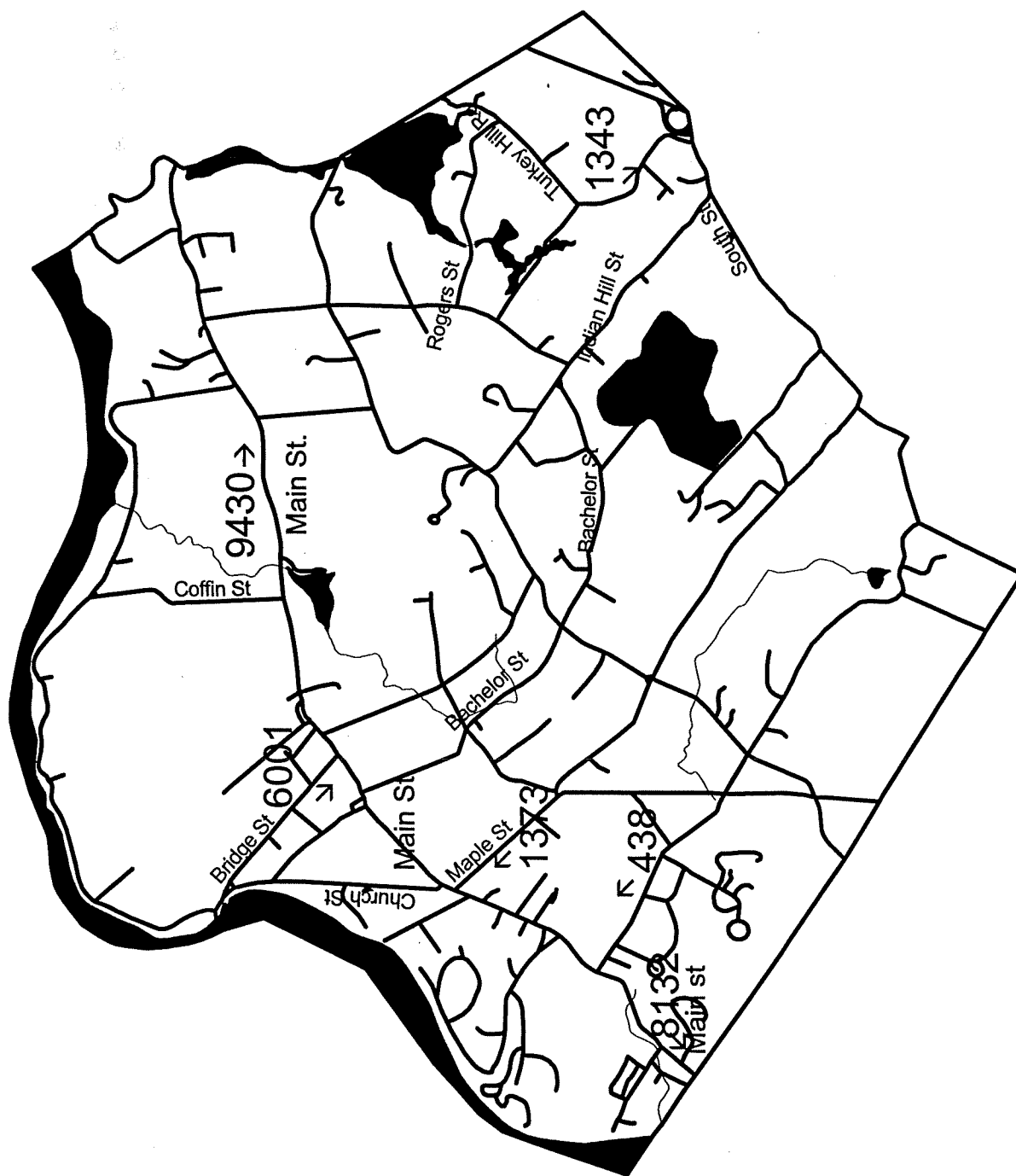
efficiently. While overall traffic generation will remain the same, it will be funneled into fewer intersections to gain access to collector streets.

Streets such as Maple, Rodgers, Bachelor, Indian Hill and Crane Neck could develop high-volume intersections in residential settings and will most likely create heavily used intersections along residential collector streets. If the dead-end street development pattern predominates as the form of new development and the Town fails to preserve future connection options, the increase in traffic volumes associated with community growth will direct a disproportionate share of increased traffic volumes to existing intersections along residential collector streets. This outcome could detract from the desirability of neighborhoods most affected by such conditions.

By pursuing policies to create a logically connected roadway system, the Town can increase the likelihood that additional traffic volumes will be more evenly dispersed and that adverse impacts on certain intersections and roadways will be minimized. To ensure a connected roadway system that provides multiple access options for local traffic, the Planning Board must be *extremely* selective in granting approval of dead-end streets. Further, when approving a dead-end street the Planning Board should provide for future connections wherever feasible.

West Newbury's most visible and steadily used roadway is Route 113. It has served as an inter-local route for 300 years and while the great majority of the region's traffic is bound for I-495 and I-95 today, Route 113 remains an important regional connector. As such, the traffic volumes experienced on Rt.113 are and will not be of local origin only. Table C-1 indicates that currently, two-way traffic volumes along Route 113 are heaviest from Coffin Street to the Newburyport boundary. In this location,

⁷ Assumptions based on ITE standards for trips generated by different types of land use, given the scale and function of a given project under review.



Selected Traffic Counts
Average Daily Traffic

Figure T&C-1

West Newbury

Route 113 accommodated 9,430 trips in 1997, an increase of approximately 20% since 1990.

The chart also indicates that the eastern portion of Route 113 experiences the most traffic, approximately 16% higher at the Newburyport line than at the Groveland line. Thus, the most traveled section of Route 113 is the eastern portion that extends into the more commercially developed City of Newburyport.

The 20% increase in total traffic volume on Route 113 is significant because it indicates not only a growing community but also a growing region. Specifically, the 20% increase in traffic volume illustrated in Table C-1 translates to a 2.85% annualized increase in traffic. The current rate of traffic increase along Route 113 is considerably higher than the standard 1% increased normally used to calculate the impact of "background" traffic growth. Translated: Table C-1 supports comments from residents who perceive traffic increases on Route 113 during the past 10 years.

To some extent, the increase along Route 113 stems from local growth, meaning the approximately 200 new units built between 1990-1997. Transportation engineering standards dictate, however, that West Newbury's recent growth would produce only 600 to 700 new vehicular trips per day, or less than half of the 1,580 increase reported (assuming all the new growth trips affected Route 113). While the historical traffic counts are not extensive, the data for Maple Street illustrate the probable contribution of West Newbury to Route 113 traffic growth. From 1989 to 1997 average daily traffic along Maple Street increased from 1260 to 1373, an additional 113 trips or 9%. Thus

Table C-1. Route 113 Traffic Volumes

	1990	1997	%
<u>increase</u>			
Rt.113\Coffin St	7850	9430	20
Rt113\Groveland line	NA	8132	

Sources: Merrimack Valley Planning Commission, 1997, and Town of West Newbury Highway Department, 1998.

Maple Street, while a major residential collector, provided less than one-tenth the traffic increase on Route 113. Traffic on Crane Neck Street increased by 22% but from a small base of 360 in 1990 to 438 in 1997; an increase of only 78 trips in 7 years.

Although these traffic reports document growth and change, they do not exhibit the necessary volumes to account for the amount of increased traffic on Route 113. Bridge Street (a minor regional collector street) carried 6001 trips in 1996, up from 1918 four years earlier, however, for an increase of 370%. Bridge Street can therefore be identified as a major access point for regional traffic onto Route 113 in West Newbury. While local growth is a factor, the majority of the increased traffic volume on Route 113 is due to regional growth beyond control of local land use policies. This characteristic of traffic growth is anticipated to exist for at least the coming two decades.

While the traffic data provided in Table C-2 are incomplete, they support certain assumptions about the percentage of internally generated traffic that will impact Route 113 in the immediate to mid-term. If the ratio of Route 113 traffic growth and the traffic generation of new local growth remains at levels consistent with what was experienced in the 1990's, then West Newbury should expect at least 45% of all

new local traffic generation to impact Route 113. Still, if regional growth slows (and there is little indication that this will occur prior to 2020), then the percentage of overall Route 113 traffic increases that are *attributable to local impact* may rise. To be conservative, West Newbury should adopt an estimate that 50% of all new internally generated traffic will add to average daily traffic volumes along Route 113.

The build-out analysis for this Comprehensive Plan indicates at least 1,200 additional dwelling units by 2020. The traffic volume generated by new homes will be approximately 12,000 trips per day. Given the points of access to and from West Newbury and the data cited above, it is reasonable to anticipate that at least 50% of the new volume -- 6,000 vehicle trips per day -- will impact Route 113. Assuming a 2% regional background increase for 20 years adds 4,700 additional trips per day. Thus, by 2020 Route 113 will probably carry over

20,000 trips per day, which is more than double the current volume.

The most noticeable result of these higher traffic volumes will be during the morning and evening peak commute hours, and most particularly at the Bridge Street-Route 113 intersection, where a new traffic signal seems inevitable. Indeed, increased traffic volume here is a foregone conclusion, and West Newbury faces some difficult choices given the importance of Route 113 to the community's overall character. Specifically, additional traffic demands will increase pressure to "improve 113." Safety issues relative to intersection capacity and design will have to be addressed in some manner, possibly including new traffic signals and unarguably, a better system of signage. The most important traffic debate concerning Route 113, however, will focus on the character and image of the roadway. This debate promises to become the overriding transportation policy issue of the next 20

Table C-2: West Newbury Traffic Counts, Selected Sites, 1989-1997

Location	1997	1996	1995	1994	1993	1992	1991	1990	1989
Little Rd/Groveland Ln	125								
113-NE of Church									5050
113 E. of Coffin	9430	9234	8161	8647	8335	8162	8294	7850	
113 Groveland Ln.	8132								
Bridge SE Church		6001				1918			
Church St.\N 113						2633			2790
Maple SE 113	1373					1389			1260
South SW Turk. Hill					1343				970
Crane Neck\113	438				449				360

Source: Merrimack Valley Planning Commission, 1998.

years, equaled only by minimizing dead-end streets in residential areas.

The Route 113 issue will pit improving traffic flow and containing current speed levels against preserving the historic character of the road. Pressure for roadway expansion will most likely be greatest on Route 113 from Coffin St. to the Newburyport line. Preserving roadway character is consistent with West Newbury's expressed land use and rural heritage goals, but to retain Route 113 at its current design capacity requires an acceptance that "level of service" will deteriorate significantly -- although not to the point of gridlock. Further, protecting the ambience of Route 113 means longer trip times and reduced average speeds. Delays near the Town Center and at other key intersections will also become more common.

If traffic flow improvements to Route 113 were to become Town policy, they would most likely feature additional travel lanes for portions of the roadway or at the least turning lanes at key intersections. As with most development issues in West Newbury, the concept of community character will be a key factor in the debate concerning Route 113's future.

As discussed in the chapter on Economic Development, there is potential for significant, fiscally beneficial commercial development at the Scotland Road/I-95 interchange. Depending on project scale, the probable traffic generation would range from 3,200 to 13,000 trips per day. While

significant, this increase in traffic volume may have more implications for I-95 than for West Newbury. According to the Massachusetts Highway Department (MassHighway), the average daily traffic north of the Scotland Road exit has been relatively stable since 1990. In 1989, MassHighway recorded an average daily traffic count (ADT) of 40,790 and in 1997, an ADT of 39,900, which represents essentially no change. Thus, major commercial development in West Newbury could significantly increase traffic volumes on I-95.

Predictable traffic and circulation changes in West Newbury's future:

- West Newbury's internal traffic generation is likely to double by 2020.
- The growing predominance of dead-end streets guarantees extreme pressure on a few collector roads and will create a few heavily used intersections.
- ...Route 113 is at risk of a fundamental change in character that will affect not only West Newbury's scenic gateway, but also the image of the Town as a whole.

Given the location, however, it is very unlikely that a large majority of the trips to this commercial facility would be made through West Newbury's local roads from traffic already on Route 495. In fact, commuters seem more likely to use the convenient and faster interstate highway system to access any development served by the Scotland Rd. intersection. This means that although the potential traffic generation from commercial development is high, the potential impacts

on local roadways are apt to be very low. The exception will be traffic coming from surrounding communities but not using I-495.

For example, employees from Groveland, Haverhill and Merrimac may use Bridge Street or Route 113 and Bachelor Street as a cross-town means of accessing the Turkey Hill area. The total volume generated is impossible to predict at this point in time, but it will most likely be less than 10% of the associated traffic volume and its effects will

be felt during the morning and evening peak travel periods only. The Town will need to examine traffic impacts carefully, but doing so requires more data than West Newbury has at this time and also argues for a street classification study to fully understand existing conditions and future probabilities.

In summary, West Newbury's internal traffic generation is likely to double by 2020. While more traffic will be evident along local roads, it could be evenly dispersed if the Town pursues a policy of connecting its residential roadway system. The growing predominance of dead-end streets guarantees extreme pressure on a few collector roads and will create a few heavily used intersections. The character and service capacity of Route 113 will be the most dominate traffic issue, however.

The doubling of traffic volumes over a 20-year period will spawn demands to improve traffic safety and flow along the Town's primary corridor. The types of improvements required to accommodate these demands would most likely replace West Newbury's historically significant, scenic gateway with a more highway-oriented cross-town road. Thus, resolving the foreseeable debate over traffic management demands that West Newbury choose between level of traffic service and the rural character that residents want to preserve.

Commercial development at the Scotland Road/I-95 interchange (see Economic Development) will generate a volume of traffic consistent with a suburban-scale office and research park. Due to location, however, almost all traffic generated by such a complex will be more likely to use the interstate highway system for access. Still, it is important to point out that Bachelor Street could function as a cross-town connector for commuters from neighboring towns and its own character may suffer as a result. In general, however, traffic impacts on West

Newbury's residential streets will be negligible because of the relatively unique location of the proposed site.

Key Findings and Recommendations

West Newbury needs to anticipate that local and regional growth will create pressures for capacity improvements on Route 113. The limited amount of state and regional traffic data, while useful for projecting general trends, are inadequate for strategic planning purposes. What is clear is that Route 113 is at risk of a fundamental change in character that will affect not only West Newbury's scenic gateway, but also the image of the Town as a whole.

The perpetuation of suburban-style residential development will contribute to West Newbury's traffic problems by forcing a circulation pattern that funnels too much traffic onto the Town's rural (local) streets. Thus, West Newbury needs to adopt appropriate policies and synchronize its zoning and subdivision regulations with the need for planned traffic solutions.

Toward these ends, the Town of West Newbury should consider the following recommendations to meet its traffic and circulation needs:

1. Appropriate funds for and commission a detailed Route 113 Corridor Study. Although Route 113 is a state road and MassHighway will ultimately make road improvement decisions, West Newbury needs to be prepared to engage in the citizen participation and public comment process. Moreover, the Town ought to examine the entire corridor for zoning issues (e.g., design standards, dimensional requirements, parking and allowed uses, especially in the Town Center area) that could contribute to

improved traffic and circulation conditions on Route 113.

2. Commission and complete a street classification study that will allow West Newbury to fully understand its existing circulation system and anticipate the functional and use impacts of new growth. Moreover, this process will help West Newbury's Planning Board make the most informed decisions possible about appropriate locations for interconnecting dead-end subdivision streets -- in effect developing, over time, an amplified system of local streets.
3. Establish a Town Center District that replaces and expands the existing Business District at Maple Street and Route 113.⁸ District regulations should be written to accommodate improved access, parking and pedestrian amenities in the Town Center area.
4. Adopt development policies, rules and regulations to promote strategic street connections so that internal traffic circulates more efficiently.
5. Revise the Rules and Regulations of Subdivision Control as needed to align requirements with the Town's rural character and natural resource protection goals.⁹
6. Establish and adopt an "alternative travel" development plan that identifies desirable locations for new and expanded sidewalks, pathways, bike routes and trails that can serve multiple forms of non-vehicular traffic. At minimum, the plan should specify locations, design, use, function, cost and timeline for each

type and phase of the system's development. The Town must consider designs that accommodate persons with disabilities as part of this planning initiative so that all residents have equal access to the same health, safety and recreation benefits of a pedestrian network.

⁸ See also, Economic Development. The Town needs an urban design plan for the Town Center.

⁹ For additional information, see Land Use.

West Newbury's land use and development issues raise two questions with potentially conflicting answers:

- Can the Town retain what is left of its rural-agricultural heritage and still accommodate new growth?
- Is it possible for the Town to preserve its semi-rural appearance and simultaneously maintain fiscal stability?

Addressing the first question is less difficult than many people might imagine. If West Newbury wants to preserve the essential ingredients of its pastoral form and appearance, the required tools either exist or can be secured with the right mix of local will, political action and spending commitments. They are discussed throughout the Comprehensive Plan and include such recommendations as:

1. Adopt a Rural-Agricultural Overlay District that would encompass the West Newbury natural resource and open space areas residents most want to protect, and establish *workable* cluster and planned unit development design guidelines in order to discourage suburban development forms.
2. Implement the Town's current Open Space and Recreation Plan: purchase land for conservation, recreation, and general municipal purposes, increase participation in the APR, Chapter 61 and 61A programs, secure voluntary agreements from landowners to grant a right of first refusal to the Town or a non-profit land trust.
3. Enact zoning amendments and adopt local bylaws to manage the form, type, scale

and location of new development, increase the Town's capacity to protect wetlands and historic resources, enforce existing laws that are designed to preserve rural imagery across the Commonwealth, e.g., the Scenic Roads Act and the Shade Tree Act, and modify the subdivision regulations in order to encourage through streets and discourage suburban pods.

4. Create a comprehensive Community Protection Map that identifies all of the critical natural and cultural resources in West Newbury; use it as a guide for delineating areas for restrictive zoning and other regulatory purposes, thereby enabling land use and permitting officials to coordinate their decisions.

Fiscal Policy and Land Use

The Comprehensive Plan recommends several land use and development strategies that would be appropriate for West Newbury's rural preservation aims. While some recommendations will have relatively greater

appeal to the community, overall the Plan is consistent with the interests of town officials and residents who want to keep West Newbury small, rural and picturesque. Most of what the Town needs to do in the short run is permissible under existing state laws. Some desired growth management strategies that require special legislation today may be the subject of tomorrow's general laws, making the Plan's overall "town character" objectives easier to achieve over time.

Saving West Newbury's beauty will be much easier than making it an affordable place to live. Because Massachusetts cities and towns depend primarily on property taxes to support the costs of municipal and school services, land use and local revenue present inextricable problems for growing communities. West Newbury's tax base is 98% residential, and there is no indication that citizens want any

fundamental change in the land use make-up of their community. Indeed, a significant departure from the residential fabric of West Newbury could conflict head-on with the main goal of the Comprehensive Plan: to preserve the Town's semi-rural character. Thus, even the addition of modest non-residential development options proposed in the Action Plan (Part IV) reflects a conservative stance favoring West Newbury's "rural demeanor" over more fiscally beneficial alternatives.

This chapter broadly examines relationships between land use and fiscal policy in order to help residents make informed choices about the kind of community they want to grow. There *are* ways to strengthen and diversify West Newbury's tax base without destroying the Town's charm. Moreover, one can argue that without tax base diversification the very beauty West Newbury cherishes is at risk. Much depends on West Newbury's ability to agree on a more complete definition of "character" than what is purely visible. In such intangibles as population mix, political participation, community benefits and income diversity lie other town character attributes that will be lost or enhanced by land use decisions.

Summary of Existing Conditions

West Newbury operates with a Board of Selectmen-Open Town Meeting form of government that is organized for the most part under the general laws of the Commonwealth. As a very small community, its departmental structure is fairly simple and the Town relies heavily on volunteer boards, commissions and committees to carry out basic municipal responsibilities.

Unlike most towns of its size, however, West Newbury has a Finance Director who oversees accounting, treasury and assessing functions, coordinates interdepartmental communications throughout local government and directs the Town's fiscal policy process. With the state legislature's blessing, West Newbury consolidated all finance offices into one department several years ago, placing the chief assessor, town accountant, town clerk and

treasury/collection functions under a Finance Director who doubles as the Treasurer/Collector. (A much earlier special act of the legislature established West Newbury's Water Department, giving it exclusive jurisdiction over the Town's public water system including the raising and managing water revenues.)

In preparation for the Annual Town Meeting, town departments develop budget requests and submit them to the Finance Director. She consolidates the departmental requests into a unified budget message for the upcoming fiscal year, forecasts available revenues to meet the Town's needs and estimates the tax rate impact of the proposed spending plan. Both the Selectmen and Finance Committee review the consolidated budget and each department's original request, and they also meet with town employees and volunteers in order to develop recommendations for the Annual Town Meeting. West Newbury voters receive the town meeting warrant and all Selectmen and Finance Committee recommendations prior to Town Meeting.

Although the Selectmen review and take positions on all town spending items and they have broad statutory responsibility for the community's health, safety and welfare, they share "executive branch" functions with a number of other elected and appointed officers. West Newbury town government is typical of many small communities that distribute policy and oversight powers across independently elected boards and commissions. Thus, West Newbury voters have retained the right to elect their Board of Assessors, Board of Health, Planning Board, Board of Library Trustees, Water Commissioners and Parks & Recreation Commissioners, along with representatives to the Pentucket Regional School Committee.¹

¹ The Town Moderator is also elected, as is the tradition in nearly every community with an open or representative town meeting. Further, the West Newbury Housing Authority is an elected board with one member appointed by the Governor, as called for by law.

These entities, in turn, derive their authority from state laws, West Newbury's general bylaws, and special acts of the legislature.

The effect of West Newbury's town government structure is a pyramid that places the Finance Department, most municipal employees and appointed committees under the Selectmen's oversight. All other elected boards are independent entities whose separate pyramids entitle them to control their own specialized areas, including any employees who work in their departments. Regardless of whether independent boards and commissions work harmoniously with the Selectmen on policy matters, all of West Newbury's governing arms merge in two arenas: responsiveness to the electorate, and financial management.

It can take a very long time for local government to see the consequences of failing to synchronize its policies and practices with "the electorate," which changes slowly and often sends mixed messages as newcomers and old timers compete to be heard. There are usually hints about evolving change in the culture of the electorate long before political power fully shifts in communities, e.g., town meeting halls packed with voters whose concerns have far less to do with debt service than high quality schools, new recreation fields or sidewalks. Episodic town meeting floor fights and controversial decisions by selectmen, planning boards and school committees signal a changing slate of local priorities. Issues, wants and needs emerge like the passing of a torch from one generation of community leaders to the next -- or from long-time residents to their younger, often more affluent neighbors.

The very term "electorate" resists a unified definition because its make-up changes radically based on how and when it is measured: is the electorate comprised of town meeting voters, election day voters, "regular" voters or networked interest groups? In truth, its composition varies from year to year and over time as population growth, demographic change and a new political culture pave the

way for subsequent generations to lead communities. To the extent that growth brings more people, it also brings different values and priorities. It changes local politics and in turn, it changes how communities spend money. More to the point, growth changes how communities and the voters who act on their behalf define *costs* and *benefits*.

Local government's failure to collectively address financial management realities would reduce if not thwart West Newbury's ability to manage resources and obligations.

Occasionally, the impacts are short-term, such as the emotional, well-meaning vote made by a town meeting that wants *something* regardless of cost -- only to see that cost show up in next year's tax bill. More often than not, however, the impacts are so long-range that one generation's voters have trouble sensing the urgency of a decision with huge consequences for a later generation of taxpaying residents. Nowhere is this more obvious than the impact of land use decisions, and the ones West Newbury faces today will affect the cost and quality of life here for many years to come.

Any evaluation of local finances in present or future terms demands looking at revenue sources, expenditures and financial management practices. A number of charts and tables at the end of this chapter shed light on West Newbury's current financial condition and the structural relationship between land use and finances. Because growth in West Newbury has begun to escalate only recently, the "Analysis of Significant Issues" section of this chapter borrows from the experience of other Massachusetts communities in order to estimate likely future outcomes.

Forecasting West Newbury's fiscal future is complicated by local and regional growth increases that *will* place new capital and operating cost burdens on the community's homeowners in the same period that newcomers will also begin participating in the system through which major local decisions are made -- town meeting. Potential shifts in political culture and a steady rise in the

number of single-family homes in West Newbury will have a far greater impact on the Town's fiscal future than the quality of municipal management practices can have, although clearly the latter is crucial.

In fact, West Newbury's present financial management procedures and policies are exemplary; many comparably sized communities have not enjoyed and still lack the financial management strength that West Newbury town government has established in-house. To the extent that prudent management affects future fiscal stability, the correlation between political choices and the total cost of town services is more influential and therefore of greater concern. West Newbury stands to incur significant growth costs during the next 10-15 years no matter what cost control procedures the Finance Department puts in place. The potential for a fiscal-growth impact collision seems almost axiomatic, as demonstrated in the Community Facilities element of this Comprehensive Plan. For example, in the next five to ten years West Newbury faces such major capital needs as:

- The development and construction of at least two new well fields to address the growing gap between water consumption and the safe yield of its existing Main Street water supply. Without more locally produced water, the Town has no choice but to continue purchasing additional drinking water from the City of Newburyport -- at considerable expense to ratepayers, nearly all of whom are homeowners.
 - Design and construction of rehabilitated and/or new facilities for the police and fire departments.
 - The Town's share (27%) of a new, \$33 million regional high school.
 - Additional outdoor recreational facilities, e.g., baseball and soccer fields.
 - Renovations to the Page School, the total cost of which may reach \$2.3 to \$3.1 million.
- Acquisition of land for a future elementary school.
 - In all probability, an expansion of the GAR Memorial Library.
 - Acquisition of land for future water supplies.

Municipal Finance Data (Tables 1 through 5)

1. Table 1 summarizes the values of all West Newbury properties according to the way they are classified for assessment purposes. "Assessed value" means the full and fair market value of a given piece of taxable property, which may be residential, commercial, industrial or personal, i.e., assets of a business. Table 1 also characterizes West Newbury's tax base, which essentially mirrors the land use make-up of the community. (See Land Use Element for additional information.)
2. Table 2 suggests that West Newbury's revenue *sources* to support all local government operations are similar to many middle- to upper-income communities in the Commonwealth.
 - West Newbury's revenue from property taxes equals the third quartile for all cities and towns, but the state aid it receives each year is relatively low -- largely because education aid for the Pentucket Regional School District does not pass through West Newbury's local treasury. (This accounts for the drop in state aid that West Newbury experienced in 1990 and again in 1992).
 - The share of local receipts --13% -- which includes income from water charges, motor vehicle excise taxes, permits and licenses and various other non-tax sources is slightly less than the statewide median of 14.4%, but is commensurate with the experience of smaller towns.
 - The Town can take pride in the fact that "other available funds"

contributes as much as 11.6% of all revenue available in a given fiscal year, for the statewide median is only 6%. "Other available funds" is a direct indicator of local fiscal management; it includes certified free cash, the amounts that towns allocate to overlay reserve and stabilization funds, and interest income from investing town funds.

3. Table 3 shows that total per capita spending in West Newbury is relatively low compared to the experience of other towns, although this may reflect the Town's participation in a regional school district and that West Newbury does not have a full-time fire department. The one area in which West Newbury spends more per capita is Public Works.
4. Table 4 provides a basis to compare West Newbury to other similar communities in the state. The table is an excerpt from the Department of Revenue's "Kind of Community" (KOC) analysis, which classifies Massachusetts cities and towns under a seven-category system. In general, the KOC model groups communities by relative wealth, development maturity and financial capacity. West Newbury joins 43 other towns under Category 5, "Small Rural Communities."
 - Among these towns West Newbury ranks as follows: population, 13; per capita income, 3; equalized value per capita, 6; land area, 44 (meaning it is the smallest in the group); miles of road, 33; operating budget, 12; and total parcels, 19.
 - It is interesting to note that at 2.95 miles of roads per square mile of land, and 116 parcels per square mile of land, West Newbury significantly exceeds the third quartile for all "Small Rural Communities." In essence, this means that *compared to other small Massachusetts towns*, West Newbury would appear to be

more developed or "development-ready" than most others are, yet in this case statistical appearances are deceiving. West Newbury's roads are primarily narrow, winding local streets that will have difficulty accommodating new growth. As the Traffic & Circulation chapter shows, West Newbury roads face inevitable circulation problems if growth proceeds as current zoning and subdivision rules allow.

5. Table 5 summarizes 10-year expenditure trends in municipal and schools costs through Fiscal Year 1997, the most recent year for which the Massachusetts Department of Revenue, Division of Local Services, has complete comparative data on most Massachusetts cities and towns.

Together, these charts tell part of West Newbury's recent financial history, but not all of it. In the current fiscal year (1999), the Town will ask property taxpayers for approximately \$5,361,845 and by year's end it will have raised an estimated \$962,848 from local receipts -- mainly water charges and motor vehicle excise taxes.² West Newbury also applied over \$1 million in other local funds to meet obligations voted at last year's Annual Town Meeting. Along with West Newbury's impressive tax collection rate of 99.6% (1997), these data suggest that the Town is doing everything possible to "pay its own way," even as state aid dwindled to about \$300,000 this year.³

In large part because West Newbury has adopted prudent fiscal goals and policies governing free cash, the stabilization fund and debt service, the Town has the essential elements of strong financial management in place. Significantly, however, these goals and policies are established by executive officials -

² Tracy Blais Durkin, *Town of West Newbury Fiscal Year Budget: 1999*, March 23, 1998.

³ DOR, Division of Local Services: "At A Glance Report: West Newbury," March 1, 1999.

- namely the Finance Director, with the Selectmen's concurrence -- but they have no binding impact on town meeting.

When residents have a sense of political efficacy and they believe

local resources are distributed fairly, it remains likely that town meeting and referendum voters will act within the parameters of executive policy. Problems emerge when groups of voters object to particular spending decisions that leave some needs adequately addressed and others, deferred. Nationally, tensions over school, police and fire budgets cause the majority of local government spending disputes, but in affluent, high-growth communities another ingredient exacerbates these conflicts: capital spending, which is the very arena that often pits new school buildings and open space purchases against one another in tight fiscal years. West Newbury's long-term capital improvements needs suggest that the same conflicts will soon be unavoidable.⁴

Although communities are understandably reluctant to draw conclusions from 10-year-old U.S. Census data, this "Indicators of Wealth" chart raises questions about how long West Newbury households can support the Town's rising dependence on residential property taxes as the primary source of local revenue. In FY99, 73% of West Newbury's local revenue has come from property taxes -- up from 68.5% only two years ago. Of the \$5.3 million in FY99 property tax revenue, 96% or \$4,994,155 comes from residential taxpayers. This translates into an average

Indicators of Wealth: How West Newbury Ranks Statewide

1996 Equalized Valuation Per Capita	Rank	1989 Income Per Capita	Rank	1989 Median Household Income	Rank	1989 Median Family Income	Rank
\$85,030	89	\$20,450	70	\$56,591	36	60,381	47

Source: Massachusetts Department of Revenue, 1999.

FY99 single family tax bill of \$3,623. West Newbury's tax bill rank has edged upward throughout the 1990's, and today (FY99) it is about the 37th highest in the Commonwealth -- although its *per capita income* ranks 70th.

West Newbury voters have been supportive of spending requests that meant increases in their annual tax bills, including authorizations to override the levy limit under Proposition 2 1/2. At some point, however, the community's cost-of-services demands will surpass what many family householders can pay to live in West Newbury and may have already surpassed reasonable standards of affordability for the Town's elderly residents. Using FY 1999 assessed values, the *estimated* tax rate impact of each additional \$100,000 in spending is fifteen cents. In truth, the amount can vary significantly -- up or down -- depending on such factors as property valuation changes, amounts held in reserve in a given fiscal year, and method of financing.

Herein lies West Newbury's fiscal challenge for the future. It seems arguably true that because of its high-end housing market, West Newbury has witnessed some growth in family and per capita wealth since the last federal census. Absent evidence to the contrary, however, one must speculate that other communities have also seen population wealth changes since 1990, and that West Newbury's experience may be consistent with, rather than different from, broader regional trends. If so, then per capita income in West Newbury remains somewhat low in relation to the cost demands of living in the community --

⁴ Please refer to Community Facilities & Services for more detailed information about West Newbury's anticipated future public facility needs and associated costs.

especially for homeowners who pay not only mortgages and tax bills, but water use charges.

This means the Town has to think *carefully* and *strategically* about the kind of community it seeks to create. As discussed in the Community Facilities and Services chapter, West Newbury faces significant capital costs during the next 10-15 years, including annual capital outlays and long-term indebtedness. The Town must anticipate that adhering to its fiscal goals will become increasingly difficult unless general fund revenues grow at a rate commensurate with the cost of community services and prudent financial management.

Analysis of Significant Issues

Under present conditions, West Newbury is poised to develop as a residential suburb of single-family homes. Its zoning bylaw, location, available land and sheer beauty function together as sources of growth pressure, exacerbated by strong regional housing market conditions. Other than somewhat higher-than-average public works spending on one hand and very low fire department costs on the other, nothing in West Newbury's current budget seems particularly out of line with comparably sized Massachusetts towns. The difference: West Newbury is clearly in the midst of a growth period, with subdivision approvals and new-home construction proceeding at a super-normal pace for a rural town.

Given rising property values and a relatively predictable operating budget, one could say that West Newbury is on a strong footing to meet its current and near-term future community service costs. The problem is that because the Town is producing *single-family homes* alone, at least three obvious areas of community service demand will grow: water, education and recreation. Whether water costs are paid not from the general fund but rather, from user fees in a special revenue account, the reality is that every West Newbury homeowner pays much higher-than average water bills on top of a tax bill that

approximates the 90th percentile statewide. As previously explained, the already high annual water fees paid by West Newbury residents are inadequate to shoulder the cost of developing new public water supplies or improving an older, apparently leaking distribution system.

Although the Town did not commission a formal fiscal impact study as part of this Comprehensive Plan's work program, reasonable land use and fiscal inferences can be made from the reported experiences of other New England communities. As a rule:

- Residentially developed properties cost more in town services than they pay in property taxes, except that homes valued at the very high end of the market occasionally pay for themselves. In the short run, new homes *do* increase total property tax revenue but within 5-10 years of construction, they also contribute to expanding municipal cost burdens mainly in the schools.⁵
- Low-population communities tend to have lower tax rates than larger-population towns and cities. West Newbury's current tax rate of \$13.47 falls in the upper band of small, rural Massachusetts communities with year-round populations of <6,500.
- Non-residential land uses almost always pay far more in property taxes than they cost in municipal services. Although one recent study suggests that higher tax rates tend to correlate with higher levels of commercial and industrial development, the job base and non-residential property valuations required to tip the scales are so significant that they do not apply to West Newbury. On the basis of jobs and the non-residential share of total property

⁵ For sources on fiscal impact modeling, see Robert Burchell and David Listoken, *The Fiscal Impact Handbook* (1987) and *Development Impact Assessment Handbook* (1992); The Trust for Public Land, *Community Choices* (1998) and Mass. Department of Housing and Community Development, *Growth Impact Handbook* (1997).

valuation, West Newbury's tax rate is lower than what comparable towns charge by about \$2.00 per thousand in assessed value. In fact, it is well under the *mid-point* tax rate of \$14.50 in communities with 3,300 to 6,700 year-round residents (limited to communities that assess the same rate across all property classifications). West Newbury can afford to increase the amount of land zoned for non-residential uses without disrupting the Town's fiscal stability. If anything, a modest increase in *targeted commercial or industrial uses* will produce more benefits than detriments *as long as the zoning bylaw is amended* to provide for superior design, safety and environmental performance standards.

- Open space acquisition can and does contribute to long-term financial stability, first because annual debt service costs are *relatively* low and second, because land preservation acts as a municipal cost avoidance strategy. Assuming that open space purchases will solve a community's fiscal problems is faulty, however, in high-growth towns like West Newbury that must *also* absorb many years of capital improvement costs to address even a "normal" rate of population growth. It is very important to look at all immediate and foreseeable capital demands -- modernized, expanded or new schools, police stations and other public facilities, along with open space -- in order to estimate the true cost of debt service associated with growth management. The seemingly nominal tax bill impact of acquiring land is different when examined together with, and not in isolation from,

the totality of a town's portfolio of long-term debt.

Non-Local Funding Opportunities for Community Development and Preservation

West Newbury might benefit from augmenting its available sources of revenue with grants that can cover all or a portion of the cost of special projects. Many communities find that state and federal grant programs create invaluable opportunities for unique or innovative projects; at the same time, the public grants system is complex, time consuming, administratively burdensome and frequently unpredictable.

For example, numerous grant programs have matching fund requirements that can be difficult to meet for projects that are locally controversial, or when communities are under substantial fiscal stress. Sometimes, the grant application process requires a considerable amount of research, writing, and what is known generally as "grantsmanship." Furthermore, grant administration demands vary widely. Some state grants invoke relatively simple administrative procedures; federal grants trigger the awarding agency's regulations as well as rules, policies and standards of other federal government offices or departments. This means that before communities apply for a grant, they should become familiar with the grant program's administrative expectations *first* so they can decide whether they have adequate compliance capacity. Finally, while grant programs usually survive political changes at the state or federal level, they are sometimes "reinvented" in order to meet the policies of a new administration. Thus, what a neighboring town accomplished with a particular grant

About state and federal grants

Many communities find that state and federal grant programs create invaluable opportunities for unique or innovative projects; at the same time, the public grants system is complex, time consuming, administratively burdensome and frequently unpredictable.

...before communities apply for a grant, they should become familiar with the grant program's administrative expectations *first* so they can decide whether they have adequate compliance capacity.

source five years ago may no longer be "competitive" today.

That said, some of the proposals described in the Comprehensive Plan are eligible projects under the rules of various state grant programs. These are the most obvious outside funding possibilities that relate to West Newbury's existing or future needs:

- West Newbury needs to update and expand its historic resources inventory. The Massachusetts Historical Commission (MHC) provides small planning grants to produce new and/or update previous historic resource inventories. Through its "Survey and Planning Grant Program," MHC typically awards reimbursement grants for 50-60% of the total cost of completing an inventory. "Reimbursement" means the community that receives grant approval must pay the entire cost up front and submit a request for reimbursement when the project is finished. At present, MHC sets no ceiling on the amount of Survey and Planning Grant funds it will award to a given applicant. In reality, however, most of the grant awards range from \$10-\$20,000.

MHC also awards funds to preserve historic properties and landscapes. The Massachusetts Preservation Fund provides grants of up to 50% of the cost of a preservation project and also makes small "pre-development" grants available to design, or to determine the feasibility of, a project that could preserve a historic resource. Applicants with historic property maintenance funds can receive up to 75% of the cost of a preservation project instead of the 50% cap that applies under all other circumstances. As for landscape preservation, MHC administers a Historic Landscape Preservation Program that awards grants of up to \$50,000 for planning, construction, preservation maintenance and public education. Municipalities are required to provide a *cash* match of 30-48% of the total project cost.

- West Newbury has already had experience with the Massachusetts Self-Help Program, but it is worth reiterating the usefulness of Self-Help funds to defray the cost of purchasing conservation land. Self-Help is a reimbursement grant program. Applicant cities and towns that receive Self-Help approval pay the full acquisition cost up front and submit documentation for reimbursement when the project is complete. Normally, these grants range from 50-70% of the land acquisition price, up to a maximum of \$500,000. It is important to point out that Self-Help is available for conservation land purchases, but not for the acquisition of school sites, active recreation areas and other *developed* public facilities.
- West Newbury has expressed an interest in producing comprehensive land management plans for properties in the Town's public open space inventory. A grant source that could help to pay for a woodland management plan and provide a model for similar plans is the "Forest Stewardship Planning and Project Grants" program. Administered by the Massachusetts Department of Environmental Management (DEM), the "Forest Stewardship Program" provides small, federally funded planning grants (\$1,500-\$2,000) to create 10-year stewardship programs for town-owned forests. In the past, DEM has funded projects involving trail design, forest thinning, maple sugaring, and strategies to deal with problem (invasive) species.

Another DEM service that could help West Newbury achieve its comprehensive plan goals is the "2000 Greenways and Trails Demonstration Grants Program." The agency's funding priorities include (a) river greenways that increase or enhance public access to the water, (b) youth education and youth participation in greenway projects, and (c) multi-town linkages and corridors. Eligible applicants can compete for grants of \$1,000-\$5,000,

although multi-town applicants can request and receive up to \$10,000.

- The Department of Housing and Community Development (DHCD) offers several grant opportunities to cities and towns. Of particular use to West Newbury would be the Municipal Incentive Grant (MIG) Program, which funds planning grants of up to \$30,000 for single-town projects and \$50,000 for multi-town projects. MIG entertains applications for a wide variety of planning and municipal management activities. The program is extremely competitive, however, and funding availability depends on the legislature's fiscal year budget decisions. In previous years, communities have received grants for such activities as economic development and affordable housing plans, town management studies, designing and instituting capital improvements plans, visioning projects, feasibility studies for regional delivery of public safety services, and fiscal impact analyses.

DHCD is also the state's primary affordable housing subsidy provider. The agency administers the state's Community Development Block Grant (CDBG) and HOME Program allocations from the federal Department of Housing and Urban Development (HUD). It also awards state-funded grants for affordable housing development and preservation, and for the creation of housing cooperatives. If West Newbury were to decommission the John C. Page School and replace it with a new, larger elementary school, the Town may want to seek feasibility study and construction funds from DHCD in order to convert the school to elderly housing, which has been done in many communities across the state.

Key Findings and Recommendations

1. Increase the amount of land zoned for non-residential uses, ensuring location

suitability so that traffic impacts can be managed to the maximum extent practical.

2. Adopt appropriate architectural design, site plan and mitigation standards to ensure that commercial, office and research/development projects do not detract from the Town's rural character. (See also, Economic Development chapter.)
3. Adopt planned unit development bylaw to (a) alter the mix of residential use types in West Newbury and reduce school/municipal service costs, (b) conserve open space without adding purchase cost to Town's debt burden, and (c) create opportunities for population and household diversity.
4. Establish a consensus-based process for nominating, ranking and scheduling major capital projects (including land acquisition) that require long-term debt financing. Involve all town boards, committees and staff in annual project list reviews and modifications in order to broaden support for a unified capital improvements plan and reduce town meeting conflicts.⁶
5. At present, West Newbury's fiscal policy process is driven by the Finance Department working in conjunction with the Board of Selectmen. While from a management standpoint existing fiscal goals and policies serve the Town very well, West Newbury officials ought to consider whether the policy setting

⁶ Several towns use an "Interpretive Structural Modeling" (ISM) format for this purpose, borrowing from successful experiences in larger communities like Winchester, Watertown and Plymouth. DHCD has information about the original Massachusetts ISM project in Watertown (Municipal Incentive Grant Program, 1985).

process is as responsive to political realities as it needs to be. In a tight or otherwise difficult fiscal year, policies that lack broad political support can be ignored or overruled no matter how sound or reasonable they may be to financial managers, auditors or municipal credit rating agencies.

- a) Prior to the beginning of each annual "budget cycle," that is, before town departments begin preparing their next fiscal year's budget requests, the Finance Director and Board of Selectmen should sponsor a public meeting to discuss and formally adopt fiscal goals and policies. The purpose of the meeting would be to encourage public participation in the process by which operating and management policies are established. Although this approach supplies no guarantees against town meeting decisions that conflict with executive policies, it does afford town staff, other boards and commissions and residents an opportunity to learn the rationale for and implications of fiscal policies that affect the budget process. Ideally, the process would also increase the potential for public "buy-in" and reduce or contain budget disputes on town meeting floor.
- b) West Newbury should consider setting revenue *source* goals as a guide to measuring the effectiveness of growth management changes made as a result of (a) the Comprehensive Plan or (b) other land use decisions carried out by the Town. For example, the Town may want to establish a baseline for the share of revenues contributed from the three sources over which it has the greatest control: property taxes, local receipts, and other funds.
- c) If West Newbury adopts the Comprehensive Plan's recommended land use changes that would make more land available for non-

residential development, the Town should establish a goal for the percentage share of property tax revenues derived from residential, commercial and industrial uses and monitor its progress over time.

- d) Working with the regional school district and town finance officials, West Newbury should adopt a formal policy that sets a fixed percentage of the annual operating budget for education costs. West Newbury's K-12 public schools fall under the regional school district's jurisdiction and all three communities are asked to vote on a budget proposal prepared and submitted by the district. For budget planning and policy purposes, however, the Town should consider establishing a "standing percentage" that it will commit for school and municipal operating expenditures, capital outlays and total debt service in any given year.

Whether this seems controversial or potentially unworkable, it *can* work and would help to achieve long-term stability in the distribution of available revenues. As West Newbury knows, communities that have struggled with rising education costs frequently curbed municipal-side (non-school) spending in order to live within their means. In many instances, cities and towns have passed overrides for school spending increases while the base of support for public works, public safety and other municipal department budgets eroded, as it did for routine maintenance of public facilities. Despite West Newbury's tendency to support override requests in the past, resources *are* finite. To set fixed budget standards for all departments (including what the Town will allocate for regional school costs) communicates an important message: reasonable budgetary "constants" can be established and will be applied to

all agencies over time, subject to reviews or adjustments at specified intervals, e.g., every five years.

The issue is not only stability in the budget process, but also equitable public policy. Under a fixed percentage of revenues system, the following outcomes occur. In a "good year," such as one with more new growth or state aid than originally projected, every department (or budget cost center) benefits. In a strained fiscal year, every department shares responsibility for absorbing budget request reductions at a level necessary to maintain the same revenue distribution formal. Although this approach may seem to offer less flexibility than budgeting "according to need," it institutes stability and can be reasoned on the basis of both historic cost averages and fairness. Clearly, however, such a policy requires significant public input and consensus among local and regional school authorities; otherwise, it will not endure from one town meeting to the next.

Fiscal Table 1
ASSESSED VALUE GROWTH IN WEST NEWBURY, FY89-97⁷

	(1)	(2)	(3)	(4)	(5)	COLUMN #		
	RESIDENTIAL	OPEN SPACE	COMMERCIAL	INDUSTRIAL	PERSONAL PROPERTY	TOTAL	1-2 % TOT	3-5 % TOT
FY								
89	\$294,866,348.00	\$505,080.00	\$7,116,543.00	\$1,396,420.00	\$4,827,407.00	\$308,711,798.00	95.7	4.3
90	\$295,529,836.00	\$651,600.00	\$6,834,669.00	\$1,396,420.00	\$4,942,132.00	\$309,354,657.00	95.7	4.3
91	\$300,929,321.00	\$258,570.00	\$7,058,599.00	\$1,396,420.00	\$5,679,088.00	\$315,321,998.00	95.5	4.5
92	\$243,844,197.00	\$188,700.00	\$6,171,603.00	\$954,400.00	\$5,734,040.00	\$256,892,940.00	95.0	5.0
93	\$249,447,038.00	\$137,700.00	\$6,072,962.00	\$959,500.00	\$5,745,400.00	\$262,362,600.00	95.1	4.9
94	\$256,608,606.00	\$94,700.00	\$5,882,714.00	\$959,500.00	\$5,761,430.00	\$269,306,950.00	95.3	4.7
95	\$288,673,087.00	\$66,000.00	\$6,129,413.00	\$994,100.00	\$5,691,490.00	\$301,554,090.00	95.8	4.2
96	\$295,269,436.00	\$66,000.00	\$6,116,864.00	\$1,009,100.00	\$5,746,930.00	\$308,208,330.00	95.8	4.2
97	\$304,982,009.00	\$66,000.00	\$6,296,691.00	\$1,009,100.00	\$5,944,080.00	\$318,297,880.00	95.8	4.2
98	\$352,023,232.00	\$88,100.00	\$6,878,568.00	\$1,106,300.00	\$5,806,180.00	\$365,902,380.00	96.2	3.8
99	\$370,761,296.00	\$81,500.00	\$6,902,904.00	\$1,159,400.00	\$6,576,760.00	\$385,481,860.00	96.2	3.8

⁷ Unless otherwise noted, all data in this chapter were obtained from the Massachusetts Department of Revenue (DOR), which maintains an extensive database on cities and towns. See DOR, Division of Local Services, Municipal Data Bank: <http://www.state.ma.us/dor/dls>

Fiscal Table 2: Revenue Growth by Sources of Revenue, 1981-97⁸

	(1) TAX LEVY	(2) STATE AID	(3) LOCAL RECEIPTS	(4) ALL OTHER	TOTAL REVENUE	-----Pct of total-----			
						(1) %	(2) %	(3) %	(4) %
81	\$1,726,696.00	\$401,105.00	\$208,986.00	\$260,433.00	\$2,597,220.00	66.5	15.4	8.0	10.0
82	\$1,597,624.00	\$482,419.00	\$124,606.00	\$302,301.00	\$2,506,950.00	63.7	19.2	5.0	12.1
83	\$1,678,392.00	\$487,867.00	\$166,782.00	\$327,549.00	\$2,660,590.00	63.1	18.3	6.3	12.3
84	\$1,745,226.00	\$451,615.00	\$213,367.00	\$335,783.00	\$2,745,991.00	63.6	16.4	7.8	12.2
85	\$1,997,600.00	\$507,264.00	\$252,836.00	\$408,760.00	\$3,166,460.00	63.1	16.0	8.0	12.9
86	\$2,167,037.00	\$636,921.00	\$398,140.00	\$460,746.00	\$3,662,844.00	59.2	17.4	10.9	12.6
87	\$2,350,963.00	\$808,187.00	\$508,493.00	\$724,051.00	\$4,391,694.00	53.5	18.4	11.6	16.5
88	\$2,601,731.00	\$855,536.00	\$673,897.00	\$637,889.00	\$4,769,053.00	54.6	17.9	14.1	13.4
89	\$2,975,982.00	\$875,102.00	\$711,329.00	\$322,323.00	\$4,884,736.00	60.9	17.9	14.6	6.60
90	\$3,402,901.00	\$742,244.00	\$666,292.00	\$627,333.00	\$5,438,770.00	62.6	13.6	12.3	11.5
91	\$3,556,832.00	\$707,791.00	\$765,443.00	\$217,161.00	\$5,247,227.00	67.8	13.5	14.6	4.1
92	\$3,709,534.00	\$668,797.00	\$728,675.00	\$191,593.00	\$5,298,599.00	70.0	12.6	13.8	3.6
93	\$3,938,063.00	\$590,407.00	\$675,865.00	\$312,038.00	\$5,516,373.00	71.4	10.7	12.3	5.7
94	\$4,236,198.00	\$460,853.00	\$746,047.00	\$350,877.00	\$5,793,975.00	73.1	8.0	12.9	6.1
95	\$4,610,762.00	\$457,548.00	\$740,528.00	\$252,712.00	\$6,061,550.00	76.1	7.5	12.2	4.2
96	\$4,552,237.00	\$475,445.00	\$868,357.00	\$720,224.00	\$6,616,263.00	68.8	7.2	13.1	10.9
97	\$4,758,553.00	\$474,179.00	\$903,777.00	\$807,770.00	\$6,944,279.00	68.5	6.8	13.0	11.6

⁸ Note: all statistical comparisons between West Newbury and other communities are based on Fiscal Year 1997, which is the most recent year for which DOR has complete financial data on most or all of the 351 cities and towns in the Commonwealth.

Fiscal Table 3: Comparison of West Newbury and Statewide Per Capita Spending

	General Fund Expenditures (in 000's)		Percent Change FY96-FY97	Expenditures per Capita				
	FY96 Total	FY97 Total		Total	Education	Police	Fire	Public Works
WEST NEWBURY	4,881	5,213	6.8%	1,347	\$652.43	\$92.96	\$29.09	\$139.48
TOTAL STATE	9,967,347	10,334,675	3.7%	1,696	\$805.35	\$130.48	\$99.30	\$125.57

Fiscal Table 4: How West Newbury Stands in Relation to "Comparable" Communities

		FY9	1996	1989*	1996**	Land Public	Road	OPERATING	Next	FY97	May		
		KOC	County	School	Population	Income	EQV	Per Square	Milage	BUDGET FY98	Certification	Total	Bond
MUNICIPALITY		Code	Structure			Per capita	Capita	Miles	1996	(* = FY97)	Year	Parcels	Rating
ASHBURNHAM	6	365	4	4	5,471	15,595	46,941	39.15	71.03	7,236,711	96	3,598	
ASHBY	6	360	4	4	2,934	16,611	44,861	23.66	52.13	3,053,863	97	1,511	
BECKET	6	353	4	4	1,511	12,942	137,363	46.92	56.96	2,927,033	98	4,129	
BERKLEY	6	354	3	5,236	14,639	56,537	15.56	43.04	7,371,438		98	2,416	
BLANDFORD	6	358	4	1,137	15,122	73,022	52.7	62.39	1,410,830		98	969	
BRIMFIELD	6	358	3	3,093	13,563	56,688	35.37	64.27	5,389,818		96	2,166	
CHARLEMONT	6	357	4	1,256	13,451	48,996	26.05	42.53	1,704,249		96	876	
CHARLTON	6	365	4	10,073	15,128	53,204	42.86	118.4	10,172,284		96	5,360	
CHESTERFIELD	6	359	4	1,121	14,297	56,052	31.01	53.33	1,550,952		98	795	
DOUGLAS	6	365	1	6,145	14,660	55,164	36.93	69.96	12,287,330		96	3,524	A
FLORIDA	6	353	3	733	11,345	76,308	24.55	39.69	1,709,831		98	650	
GOSHEN	6	359	4	851	15,450	74,431	17.31	26.04	1,321,284		97	928	
GRANVILLE	6	358	3	1,404	15,945	69,492	43.2	64.62	2,904,155		98	888	
HALIFAX	6	363	3	6,844	15,233	49,003	16.15	41.39	11,158,708		98	2,772	A
HANCOCK	6	353	3	589	17,075	150,562	35.55	22.88	1,053,738		98	920	
HEATH	6	357	4	741	11,600	62,901	24.95	52.14	1,658,905		96	940	
HOLLAND	6	358	3	2,105	14,471	69,778	12.35	34.96	4,722,799		98	2,235	
HUBBARDSTON	6	365	4	3,373	15,575	54,434	40.34	80.54	3,747,387		98	2,205	
HUNTINGTON	6	359	4	2,126	13,536	45,145	26.24	37.07	2,167,746		98	1,329	

Fiscal Table 4: How West Newbury Stands in Relation to "Comparable" Communities

		FY9	1996	1989*	1996**	Land Public Road	OPERATING	Next	FY97	May		
	KOC County	School Structure	Population	Income	EQV Per Square	Milage	BUDGET FY98	Certification	Total	Bond		
MUNICIPALITY	Code			Per capita	Capita	Miles	(*=FY97)	Year	Parcels	Rating		
LAKEVILLE	6	363	3	8,596	16,189	71,513	29.54	55.16	12,289,645	96	4,347	A
LANESBOROUGH	6	353	3	3,053	16,688	77,354	28.96	43.39	5,295,549	96	1,923	
LEYDEN	6	357	4	708	13,678	55,696	18.09	35.46	858,381	96	604	
MIDDLEFIELD	6	359	4	448	14,014	70,291	24.13	38.35	629,025	96	518	
MOUNT WASHINGTON	6	353	4	132	23,794	253,358	22.22	17.6	336,079	98	256	
NEW SALEM	6	357	4	825	14,762	62,383	45.04	38.03	1,227,798	97	691	
NEWBURY	6	356	4	5,985	19,917	84,712	23.97	51.24	9,031,893	98	3,134	A1
OAKHAM	6	365	4	1,642	15,162	54,474	20.99	43.48	1,632,346	96	830	
OTIS	6	353	4	1,071	13,398	256,321	35.77	42.36	2,360,401	98	2,949	
PEPPERELL	6	360	4	10,606	17,374	51,198	22.79	73.33	14,618,015	96	3,912	A2
PERU	6	353	4	753	12,478	49,178	26.05	32.91	975,634	96	793	
PETERSHAM	6	365	3	1,156	17,542	68,796	54.27	62.28	1,815,924	98	770	
PHILLIPSTON	6	365	4	1,613	13,216	47,303	23.7	44.41	1,523,090	98	1,229	
PLAINFIELD	6	359	4	609	14,099	76,096	21.29	47.85	1,062,736	97	715	
REHOBOTH	6	354	4	9,354	17,642	68,564	47.25	116.17	10,208,226	98	4,318	A
ROYALSTON	6	365	4	1,203	12,421	50,041	41.99	70.04	978,744	96	1,123	
RUTLAND	6	365	4	5,186	16,661	48,484	35.42	63.73	6,939,182	96	3,001	
SAVOY	6	353	3	687	13,892	49,724	36.03	49.24	1,089,971	98	568	
SOUTHAMPTON	6	359	3	4,853	17,125	59,369	28.58	63.53	7,582,685	96	2,413	

Fiscal Table 4: How West Newbury Stands in Relation to "Comparable" Communities

		FY9	1996	1989*	1996**	Land	Public	Road	OPERATING	Next	FY97	May		
	KOC	County	School	Population	Income	EQV	Per	Square	Milage	BUDGET	FY98	Certification	Total	Bond
MUNICIPALITY		Code	Structure		Per capita	Capita	Miles		1996	(* = FY97)	Year	Parcels	Rating	
SUTTON	6	365	1	7,340	16,937	65,100	32.48	87.21	12,388,325		97	3,907	A	
TOLLAND	6	358	4	297	20,881	303,455	31.93	40.15	548,914		97	1,002		
TOWNSEND	6	360	4	8,997	15,694	46,213	32.66	81.77	9,696,329		97	3,724	A2	
WALES	6	358	3	1,566	13,337	48,954	16.21	23.67	2,567,673		96	1,074		
WARWICK	6	357	4	766	12,181	51,232	37.19	56.37	427,146		98	685		
WASHINGTON	6	353	4	625	15,915	62,471	38.2	42.06	771,482		98	511		
WEST NEWBURY	6	356	4	3,871	20,450	88,078	13.9	40.98	7,254,974		98	1,612	A2	
WORTHINGTON	6	359	4	1,210	17,745	66,267	32.04	58.1	1,682,568		96	812		

*1989 Income Per Capita: U.S. Census Bureau

** 1996 Equalized Valuation Per Capita: Mass. Department of Revenue

All data obtained from Mass. Department of Revenue Municipal Data Bank

Fiscal Table 5: General Fund Expenditures in West Newbury, 1990-97

FY	Population	GEN GOV'T	POLICE	FIRE	OTH PUB SAFETY	EDUCATION	HIGHWAYS	OTH PUB WORKS
1990	3,421	\$250,435.00	\$246,960.00	\$81,018.00	\$65,588.00	\$2,365,585.00	\$203,776.00	\$203,590.00
1991	3,421	\$263,350.00	\$252,250.00	\$85,259.00	\$63,297.00	\$2,546,494.00	\$130,259.00	\$211,416.00
1992	3,527	\$282,435.00	\$266,312.00	\$77,819.00	\$60,893.00	\$2,495,717.00	\$131,060.00	\$198,037.00
1993	3,648	\$293,657.00	\$286,799.00	\$84,443.00	\$69,159.00	\$2,630,924.00	\$223,724.00	\$258,224.00
1994	3,877	\$312,255.00	\$326,359.00	\$86,427.00	\$83,679.00	\$2,297,322.00	\$216,881.00	\$275,086.00
1995	3,930	\$353,912.00	\$328,527.00	\$90,948.00	\$161,489.00	\$2,163,438.00	\$204,564.00	\$276,288.00
1996	3,871 ⁹	\$407,087.00	\$361,824.00	\$112,321.00	\$195,785.00	\$2,291,559.00	\$271,104.00	\$260,121.00
1997	3,871	\$465,033.00	\$359,829.00	\$112,590.00	\$215,150.00	\$2,525,564.00	\$242,315.00	\$297,622.00

FY	HEALTH/ WELFARE	CULTURE & REC.	DEBT SERVICE	FIXED COSTS	INTER-GOVT	OTHER	FY TOTAL EXP.
1990	\$33,188.00	\$85,599.00	\$748,689.00	\$299,224.00	\$31,994.00	\$0.00	\$4,615,646.00
1991	\$34,376.00	\$85,607.00	\$728,888.00	\$322,131.00	\$34,275.00	\$0.00	\$4,757,602.00
1992	\$34,443.00	\$87,289.00	\$698,791.00	\$340,499.00	\$37,424.00	\$0.00	\$4,710,719.00
1993	\$35,909.00	\$93,046.00	\$634,947.00	\$321,890.00	\$37,772.00	\$0.00	\$4,970,494.00
1994	\$41,600.00	\$102,141.00	\$627,549.00	\$316,158.00	\$34,547.00	\$0.00	\$4,720,004.00
1995	\$47,541.00	\$123,830.00	\$527,641.00	\$237,418.00	\$30,057.00	\$0.00	\$4,545,653.00
1996	\$63,115.00	\$148,226.00	\$509,827.00	\$212,816.00	\$37,361.00	\$9,500.00	\$4,880,646.00
1997	\$60,520.00	\$159,766.00	\$470,971.00	\$275,619.00	\$28,502.00	\$0.00	\$5,213,481.00

⁹ Population data for 1996 and 1997 are based on the state's update of the 1990 U.S. Census.

From the very beginning of the Comprehensive Plan's development, mechanisms for organizing and synthesizing the planning elements were built into the overall process. In effect, the Comprehensive Plan culminated in an integrated document by design, meaning that taken together, the recommendations made for each element were tested constantly against a single, unifying standard: whether they fit or conflicted with West Newbury's interest in preserving what remains of its rural-agricultural origins.

"Integration" is a crucial part of the master planning protocol because without it,

communities risk the possibility of producing an implementation plan that works at cross-purposes. West Newbury's Comprehensive Plan has been integrated with the following concepts in mind:

1. **THEMATIC CONSISTENCY:** designing a growth management methodology that makes the protection of semi-rural character the organizing principle for the entire plan.
2. **COHERENT IMPLEMENTATION MEASURES:** selecting and sequencing action steps to address "first things first," that is, making the implementation program respond to the most important local priorities and create a foundation for additional steps in the future.
3. **FEASIBILITY:** placing emphasis on reasonably attainable action steps for the community, considering its management capacity and other local needs.

4. **MULTIPLE BENEFITS:** shaping an overall development plan that can preserve West Newbury's sense of place and at the same time, address other concerns in the community.

In addition to applying these tests to each element as the plan developed incrementally, the Comprehensive Plan Committee held two integration workshops (February and June 1999). The workshops

served as an additional "insurance policy" against obvious or underlying inconsistencies between specific implementation strategies that were under consideration and the development goals and policies outlined in the Executive Summary. The Committee selected and prioritized action steps

thereby creating a proposed five-year plan with the understanding that other actions would be reconsidered at a later point.

The West Newbury Comprehensive Plan Committee has tried to ensure the success of this Plan by framing a clear action strategy that incorporates the most important recommendations for each element. The process that was used to discuss, rank and organize these recommendations into a multi-year implementation schedule also served as the mechanism for guaranteeing a unified approach.

The timeframes assigned to "action steps" in the implementation schedule reflect these criteria:

- The CPC's judgment about the relative priority of each master plan recommendation
- The importance of carrying out certain steps in planned phases.

Implementation Plan

An Integrated Approach to Achieving West Newbury's Comprehensive Plan Goals

“Relative priority” was determined by a straightforward scoring procedure in which CPC members ranked each element recommendation on a scale of 1-5, where 1 = highest priority, and then shared and discussed their scores in order to create a composite ranked list. The composite list was established by tallying CPC member scores and computing an average score for each recommendation. For the most part, the highest scoring recommendations became the first action steps in the schedule.

The following pages summarize all of the major recommendations made in the Comprehensive Plan. Those to be implemented first are identified with dates in the "Timeframe" column; others that the Committee chose to defer until a later point are listed as "TBA" in the same column. For brevity, the chart refers to various town departments and commissions by initials and applies the same practice to a column that cross-references the recommendations to other parts of the Comprehensive Plan. The

abbreviations include:

PB = Planning Board
CULC = Cultural Council
CC = Conservation Commission
BOS = Board of Selectmen
OSC = Open Space Committee
PRSC = Pent. Reg. School Comm.
BOH = Board of Health
LU = Land Use
WD = Water Department
N/CR = Natural/Cult. Resources
FD = Finance Department
OS = Open Space
HD = Highway Department
H = Housing
HDC = Historic District
ED = Economic Development
Commission
CF/S = Community Facilities & Services
HC = Historical Commission
T/C = Traffic & Circulation
F = Fiscal

West Newbury Comprehensive Plan Implementation: Actions and Strategies

Element/Recommendation	Action	Also Addresses These Element(s)	Responsible Department, Office, Committee	Year/ Timeline	Anticipated Cost (Based on 1999 estimate)
LAND USE					
Implement measures to enhance the Town's ability to preserve open space	Complete usable inventory of all Chapter 61, 61A and 61B properties in West Newbury Seek public and private resources to finance open space acquisitions	OS, N/CR, OS, CF/S	OSC, CC, PB OSC, PB, FD	2000 2000	Est. Cost of YR 2000 major zoning amendments & subdivision rules, \$30,000-\$40,000
Amendments to Subdivision Rules & Regulations	Establish comprehensive design standards for rural roadways and sidewalks/pedestrian paths: regulate paved widths, limit overall site disturbance, protect trees	N/CR, OS, T/C	PB, HD	2000	
Amendments to the Zoning Bylaw	Establish a new use, "Flexible Development," to provide flexibility for lot size, setback, street widths and frontage in small (<10 lots) subdivisions, in exchange for usable open space, view preservation or other rural character "trade offs." In effect, a "small cluster" bylaw. Apply to all residential districts.	N/CR, H	PB		
<ul style="list-style-type: none"> New Use Map Amendments, Overlay District, New Uses 	Amend Zoning Map and adopt zoning regulations to establish Rural-Agricultural Overlay District, with two new uses: Rural-Open Space Development (major, public open space preservation) and Rural Housing Opportunity (mix of housing types and scale, with public open space preservation). District to encompass priority open space areas in West Newbury, identified by Town.	N/CR, OS, H	PB	2000	
<ul style="list-style-type: none"> Assisted Living Facilities (New Use) 	Establish a new use, Assisted Living Facilities, in areas with high open space value; purpose is to increase housing options for elders and create revenue source for Town. Target for all or portion of Rural-Agricultural	ED, H, F	PB, FD	2000	

West Newbury Comprehensive Plan Implementation: Actions and Strategies

Element/Recommendation	Action	Also Addresses These Element(s)	Responsible Department, Office, Committee	Year/ Timeline	Anticipated Cost (Based on 1999 estimate)
	Overlay District.				
<ul style="list-style-type: none"> Site Plan Review 	Bring site plan standards and review process in line with prevailing practices in other communities.	ED, T/C	PB	2000	
<ul style="list-style-type: none"> Estate Lots 	In limited number of locations, esp. outside of areas with no existing or planned extensions for public water, explore desirability of increasing lot size and create "estate lot" dimensional requirements. Requires Zoning Map amendments, modified use and dimensional regulations.	H, F	PB	2000	
<ul style="list-style-type: none"> Floor Area Ratio and Lot Coverage Requirements 	Control the amount of development in non-residential areas and teardown/replacement in residential zones.	N/CR, H,	PB	2000	
<ul style="list-style-type: none"> Lot controls 	Write and adopt regulations to eliminate "pork chop" lots		PB	2000	
<ul style="list-style-type: none"> Map Amendments, New District, New Uses 	Establish an Office/Research Park District near the Scotland Rd/I-95 Interchange; amend zoning map, write rules and regulations for new district, including site plan requirements, architectural review process, open space preservation and buffers, etc.	ED, F	PB, FD	2001	
<ul style="list-style-type: none"> Map and Bylaw Amendments 	Establish "Town Center District" by increasing the depth of the existing business district; set design standards and site development guidelines, promote parking and pedestrian safety.	ED, T/C	PB	2002	
<ul style="list-style-type: none"> Map and Bylaw Amendments 	Enact bylaws to protect view sheds and view corridors	N/CR	PB	2000	
<ul style="list-style-type: none"> Scenic Upland Bylaw 	Explore the usefulness and legal permissibility of a scenic upland bylaw; write regulations and adopt the	N/CR	PB, Town Counsel	2000	

West Newbury Comprehensive Plan Implementation: Actions and Strategies

Element/Recommendation	Action	Also Addresses These Element(s)	Responsible Department, Office, Committee	Year/ Timeline	Anticipated Cost (Based on 1999 estimate)
	scenic upland bylaw; write regulations and adopt the necessary zoning amendments.		Counsel; consult Atty. Gen.		
Protect historically significant structures	Adopt a demolition delay ordinance	N/CR, H			
Enhance the development potential of the Town Center area	Appropriate funds and commission a feasibility study for a municipally operated package treatment facility to serve properties in the Town Center.	ED, CF/S			\$50,000-\$65,000
NATURAL/CULTURAL RESOURCES					
Comprehensive Community Protection Map	Develop and create a comprehensive Community Protection Map (also called Conservation and Development Map) to guide decisions by land use and permitting officials, assist natural and cultural resource interests groups, promote public education and awareness. Requires field inventories.	LU, OS	PB, CC, OSC, HDC/HC, BOH, CULC	TBA	
Increase local authority to protect wetland and water resource areas, and historic resources inside buffer zones	Adopt a local wetlands bylaw	LU, OS	CC		
	Complete wetlands mapping and vernal pool certifications	LU, OS	CC		
	Identify and map zones of contribution to identified future well sites and bring them under the Aquifer Protection Bylaw by amending the Zoning Map.	CF/S, F	WD		

West Newbury Comprehensive Plan Implementation: Actions and Strategies

Element/Recommendation	Action	Also Addresses These Element(s)	Responsible Department, Office, Committee	Year/ Timeline	Anticipated Cost (Based on 1999 estimate)
Preserve appearance and character of rural roadways and maintain Town's natural features	Enforce Shade Tree Act Designate appropriate streets as scenic roads under the state Scenic Road Act	LU LU, N/CR	PB, HD PB	Ongoing TBA	
Manage and maintain publicly owned lands	Develop a comprehensive public land management plan to include all property owned by Town, Conservation Commission, other local agencies	OS, CF/S	CC, PB, BOS, OSC	TBA	
Increase public interest in and awareness of historic/cultural resources	Apply for Survey & Planning Grants from Mass. Historical Commission to update existing historic property inventories and conduct new ones.	LU	PB, HC	TBA	
	Work with PRSD to involve school children in local history appreciation projects	LU	HC, PRSC PB, CULC, BOS	TBA TBA	
	Update and maintain current lists of community organizations				
Synchronize design standards for Town road projects and new developments	Establish reconstruction/repair guidelines for Town roads that complement rural roadway protection goals of the Comprehensive Plan	LU	PB, HD, BOS	TBA	
OPEN SPACE					
	Identify and build public support for acquisition of priority open space, focusing on sites at the greatest risk of near-term development	LU, N/CR	OSC, CC, PB	Ongoing	

West Newbury Comprehensive Plan Implementation: Actions and Strategies

Element/Recommendation	Action	Also Addresses These Element(s)	Responsible Department, Office, Committee	Year/ Timeline	Anticipated Cost (Based on 1999 estimate)
Implement priority recommendations of the Town's Open Space & Recreation Plan	<p>Work with private property owners to secure public access easements or land donations to connect existing trails</p> <p>Increase and sustain annual appropriations to Conservation Fund and Stabilization Fund so that Town has adequate reserves for future land acquisitions</p>	<p>LU, N/CR, CF/S</p> <p>LU, N/CR, CF/S, F</p>	<p>CC, OSC, PB</p> <p>CC, BOS</p>	<p>Ongoing</p> <p>TBA</p>	
HOUSING					
Zoning Bylaw Amendments	<p>Establish an "independent elderly housing" use to encourage production of small homes for elderly occupancy.</p> <p>Increase flexibility for creating accessory apartments in existing residential buildings</p>	<p>LU, F</p> <p>LU, N/CR</p>	<p>PB</p> <p>PB</p>	<p>2001</p> <p>TBA</p>	
Encourage re-use of large, older structures for affordable homeownership units	<p>Identify appropriate buildings suitable for rehabilitation/ renovation and conversion to 2- or 3-unit structures, thereby avoiding new construction</p> <p>Obtain state and federal funds to defray acquisition and rehabilitation costs</p> <p>Utilize other state resources to qualify created units as affordable housing that will count toward West Newbury's 10% "fair share"</p>	<p>LU, N/CR, F</p> <p>F</p>	<p>PB, FD</p> <p>FD, PB, BOS</p> <p>PB, BOS</p>	<p>TBA</p> <p>TBA</p> <p>TBA</p>	
Encourage home occupations	Simplify and expand provisions for home occupations in all residential districts	LU, ED, T/C	PB	2000	

West Newbury Comprehensive Plan Implementation: Actions and Strategies

Element/Recommendation	Action	Also Addresses These Element(s)	Responsible Department, Office, Committee	Year/ Timeline	Anticipated Cost (Based on 1999 estimate)
ECONOMIC DEVELOPMENT					
Increase land available for non-residential development in order to provide additional revenue for the Town and control increases in community service costs; see also, LAND USE	Establish an Office/Research Park District near the Scotland Rd./I-95 Interchange; amend zoning map, write rules and regulations for new district, including site plan requirements, architectural review process, open space preservation and buffers, etc.	ED, F	PB, FD	2001	
Encourage farmland preservation and agriculture/horticulture as a vital component of the Town's economy	Explore the possibility of establishing a marketing cooperative for local agricultural/horticultural products Amend Zoning Bylaw, as needed, to allow "value added" production uses (business) on land used for active farming Liberalize the sign bylaw	N/CR, OSC N/CR, OSC, F, LU	PB, OSC PB, OSC, FD PB	TBA TBA TBA	
COMMUNITY FACILITIES & SERVICES					
Improve Town's capacity to supply its own source of drinking water, independent of City of Newburyport	Appropriate sufficient funds to complete all permitting requirements and acquire land for two new water supplies, using Town and Water Department resources as necessary to achieve most rapid results.	LU, H, CF/S, F	WD, PB, BOS	2001	\$75,000-\$100,000 development; acquisition cost unknown, subject to appraisals
Put space in reserve for future elementary school	Working in conjunction with Regional School District, identify and acquire a 40-50 acre site for future elementary school	LU, OS, F	BOS, OSC, PB, PRSC,	2002	Subject to appraisals

West Newbury Comprehensive Plan Implementation: Actions and Strategies

Element/Recommendation	Action	Also Addresses These Element(s)	Responsible Department, Office, Committee	Year/ Timeline	Anticipated Cost (Based on 1999 estimate)
Improve police and fire department facilities	Select site for police department, fund necessary design and construction work	LU, F	Public Safety Comm.	2000	\$75,000+/- design; acquisition cost unknown
	Fund necessary design and construction work to improve Central Fire Station	LU, F	Public Safety Comm.	2000	Estimate being developed
Establish complete, working inventory of all Town-owned properties	Conduct site-by-site inventory of all municipal properties by size, uses, condition, prioritized maintenance and renovation needs and estimated cost of improvements, fair market value and replacement cost	LU, F	BOS, PB, FD	TBA	
Plan for future renovations or modifications to public library	Update the needs assessment for the GAR Memorial Library	N/CR	Lib. Comm.	TBA	\$15,000-\$20,000
TRAFFIC & CIRCULATION					
Improve quality of available data and analysis of all public ways in West Newbury; prevent unplanned changes in character of rural streets.	Conduct a street classification study	LU, T/C	PB, HD	2000	\$40,000
	Make appropriate zoning amendments to use street study as a basis for considering traffic & circulation impacts during project review	LU	PB	TBA	\$60-\$75,000
	Commission a Route 113 Corridor Study	N/CR, LU	PB	TBA	
Plan ahead for ways to contain regional traffic burdens on West Newbury streets	Seek state assistance to conduct a Rte. 1-495/I-95 Interchange study	LU, T/C	BOS, PB	2003-2005	State funds
Improve town-wide circulation pattern	Discourage cul-de-sac or dead-end streets; wherever possible, require new developments to interconnect	LU, N/CR, CF/S	PB		

West Newbury Comprehensive Plan Implementation: Actions and Strategies

Element/Recommendation	Action	Also Addresses These Element(s)	Responsible Department, Office, Committee	Year/ Timeline	Anticipated Cost (Based on 1999 estimate)
	existing local streets or require rights-of-way so the Town can create connections in the future.				
FISCAL POLICY					
Synchronize land use and fiscal policies while protecting West Newbury's rural-agricultural heritage.	Adopt Office/Research Park District, Assisted Living Facilities as a new use with special development regulations and design guidelines, and diversify housing stock to reduce the number of single-family homes and their associated service costs.	LU, ED, CF/S, H	PB	See above	
Improve participation in the Town's capital planning process	Design, develop and implement a participatory process for involving Town departments, the major policy boards and committees and Finance Department in (a) identifying and ranking capital needs, (b) approving a capital plan to present to each year's town meeting.	CF/S, F	FD, CPC, BOS	TBA	\$10,000
Increase public awareness of and support for Town's fiscal policies	Hold a regular "pre-budget process" public meeting on Town's fiscal policies in order to seek comments on and build support for prudent fiscal practices.	CF/S	FD, BOS	TBA	

Notes to Implementation Plan

- Items with no entry in the "Anticipated Cost" column can be accomplished primarily by volunteer town boards working with existing Town staff, or they are not scheduled to occur in the near term; or the scope of work required to accomplish the task has not been established.
- The identification of responsible departments, offices or committees does not imply that other organizations and officials lack a role in the process. West Newbury may decide, based on its own practices and traditions, that individuals or groups other than those listed here are more appropriate for the task at hand.

Appendix A

A build-out analysis is important for any master plan because it provides an estimate of the development potential that is rooted in the interplay between existing land use regulations and land availability. The resulting development projections can be translated into fiscal, community facility, traffic and land use impacts, thereby influencing a wide range of recommendations and actions. In many communities, a buildout analysis has both a commercial and residential component but in West Newbury's case, commercial development is essentially nonexistent. Thus, the Comprehensive Plan's build-out analysis is a projection of single-family residential development.

In addition to estimating the *magnitude* of growth, a build-out analysis also projects *rate* of growth, i.e., the time required to reach the state of build-out. Both magnitude and rate come together though an analysis of historic and current development trends at the local and regional levels. We believe that West Newbury will attain essential build-out by 2020 or a few years thereafter. Our projection assumes that the increase in rate of growth by decade since 1950 will continue. Given cycles in the regional economy and individual project-related issues, the actual number of new homes added in any one year may fluctuate between 20 and 80, but the average over the next 20 to 25 years should approximate 50 to 60 housing units annually.

The traditional build-out methodology

The Comprehensive Plan's build-out estimate has had the advantage of Geographic Information System technology (GIS). The existence of a digital map prepared by the Merrimack Valley Regional Planning Commission (MVRPC) allowed us to integrate the Town's Fiscal Year 1997 property tax records with the town-wide assessor's map. Combining the assessor's database with MVRPC's base map allowed for a fine-grained build-out estimate. An example of traditional and our technique will better illustrate this point.

A 1961 land use study estimated that West Newbury's build-out would result in 6,621 single-family dwellings; our estimate is 2,500. The earlier study, which reflects the traditional approach to estimating a community's build-out potential, computed the total undeveloped land area in West Newbury and divided the area by the Town's allowed lot size to arrive at a build-out estimate. The study made no assumptions about public interventions, nor did it take into account issues of lot shape, size or location. This commonly used methodology can supply a fairly accurate measure of development potential, particularly for small areas. However, when applied to an entire town the method inherently tends to overestimate.

Specifically, the estimated developable land area in the traditional approach is an *aggregate* number. Parcel shape, size, and location issues are not taken into consideration. For example, two three-acre

parcels in a two-acre zoning district would total six raw acres. When this "total acreage" is divided by two (i.e., two-acre lots), it yields three house lots. This apparent development capacity is misleading, because the total acreage will yield three lots only if the two original parcels are situated so perfectly as to facilitate a subdivision that yields one new jointly held house lot. While this scenario is possible, it is unlikely -- certainly unlikely to any great degree. Simply assembling the available acreage without reference to current shape, size, or location almost always creates a high estimate because it "double counts" or anticipates acreage that cannot be included logically. Further, growth types such as in-fill cannot be estimated easily by the traditional build-out method. Finally, the method cannot be used to predict probable locations of new growth.

The advantages of GIS as a build-out estimating tool

For West Newbury, we used the database query capacity of GIS not only to determine a more accurate estimate of available acreage but also to add conditions to our analysis. We determined from actual tax records that there were 3,480 acres of buildable land in West Newbury. Using the traditional technique, we would have applied the lot sizes for the three residential districts as appropriate and arrived at a residential projection of approximately 2,300 additional dwellings, which is almost double the 1,200 additional dwellings we are projecting.

To eliminate the "double counting" inherent in a simple aggregate analysis, we eliminated all wetlands and divided the developable land into three categories. First, we determined the number of single-family lots that

currently have a house and are greater than four acres in size. Given current zoning and Title V regulations, some parcels in this category can be subdivided to create an additional house lot, and calculating these lots does not create double counting. Technically, each lot can create at least one additional lot without combining any excess acreage from another lot. The potential lots are called in-fill lots, and while they may happen for economic reasons they also occur as a result of family decisions.

We found 1,553 acres of land that, while technically developed, have remaining development potential. In total we identified 196 potential in-fill lots and GIS helped us to define further the nature of these lots. We found that of the 196 in-fill lots, sixteen are greater than 20 acres, with an aggregate of 448 acres. We identified these sixteen parcels as prime development sites with a potential capacity of 200 dwelling units. For the remaining 1,100 acres in this category we estimated that they could produce another 300 units given their size, location and access. When added to the 200 lots that can be created from the 16 residential parcels of 20+ acres, the total infill figure was determined to be approximately 500.

The second category of developable land in our analysis is existing agricultural land. We determined that West Newbury has 1,562 acres of Chapter 61/61A agricultural land. Given its location in various zoning districts, the vagaries of lot shape and the tendency to have slightly larger lot sizes than required, the present agricultural land appears capable of supporting 600 new single-family homes.

The third category we identified consists of 365 acres of open and developable, non-agricultural land. Given the locations involved, we assumed that these areas could produce another 100 single-family homes.

Combining the "open" and agricultural acreage creates a total of 1,927 acres. Our estimate of 700 new house lots looks very conservative in relation to 1,927 acres. However, as we stated in the Land Use Element, we assumed that at least 200 acres of the "open land" will be removed by public action at some point in the future, e.g., for a new school site, new conservation or recreation areas, or new APR's. As of this writing, 45 of the 200 acres have already been removed from the future development pool. With all 200 acres removed and considering location and parcel shape issues, we believe that 700 new units from approximately 1,700 acres is an accurate estimate.

inactive, nor do we have a basis to assert that every in-fill opportunity will be realized. We are confident that our estimate of 1,200 new homes represents an accurate profile of West Newbury's build-out potential. A build-out scenario that essentially doubles the number of single-family homes in a 20 to 25 year period must be considered as a major challenge in the community's future.

Connery Associates
December 1998

Conclusion

By classifying the total developable acres into infill and new development and by making reasonable assumptions about public intervention, we arrived at an estimate of 1,200 new single-family dwellings as the remaining residential growth potential of West Newbury. By analyzing past and current development rates, we calculated that West Newbury would attain a 1,200 dwelling unit build-out in 22 years, or approximately by 2020.

If the percentage of homeowners using their infill housing capacity increases, it is possible that an additional 50 to 100 units could be produced. Similarly, if the Town does not intervene in some fashion to remove at least 200 acres from potential development, an additional 100 to 150 house lots will eventually be created. These variations from our base of assumptions means that West Newbury's build-out could be as high as 1,400 new homes but we have no basis to conclude that the Town will be

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