REDDING, CONNECTICUT

TOWN PLAN

OF

CONSERVATION AND DEVELOPMENT

2008

Prepared by the Redding Planning Commission

Redding

Town Plan
Of
Conservation and Development

2008

A guide to land use policies and principles in Redding, Connecticut.
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CHAPTER 1: INTRODUCTION

A Unique Place

On first arriving to take up residence in Redding, in June 1907, Mark Twain exclaimed "How beautiful it all is! I did not think it could be as beautiful as this." A generation later in the depths of the Great Depression, the Emergency Relief Commission's Connecticut Guide commented "Redding consists of beautiful hill country, and is rich in mineral specimens. … " The guide goes on to describe Redding as the "jewel at the heart of Fairfield County". Redding's unique blend of hills, valleys, streams, picturesque meadows, winding lanes and traditional homes has evoked accolades from residents and visitors alike.

The Connecticut Guide also noted the many illustrious persons who have chosen to make their home in Redding, following (sometimes literally) Mark Twain's footsteps to be surrounded by Redding's scenic landscape unspoiled character. Now at the beginning of the twenty-first century Redding continues to attract those who value the quality of the town's environment.

Since Mark Twain's time Redding has continued to benefit from the efforts of residents who marvel at the town's unique character and are willing to work at preserving it. And this effort has extended beyond a postcard presentation of Redding. Connecticut Magazine, looking beyond the town's beauty to a broader statistical examination of Quality of Life issues, has several times awarded Redding its "Best Small Town in Connecticut" designation.

As a result of dedication and foresight, Redding's policies and actions over the past half century have been highly effective in:

- Securing more than a third of the town's land area as permanently dedicated open space,
- Enacting land use policies and standards, rigorously enforced, to protect public water supply watersheds and sensitive lands,
- Protecting 'the view from the road" through a scenic road ordinance and a policy that limits road widening,
- Advancing efforts to protect historic buildings and sites,
- Adopting award-winning Smart Growth policies to create a walkable, transit-oriented development in central Georgetown.

Maintaining Redding's uniqueness is a continuing challenge, and this Town Plan is intended to serve as a source of policy in sustaining a path toward long-held goals.

A Perspective on the Region

Redding's location at the heart of Fairfield County has made it one of the most desirable residential communities in the northeast United States, benefitting from accessibility to major markets while preserving a degree of isolation within Connecticut's

largest conserved forest region. Redding is within commuting distance of world-class corporate offices and regional institutions of Stamford, Norwalk, Danbury and Westchester County. Also accessible by commuter rail service is the nation's corporate and cultural capital in Manhattan.

In the midst of rapidly urbanizing southwestern Connecticut and the densely-populated Northeast Corridor of the United States, Redding lies at the heart of a great swath of forest - a resource that cannot be retrieved if lost, and that is critical for sustaining both natural habitats and quality of life for the people of a very large region. Lands in current conservation ownership in Redding and adjacent towns together comprise the largest unbroken forest tract in southwestern Connecticut, containing over 15,000 acres, This vast greenspace not only protects air and water quality for all of the greater area but forms a natural buffer between the urban centers and suburbs of southwest Connecticut (Stamford/Norwalk), metropolitan Bridgeport, and the greater Danbury area.

In other respects as well, the Plans of Conservation and Development of the three nearby regional planning agencies and of the State of Connecticut reinforce Redding's longstanding conservation priorities. These plans clearly endorse the need to concentrate future development in places where urban infrastructure is already in place, reflecting the principle of "Smart Growth" (or "Responsible Growth" as popularized in Connecticut). This approach to development aims to:

- Discourage sprawl,
- Concentrate jobs and new development where public water, sewers and mass transportation are available,
- Conserve open space and natural resources,
- Encourage new development to follow environmentally-compatible and energy efficient design principles,
- Plan new infrastructure for cohesive centers and more efficient use of land.

Redding's Town Plan 2008 embraces all of these goals.

Georgetown, in Redding's southwest corner, is not only the sole urban complex within Redding but also a multi-town village extending into adjacent portions of Weston, Wilton and Ridgefield, and across the borders of the South Western and Housatonic Valley regional planning districts. Redevelopment currently is underway at the heart of this old village, including the former Gilbert and Bennett factory site and the existing Main Street/Old Mill Road retail area, and this will significantly enhance the entire Georgetown community. With water service, a sewer system and a prospective new train station, Georgetown should soon be poised to attract future growth as well as to serve as a model of Responsible Growth. A collaborative planning effort across town and regional boundaries here is needed and should be undertaken soon.

Resource Conservation - A Defining Need

Nine-tenths of Redding's land area lies within the central highlands of Fairfield County, along with extensive areas in neighboring Easton, Weston and northern Ridgefield. Within this rugged upland terrain lie the headwaters and/or major watershed areas of rivers supplying the Saugatuck, Aspetuck, Easton Lake and Hemlocks water supply

reservoirs. In consequence the purity and quality of these streams has a direct and substantial impact upon the well-being of over 500,000 residents of the shoreline towns to the south.

Protection of this water resource is recognized as a critically important policy feature in each of the three regional plans which embrace this area, as adopted by southwestern Connecticut's three regional planning agencies: the South Western Regional Planning Agency (SWRPA), the Greater Bridgeport Regional Planning agency (GBRPA), and the Housatonic Valley Council of Elected Official (HVCEO) in which region Redding lies. Both the adopted HVCEO plan (1997, Regional Growth Guide Map) and its current draft update (2008, not yet approved) show all of Redding except Georgetown within low density or semi-rural remote area classifications intended to protect the viability of public water resources. Special attention is devoted in the draft 2008 HVCEO plan to protection of surface drinking water supplies, noting that watershed lands draining to public water supply reservoirs are areas of special environmental concern. The HVCEO plan also notes the critical role played by both till aquifers and stratified drift aquifers in protecting domestic and public water supply - a principle strongly endorsed also in this Town Plan.

A similar focus on the importance of protecting this vital upland watershed is expressed in the adopted Conservation and Development Policies Plan for Connecticut, 2004-2009.

Policies of the State Plan in respect to water supply watersheds include the following:

- Encourage land uses that are compatible with protection of water quality.
- Permit land use types and intensities that do not require sewer service.
- Minimize site disturbance through open space, conservation easements, and use of cluster-style development to lessen impervious surfaces.
- "As a general density guideline", require minimum lot sizes of one dwelling unit per two acres of upland (non-wetland) area.

The "Locational Guide Map" of the State Plan classifies all of the water supply watershed area of Redding (89.5%) as Conservation Area, the Norwalk River basin area outside of Georgetown (8.0%) as Rural Lands and the immediate Georgetown vicinity (2.5%) as a Neighborhood Conservation Area. Existing Preserved Open Space lands are also shown throughout the town. Thus the State Plan strongly supports Redding's established policy of low-density residential use throughout the town outside of Georgetown, and its efforts to conserve open space as well as minimize adverse development impacts on all water supply watersheds.

Two major initiatives for conservation and protection of this vital water supply watershed have occurred within the past decade. Faced with the threat of sale for development of the thousands of acres of Class 2 and 3 watershed lands held by the Aquarion Water Company, a remarkable coalition of the State of Connecticut, Aquarion and The Nature Conservancy was formed. Action was taken, financed by the State ($80 million) and the Conservancy ($10 million), to acquire the Aquarion lands and permanently protect them as conservation land. These acres, including 2,024 acres in Redding, are now officially designated the Centennial Watershed State Forest. In 2004 The Nature Conservancy launched The Saugatuck River Watershed Partnership, embracing eleven towns in southwest Connecticut, to develop an action plan for conservation of the water quality and

natural environment of the entire 89 square mile river basin. Redding is a key participant in this effort since, of all the towns in the region it has the largest amount of watershed area and contains most of the headwater streams.

Mindful of its responsibility, Redding has pioneered low-impact development concepts within the public water supply watershed. As these concepts become more clearly established in planning practice, the town intends to remain in the forefront in implementing them.

Policies and Goals Achieved

As indicated above, the past decade has seen remarkable progress toward achievement of many of the goals expressed in the 1998 Town Plan. Among the significant goals achieved are the following:

Conservation of Natural Resources and Open Space Preservation

Over 1,800 acres of permanent open space were added to previous totals through the efforts of the Town, The Nature Conservancy, Redding Open Lands Inc. and the Redding Land Trust, as well as from several private gifts. In particular, the entire Aquarion Water Company land holding was protected, now "Centennial Watershed State Forest. Total land area now protected as permanent conservation and open space land in Redding is approximately 7, 530 acres, over 36% or total Town land area. Moreover, most of the conserved land is located in contiguous parcels forming undeveloped corridors through the town. These "forever green" corridors provide protected natural habitat, opportunities for passive recreation, and vital protection of the public water supply watershed.

Rural character

The town's rural ambiance has been well sustained, through land conservation as well as through vigorous review of development applications and refinement of Town land use regulations. Refinements of regulations have included updating of the Inland Wetland Regulations, Town Road Maintenance standards, and Subdivision Regulations.

Historical and Cultural Resources

Cultural Resources Preservation requirements have become fully integrated into the town's land use regulations and application reviews. Extensive documentation has been made of the history and pre-history of many Town-owned properties and all recent subdivision sites. Historic preservation has been enhanced by the Town's development of a voluntary preservation easement program for historic dwellings.

The Town's senior center, which had been housed in an historic dwelling that had served for 150 years as the Congregational parsonage, has been moved to the new Community Center. This has permitted the Town to execute a longstanding plan to return the former parsonage to residential use as a key contributing element of the Redding Center Historic District. Thus the house has been sold, with historic preservation deed restrictions, to a private party.

Public Facilities

The past decade has been very active in the enlargement and enhancement of the Town's public facilities. The Town Hall was reconstructed and enlarged (1999). A new community center/athletic fields complex was constructed (2002-2004). The Joel Barlow High School was expanded and modernized, along with additional athletic fields (2001-2005).

During the same period the Georgetown and Redding Ridge Fire Companies have expanded their facilities, and the expansion of the Redding Center firehouse has been planned and is now scheduled for construction. The Police Station has begun planning for replacement of its facility, and study has been undertaken to relocate the Zoning, Health, and Building departments into the present Police building from their existing cramped quarters. The sewer treatment plant serving Georgetown has been expanded to serve increased needs resulting from the Georgetown Land Development Company redevelopment project.

In addition, public facilities operated by religious and community-service organizations were expanded. Examples of this include a new church for St. Patrick's Roman Catholic parish, and reconstruction and enlargement of the Mark Twain Library. One religious institution, the Universalist Unitarian Society of Northern Fairfield County, has relocated away from Redding, while another newly-forming church has announced plans for an all-new facility on Redding Road.

Roads and Transportation

A road and drainage reconstruction program has been begun, targeted to problem areas, and Phase I of this program has been completed.

Housing Needs

Provision has been made in the Georgetown Land Development Company redevelopment of the former Gilbert and Bennett factory site, to provide 55 units of state certified Affordable Housing. The provision of appropriate housing for existing elderly residents of Redding remains a concern, partially alleviated by the completion of the Meadow Ridge Life-Care facility in Georgetown.

Economic Development

Although the Town's Grand List has continued to increase, anticipated increases in revenue from real estate appreciation and from development in Georgetown have come on line more slowly than the Town had projected while state contributions to the Town budget has decreased dramatically. Thus Redding's finances have become temporarily strained by increased borrowing for necessary investments in town facilities along with the steadily-increasing operating costs of a growing community. This stress is expected to be alleviated in coming years with minimal adjustment necessary to the town's long-term goals, as school costs level off and revenues related to development increase. Nevertheless careful coordination will be needed in coming years between revenues and expenses.

Existing Village Centers in Georgetown and West Redding

The Town used the leverage from its tax liens to arrange for the former Gilbert and Bennett factory site to be redeveloped by Georgetown Land Development Company. The developer, working in close cooperation with the Town, is at this writing in the early stages of construction of an award-winning "Smart Growth" mixed-use urban village. The project will incorporate over 400 dwelling units, one million square feet of commercial floor space, civic and cultural uses, a train station, an expanded sewage treatment plant and supporting infrastructure. Many of the historic mill buildings will be preserved and the river will be "daylighted".

West Redding and Georgetown, have both become focus areas for the town's preliminary studies in planning Incentive Housing Zones using Transit-Oriented Development concepts under the Connecticut Housing Program for Economic Growth.

Public Safety Operations

Two of the Town's three volunteer fire companies have constructed and/or planned expansions of their firehouse facilities and equipment inventory. Water storage for firefighting has become a frequent requirement in residential subdivision approvals. Police operations have become professionalized by the change from the Connecticut Resident State Trooper program to a locally-organized full-scale police force.

Regional Concerns

Major land use and transportation issues have been reviewed and reported on to the responsible agencies as they arose (see preceding section "A Regional Perspective").

Redding in the Coming Decade:

An Executive Summary of Redding's *Town Plan of Conservation and Development* for 2008

Since town planning began in Redding in the late 1950's, there has been a constancy of purpose and unchanging set of basic goals underlying each of the Town plans, adopted respectively in 1960, 1971, 1984, and 1998.

Those basic goals are excerpted as stated in the 1998 Plan:

- Conserve the town's scenic, cultural and historic heritage through appropriate planning and land use controls.
- Maintain and protect Redding's low-density, rural residential character.
- Preserve at least one-fourth of the town's land area in permanent open space.
- Plan needed public facilities and other development for minimal impact on the natural environment and for optimum public benefit.
- Limit new commercial development to existing centers in Georgetown and West Redding.

All of these goals remain entirely relevant today. The open space goal (third in the list above) might be restated - now that the 25% open space goal has been achieved - as follows:

"Acquire significant parcels of remaining open land wherever possible, to consolidate greenway corridors and to sustain the contribution that Redding makes to natural habitat and open space preservation in the Saugatuck and Aspetuck public water supply watersheds. This is important because of the extraordinary contribution that open space makes to protection of regional water resources along with benefits to the town's natural environment and quality of life".

Reflecting these goals, the Redding Open Space Plan, 2008, prepared by the Redding Conservation Commission and published under separate cover, is an integral component of this comprehensive Plan of Conservation and Development.

The basic vision for the future of Redding as expressed in these two Town Plan documents is that of a semi-rural residential community in which the natural environment is protected, historic and cultural resources are preserved, public service needs are provided responsibly and economically, the water supply watershed and Saugatuck Forest are preserved as a boon to the entire region and a legacy for future generations, Georgetown village is brought to its full potential as a diverse hub of activity, and the quality of life for all residents is sustained and enhanced.

These principles and goals are described in detail in the Recommendations lists that are a part of each chapter of this report. They find graphic expression in the Plan of Conservation and Development Map and the Open Space Plan Map, also accompanying this report.

The Plan Map

The Plan map, "Town Plan of Conservation and Development, 2008" on file at the Land Use Office and a copy of which is reproduced in this Plan, expresses graphically the major recommendations of the Plan under four headings. Summarized, these major recommendations are:

(1) Land Use

- **Conservation Residential**

  Area with severe limitations for development due to natural conditions and/or remoteness; recommended for open space and dwelling density not greater than one unit per four acres.

- **Rural Residential**

  Area with moderate to severe limitations for development due to natural conditions; recommended for open space and dwelling density not greater than one unit per two acres.

- **Medium Density Residential**

  Area with moderate limitations for development, generally close to an existing center (such as Georgetown); recommended for dwelling density of one to two units per acre depending on natural conditions and available utilities.

- **Village Residential**

  Area accessible to public water and sewer service; recommended for dwelling density of two to five units per acre.

- **Planned Commercial Center**

  These three areas, in central Georgetown, at Ethan Allen Highway (Rt. 7) and at West Redding Center, are proposed areas of mixed commercial and residential use in which selected retail, service, office and residential uses are appropriate to form cohesive community centers within the limitations imposed by available infrastructure and environment. Future comprehensive planning is recommended for each area.

(2) Public Facilities

- **Town Civic Campus**

  Town Hall, public and civic buildings and sites, public greens

- **Schools**

  Sites of existing and planned public school facilities

- **Active Recreation**

  Sites of existing and proposed playing fields, tennis courts and other outdoor recreation facilities (public and quasi-public)

- **Cultural Sites**

  Museums, library, churches and other institutions (existing)

- **Infrastructure**

  Public and private utilities (existing)

(3) Circulation

- **Arterial Road/Regional Connector**

  Maintain major capacity (existing Route 7)

- **Local and State Collector Roads**

  Recommended classification (moderate traffic volumes)

- **Other Town Roads**

  Local neighborhood service (lighter traffic volumes)

- **Safety Improvement**

  Location of potential trouble spots where improvements should be made compatible with Redding's environmental and rural character, such as minor realignment, repair, signage or traffic calming

- **Circulation Improvement**

  Proposed minor relocation for safety or neighborhood protection

- **Scenic Roads**

  Existing or proposed scenic road designation

- **Proposed Closure to Vehicles**

  Old right of way recommended for official abandonment

- **Greenway**

  Proposed linear park or regional pedestrian trail

(4) Conservation and Preservation

- **Special Village**

  Potential areas for "Village Districts" designation for protection of unique scenic and historic buildings and sites, with design review

Historic Preservation

Areas, sites and structures of special historic or archaeological significance, protection required

- **Greenbelt**

  Land areas of continuous countryside in natural or undeveloped condition which possess unique value for open space and watershed protection, recommended for conservation and only minimal development (Aspetuck, Little, Saugatuck, Saugatuck West)

- **Open Space**

  Existing and proposed lands permanently reserved as open space, public and quasi-public, by acquisition or easements

- **Scenic Protection**

  Areas of unique scenic quality, recommended for protection by acquisition or easements

- **Water Body, Protected Streambelt**

  Existing lakes, ponds, streams and annual flood plains protected from development

CHAPTER 2: NATURAL RESOURCES

Overview: A Special Environment, a Special Obligation

In the midst of populous Fairfield County the Town of Redding and portions of six adjoining towns comprise a unique regional resource – a natural greenbelt in excess of fifty square miles of relatively pristine forest land. Centered about the upper Saugatuck and Aspetuck River watersheds and the adjacent headwater areas of several other streams, this lightly-developed semi-mountainous area of terrain encompasses the 7,000-acre Centennial Watershed State Forest, Devil's Den Preserve, Trout Brook Valley, three state parks, and over 5,000 acres of other public open space. The area has been identified by The Nature Conservancy as one of the seven major (over 15,000 acre) intact forests of Connecticut and by the State of Connecticut, in the adopted State Plan, as vital public water supply watershed for all of southwestern Connecticut.

Redding, with 90% of its land area embracing these headwater areas, is at the very center of this unique natural area. The Nature Conservancy has described the upper Saugatuck River watershed as "a Fairfield County gem", stating that "These protected lands contain habitats critical to the health of diverse species, habitats such as forests, streams, wetlands, hilltops and fields . . ."[1]

The 1998 Redding Town Plan of Conservation and Development observed that "The natural heritage of Redding is a blend of hills, valleys, streams, wetlands, rock ledges, soils, surface water and groundwater. It also includes forests, meadows, wildlife and scenic vistas. The town's natural environment is its one irreplaceable resource, as indispensable to its future as to its past".

The Town is committed to managing its natural resources and protecting them from harm. For this to be accomplished there must be a detailed understanding of the resources, where they are located and how they relate to one another. Thus it is essential for the Town of Redding to produce an Inventory and Assessment of Redding's Natural Resources. This document will serve as a tool for Town officials whose responsibility it is to maintain Redding's quality of life and unique character as well as an educational reference for citizens interested in supporting natural resource conservation. An accurate inventory and assessment of Redding's natural resources can enable land use decision makers to protect the integrity of natural resources while providing for compatible growth. While the Connecticut Department of Environmental Protection (DEP) is a valuable source of natural resource information, this data is often lacking in sufficient detail to be useful at a local scale.

The following sections describe the natural characteristics and geological origin of Redding's terrain, noting the significant limitations that affect development within this area. A concerted effort by Redding and its neighboring towns will be needed, if the environmental quality of this special area is to be conserved for future generations to enjoy.

Land, Water and Climate

[1] An Introduction to the Saugatuck River Watershed and the Saugatuck River Watershed Partnership (a report by the Nature Conservancy's Saugatuck Forest Lands Project, March 2006).

The nearly 32 square miles of hilly terrain which make up the Town of Redding lie in the Western Highlands of Connecticut along the rim of land which separates the southwestern coastal slope from the interior Still River Valley.

High north-south ridges, steep-sided valleys and numerous small streams characterize the town's landscape in every section. The ridges and stream valleys generally have their highest elevations near the town's northerly border where several hills reach heights 800 feet above sea level and 500 feet above the valley floors to the north.

The basic physiography of Redding contains three major north-south ridges or uplands and portions of two others, separated by deep valleys along the streams described above. The upland of West Redding includes Goodsell, Windy and Umpawaug Hills. The high terrain of Redding Center and Lonetown represents the "middle ridge". Redding Ridge and Giles, Meeker and Sunset Hills comprise the third major ridge. In the northwest and southeast corners of the town are portions of other ridges – Fire Hill and Pickett's Ridge in the northwest and Goodridge and Rockhouse Hill in the southeast.

Gently contoured till-soil areas, deposited by ancient glaciers, are typically distributed over the crests and upper sides of the major ridges. Interspersed through the intervening areas, however, are extensive areas of rough, ledgy terrain characterized by steep slopes and numerous rock outcrops. Examples of these rocky areas are notable in such sections of the town as Redding Glen, Gallows Hill, Peaceable Street, Hopewell Woods and Topstone Mountain.

There are two major stratified-drift aquifers, where the receding glacier of fifteen millennia ago laid down broad gravel terraces in deep valleys. These are found at West Redding Center and in Poverty Hollow. Along with nineteen smaller, shallower aquifers along various streams, these valuable groundwater reservoirs recharge adjoining streams, wetlands and the fractured bedrock which supplies most Redding homes with potable well water. At this time Redding does not have public wells subject to the aquifer protection regulations of the State of Connecticut. However, protection of the quality of Redding's domestic potable groundwater is essential for the health of all its residents, and enactment of the aquifer protection measures should be an urgent Town priority. Redding's aquifers are more fully described, and illustrated by map, on page 2-7.Wetlands, typically small and poorly drained depressions, are very numerous and widely distributed throughout all sections of the town. Two of the most extensive wetlands are Huckleberry Swamp and Lyons Swamp in the west central and southeast sections respectively, although narrow wetland corridors and minor flood plains occur along most streams and drainage ways. Two rare examples of alluvial marshes exist in Redding in the Saugatuck Falls area and south of Poverty Hollow. Because most stream corridors are narrow with moderately rapid stream flow, major flood plains -- areas of wide flooding in one hundred to five hundred year frequency storms – occur at only a few locations. These locations include the larger swamps and lowlands as well as intermittent low areas along the Saugatuck, Little and Aspetuck Rivers. Nonetheless, disastrous floods have occurred along the narrow stream corridors, most notably in 1955 when the Norwalk River devastated central Georgetown and two lives were lost in the Saugatuck River at Diamond Hill Road.

Four principal rivers originate in this highland and flow southward through Redding toward Long Island Sound. The Norwalk River, which Redding shares with Ridgefield, roughly parallels the town's western border and flows through the village of Georgetown. The Saugatuck River, rising in the uplands just northwest of Redding, flows southeasterly

through the middle of Redding where it enters the Saugatuck Reservoir on the Redding-Weston border. Little River, a tributary of the Saugatuck, originates at Putnam Park Pond and flows southerly through the deep valley between Redding Center and Redding Ridge to the Saugatuck Reservoir. In the eastern portion of Redding the Aspetuck River flows southward through Poverty Hollow in its course to the Aspetuck Reservoir in Easton and beyond to join the Saugatuck River in of Westport.

Topographic map courtesy of Brian Hall, Harvard University & The Highstead Arboretum

About 85.2% of the town's land area, or 17, 503 acres, lies on established public water supply watershed. All of this land drains to streams which flow southward to the Aquarion Water Company (AWC) Saugatuck, Aspetuck, Easton and Hemlocks Reservoirs. In addition an area of 82 acres in northeast Redding, which forms the headwaters of northwest flowing Limekiln Brook is regarded by CT DEP and Bethel as a potential water supply source and is therefore classified as a protected watershed. The headwaters of the West Branch of the Saugatuck River encompass slightly over 400 acres in southwest Redding and contribute potential recharge to Aquarion Water Company's Coleytown Wellfield in Westport during periods of heavy draft. Only the 10.1% of Redding's land surface which lies in the Norwalk River watershed, surrounding Georgetown and extending along the westerly fringe of the town, is area which does not ultimately recharge public water supplies."

The development of the former Gilbert & Bennett site in Georgetown will result in the reclamation of a unique section of the Norwalk River which snakes its way through the site. As part of the development process, concrete decking and portions of buildings that have totally covered much of this section of river have been removed, exposing the waters to daylight for the first time in over seventy five years. The river will become a focal point for pedestrian activities in the planned village landscape. In addition, Gilbert Pond to the north will gain a valuable public access greenway along its shoreline.

Water is a regional resource. Redding water sources supply approximately one half of the people in Lower Fairfield County with water, and the town's stewardship of its surface water and aquifers is an inherent responsibility to the region. As Redding sees further development, the town must anticipate threats to water quality and protect this vital resource. According to HVCEO, "Whereas 25% of the Region's total land area lies within existing water supply watersheds, 87% *[sic]* of the Town of Redding is so designated. This is the highest municipal percentage in the region, followed by 62% of the land area of Ridgefield and 42% of Danbury."

In 2006, the Saugatuck River Watershed Partnership was formed as a regional collaboration between eleven towns as well as various stakeholder groups such as The Aquarion Water Company of Connecticut, Inc., The Connecticut Department of Environmental Protection, Trout Unlimited and members of the local community. These towns include Bethel, Danbury, Easton, Fairfield, Newtown, Norwalk, Redding, Ridgefield, Weston, Westport and Wilton. As stated by the Nature Conservancy, the goal of the Partnership is to protect and enhance the health of the watershed by working collaboratively to link, maintain and restore habitats which support healthy populations representing the natural biological diversity of the watershed system. These goals include promoting education and understanding of the watershed as a natural resource; protecting and restoring water quality in the watershed; protecting and enhancing stream flow; encouraging sound land use and management practices; controlling invasive species; restoring migratory fish passage; working to establish protective development guidelines; and facilitating communication and collaboration among individuals, governments and communities to protect the health of the Saugatuck River Watershed and promote research and distribute information about issues concerning the watershed, its management, and health.

Redding lies in the humid, continental cool-summer climate region of the northeastern United States. Annual precipitation locally is about 47.5 inches, of which 23.6 inches is lost by evapotranspiration and 23.9 inches becomes groundwater and streamflow. A little over half of the town's rainfall occurs between April and September. Average daily temperatures in January, the coldest month, range between 18 and 35 degrees Fahrenheit and those in July, the warmest month, between 60 and 83 degrees. Under these conditions, the loamy till soils distributed over the entire town support a dense forest cover throughout the town. Although intensively agricultural in the nineteenth century, most of Redding's undeveloped land has now reverted to second–growth forest, with hardwood species such as maple, oak, ash, hickory, birch, beech and sycamore predominant. Dense shrub understories are typically present in many recovering woodlands and in wetland margins. The forest canopy throughout the town reaches an average of 70 to 80 feet in height and effectively conceals much of the newer residential development, giving the town a "green" and pristine appearance in all sections.

Redding should plan now for the potential of climate change which may reduce the expected yield of safe surface reservoir and groundwater aquifer water supplies. According to HVCEO, the Union of Concerned Scientists' water supply engineers throughout New England need to evaluate the adequacy of their surface water supplies and storage facilities in light of the projected increase in droughts due to the potential of climate change. Additionally, "overall, stream flow is projected to become more extreme, higher in winter and lower in summer, exacerbating drought." The town of Redding recognizes that wise planning to balance future conservation and development in our municipality can make a difference. Therefore, the town of Redding should guide future growth in a manner that will reduce greenhouse gases from residential, commercial, industrial and institutional land uses.

The potential of climate change means reservoir yields would be less than originally planned. (photo: HVCEO)

Geology and Soils

Far back in geologic time what is now western Connecticut was in the midst of a monumental collision of the earth's North American and Euro-African continental plates. The pressure of the collision buckled the original North American shoreline and adjacent ocean floor into enormous mountain ranges 25,000 to 35,000 feet high composed of hard metamorphic rock. About 200 million years ago the continents drifted apart and erosion began the process of steadily reducing the great mountain ranges to the vestigial rock hills which remain today. Extending through West Redding in the vicinity of Simpaug Turnpike, Marchant Road and Redding Road northward to Bethel is a geologic boundary known as "Cameron's Line" which marks the original shoreline of North America. Limestone deposits, such as those once worked near Limekiln Road, originated here over eons of shoreline shellfish deposits. North and west of this line the mountains were formed from ancient Precambrian rocks over 570 million years ago. South and east of this line the rocks are Paleozoic, formed about 200 to 250 million years ago from the upthrust oceanic plate. These eroded mountains, formed by the "Great Collision", still exhibit a distinct pattern of northeast to southwest ridging wherever bedrock is close to the surface. The dry ravine,

which runs southwesterly from Redding Center to Redding Glen, is an example of such a feature. The extensive faulting and fracturing of all of this bedrock, as shown in Redding's Bedrock Fracture Zones map, makes possible the subterranean water supply which is tapped by virtually all of Redding's domestic wells. A great diversity of unusual minerals has been found in old quarries and rock cuts in Redding, many of which are exhibited in museums around the country.

About 18,000 years ago the last of a series of great continental ice sheets which had covered this area began receding. Left in its wake were the elongated, smoothly-rounded north-south ridges of glacial till soils which are so characteristic of Redding's landscape. Also deposited by glacial meltwaters were the gravel stratified drift aquifers of the several valleys, originating as temporary lakes dammed by ice or sediment, and the high elliptical-shaped hills known as "drumlins", of which Mohawk Hill in Lonetown is an example. The surface stones and boulders which dot the landscape, and from which Redding's extensive stonewalls were built, are also products of the once mile-high glacier which covered the land. The mixing and sorting action of the glacier is responsible for the diversity of surface soils present in the town, many of which are shallow in depth to bedrock or have limited permeability in subsurface layers, resulting in seasonal wetness or poor drainage in extensive areas.

Habitat

Redding's extensive network of waterways and wetlands, and its large contiguous tracts of open space, both forested and in the form of natural meadows, provide habitat for diverse plant and animal species. Many animals that have been pushed aside by the advance of suburbia elsewhere still can be found in small numbers here, including weasels, beavers, otters, bobcats, coyote, and red fox. Certain bird populations such as the wood thrush, kestrel and bobolink are under decline from the breakup of contiguous tracts of forest and meadow habitat, but can still be found here in Redding.

The waterways, vernal pools and wetlands provide essential, shaded habitat for numerous species necessary for the maintenance of a healthy aquatic ecosystem. Because their water supply is temporary and seasonal, vernal pools provide a unique ecosystem devoid of fish, which allows many amphibian life forms including newts, salamanders and frogs, to successfully breed without danger of predation. Riverfront areas and associated native vegetation and soils maintain the diversity of stream ecosystems, filter polluted stormwater runoff, protect water quality, prevent erosion and scouring of streambed habitats, reduce sedimentation, absorb overland water, (often carrying fertilizers and pesticides), and reduce flooding impacts. As the temperature of streamwater increases, the dissolved oxygen levels decrease, and this creates an inhospitable environment for fish, amphibians and invertebrates so crucial to the food chain. For this reason, shade is vital to health of the watercourses, and undue clearing of their verges should be actively curtailed. As part of a statewide effort Redding should seek to strongly encourage a 100' buffer of naturally occurring vegetation along its waterways to provide this important safeguard.

A vernal pool is shown transitioning from early spring to spring and summer. (photos: www.vernalpool.org)

Due to imbalances in the predator/prey ratio and changes to the habitat, white-tailed deer have greatly intensified in population over the last thirty to forty years. Their population has grown so large that their overbrowsing has decimated not only saplings, destined to replace older trees, but groundcover, understory shrubs and wildflowers as well. As a result, there has been a marked change in the diversity of species in the area. A number of songbird species have been prevented from nesting and feeding, and have been added to the endangered species list in Connecticut. Rufous-sided towhees have declined by 95%, the blue-winged warbler by 73%, and brown thrashers by 99%.

The deer overpopulation has also contributed to a high incidence of deer related auto accidents and the high number of cases of Lyme disease and other tick-borne diseases; Redding has one of the highest Lyme incidence rates in Connecticut, which in turn ranks second for incidence nationwide. Lyme disease can result in permanent long-term neurological and musculoskeletal damage if not diagnosed and treated quickly and correctly.

In order for the adult stage of the tick to reproduce, deer (or very rarely other large mammals) must be present in high enough densities for adult ticks to find and feed upon them in order to become fertile and lay eggs. In Connecticut, the white-tailed deer is the only host mammal that fulfills this tick-sustaining role. White footed mice, shrews, chipmunks, voles and many small birds are examples of several small animal hosts that infect the larval stage of the deer tick with the Lyme bacteria. Initial efforts have been mounted to reduce the population of deer through hunting, since their natural predators have been marginalized due to the growth of suburban development. Currently, the deer population in the Redding area is still between 34 and 60 per sq. mile, which is far higher than the target level of 10-12 per square mile at which Lyme disease can be contained. This reduced density is also consistent with levels that help to maintain healthy forest ecosystems with understory suitable for forest birds. (Data from the Conn. Agricultural Experiment Station, Dr. Kirby Stafford, Chief Entomologist and Milan Bull, Sr. Dir. of Science and Conservation for the Connecticut Audubon Society).

Part of Redding's role in proper land stewardship is not merely the protection of habitat, but the careful management of species to achieve a healthy, balanced and sustainable status. To that end, Redding is a member of the sixteen-town Fairfield County Municipal Deer Management Alliance (FCMDMA), which works to find solutions to control the size and activity of the deer population.

Invasive plants are another major concern to conservationists, ecologists, natural resource managers, and land owners because of their potential to displace native species, alter habitat conditions, change ecosystem patterns and processes, and interfere with land management objectives. Invasive plant species such as Japanese barberry, Japanese

knotweed, garlic mustard, winged euonymus and oriental bittersweet have made inroads into even the wildest areas of Redding, and need to be actively prevented from negatively affecting populations of native species. Many invasive species propagate rapidly and aggressively crowd out or destroy their native competitors. Land disturbance has been shown to greatly speed the introduction of invasive species by providing freshly exposed soils in which their seeds can establish themselves; thus there is a need to develop preventative practices to be mandated and enforced during construction work.

There is an ongoing and sustained effort to eradicate invasive plant species by several groups including The Nature Conservancy and Saving Natural Redding. Unfortunately, at this time invasive species are still permitted to be sold as ornamental plants, so the twin efforts of both educating the public and landscaping firms to prevent these plants from being distributed, coupled with eradication efforts of those already in the environment is of paramount importance.

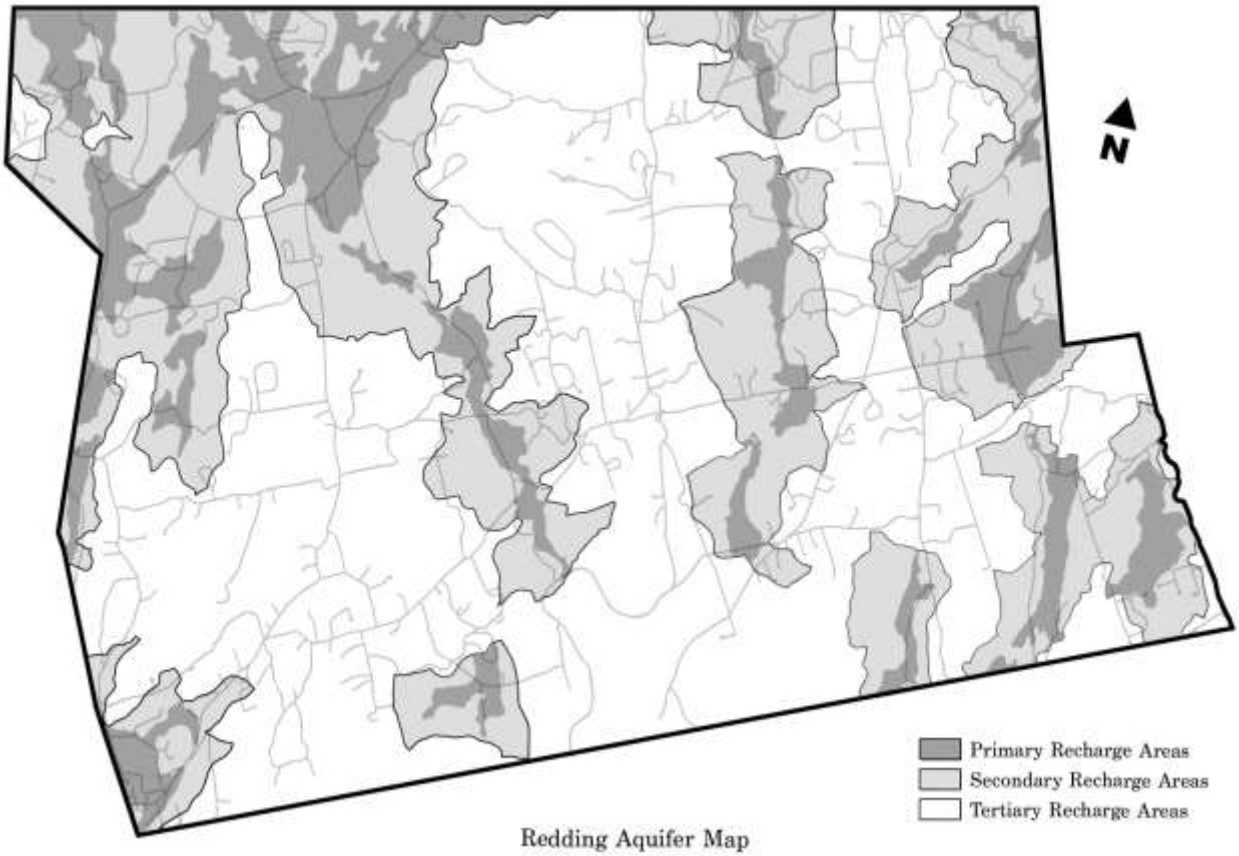
Major Natural Constraints

The forces that shaped the landscape of Redding have significantly influenced its past development and impose practical limits on its future development.

Foremost among these constraints are wetlands and the annual flood plains which lie along all streams. When combined with major flood plains – those which flood only once in every 25, 50 or 100 years – and existing or perennial streams and water bodies, an estimated 10.3% of the town (2,100 acres) is land unsuited for development due to wetland conditions or potential flooding. Of the privately held vacant land in Redding (see table: "Analysis of Town Development Potential" in Chapter 3) an estimated 707 acres (21.4%) is water body, wetland or flood plain.

Almost as severely constrained for development is land which is predominately steeply sloping, with 20% and greater slopes, and exposed bedrock or ledge. The hazards or limitations here are different from those imposed by wetlands. Steep slope areas often provide too little soil for safe sewage renovation, are subject to excessive erosion due to rapid stormwater runoff, and provide unsafe access for driveways. In addition, earth moving on steep slopes can be environmentally destructive. Extensive areas of such terrain are found in all sections of Redding; nearly 10% of vacant, privately owned land is estimated to fall into this category.

Twenty-one stratified drift aquifers lie wholly or partly within the town's boundaries. Two of these, at West Redding along the Saugatuck River and at Poverty Hollow along the Aspetuck River, have major significance because of their size, depth and favorable transmissivity. All aquifers, however, are important sources of groundwater recharge which supply local domestic wells. Those aquifers which lie along the Aspetuck, Little and Saugatuck Rivers are also recharge sources for public water supply streams. Stratified Drift aquifers are highly prone to damage from development because of their rapidly permeable soils and frequently high water tables; in addition they are likely to underlie surface topography with easy-to-develop characteristics. Great caution must be exercised in planning and developing these areas, since contamination introduced to a stratified drift aquifer can be transmitted through underlying bedrock fracture systems to both nearby and distant wells. Of the 3,300 acres of private land still undeveloped in Redding about five percent lie on direct (primary) recharge areas of stratified-drift aquifers.



Redding Aquifer Map

Recent advances in sewage treatment methods (i.e. so-called Alternative Treatment Systems or ATS) have been touted as solutions for higher density housing designs or for use in soils not normally sufficient for conventional septic systems. While these systems have shown promise in controlled situations, in the field there is mounting evidence that sewage effluent received by these systems must be limited to narrow and specific criteria for these systems to perform as claimed. These criteria include steady flow rates, no introduced household cleaners or chemicals, among others. In addition, while traditional septic systems are relatively forgiving of haphazard maintenance, ATS systems require professional long-term monitoring and maintenance in order to sustain their full functionality. In the years to come, Redding must be cautious as the town begins to see development proposals utilizing these systems to enable development of marginal lands and higher density building projects. A recent study by the United States Department of Agriculture Forest Service indicates that because of development pressure, Connecticut's public drinking water supply watersheds are among the highest risk in the Northeast for water quality degradation due to forest loss and the non-point source pollution that accompanies increased development. These cumulative effects of higher-density development are known to be detrimental to aquatic systems and water quality on a watershed-wide scale, and so the town should assure that any alternative sewage treatment systems proposed for use in sensitive areas are fully proven in both their design and their management. Current legislation in CT prohibits the use of ATS within a drinking water supply watershed except for remediation of a failed system, or for certain school and municipal projects. (CT GS 22a-430)

Stormwater runoff from roughly ninety percent of Redding's land surface finds its way to public drinking water supplies, either directly through streams flowing to reservoirs or indirectly through streams, which are recharge sources for adjacent well-fields during dry seasons. The Saugatuck, Aspetuck and Hemlock Reservoirs, which receive streamflow directly from Redding (as well as from Easton and Weston) and store over 16 billion gallons, supply about half of the total water consumed in the populous coastal towns to the south. For Redding's own population, moreover, equally dependent on the purity of groundwater flow to its domestic wells, protection of natural water quality is absolutely essential. This two-fold water quality imperative is a fundamental basis for Redding's low-density land use policies. Stormwater Management Regulations implemented in Connecticut in 2004 require all towns to initiate efforts to prevent compromised stormwater from entering its storm sewer systems before ultimately entering water bodies. Redding's Stormwater Management plan is posted on the town website and updated annually. Best Management Practice initiatives for the town's future implementation include increased public education, GIS mapping of outfalls, and improved tracking of maintenance schedules.

A regional watershed perspective is inherent when dealing with non-point source pollution. The Environmental Protection Agency estimates that this type of pollution is now the leading cause of the deterioration of our nation's water quality. Thus in Redding there is a particular need to reduce or eliminate the usage of fertilizers, herbicides and pesticides especially in areas directly effecting wetlands and watercourses. The use of organic fertilizers, Integrated Pest Management and natural controls are safer alternatives to the use of pesticides. With the prevalence of Lyme disease in the State, The Connecticut DPH has advocated spraying pesticides such as permethrin, (known to be toxic to fish and cats,) as an important component in its campaign of prevention. However, this approach poses a threat to the ecosystem by killing both beneficial insects and those that feed insectivores, while introducing pesticides into groundwater and stormwater runoff which threatens aquatic life, invertebrates, amphibians and reptiles.

Rugged topography, soils poorly suited for development, wetlands, aquifers, flood plains, extensive public water supply watershed, the Town's dependence on individual wells, and a threatened, fragile ecosystem together comprise an array of factors which mandate strong efforts to preserve the town's low-density rural characteristics, and its natural resources.

The major critical land areas are illustrated on large-scale Town maps at the Redding Planning Commission office and are not reproduced in this report.

The Challenge

The major challenge of Redding's entire 2008 Town Plan is the search for fair, prudent, and future-oriented methods of guiding development on the more than 3,000 acres of privately-held open land still remaining in Redding. In regard to the town's natural environment, this challenge takes on special importance as our nation awakens to global environmental issues and as Redding seeks to sustain its leadership in this area. This is primarily from the following factors:

- New development, of necessity, will tend to utilize more marginal land.

- As “infill” development occurs, density will increase significantly; fragmenting meadows and forests.
- Increasing land values are driving more elaborate and site-intensive projects.

Because of the fragility of the remaining open land, all of these factors are likely to disproportionately impact the environmental quality of the aquifers, watershed, natural habitat, and open-space resources of the entire region.

Preservation of the town’s natural heritage and natural resources has long been a fundamental objective in Redding's Town Plan, on behalf of the town as well as in recognition of an obligation to the wider region. In conjunction with an updated Open Space Plan, the 2008 Town Plan proposes measures to balance future development with the resource conservation imperatives described above.

Recommendations

2-1) Support the preservation, through land use regulation and best-management practices, of existing and potential surface water supply watersheds and subsurface aquifers as vital reserves of future local and regional water supply.

2-2) Protect habitats through open space conservation and environmentally sensitive stewardship. Continue to work with partner public-benefit organizations such as the Redding Land Trust, the Trust for Public Land, The Nature Conservancy, etc. to further these efforts.

2-3) Monitor research and legislation regarding use and efficacy of Alternative Sewage Treatment Systems (ATS). Questions regarding the in-use, long-term performance and feasibility of these systems have been raised by several studies, most recently by The Nature Conservancy. A moratorium on ATS installations pending further study has twice been proposed at the State level. The significant watershed acreage present in Redding makes it imperative that the town should both monitor these ongoing studies and pending legislation closely, and be extremely cautious in approving such systems, especially in watershed areas. Determine with the Town how to assure adequate ongoing monitoring of any ATS installations. Use data from such monitoring to inform the State regulatory efforts.

2-4) Utilize the HVCEO GIS program to assist with mapping data for municipal stormwater management efforts.

2-5) Review Town regulations for compliance with the CT DEP Stormwater Management Plan and the CT DEP Stormwater Manual.

2-6) Review the town's land-use regulations to strengthen the consideration of aquifer protection and downstream water quality when making local land use decisions - especially when considering development on watershed lands that drain to public water supply reservoirs. Create in the body of regulation clear performance standards for new development and stormwater runoff in sensitive recharge areas. Within the Planning Commission, create a subcommittee to investigate a method for adopting aquifer protection measures.

2-7) Update land use regulations to curb energy use, as part of a nationwide goal of moderating the potential effects of climate change.

2-8) Support legislation to create a mandatory 100 ft. riparian buffer of native vegetation and trees to provide shade for control of water temperatures and resulting dissolved oxygen levels, as well as native, non-invasive vegetation for the protection of water quality, riverbank stability, aquatic nesting areas, wildlife habitat and the preservation of open space resources.

2-9) Support regulation of pesticide and herbicide application, especially near wetlands and where storm water runoff may be prevalent.

Clockwise from Left: Saugatuck Reservoir, Meadow, Aspetuck Falls at Poverty Hollow, Topstone Pond in Fall.

CHAPTER 3: LAND USE

Redding: From Wilderness to Present

The land that now comprises the Town of Redding was a densely forested wilderness until early in the eighteenth century, accessible only by rough trails connecting Native American settlements with long-established shoreline fishing grounds.

About 1640, however, the General court of the Colony of Connecticut granted to the Town of Fairfield a territory extending inland some fourteen miles to a boundary along what is now Cross Highway in Redding. North of this grant was a seventeen square mile area of unallocated land known as "The Oblong" which would later become the northern portion of Redding.

In 1670 the Town Proprietors of Fairfield secured the northerly six miles of their grant by formal purchase from a group of local Indian sachems, paying in produce and goods worth about 36 pounds, equivalent to $8,400 in 2008 dollars. The following year, 1671, the town meeting of Fairfield adopted a plan to divide the unsettled lands of the interior, about seven miles wide by nearly ten miles in depth. Laid out from the southern to the northern boundary of these lands, nearly ten miles, were a central mile-wide common, thirteen "upright highways" and numerous "long lots" ranging from 50 to 1,150 feet wide, all parallel to the central common and to the easterly and westerly town bounds.

Long lot parcels of land were actively traded from an early date and by the early 1700s enterprising settlers were following Indian trails into the interior to claim the lands they had purchased or inherited. A cross-country path along the north boundary of the long lots, connecting the upper ends of the upright highways, was soon laid out as the "Cross Highway"; other segments of this ancient highway remain in place today, west to east, as Seventy Acres, Fox Run, Great Pasture, Church Hill and Uncle John's Roads. Many portions of the original upright highways also survive in Redding; these include the parallel sections of Goodsell Hill, Dorethy, Dayton, Tudor, Sanfordtown, Greenbush, Turney and Sport Hill Roads, as well as Church Street along the Wilton line and North Park Avenue along the Easton line. Numerous fence lines and stone walls also align with the original "long lot" boundaries. The basic "layout plan" of the Town of Redding thus has its roots in the seventeenth century town plan of Fairfield - the first use of a gridded plan by which to implement the expansion of settlement in what would become the United States.

North of Cross Highway, the seventeen square mile "Oblong" of unallocated land attracted early speculation. Several grants for large tracts in this area were given by the General court in 1673, 1687, 1700 and 1706. A fortified Indian village was located on a high ridge near the center of this area. In 1714 an Indian patent for 500 nearby acres was secured from the local sachem by the Hon. John Read, Queen's Attorney for the Connecticut Colony, who worded the patent to name his holding "Lonetown Manor" and himself as "Lord Justice" of the manor.

Settlers streamed into this wilderness during the first several decades of the eighteenth century, attracted by the broad and fertile ridges which dominate Redding's landscape east (Sunset Hill and Redding Ridge), center (Lonetown and Redding Center) and west (Umpawaug, Windy Hill and Goodsell Hill). By 1723 some 15 inhabitants of the Oblong and 25 residents of the nearby long lots petitioned the General Court to be set apart

from Fairfield as the parish of "reading", a name chosen in honor of John Read Esq. The parish petition was granted in 1729, encompassing the seventeen square mile Oblong and a two-mile-deep portion of adjacent territory from the rear of the Fairfield long lots, totaling about 32 square miles.

The new community grew rapidly. A meetinghouse was erected in 1733 on Cross Highway by the northeast corner of the Mile of common, on the present Redding Center green, and the same year an Episcopal Church was erected beside Cross Highway at Chestnut Ridge (present Redding Ridge). A parish school was established in 1737, conducted in rude log schoolhouses part of the year in each of three localities: the Ridge, Lonetown and the west side. A saw and grist mill was in operation by 1737 on the Saugatuck River at Nob Crook Brook and a fulling mill nearby in 1743. Population had increased sufficiently by 1743 that three school districts were organized, each responsible for maintaining a master and a schoolhouse.

Committees began work in the 1730's to lay out needed highways. One of the earliest roads extended from John Read's manor to the meetinghouse; this exists in the present day as Lonetown Road. Several additional "cross highways" were laid out in the 1740s, including east-west segments of Peaceable Street, Redding Road, Giles Hill Road and Stepney Road. Other early roads appear to have evolved from Indian trails, following natural north-south routes along high ground, such as Umpawaug Road, Sunset Hill Road and Black Rock Turnpike. Nonetheless most roads at this time were ill-defined and all were simply trails or rutted cart paths.

By the 1750s the parish was settled in all sections with farms, dwellings, and mills on several streams. In 1750 a new Episcopal church was constructed to replace the earlier structure on the same site, and in 1753 a new and more spacious Congregational meetinghouse was erected on Cross Highway a half mile west of the original structure.

In 1767 the parish's second petition to the General Court for township privileges was granted, and the Town of Redding was officially incorporated – with a more phonetic spelling of its name. It is estimated the new town had between 800 and 1,000 inhabitants at the time. Town committees immediately set to work to lay out additional highways. A parade ground and town house site were laid out at the intersection of Cross Highway and Lonetown Road where the present green is located. In 1769 the first "Town House" was erected here, a few yards south of the present "Old Town House" which was built in 1834.

The high terrain of Redding, commanding views south to Long Island Sound and northward toward Danbury, assumed strategic importance during the Revolutionary War. In April 1777 the road over Redding Ridge and Sunset Hill was the invasion route used by British forces in their assault on Continental army provisions stored in Danbury. A year later, in 1778 and 1779, Putnam's division of Washington's army was in winter encampment at three key locations in Redding to protect the left flank of American forces then holding the Hudson Valley. Remains of the largest of these camp sites are now preserved by the state within Putnam Memorial State Park, which contains a colonial museum as well as a monument to the American troops.

By the 1780s much of the better land had been thoroughly cleared, stone fences marked property boundaries, and substantial houses and barns had been built in every section. The growing town's population reached 1,310 persons in 1782, as reported in the Connecticut Census that year. Families were large, often with eight to ten children, and a

typical farm was likely to include an orchard, cropland, pasture, and domestic animals for the family's sustenance.

Numerous crafts, trades and specialized services had emerged to serve the needs of the growing community, and many farms were beginning to trade and export to distant markets. Records of the 1790s show that there were four grist mills and four saw mills operating on the several streams, also cider mills, a distillery and an iron works. The iron smelting and forging operation was located on the Little River at Sanfordtown, utilizing iron ore transported in large wagons from Brookfield and Roxbury. Also present in the growing town during this era were six stores, five taverns, two attorneys and two physicians. Tradesmen included tailors, blacksmiths, joiners, a shoemaker, a cooper, a weaver, a saddler, a tanner and wheelwright. By 1800 Redding had reached a population of 1,632 persons.

As the nineteenth century dawned, Redding's land was now thoroughly cleared and entirely allocated among self-sufficient family farms enclosed within stonewall-fenced fields. Produce being exported included apples, onions, potatoes, dairy products, wool, beef and pork, hauled regularly by wagon to such ports as Black Rock, Southport, Saugatuck and Norwalk for shipment to New York markets.

The roads of this period were little better than rocky, rutted paths, often mired in mud. A public outcry for better roads led the General Assembly in the 1790s to begin chartering private turnpike companies. One of the earliest of these companies was the Fairfield, Weston and Redding Turnpike, chartered in May 1797, which improved the old country road leading from Fairfield to Danbury via Redding Ridge (now Sunset Hill Road and Black Rock Turnpike). Other turnpikes chartered through Redding after 1800 included the Norwalk-Danbury Turnpike (through Georgetown and over Umpawaug Hill), the Simpaug Turnpike (through West Redding), the Norwalk-Newtown Turnpike (through Valley Forge, Sanfordtown and Hopewell Woods), and the Sherman Turnpike (through Sanfordtown, Redding Center and Lonetown).

Turnpikes were clearly superior to the old cart paths that they replaced, following in some locations the older highways but in others built on new, straighter and more level alignments. Bridges were used instead of fords for stream crossings on the turnpikes, and graded gravel surfaces made all-weather travel possible for the first time over long distances. It is important to remember that a turnpike company was a business venture and was given the right to charge a fee or toll to all of those who would be using the road. The toll rate was carefully controlled by the state legislature and was to be collected at tollgates placed at convenient locations along the road. The tollgate usually consisted of a small house in which the toll taker could take refuge in inclement weather, and a pike that could be rotated horizontally on a post. The word "turnpike" remains today as reference to the pike or long pole that was held across the road, and was raised or turned aside only when the traveler had paid the toll.

Increased mobility not only aided Town agricultural and manufacturing prosperity but brought other improvements in town life. Early in the 1800s stagecoach lines began regular runs over several of the improved roads, stopping at taverns in the Boston district, in Redding Center and on Redding Ridge. In 1809 Congress granted the Town its first U.S. Post Office. Small neighborhood trades, such as button and comb making, expanded to full-time operations. Several private schools were founded. Population reached 1,717 persons in 1810.

As the century advanced, industry and production of goods for export assumed new importance in the Town's economy. Wagon and carriage manufacture began in Sanfordtown in 1800, at one point employing 30 persons, and continued for over half a century. A woolen mill began operations on the Saugatuck in 1812, continuing successfully until destroyed by fire in 1843. Pins, iron carriage axles, and other metal goods continued to be produced in Sanfordtown for many years. One of the earliest limekilns in the State, located just north of Limekiln Road, was prospering by 1803 and continued for several generations. Hat making was another prominent industry of the era, in several locations; the largest shop, in Sanfordtown, employed from 25 to 30 persons. Buttons were manufactured at the same time in three shops along the gorge of the Aspetuck, employing 28 persons to produce three to four hundred gross of buttons per day. Bricks were manufactured on Redding Ridge and a successful shirt factory also operated nearby.

In 1818 a Georgetown tanner and currier invented a practical sieve made from animal hair, and began production on the banks of the Norwalk River. By 1837 the new partnership of Gilbert and Bennett succeeded in devising a loom to weave fine steel wire into sieves, wire netting and fence wire. So successful was the enterprise that a half dozen mill buildings were in production by mid-century, surrounded by a growing village of two dozen buildings.

Another successful industry, the Sanford Iron Foundry, began operations in 1842 at a site on the Aspetuck River at Stepney Road. Its products included agricultural implements and a hay-cutting machine that had extensive sales throughout the country.

By mid-century (1845), Redding's farms were annually producing, mostly for export, large quantities of corn and oats (over 30,000 bushels), potatoes (12,000 bushels), butter and cheese (75,000 pounds), wood, apples, onions and other produce. From the remaining forest stands, over a million board feet of lumber was being harvested each year for the local wagon and cabinet shops and four or five local sawmills. Large amounts of wood were also being cut annually to supply charcoal for the iron, lime and brick industries in Town, as well as for domestic fuel.

Town population peaked at 1,754 persons in 1850. Two years later the Danbury and Norwalk Railroad line was completed through the west side of the Town with depots at Georgetown, Topstone and West Redding. By the 1850s and 1860s the Town's woodlands were badly depleted and some farmland was beginning to lie fallow as an increasing flood of lower priced western produce came to eastern markets. Not surprisingly, some Redding farmers emigrated to the new land opening up in Kansas and other Midwestern areas. This also was a period in which new steam powered factories were being built along main rail lines. Redding's small water powered industries could no longer compete and gradually began to cease operations. Only Gilbert and Bennett, with access to the new railroad for coal and raw materials, and for shipment of its finished wire goods, was able to survive in the new economy. An 1867 atlas map depicted a rural town with an extensive network of roads, the new railroad line, 341 dwellings, 10 district (one-room) schools, four churches, three post offices, six neighborhood stores, and 35 small mills, shops and factories still in existence. By 1870, however, the Town's population declined by 130, to 1,624 persons.

The next half-century was the quiet period of Redding's history. As the small water powered mills and industries disappeared and less-productive farmland was abandoned, population continued a steady decline. Farming, mostly producing dairy and other produce shipped daily to nearby centers, was now the mainstay of the Town's economy, and those

families with the better farmland managed an adequate livelihood. Despite a disastrous fire in 1874, the Gilbert and Bennett Company rebuilt immediately on its site with modern buildings and machinery. The Company continued to prosper and expand thereafter, employing nearly 600 persons by the early 1900s. Consequently the village of Georgetown grew modestly during this period, adding new homes and streets while the countryside of Redding remained rural and pastoral.

Several noteworthy public gifts by Redding citizens occurred during this era. In 1878 a bequest established a public high school, the Hill Academy, in Redding Center. A few years later about 35 acres of land were donated to the State to establish the Israel Putnam Memorial Campground (now Putnam Park). Early in the 1900s a public school was presented to the Georgetown community by the Gilbert and Bennett Company.

During the 1890s Redding was "discovered" by prominent summer visitors from New York City and vicinity who were enchanted by the Town's tranquil beauty. Within the next two decades several dozen old farms, colonial houses and woodland tracts had been purchased by distinguished writers, artists, business and professional people who established summer homes and country estates in Poverty Hollow, Redding Ridge, Sunset Hill, Sanfordtown, Redding Center, Diamond Hill, Umpawaug and other sections. By 1910 automobiles were frequently seen on Redding's dirt roads, owned by the more adventuresome and affluent residents.

About 1909 one of the literary newcomers, Mark Twain, organized and donated a public library to the Town, which grateful townspeople promptly named for him. A few years later the Town had its first telephone exchange (located in a private dwelling on Cross Highway), with a small group of subscribers. Post offices continued to operate from private dwellings and country stores. After several disastrous fires, a volunteer fire company was organized at Redding Ridge around 1916, followed shortly by other fire companies at West Redding and Georgetown.

In 1916 the State of Connecticut embarked on an ambitious program to construct a network of trunk-line highways linking population centers and providing farm-to-market access for the rural towns. Construction of two-lane paved highways began shortly along the corridors of Route 7 and Route 58, the latter completed in 1921. Other state roads followed in the twenties and thirties, and Redding began a program of oil-surfacing the principal Town roads. By the mid-1930's hard-surfaced roads reached every section along with telephone and electric lines, and the Town's rural isolation passed into history.

While the rise of the automobile brought state-financed enlargement of some roads, the inability of automobiles to traverse the town's more severe roads resulted in widespread abandonment of minor roads. Traces of these roads are still visible in areas of second-growth forest throughout the town. The development of the Bridgeport Hydraulic reservoir system in Redding during the 1930's and 1940's led to additional road abandonment. One of the on-going tasks of the Planning Commission in the present time is to research these roads to assure that they have been properly discontinued from designation as public highways, while being documented and sustained in the town's historical record. In some cases, discontinued roads have been put to new use either as private driveways or as public ways for passive recreation and other minor uses.

As farming declined and the land reverted to woodland or was absorbed into country estates, the Town's population reached its lowest ebb since the first census in 1782, with only 1,315 persons counted in 1920. Despite this, new civic clubs and organizations were

founded by newcomers and new homes and small wayside businesses such as tearooms and gasoline filling stations began to appear along the principal paved highways. By 1931-32 the Town had closed all of its one-room district schoolhouses and enlarged the former Hill Academy at Redding Center to four classrooms to serve the eight elementary grades.

Home building slowed but did not cease during the Great Depression years of the 1930s. About two dozen farms were still operating, although Redding's land had by now returned to approximately 70% forest and woodland. A major controversy raged during the 1930s over the Bridgeport Hydraulic Company's plan to flood the Saugatuck valley for a large new water supply reservoir, inundating the historic village of Valley Forge and much of Redding Glen. Opponents lost their appeals and the Saugatuck Reservoir was completed in 1942.

Redding continued to attract artistic and professional persons through the period; its population in 1940 stood at 1,758 persons, equaling its peak from 90 years earlier.

With the close of World War II and the beginning of the great postwar housing boom, new house construction in Redding commenced at a vigorous pace. Now within easy commuting distance of job centers in Bridgeport, Danbury and lower Fairfield County, Redding began to attract speculative developers and its citizens realized that a potential avalanche of development threatened the still-rural Town. Following a public referendum, zoning was established and the Town's first zoning regulations became effective in June 1950.

As the fifties began, the anticipated rush of new development became a reality. Several large tracts were subdivided into one-acre lots, new subdivision roads were built, and the school population began to spiral upward putting pressure on the combined facilities of the Hill School and the new eight room Redding Elementary School, completed in 1948. Responding to Town wide demand, in 1953 the Zoning Commission enacted two acre residential zoning all areas outside of Georgetown, which retained enclaves of multiple-family, ½ acre and 1 acre lot zoning.

Concern about the Town's future persisted, and in 1956 a town meeting authorized the establishment of a planning commission. Regulations to control the layout of subdivisions were swiftly prepared, and adopted in February 1957. The construction rate for new dwellings was now about 40 per year, and the Town rushed to completion a new classroom wing at the elementary school, doubling its capacity. The same year, 1957, Redding and Easton referenda approved the formation of a regional school district, and a 35-acre site was purchased from a farm on Black Rock Turnpike for a school site. The new Joel Barlow High School, initially serving grades seven through twelve, opened for classes in the fall of 1959. The Town acted to create needed public office space by converting the Hill School into a Town Hall, and over the next twelve years the town also would acquire two modest wood-frame buildings and one historic dwelling adjacent to the Hill School site (these buildings are now the Town Hall Annex, the Police Department and the former Heritage House).

The buildings to house the Police Department and the Heritage House were purchased from the First Church of Christ Congregational, and this transaction represented a major shift in institutional ownership patterns in Redding Center. The First Church of Christ Congregational consolidated its facilities (church, church hall, and parsonage) on the Redding Green, in structures originally built as a distinguished private residence and as the town's Methodist church. In so doing the church vacated its historic

parsonage of 150 years. The town government, in like manner, consolidated its facilities in structures originally built for other purposes (school, dentist office, parsonage, Sunday school) around the Redding Parade Ground (which had been itself originally a part of the farm lot of the Congregational parsonage). This rationalized the facilities of both institutions, and ironically it brought to Redding the simple image of a Connecticut town centered on a green with a Congregational church and parsonage, while in reality Redding's physical, political and religious history had been somewhat more complex than this.

In 1960 the Planning Commission adopted a "Policy Plan" for the Town, which recommended preserving the low-density character of Redding and proposed an open space program for the Town. The Town's 1960 population was recorded at 3,359 persons, a 65% increase from its size ten years earlier. By the mid-sixties new residential construction was running at the rate of 60 to 70 units per year and the Town initiated planning for another school. John Read Middle School, located on a new site on Route 53, opened in early 1966.

1964 saw the official establishment of the Redding Conservation Commission and in 1965 a long and successful public-private partnership for land preservation was begun with the founding of the Redding Land Trust. The Land Trust, a private non-profit organization, was founded to encourage gifts of open space land, and it quickly became a groundbreaking model for such organizations, advancing Redding to the forefront as a model of grassroots creativity and a community-based vision. The Redding Land Trust has remained a key Town institution ever since that time.

In 1965, a town-wide survey undertaken by the Planning Commission showed that 73% of Town respondents favored spending tax money to buy open space land; the Commission adopted, as long-range policy, the goal of preserving one-fourth of the Town – 5,000 acres – as permanent open space. A town meeting on October 20, 1967 authorized using up to a total $1.3 million of the Town's credit for purchase of open space land should opportunities arise. To assess the worth of this policy, the Town commissioned a study by an economic research firm. The study showed statistically that buying acreage for open space would be more beneficial to existing taxpayers than building houses on the land. The study demonstrated that tax revenues from new homes would not fully offset the added costs for schools and infrastructure that they would necessitate.

Private efforts, spearheaded by the Redding Land Trust, supplemented what the town could afford. Over the years the Land Trust has received more than 150 donations of land for open space, encompassing more than 1500 acres.

When the 412-acre estate of famed photographer Edward Steichen came on the market in 1970, a referendum approved its purchase for a Town park centered on the property's large pond. When a later referendum reversed that approval, members of the Planning Commission journeyed to Lincoln, Massachusetts to assess that community's use of joint public-private purchase of open space. The result was creation by a group of citizens of Redding Open Lands Inc. As a not-for-profit development entity, ROLI borrowed enough to purchase more than a quarter of the Steichen tract (118 acres), reducing the Town's costs by a sufficient amount to gain voter approval. ROLI in turn donated 75 wetland acres within its acquisition to the Audubon Society, and divided the remaining 43 acres into ecologically laid-out lots of three to 10 acres each. ROLI was able to repay its bank loan with the proceeds from selling these lots for single-family house development.

Over the next ten years, using then-available Federal grants-in-aid, State matching funds, and Town funds in the amount of 1.18 million dollars, the Town purchased thirteen tracts of land totaling 1,256 acres. By 1979 a total of 2,627 acres had been acquired or reserved as permanent greenspace – 1,367 acres held by the Town, 737 acres in two State parks, 336 acres donated to the Redding Land Trust and 187 acres in two tracts owned respectively by the Connecticut Audubon Society and by the Nature Conservancy.

The "Race to Save Open Space" was timely and effective. Subdivision and new house construction continued at a fast pace through the sixties and seventies, increasing the Town's population by an additional two-thirds each decade. In 1980, only thirty years after the development boom began, Redding's population exceeded 7,200 persons and about 35% of its land area was developed, the great majority comprising newer single-family homes distributed throughout all sections of the Town. Although Federal and State open space grants essentially ceased after 1975, the open space network continued to grow through private donations and a newly enacted local requirement for open space setaside in subdivisions. From all sources, Redding's open space resources reached 2,730 acres by 1984.

When the Town Plan was updated in 1984, it was expanded to incorporate a formal Open Space Plan. This document strongly reaffirmed the Town's commitment to the twin goals of preserving 25% of the Town's land area as permanent open space and maintaining the Town's "country atmosphere" of low density residential, rural roads, and protected water resources.

Town development slowed in the latter 1980s and early 1990s due to a lengthy real estate recession. At the same time Redding's land use regulations were comprehensively strengthened. Nevertheless, the Town registered a 1990 population of almost 8,000 persons. New plans and Town regulations were adopted for the village area of Georgetown in 1989. A special Town Plan supplement was prepared for Redding Center in 1992, and at mid-decade the Town undertook a comprehensive remodeling of the Town Hall consistent with preservation of the historic character of the area.

During the decade from 1996 through 2006, Town growth continued at a modest rate, adding about 315 new dwellings and nearly 900 new residents. A new town Community Center, on land west of the Elementary School, was constructed at mid-decade, providing much needed space for indoor recreation and an expanded Senior Center. School additions were completed at John Read Middle School and at Joel Barlow High School, as well as extensive new playing fields at the Barlow campus and at the Redding Community Center.

Perhaps the two most significant land use developments during the decade, however, were the spectacular growth in permanently conserved open space land and real progress in the redevelopment of central Georgetown.

Long threatened by potential sale for development, over 15,000 acres of watershed land held by the Aquarion Water Company – including more than 2,800 acres in Redding – were acquired in a collaborative venture between the State of Connecticut and The Nature Conservancy and is now the "Centennial Watershed State Forest". In a similar collaborative venture the Town of Redding partnered with The Nature Conservancy (TNC) and Redding Open Lands Inc. (ROLI) to purchase five large tracts, aggregating 332 acres for public open space. By 2007, Town residents lived in the midst of more than 7,440 acres of greenspace - 36% of the Town's area - greatly surpassing the previous Town Plan goal of 25% "forever green".

Collaboration was also the theme in the Town's efforts for redevelopment of the old Gilbert and Bennett Manufacturing Company brownfield site of 58 acres in central Georgetown. Having gone out of production as a factory in the mid-1980's, by the time of the 1998 Town Plan revision Georgetown was a key continuing focus - and an ongoing worry - for the Planning Commission and the town at large. Reflecting recommendations in the 1998 Town Plan, a multidisciplinary effort was begun involving all of the Town's relevant agencies, which contributed personnel to the ad-hoc *Georgetown Master Plan Committee (GMPC).* The stated objective was to overcome the impact of more than 10 years in which planned redevelopment of the site had not occurred despite the Town's rezoning for mixed-use development, based upon a master plan that had been proposed by the developer.

The necessary master plan had been approved in 1989, and yet the site had remained largely unoccupied with no new development activity. In 1994, the owner had put the site up for auction and yet no qualifying bid had been obtained. By the time of the formation of the GMPC, the Town held a tax lien approaching $1,000,000 in value, and so the Town's intent was to use the leverage derived from the lien to facilitate appropriate redevelopment.

The main impediment to a successful redevelopment effort had been identified as uncertainty as to the development potential of the site. This reflected concerns about unknown environmental costs, unknown potential for the expansion of sewer and water resources, etc. Assurance of the town's assistance was seen as a means of at least mitigating the impact of these uncertainties.

The Georgetown Master Plan Committee considered a wide variety of options ranging from simple vending of the lien to direct public ownership of the site. In the end it was decided that the best course of action would be to find a private developer capable of delivering a finished product, who would also be willing to work within the boundaries of the Town's stated interests. Among those interests was the use of Andres Duany, of Duany Plater Zyberk, the world's leading "New Urbanist" planning firm, to develop a new Master Plan from a public-participation Charrette process (the Charrette process involves developing the Master Plan in a short-term period of intensive on-site work with a multi-disciplinary professional team and continuous public meetings).

The winning developer, Steven Soler, an experienced brownfields expert, met the town's requirements and since the time of the Charrette has further developed the Master Plan in a continuous teamwork process with Town officials. The result is a project that has brought multiple awards to both the Town and the developer, including a United States Environmental Protection Agency national Smart Growth award in 2005. The project, which now is in the early stages of construction after lengthy rounds of review and approval on local, state, and federal levels, will form a true town center for Georgetown - a walkable, transit-oriented neighborhood that will include the best of the historic existing factory buildings as well as substantial new construction. The mix of uses will include:

- Single-family and multi-family residential,
- Office and retail space
- Space for small-scale craftsmen and artisans,
- Space for the arts and for recreational uses

- Public access for protected open space along the Norwalk River and the Gilbert and Bennett Pond.
- A newly-re-established Georgetown station on the Metro-North railroad

Across the unfortunate traffic gulf created by the state's 1954 imposition of Route 107, the Georgetown Land Development Company's project looks out toward Main Street and Old Mill Road. These streets, comprising only a few blocks, constitute the historical commercial center of the village of Georgetown.

During the same period when the Georgetown Master Plan Committee was setting a plan in place for the former Gilbert and Bennett factory site, the Committee also began implementation of longstanding planning goals for preserving the physical form and increasing the business potential of the existing commercial center of Main Street and Old Mill Road.

Other interest groups also coalesced around the need for improvements on Main Street/Old Mill Road. Of particular importance was the Georgetown Village Restoration (GVR) group, encompassing both merchants and residents, which became a key stakeholder representative. The Norwalk River Watershed Association (NWRA) also became instrumental in the planning of improvements. Over the course of a time period now approaching a decade the town, the GVR group, NWRA, and several consultants have sought the right solution for this area. The planning of improvements for Main Street/Old Mill Road has been slow and complicated but as of this writing these efforts are starting to be realized. When a successful project finally is finished, it will have benefitted from both a long-term Town commitment and indefatigable grassroots efforts.

As far back as the early 1980s the Planning Commission had realized that the impending closure of the Gilbert and Bennett Manufacturing Company and the aging central business district along Main Street and nearby Old Mill Road would require serious planning attention. The 1984 Town Plan stated, in respect to Georgetown development: "Town planning and action programs should be carried out to create needed parking, traffic circulation and other improvements in collaboration with Georgetown business people." As a result the Commission and its consultants prepared the *Georgetown Supplement to the Town Plan*, embracing a study area of 1.080 acres predominantly in Redding, but including peripheral areas in Ridgefield, Weston and Wilton, adopted in 1989.

Based on studies of land use, natural resource limitations, water supply, sewage disposal, traffic circulation, etc. a major focus of the plan (along with the Gilbert and Bennett site) was revitalization of the Main Street/Old Mill Road commercial district. Detailed studies of the district were carried out by the Commission throughout the 1990s and early 2000s, analyzing parking deficiencies, site limitations and growth potential. A streetscape enhancement analysis and plan was prepared, and grants were obtained by the Town to carry out work within the street right-of-way such as sidewalks, lighting, plantings, and street trees. In 1999 the Commission amended the Town Plan to define its program for the Main Street/Old Mill Road business center as follows:

- Establish building lines to allocate appropriate areas for buildings, streets, parking, open space and other uses.
- Encourage a village center which incorporates residential uses.

- Provide for infrastructure improvements, including streetscape enhancement, parking, pedestrian walks, lighting and planting.
- Work with local property owners for private investment and to encourage harmonious design.

In entering into the implementation of these improvements, the 1989 and 1999 goals remain fully valid. To these some new and more-specific concepts have been added:

- Provide active pedestrian linkages between the Main Street/Old Mill Road commercial area and the mixed use development being planned simultaneously by the Georgetown Land Development Company (GLDC) on the Gilbert and Bennett factory site. These linkages should encourage pedestrian traffic in a safe and controlled manner across Route 107, as well as a pedestrian linkage directly to the large parking garage being planned by GLDC.
- Continue to provide on-street parking, supplemented by surface parking lots and limited, shared, complementary use of the parking garage anticipated for construction on the GLDC site. As a generally-applicable concept, property owners should be relieved of the requirement for providing off-street parking and instead this should be provided by the Town for shared use by the businesses of the district.
- Provide for traffic calming, and coordinate traffic planning with the traffic planning for the GLDC site.
- Initial recommendations to place all utilities underground have been dropped from the project as unfeasible

A program of incentives for business center property owners has been enacted by the Zoning Commission on the recommendation of the Planning Commission. Under this program, a Main Street or Old Mill Road property owner who donates land along the street frontage, up to the Building Line adopted by the Planning Commission, receives a substantial benefit in additional floor space allowed and is relieved of on-site parking requirements. The first phase of added building lines went into effect as a Pilot Program in 2007, along the West side of Main Street.

This 2008 revision of the Town Plan of Conservation and Development envisions a healthy and attractive future for central Georgetown. New planning initiatives for this part of town may be not be appropriate at this time, however, while both the Georgetown Land Development Company project and the Main Street/Old Mill Road enhancements are in the early stages of implementation. As these projects begin to achieve completion and occupancy, new patterns of activity will emerge, perhaps new problems will be present, and a thorough review of the Town's 20-year effort to bring Georgetown into a new 21st-century life will be valuable. Thus there is a possibility that a new Georgetown supplement to the Town Plan of Conservation and Development will be issued before the next general-revision date for this document.

Present-day Land Use Picture

Land use is the bedrock foundation of all Town planning, since the manner in which a community's land is used and conserved is a measure of both its current character and its future potential. The starting point, therefore, of this update of the Town Plan was preparation of a new and more accurate town base map, using digital "geographic information system" (GIS) technology.

The new base map, which is coordinated with previously prepared natural resource mapping of the town and with prior land use maps, shows all roads, streams, water bodies and lot lines. Town boundaries have been researched - and corrected in one section- with the result that Town area has increased by approximately 17 acres. GIS mapping provides a base of improved accuracy for future data analysis.

Land use has been mapped to the end of 2006, and classified in accordance with seven major categories of Developed Land and six major categories of Undeveloped Land, as counted in acres and expressed in Table 3-A. Various symbols and facility names are used to identify significant uses.

Two minor categories are new on the 2006 Land Use Map. These portray significant new uses for "Life-care Facility" and "Centennial Watershed State Forest"; otherwise 2006 land use types closely correlate with previous maps (the Centennial Watershed State Forest comprises lands formerly identified as "Water Supply Land", due to the transfer of development rights on water supply land to conservation agencies).

Since 1996, land in the "Developed" and "Permanently Reserved (Open Space, Public; Open Space, Private; plus Conservation Easements)" categories has increased dramatically faster than Town population. The total of developed land has increased by a little over 7% from 8,900 acres to 9,550 acres while privately owned land potentially available for development has declined by one-third, from 5,010 acres to 3,300 acres (see Table 3-A). Due to the shrinkage of land available for development, it is now realistic to anticipate a maximum future Town population of between 10,900 and 11,500 persons, depending on such variables as family size, future development in the Georgetown area, likely quantities of dwelling units in Affordable Housing Developments, and Town land use policies.

As noted in the 1998 Town Plan, the R-2 Residential Zone at 97.4% of total Town area continues to experience most of the Town's new single-family residential growth. All but a handful of new homes built occurred in recent subdivisions within this "Rural Residential" Zone, throughout all sections of the Town. In addition to the 315 new single family dwellings counted (including the more densely developed "Redding Woods" project), an estimated 18 accessory residential apartments and 9 condominium apartments were created. Residential unit totals do not include the approximately 200 assisted-living units recently completed in the "Meadow Ridge" life-care community on Gilbert Hill.

At the last land use survey in 1996, Light Industry and Corporate Office categories were included to provide for undetermined future uses in the Georgetown area. In the 2006 land use table the former Gilbert and Bennett complex, now zoned Historic Mill Center (HMC), is classified as "Vacant". However the underlying zone regulations in HMC provide for master plan-based development standards, and the master plan and resulting form-based supplementary zoning for that site provide for potential light industry and research uses, so those use classifications appear in the 2006 land use table.

A significant increase in land area devoted to recreation, 20 acres, has occurred primarily as a result of new playing fields developed at the Redding Community Center and at Joel Barlow High School.

In the group of "Permanently Reserved"[2] lands there has been a notable increase in conservation easements, the largest two being the 66.4 acre Meadow Ridge setaside and the 18.9 acre Georgetown Land Development Company setaside (comprising Factory Pond and environs). As of the beginning of 2000, the Redding Land Trust held 634 acres of conservation easements, 191 acquired since the end of 1996.

[2] Permanently Reserved lands are recorded on the Assessor's record as "Protected."

Table 3-A(i) (Rev. Dec. 2007)

EXISTING LAND USE

In Acres, By Zone

Note: *All italicized figures are SUBTOTALS of figures above*

DEVELOPED LAND	R-4	R-2	R-1	R-1/2	RV	HMC	SDD	NB	SB	BC	OR	TOTAL
Residential	--	8,029	90	33	22	--	--	--	2	4	--	8,190
Institutional	--	347	1	3	2	--	58	--	--	2	--	413
Town Government	--	*5*	--	--	--	--	--	--	--	--	--	*5*
Public School	--	*70*	--	--	--	--	--	--	--	--	--	*70*
Recreation	--	*211*	--	--	--	--	--	--	--	--	--	*211*
Public Safety	--	*6*	--	--	--	--	--	--	--	*1*	--	*7*
Library/Museum	--	*9*	--	--	--	--	--	--	--	--	--	*9*
Life-care Facility	--	--	--	--	--	--	*58*	--	--	--	--	*58*
Religious	--	*33*	*1*	*3*	*2*	--	--	--	--	*1*	--	*40*
Cemetery	--	*13*	--	--	--	--	--	--	--	--	--	*13*
Commercial	--	6	2	--	--	--	--	5	15	13	--	41
Light Industry	--	--	--	--	--	--	--	--	4	3	--	7
Corporate Office	--	--	--	--	--	--	--	--	--	--	--	-
Utilities	--	109	--	--	--	2	--	--	--	--	--	111
Roads & Transportation	--	749	12	6	2	3	2	4	11	7	--	796
TOTAL DEVELOPED	-	9,240	105	42	26	5	60	9	32	29	--	9,548

Legend:

- R-4: Conservation Residential Zone
- R-2: Rural Residential Zone
- R-1: Low Density Residential Zone
- R-1/2: Suburban Residential Zone
- RV: Village Residential Zone
- HMC:
- SDD: Special Development District
- NB: Neighborhood Business Zone
- SB: Service Business Zone
- BC: Business Center Zone
- OR: Office and Research Park Zone

Table 3-A(ii) (Rev. Dec. 2007)

EXISTING LAND USE

In Acres, By Zone

Note: *All italicized figures are SUBTOTALS of figures above*

UNDEVELOPED LAND AND WATER AREA	R-4	R-2	R-1	R-1/2	RV	HMC	SDD	NB	SB	BC	OR	TOTAL
Open Space, Public	--	5,420	--	--	--	--	--	2	--		--	5,422
Town-owned	--	*1,517*	--	--	--	--	--	--	--	--	--	1,517
Town & Nature Conservancy	--	*332*	--	--	--	--	--	--	--	--	--	*332*
State Park	--	*749*	--	--	--	--	--	--	--	--	--	*749*
Centennial Watershed State Forest	--	*2,822*	--	--	--	--	--	*2*	--	--	--	*2,824*
Open Space, Private**	--	1,362	--	--	--	--	--	--	--	--	--	1,362
Conservation Easements	--	659	--	--	--	19	66	--	--	--	--	744
Water Bodies***	--	(377)	(2)	--	--	(12)	--	--	--	--	--	(391)
Vacant, Public****	--	156	--	3	--	--	--	--	--	--	--	159
Vacant, Private	--	3,169	45	1	4	34	11	3	28	5	-	3,300
TOTAL UNDEVELOPED	--	10,766	45	4	4	53	77	5	28	5	-	10,987
TOWN TOTAL	--	20,006	150	46	30	58	137	14	60	34	-	20,535

* Data compiled from Town Records and aerial survey, as of December 2007

** Privately owned non-profit conservation organizations and neighborhood associations.

*** Lakes, ponds and reservoirs only (wetlands not included). Because water bodies are included in the area counts for other undeveloped categories these figures are in parentheses, signifying that they are not to be added to the other figures in this column. Water bodies are tabulated here because they appear as distinct categories on the Land Use Map.

**** Town and Fire District owned.

Conserving Open Space and Rural Character

For several decades a particularly effective program in maintaining Redding's rural character has been its reduction of property tax on sizable land holdings, authorized by C.G.S. Section 12-107a through 12-107c as amended and known as "Public Act 490". Under Public Act 490, property tax reduction is applied, at differing rates of reduction, to three categories of land:

- Forest land (minimum of 25 acres certified by a state forester),
- Farm Land,
- Open Space land.

Without Public Act 490 tax relief benefits, the financial burden on landholders would have resulted in a substantially larger quantity of residential development and a correspondingly smaller amount of land conservation during the recent ten-year period.

In Redding, by virtue of an amendment to the Town Plan of Development in 1970, contiguous land areas in excess of four acres under unified ownership are classified as Open Space by the Assessor. The resulting property tax savings to land owners are subject to proportional recapture if the designated land is sold during the first ten years after classification.

In 1981 land qualifying for Public Act 490 property tax reduction in Redding totaled 6,750 acres. By 1996, 15 years later, the amount of tax reduced acreage had declined modestly to 6,003 acres, a 12% decline reflecting increased development. In the past ten years the Public Act 490 land has declined dramatically to 2,898 acres - although this does not indicate a reduction in land conservation as many of the parcels removed from the Public Act 490 program have been purchased by the Town and/or The Nature Conservancy, or have been donated to private land preservation bodies such as the Redding Land Trust. Aquarion Water Company land purchased by the State for the Centennial Watershed Forest has also been removed from this category. Per Town Assessor figures:

Table 3-B

Acres of Private Land, Tax-reduced

	1996	2006
Farm	254.7	211.2
Forest	3,880.7	1,134.8
Open Space	1,868.0	1,552.8
Total	6,003.4	2.898.8

Redding's use of the Public Act 490 program has been successful in its original mission of preserving farms, forest and open space land. Tax reduction on larger acreages continues, and this form of conservation remains as an essential ingredient in Redding's rural ambience. Some owners have been able to hold their land over many decades until a satisfactory final disposition could be achieved. Gratefully, the outcome on many parcels also has benefitted the Town and has aided in the protection of regional natural resources and water resources in harmony with the stated goals of the Town Plan of Conservation and Development. Without Public Act 490 many of Redding's preserved acres would have been developed long before they could have been considered for preservation.

Table 3-C

ANALYSIS OF TOWN DEVELOPMENT POTENTIAL

Vacant Land Suitable For Development, In Acres

(a)	(b)			(c)
Z0NES (Total Acres of Private Vacant Land) (1)	Vacant Land Generally Not Suitable For Development			Suitable For Development
	Lake, Pond and Water Body (2)	Major Wetland and Flood Plain (3)	Steep Slope and Ledge (4)	Net Acres (5)
RESIDENTIAL				
R-2 (3,169)	54	623	317	2,175
R-1 (45)	2	15	9	19
R-1/2 (1)		1		0
RV (4)		1	3	0
SPECIAL USE				
HMC (34)		3		31
SDD (11)			11	0
NONRESIDENTIAL				
NB (3)		1		2
SB (28)		6	11	11
BC (5)		1	2	2

NOTES:

(1) Vacant private land totals derived from Table 3-B.

(2) Surface water bodies only (excludes aquifers). Does not include water bodies within reservations or developed land.

(3) From Town wetland, flood plain and natural resources mapping; minor wetlands and narrow stream corridors excluded, as these do not typically preclude site development.

(4) From Town slope analysis mapping; slopes 20% and greater.

(5) Land deemed suitable for development is the amount of vacant private acreage, Column (a), minus the sum of seriously constrained acreages within such land, Column (b).

Land Use Issues For The Future

Since planning was initiated in Redding a little over fifty years ago, the Town's landscape has changed dramatically.

In the mid-1950s the 98% of Redding outside the village environs of Georgetown was essentially rural – characterized by widely spaced country homes, a dozen or more

operating farms, and much open land in every section. Residential development at the time occupied about 10% of Redding's land area. All other developed and reserved land (including Georgetown, Bridgeport Hydraulic lands, and Putnam Park) occupied another 17% and nearly three-fourths of the Town area was developable land in private ownership.

Today nearly half of the land area of Redding, 47%, has been developed for active use and of this amount 86% is residential, mostly in single-family dwellings on two acre and larger lots. Of more than 160 Town roads, 81 have been created by subdivision of formerly-large tracts. As a result of the more than 7,300 acres of permanent open space set aside over the past half century, this impact from development is offset by establishing 36.7% of the Town's area as "forever green", exceeding the long-established goal of 25%. Privately owned developable land has declined to approximately 3,300 acres, or 16% of the Town's area, widely distributed across the Town.

But what of the 3,300 acres of land as yet uncommitted to future use? Herein lies a particular imperative for thoughtful evaluation of growth alternatives, as it is quite likely that serious development challenges will arise involving these lands during the years ahead. Longstanding land-use practice in Redding has mandated a high standard of environmental design, in part because of an overall orientation toward land conservation and in part because of the town's necessary role in protecting underlying public water supply resources. Some of the areas of concern for the upcoming ten-year period include the following:

- High density affordable housing applications. State law (General Statutes, 8-30g.) presently permits appeals of denied applications for Affordable Housing Developments, with the burden of proof falling upon the Town's Planning and Zoning Commissions (8-30g does not impact Inland Wetlands decisions) to prove that a health and safety issue is at stake that supersedes the established need for Affordable Housing. Such proof can be highly technical and difficult to sustain, and in both the language of the law and in case histories, it appears that Affordable Housing appeals have not adequately addressed the negative environmental impacts that can arise when dense multi-family projects proliferate in public water supply watershed areas. Due to this Redding is at particular risk of negative impacts from inappropriately sited Affordable Housing Developments, and the environmental risk involved has the potential to affect over 500,000 people regionally who depend upon reservoirs in Redding, as well as most of Redding's residents who obtain water from the same watershed through private wells. Given these circumstances Redding should advocate to amend Sec. 8-30g, in order to prohibit high-density zoning overrides for housing projects in public water supply watershed areas. At the same time, Redding should actively take on the challenge of creating town-owned Affordable Housing Developments on Town-owned land.
- Advancing technology in water supply and waste treatment. New techniques for wastewater purification, as well as for renovation of lower-quality drinking water sources, have begun to be available, and could eventually remove or diminish traditional barriers to more intensive development of water supply watersheds and to minimum lot sizes for on-site wells and septic systems. Questions have been raised, however, about the sustainability and utility of these technologies in actual practice, and expert sources such as the Nature

Conservancy have recommended a moratorium on the use of such systems. At present Redding's regulatory environment does not prohibit or discourage the use of these systems. This policy is in urgent need of review, and Redding should advocate on the state level for a moratorium on these technologies until they can be shown to be safe in real-world usage (see also Chapter 2, Natural Resources).

- Growing regional infrastructure and transportation needs. As population and congestion intensify in this northeast corridor there will be increasing pressure for new transportation facilities, institutional growth, expanded utility systems, senior and affordable housing, and other needs of an urbanizing area. Examples of regional growth that have recently had an impact in Redding include the plans for highway upgrades of Route 7, plans for expanded Danbury branch rail service, a new rail station at Georgetown, the new 345kv powerline through Redding, cellular towers, and the Meadow Ridge life-care project. More are likely in the future because of Redding's location and accessibility, and in the absence of careful planning unnecessary impacts may occur. Town plans must carefully define, in concert with regional planning's agencies, where growth of regional facilities may be located to successfully coexist with the town's conservation and preservation needs.
- Special Treatment of Sensitive Lands: Redding's longstanding partnership with both public and private charitable institutions has been a key factor in sustaining both the desirable visual character of the town as well as the viability of the underlying public water supply watershed. Specific techniques such as conservation easements, open space purchases, bequest programs, and set-asides on development parcels have been effective in providing for sustainable development in sensitive areas. These techniques will be of particular importance as development pressure begins to be felt on the town's remaining large parcels.

As State and Regional Plans have evolved over the past several decades, the greater portions of Redding, Easton and Weston, as well as southern Danbury and Bethel, northern Ridgefield and southwestern Newtown have been recognized as an extensive greenbelt which separates urban centers and provides vital fresh air, water supply, recreational and environmental benefits to all of southwestern Connecticut. Special conservation studies, such as The Nature Conservancy's "Saugatuck Forest Initiative," are currently underway for this area.

At the heart of this special area, Redding has a key role to play in conserving a sound environment for future generations who will inherit our region as their homes. The town's land use policies must reflect this mission.

Recommendations

3-1. Purchase tracts of land as they come on the market to protect the Town as a vital watershed, maintain its rural character, provide for active and passive recreation, and preserve an equitable tax base by minimizing costs of additional schools and services. Continue meetings of Redding's seven-member Open Space Committee (consisting of two members from the Conservation Commission and Planning

Commission, a representative of the Historical Society and the Redding Land Trust and the Land Use Coordinator) on an as-needed basis to review the status of available land and make acquisition recommendations to the Selectmen.

3-2. Pursue legislation to accomplish the recommendations of State and Regional Plans, including the State Plan of Conservation and Development, which recommend limiting residential densities on public water supply watersheds to no greater than one dwelling unit for every two upland acres. In particular, pursue legislation disallowing zoning density overrides in Affordable Housing appeals under CGS Sec. 8-30-g, for housing development in watershed areas.

3-3. Protect the Town's groundwater resources by enacting:

a) aquifer protection districts and regulations;

b) a Town health code with stricter standards in recognition of Redding's special environmental issues including its presence on a public water supply watershed.

3-4. In order to preserve environmentally sensitive land, consider adoption of coordinated amendments to the Zoning Regulations and Subdivision Regulations to require that the countable portion of newly created lots in residential zones shall not include land comprised of wetlands, watercourses, 100 year floodplains or slopes of 20% or greater.

3-5. Support the limitation of the public water supply franchise area and sewer service area to higher-density areas, as delineated on the Town Plan, to avoid pressures for intensive development in outlying environmentally sensitive areas.

3-6. Utilize Incentive Housing Zones under the Connecticut Housing Program for Economic Growth in order to create Affordable Housing consistent with other planning priorities of the town. Examine the potential for non-profit development on Town-owned land in order to assure maximum affordability and minimum environmental risk (see also Chapter 9 – Housing).

3-7. In an effort to preserve the scenic character of the Town as well as its existing smaller homes, study ways to amend Subdivision Regulations and Zoning Regulations to provide clearer regulation of maximum building area. Investigate potential for using floor-area ratio as a further means of regulating building bulk.

3-8. Continue supporting Public Act 490 as a means of preserving Redding's farm, forest, and open space land. Study the potential impacts that would result if 490 tax reductions were expanded to include lands having permanent conservation easements upon them.

3-9. Recognize that farming and animal husbandry are established elements in Redding's history and rural residential character, and are therefore desirable to preserve insofar as they contribute to open space, food production and community values. Such activities, however, should not be conducted so as to cause injury to the health, safety or property values of neighbors or the community.

3-10. In reviewing Subdivision applications, encourage use of scenic and historic vistas, the "view from the road" and ridgelines as open space set asides to preserve the rural character along with the long-standing priority of land conservation. Study

ways to amend the Subdivision Regulations and Zoning Regulations to protect scenic vistas and areas of unique environmental value.

3-11. Continue to support the economic and cultural revitalization of central Georgetown including the Georgetown Land Development Company project and the Main Street/Old Mill Road enhancement. Coordinate with adjacent towns to study joint policies by which to affect the Georgetown community as a whole. As current development projects begin to reach completion and occupancy and new patterns emerge, plan a thorough review of the past 20-year planning effort for Georgetown and set new goals to assure a sustainable future for the community.

3-12. Evaluate the viability of current Alternative Treatment System technology for on-site sewage disposal, and advocate on the state level for a moratorium on the use of such systems until they are proven from real-world testing to be environmentally safe (see also Chapter 2).

3-13. Develop the Town's GIS mapping management procedures to coordinate the needs of the Town's various departments and agencies, and to place responsibility for communicating with the town's GIS consultants into the hands of a single GIS Manager. As part of this, develop procedures for updating the Land Use map in a unified process whenever the Town Assessor's map is updated.

CHAPTER 4: POPULATION AND PEOPLE OF REDDING

Population Change Over the Years

From the time of its first settlement, early in the eighteenth century, to the end of World War II, Redding remained a distinctly rural community.

At the Connecticut Census of 1774 Redding contained 1,234 inhabitants, or about one person for every seventeen acres of land. The town grew slowly for the first eighty-three years of its existence, reaching a peak population of 1,754 persons in 1850. Thereafter the town experienced a gradual decline in its population for another eight decades as many of its small family-operated industries and rocky farms were abandoned. Redding's population in 1920 stood at only 1,315 persons, just what it had been in 1782. Twenty years later, in 1940, the Town's population reached 1,758 persons, equaling its peak of 1850. Throughout this early period there were no more than 41 to 55 persons, approximately 12 to 18 households, for every square mile of Redding's terrain.

Table 4-A

POPULATION HISTORY OF REDDING

1782 – 2006

Persons

Year	Town Population*	Per Square Mile**
1782	1,310	41
1800	1,632	51
1850	1,754	55
1900	1,426	44
1910	1,617	50
1920	1,315	41
1930	1,599	50
1940	1,758	55
1950	2,037	64
1960	3,359	105
1970	5,590	174
1980	7,272	227
1990	7,927	247
2000	8,270	258
2006 (Estimate)	8,620	269

* Population figures from Connecticut State Census (1782) and Federal Decennial Censuses (1800-2000). Estimated population (2006) based on 2000-2006 dwelling units added and 3.0 persons per household.

** Town area rounded to 32.1 square miles for consistency with State Register and Manual area figures.

In the six decades following World War II, however, Redding has become closely linked to the economy and population trends of the surrounding area, especially Fairfield County and the New York metropolitan region. Along with the seven towns which encircle it, Redding has grown dramatically in population, adding about 6,500 residents since 1950. As shown in Table 4-B this group of towns increased in population between 1950 and 2000 by 146% to 442%, Redding's increase being 306%. This tidal wave of suburbanization has transformed the character of Redding and its environs from a semi-rural area to a highly-developed, mostly low-density, spread-out exurban residential area. Peaking in the 1960's and 1970's, the rapid population growth rate has slowed since 1990 due to a shrinking supply of developable land and an escalation of land values, as the diminished rates of increase from 1990 to 2000 demonstrate.

Continued population growth in Redding and adjacent towns is predictable for the next several decades, but recent trends suggest that the rate of growth throughout the area will tend to diminish as towns approach their development capacity.

Table 4-B

CURRENT POPULATION AND DENSITY

Redding and Adjacent Region

	Year 2000 Population	Rate of Increase 1950-2000	Rate of Increase 1990-2000	Year 2000 Pop./Sq. Mile
REDDING	8,270	306.00%	4.30%	263
Bethel	18,067	254.00%	3.00%	1,076
Danbury	74,848	146.70%	14.10%	1,777
Easton	7,272	235.90%	15.40%	265
Newtown	25,031	236.10%	20.50%	433
Ridgefield	23,643	442.80%	13.00%	687
Weston	10,037	402.40%	16.10%	507
Wilton	17,633	286.90%	10.30%	654
HV Region	212,248	258.60%	13.00%	630
State of CT	3,405,565	69.70%	3.60%	700

Data Source: Population and population density figures as reported in 2000 Federal Census.

Town Growth Potential

Redding's potential population capacity depends on three factors: land use policies, trends in household size, and the amount of land available for residential development.

It is reasonable to assume that presently established zoning and land use densities, as well as Town policies encouraging restraints on intensive development, will continue for the foreseeable future. Based on recent trends it is also reasonable to expect that average household size will remain steady at around 2.8 persons per single-family household (see Table 4-D) which is consistent with the Town's predominantly single-family character and with area wide demographic trends. Accessory apartments, townhouses, and assisted-living units, comprising a minority of future residences in Redding, are projected to average no more than 1.5 persons per dwelling unit.

Table 4-C, "Residential Growth Capacity" , combines these factors with the land available for future development (Table 3-B) to project the number of dwelling units likely to be constructed in Redding, and thereby the town's probable population capacity. From this analysis it is estimated that Redding may grow to a population, at full development, just short of 12,000 persons. It is important to note that a significant change in any of the three factors influencing town growth could alter this estimate upward or downward.

The rate at which Redding's population will grow in the future is considered in the projections given in Table 4-C. By 2007 the rate of new residential construction had significantly slowed, a national housing recession was underway, and the Georgetown redevelopment project was yet to start construction. Consequently the year 2010 projection is modest. The projection for 2020, however, reflects an anticipated housing recovery and completion of the Georgetown project, and 2030 anticipates a more modest growth as developable land continues to be consumed.

Table 4-C
RESIDENTIAL GROWTH CAPACITY
Town of Redding

(1) Estimated Current Dwelling Units (12/06)	
Single–family detached	3,020
Multiple-unit (all types, including apartments)	390
Town Total (all zones)	3,410
(2) Potential Growth in Dwelling Units	
Single-family detached	
R-2 Zone	680
R-1 Zone	14
R-1/2, RV, SDD Zones	0
HMC Zone	31
Potential additional single-family	725 units
Multiple-unit (all types)	
R-2 & R-1 Zones	50
R-1/2, RV, SDD Zones	104
HMC zone	350
Potential additional multiple-unit	504 units

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Table 4-C (continued)

(3) Estimated Town Potential Dwelling Units	
Single-family dwellings(3,020 existing + 725 potential)	3,745
Multiple-unit dwellings, all types(390 existing +504 potential)	894
Potential dwelling units at full-growth	4,639
(4) Projection of Population at Full Capacity	
Single-family dwellings (2.8 persons / dwelling unit.)	10,490
Multiple-unit dwellings (1.5 persons /dwelling unit.)	1,340
Town Population at Capacity	11,830
(5) Short-term Population Projections, Town of Redding	
Census Population , 2000	8,270
Estimated Population, 2007	8,650
Projected Town Population, 2010	8,880
Projected Town Population, 2020	9,670
Projected Town Population, 2030	9,960

Explanation:

(1) Figures derived from 2000 Census count and from Town permit records for new dwellings 2000-2006.

(2) Estimate of additional dwelling units likely at full build-out of land available for development by Zone (Table 3-B). Factors used: R-2 Zone, 3.2 ac./d.u.; R-1 Zone, 1.4 ac./d.u.; HMC Zone, units approved; all other zones (apartments), 3.0% of total potential single-family units.

(3) Assumes all available land will be developed at mid-range (not maximum) zone capacity, with allowances for open space set asides, roads and lot oversizing.

(4) Occupancy ratios reflect average conditions and will vary over time. All estimates based on existing zoning and development standards.

(5) Projections assume slower growth 2008-2010, an upsurge in 2011-2013 as the mill village in Georgetown is occupied, and a declining growth rate thereafter.

Characteristics of the Town Population

Social and economic trends in Redding's population over the past several decades are summarized in Table 4-D.

The typical age of Redding residents has increased markedly since 1970. In 1970, 44.1% of the population was under age 24 and 31.5% was age 14 or younger; in 2000 the under-24 age group had fallen to 32.2% and those of age 14 or younger had declined to 24.7% . In corollary fashion, Reddingites age 45 and over were 28.6% of the population in 1970 and 41% in 2000. Seniors, those 65 and over, were 7.8% of Redding in 1970 and 10.1% in 2000.

Over the same period, with a smaller proportion of children in town, average household size has declined from 3.36 persons to 2.83 persons, a trend echoed in other towns.

Redding remains an overwhelmingly single-family residential town. 95.4% of its residential units in 2000 were single-family, as compared with 94.0% of units in 1970.

Table 4-D
SELECTED DEMOGRAPHIC TRENDS

Town of Redding

	1970	*1980*	*1990*	*2000*
Population By Age				
Under 5	*8.7%*	*5.7%*	*6.8%*	*(582) 7.0%*
5 – 14	*22.8%*	*18.4%*	*13.7%*	*(1,465) 17.7%*
15 – 24	*12.6%*	*14.9%*	*11.3%*	*(616) 7.5%*
25 - 44	*27.3%*	*31.1%*	*33.0%*	*(2,213) 26.8%*
45 – 64	*20.8%*	*22.1%*	*26.4%*	*(2,555) 30.9%*
65 & over	*7.8%*	*7.8%*	*8.8%*	*(839) 10.1%*
Total	*100.0%*	*100.0%*	*100.0%*	*(8,270) 100.0%*
Household Size				
Avg. Pers./Household	*3.36*	*3.13*	*2.86*	*2.83*
Dwelling Units By Type				
Single Family Detached	*1,664*	*2,273*	*2,843*	*2,945*
Two (+) Families / Unit	*107*	*179*	*147*	*141**
Total	*1,771*	*2,452*	*2,290*	*3,086*
Occupational Profile of Town Residents				
Management, Professional & Related	*N/A*	*65.2%*	*62.0%*	*62.8%*
Service Occupations	*N/A*	*7.4%*	*5.8%*	*7.3%*
Sales & Office	*N/A*	*14.1%*	*19.0%*	*20.1%*
Farming & Forestry	*N/A*	*1.8%*	*2.0%*	*0.4%*
Construction & Maintenance	*N/A*	*9.5%*	*7.9%*	*6.2%*
Production & Transportation	*N/A*	*2.0%*	*3.3%*	*3.2%*
Total	*N/A*	*100.0%*	*100.0%*	*100.0%*

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Table 4-D (Continued)

Employment Locations for Redding Residents	*1970*	*1980*	*1990*	*2000*
Redding	*N/A*	*16.5%*	*18.0%*	*20.1%*
Stamford	*N/A*	*9.8%*	*10.0%*	*14.2%*
Danbury	*N/A*	*13.1%*	*14.5%*	*8.5%*
Norwalk	*N/A*	*10.8%*	*8.7%*	*6.6%*
Westchester, NY	*N/A*	*N/A*	*3.5%*	*6.3%*
Manhattan, NY	*N/A*	*5.7%*	*5.8%*	*5.8%*
Wilton	*N/A*	*11.2%*	*6.1%*	*5.5%*
Westport	*N/A*	*5.6%*	*4.1%*	*5.2%*
Other CT towns	*N/A*	*N/A*	*28.2%*	*25.7%*
Other locations	*N/A*	*N/A*	*0.9%*	*2.1%*
Total	*N/A*	*N/A*	*100.0%*	*100.0%*

Source of Data: Federal Decennial Census, 1970 – 2000 inclusive.

* Includes 58 accessory apartments; does not include 312 assisted-living apartments at "Meadow Ridge".

N/A indicates that data for these years are not available.

Figures reported in Table 4-E for income and residence value have substantially increased during the 2000-2007 period but remain valid as general indicators of the economic health of Redding's population in relation to adjacent towns and the state. While the data show a distinct correlation between education and relative prosperity they also show that Redding benefits from its proximity to lower Fairfield County with its wealth and high property values.

The Housatonic Valley Council (HVCEO) reports that median family incomes decline from south to north as a town-by-town pattern in western Connecticut.

Although only twenty-year comparisons are available, the trend shows that Redding's work force is becoming increasingly 'white collar". The management, professional, sales and office groups have increased since 1980 from 79.3% to 82.9%. Quite dramatic declines have occurred in construction and maintenance employment for town residents (down from 9.5% to 6.2%) and in farming and forestry (down from 1.8% to 0.4%).

An interesting shift in workplace location for local residents is also evidenced in the figures. Those residents reported as working in Redding, possibly from their homes or nearby, is now a full one-fifth (20.1%) of the work force. More residents work in Stamford and Westchester than formerly, fewer in the Danbury area. The proportion that commutes daily to Manhattan (5.8%) has remained steady.

Table 4-E

Selected Economic and Social Characteristics

Redding and Adjacent Region

	Family & Per Capita Income		Persons 25 & Over Education		Relative Affluence	
	Median Family Income	Per Capita Income	Completed High School	College or Advanced Degree	Median Residence Value	2 or More Cars Per Household
REDDING	$ 109,250	$ 50,687	96.9%	63.1%	$ 393,700	81.0%
Bethel	$ 78,358	$ 28,927	88.9%	36.8%	$ 219,200	70.7%
Danbury	$ 61,899	$ 24,500	77.0%	27.1%	$ 186,500	58.2%
Easton	$ 135,055	$ 53,885	93.8%	59.5%	$ 455,700	81.6%
Newtown	$ 99,192	$ 37,786	92.8%	49.8%	$ 260,900	79.9%
Ridgefield	$ 127,981	$ 51,795	96.0%	65.9%	$ 439,000	75.8%
Weston	$ 162,032	$ 74,817	98.1%	74.4%	$ 633,900	86.4%
Wilton	$ 158,515	$ 65,806	95.0%	70.0%	$ 561,100	79.8%
HV Region	N.A.	N.A.	N.A.	N.A	N.A.	N.A.
CT State	$ 65,521	$ 28,766	84.0%	31.4%	N.A.	N.A.

Explanatory Note:

Data for Table 4-E is from Federal Decennial Census, 2000 ("N.A." indicates data not readily available in form allowing for comparison).

The data in Table 4-E may vary in some details from Table 6-A (based upon 2008 Town Profiles by the Connecticut Economic Resource Center, Inc.) and Tables 6-B through 6-F (based upon audited Annual Reports of the Town of Redding).

A Perspective

Significant nation-wide demographic trends, as well as continuing advances in personal mobility and communications, are likely to impact Redding's future population in several ways.

An aging population. Demographers now predict that the over-65 age group, currently 13% of the nation's population will, increase to at least 20% of the population by the year 2030 with consequent impact on life style, service needs and housing preferences.

Longer lifespan. Dramatic improvements in health care have lengthened the productive working life of the population with the result that many "second careers" will be operated from homes or domestic offices; this also foreshadows an increase in care costs for the very elderly.

Multiple wage earners. For most families in metropolitan areas both husband and wife now pursue separate careers, elevating household income but impacting commutation,

child care needs, maintenance services and other aspects of life, a trend likely to continue as household size stabilizes or diminishes further.

Mobility. In Redding, as elsewhere, the 2,000 Census showed that only 60% of residents had occupied the same house for five years or more, clearly demonstrating that job relocation and retirement to other places produces a constant turnover in the local population.

CHAPTER 5: HISTORICAL AND CULTURAL RESOURCES

Perspective

Among the many qualities of Redding which define its unique character, the town's blend of scenic natural beauty, unspoiled natural environment and traditional New England appearance are quintessential elements uniformly appreciated by all of its residents.

Despite the development which has occurred over the past half century, Redding retains a wealth of historic homes, barns and public buildings, many framed by century-old trees and stonewall-bordered lanes and roadways. With over three centuries of settled existence as a community and perhaps ten thousand years of human habitation before that, Redding has an extraordinarily rich heritage in need of documentation and preservation. Conservation and enhancement of the town's cultural legacy for the benefit of future generations of Redding residents is one of the most urgent and essential objectives of the Town Plan.

In 1998, the Town's Cultural Resource regulations were developed and implemented to protect historic and archaeological sites during the review process for proposed subdivisions. According to the Connecticut State Archaeologist, Nicholas F. Bellantoni, PhD, "The Redding Cultural Resource Plan is an important and successful mechanism for historic and archaeological site preservation. We consider Redding's plan one of the best written regulations in the state and when providing technical assistance to other municipalities, we often use Redding as a model for cultural resource preservation."

Scenes in Redding (Images from www.HistoryofRedding.com)

A bucolic field and barn

Statue by Anna Hyatt Huntington at Huntington State Park

Old Town House in Redding Center

Cultural Tradition

Redding has a long tradition of distinguished residents and institutions which has enriched the social and cultural life of the community.

Among the early residents of Redding were John Read, colonial attorney, land speculator and the Town's founder (1714), and Joel Barlow (1754-1812), poet and diplomat. During the latter half of the nineteenth century two notable private schools flourished in town -- the Hill Academy in Redding Center and the Redding Institute at Redding Ridge (later the distinguished Sanford School), forerunners of a tradition of excellence in secondary education which continues today at Joel Barlow High School. An 1880's donation by a local landowner initiated preservation of one of Connecticut's most significant

Revolutionary War landmarks, the winter encampment of General Israel Putnam's army. A portion of this encampment, known colloquially as the "Northern Valley Forge", is now Putnam Memorial State Park with its historical museum and exhibits. This year marks the centennial of the Mark Twain Library, founded as a gift to the community by the famed author during his final years in Redding. Another renowned resident, sculptor Anna Hyatt Huntington, presented three magnificent equestrian statues to the Redding, which now grace the entrances to Redding Elementary School, Putnam Park and Mark Twain Library. Additional statues by the sculptor exist at Huntington State Park. The list of accomplished artists, musicians, educators, writers, scientists, professional and business leaders who have resided in Redding is very long and speaks eloquently of the town's long standing appeal to persons of exceptional talent and civic instinct (see Table 5-1 below).

Table 5-1

A representative listing of Redding's accomplished residents during over 200 years of history:

Joel Barlow - Poet, Diplomat	Igor Kipnis - Music Director, Harpsichordist
Dan Beard - Illustrator, Founder of Boy Scouts	Joseph Wood Krutch - Writer, Critic and Naturalist
Rosamond Bernier - Art lecturer, author	Hope Lange - Actor
Leonard Bernstein - Composer	Enoch Light - Musician
Stuart Chase - Writer, Economist	David Lilienthal - TVA Director
Hume Cronyn - Stage and film actor	Carmen Mathews - Actor
Howard Fast - Writer	John G. Mitchell - Writer / Editor Audubon & National
Varian Fry - "The American Schindler"	Flannery O'Connor - Writer
Robert S. Fitzgerald - Poet, Critic and Translator	Albert Bigelow Paine - Writer
Hal Foster - Cartoonist	Maj. Gen. Samuel Holden Parsons - Revolutionary War
Gilbert Fox - Cartoonist	John Russell - NY Times Art Critic and Author
George Giusti - Graphic Designer, Illustrator	Edward Steichen - Artist, Photographer
Eliot Janeway - Economist, Writer	Ruth Stout - Horticulturalist, Writer
Frank Hawks - Aviator	Jessica Tandy - Stage and film actor
Jascha Heifetz - Violinist	
Elsie Hill - Women's Suffragette	Anne Parrish Titzell - Writer
William Hill - Political Cartoonist	Tasha Tudor - Writer, Artist
Anna Hyatt Huntington - Sculptor	Mark Twain - Writer
Charles Ives - Composer	Walter White - Head of NAACP
Alfred Winslow Jones - Sociologist, Hedge Fund	

Cultural institutions and programs are important facets of life in Redding today. In addition to the quality education provided in its public schools, and the programs of a dozen active religious communities within the town, Redding's assets include:

- Highstead Arboretum
- New Pond Farm Education Center
- The Redding Historical Society's museum at Lonetown Farm
- The Historical Museum at Putnam Memorial State Park

- Collis P. Huntington State Park
- The Mark Twain Library
- The Redding Community Center

Many of the above facilities actively sponsor educational and cultural events throughout the year including art & antique shows, lectures, concerts on The Green, and an Annual Book Fair to further enhance the community. Community clubs and organizations include The Redding Open Lands & Trails, The Redding Land Trust, The Redding Historical Society, Redding Preservation Society, Redding Garden Club, Neighbors and Newcomers, Redding Boys & Girls Club, The John Sherman Hoyt Training Center and Boy Scout Reservation, Georgetown Farmer's Market and more. Additionally, in 2008 the Georgetown History Project created a 30-minute documentary combining interviews, artifacts, photographs, music, and recreations to depict highlights of Georgetown's history to date.

The tradition of public support for cultural institutions, respect for historic tradition and dedication to environmental conservation is the essence of Redding's distinctive character as a community. To sustain this quality of community life for the benefit of future residents is one of the most important objectives of the Town Plan.

Historical Sites and Buildings

Umpawaug School

Daniel and Esther Bartlett House

Putnam Park

Redding's existence as a settled community since the very early 1700's is reflected in the town's exceptionally rich heritage of dwellings, barns, churches, public buildings, stone walls, mill sites, ancient cemeteries and locations of historic significance.

Two National Register Historic Districts have been designated in Redding, embracing 123 buildings and sites in Georgetown (1987) and 39 buildings and sites in Redding Center (1992). Individual sites listed in the National Register of Historic Places include the Umpawaug School (brick school house at 304 Umpawaug Road), the Daniel and Esther Bartlett House (Redding Historical Society, at 43 Lonetown Road), the Aaron Barlow House (at 313 Umpawaug Road) and Putnam Memorial State Park, the oldest Connecticut State Park.

Historic Postcards

Putnam Park Pavillion

Putnam Park Entry

Several comprehensive studies have documented virtually all of the historic structures in Redding and many of the sites of historic and pre-historic significance (see Table 5-A for a list of the most significant surveys). From these compilations Redding appears to have, as of this writing, 375 standing structures deemed to be historically significant. One hundred nineteen of these structures date from the eighteenth century and another 90 were erected in the first half of the nineteenth century (1800-1849). Despite a decline in the town's population after 1850, another 127 of the still-standing structures were built in the years from 1850 to 1899. Thirty-nine buildings which were erected in the early 1900's but before 1950 are also considered architecturally or historically significant and deserving of preservation.

Table 5-2

		Old - Date Unknown	1700 - 1799	1800 - 1849	1850 - 1899	1900 - 1949	Total
Houses listed on the State Historic Resource Inventory (2007)	Quantity	0	82	62	59	28	231
	Percent	0.0%	2.5%	1.9%	1.8%	80.0%	7.0%
Houses not currently listed on the State Historic Resource Inventory (2007)	Quantity	68	67	36	91	19	281
	Percent	2.1%	2.0%	1.1%	2.8%	0.6%	9.0%

While the great majority of these structures are private dwellings, a small number of very old barns and outbuildings survive and an effort is ongoing by the Town historian to document these interesting structures. Six church buildings ranging in age from 100 to 175 years still serve their congregations and there are at least ten burial grounds present in Redding, all of which preserve invaluable records of the town's early settlers and founding families. A survey of over 1,800 headstones in Redding cemeteries, conducted in the 1930's before decimation of these markers by acid rain and recent vandalism, identified 105 headstones from the 1700's and 1,113 headstones from the 1800's -- although these totals undoubtedly under-represent the town population during those eras.

Surviving structures which are significant in Town history include two small masonry-arch bridges, one on Poverty Hollow Road over the Aspetuck River and the other a stone and brick rail viaduct over Simpaug Turnpike.


One lane stone & masonry train trestle


A Redding barn and field


A peaceful Redding cemetery

Additionally, there are about a dozen masonry-construction factory buildings that are to be preserved in the redevelopment of the former Gilbert and Bennett Company site in Georgetown. Recent developments on the site include the demolition of a number of non-historic buildings and the day-lighting of a 60-foot width of the Norwalk River is to be exposed along a length of about 500-feet from the waterfall to enhance the planned pedestrian-friendly, transit-oriented village.


The waterfall and Norwalk River in 1900
(image from www.HistoryofRedding.com)


The waterfall in 2008 prior to removal of concrete slabs
(image from The Redding Pilot)

The Georgetown Streetscape Project includes the enhancement of the Main Street business district and Old Mill Road. Planned improvements include sidewalks, street lights, and amenities such as benches and landscaping to enhance the existing neighborhood. Additionally, on-street parking and a pedestrian walkway to the Georgetown Land Development Company parking garage along with a new railroad station will increase connectivity to the surrounding area.

Table 5-3

A Selected List of Available Historical and Archeological Studies

Town of Redding

1. The History of Redding, Connecticut, From Its First Settlement to the Present Time. By Charles Burr Todd, 1906 (MTL).
2. Building Survey, Town of Redding. By Work Projects Administration, 1934. (MTL, vertical files)
3. Georgetown and Its People, By Irene Baldwin, History Department, Danbury State College, April 1956. (RPC)
4. National Register of Historic Places Inventory Nomination Form, Georgetown Historic District. By U.S. Department of the Interior, (Two separate documents, RPC)

5. Historic and Architectural Survey of Redding, Phase I. By Preservation Computer Services Inc., Steven Bedford and Nora Lucas, Consultants, June 1988. (MTL, RPC)
6. Inventory and Map of Historic Structures in the Redding Section of Georgetown. By Clois Ensor, Margaret Wixted and Mary Ann Root, February 28, 1989. (RPC)
7. Redding Center Historic District, National Register of Historic Places Inventory. By U.S. Dept. Of the Interior, October 1, 1992. (MTL, RPC)
8. Redding Center National Historic District, By the Redding Historic Study Committee, November 1992. (RPC)
9. Phase II. Cultural Resource Survey of Redding: a continuation of Phase I. By Preservation Computer Services Inc., Steven Bedford and Nora Lucas, Consultants, 1995. (MTL, RPC)
10. Archaeological Investigations at Lonetown Manor, Redding, CT. Six archaeological survey reports. By Stuart A. Reeve, 1997-1999. (RPC, Application #469 file)
11. Inventory and Map of Redding Historic Structures, Appendix 1 and Table 2, Redding History of Development, Construction Dates of Standing Structures. By Stuart A. Reeve, December 1997. (RPC)
12. Redding's Land, A History of Changing Use Over Three Centuries. Prepared for HVCEO by John Hayes, Consultant, March 1998. (RPC)
13. Archaeological Investigations at Three Sites in Redding Center Historic District, Redding, CT. Prepared for the Town of Redding, Office of the First Selectman. By S.A. Reeve, Archaeological Consultant, 1998. (RPC)
14. Archaeological Investigations at the Burritt Property, Redding, CT. Prepared for the Office of the First Selectman, Town of Redding. By S.A. Reeve, Archaeological Consultant, Katherine Forgas, Scott Palumbo, Andrea Berger, 1998. (RPC)
15. An Historical and Archaeological Assessment Survey of Redding, Connecticut. By Stuart A. Reeve, Archaeological Consultant, September 1999. (MTL, RPC)
16. Redding and Easton (Images of America series). By Daniel Cruson, 2000 (MTL)
17. The History and Archaeology of Poverty Hollow: The Rise and Fall of an Industrial Community in Redding, Connecticut. By Kathleen von Jena and Stuart A. Reeve, 2002. (MTL, RPC)
18. Georgetown Historic District, National Register Form, January 2004. (RPC)
19. House Histories (two volumes). By Margaret Wixted, undated. (MTL, RHS)
20. Historic Houses of Redding: Based on the Research of Margaret Wixted. By Jean Taylor, undated. (MTL/RPC)

Notes on selection of titles and sources:

The studies selected for this list are those of direct relevance to the historic development or archaeology of the Town of Redding, or to particular localities within the town. For works which relate primarily to individual persons, buildings or events, to the cultural history of the region or state, or to basic resource guides, refer to the more complete bibliographies maintained by each of the sources cited above.

The source where the document is on file follows each listing:

(MTL), Mark Twain Library

(RPC), Town of Redding, Planning Commission Archives

(RHS), Redding Historical Society

Titles of listed works are from a compilation by the Redding Planning Commission and arranged in chronological order.

The Pre-History of Redding

A significant area of Redding's cultural heritage is not readily apparent to most townspeople because it lies just beneath the surface of the ground and is discovered by archaeological surveys.

It is only in recent years that the prehistoric human record of the area has begun to receive serious attention from municipal historians and land use boards. Yet it is well

documented that Native American peoples were living a fairly-settled existence here in Fairfield County for at least 10,000 years before the arrival of the first European settlers in the mid-seventeenth century. Scholars have identified seven distinct periods of cultural advance among this population from about 12,000 years ago to the final phase, the Contact Period, which lasted from the 1630's to the virtual extinction of Native American culture in the local area by the early days of the American Republic.[3]

Concern about loss of Connecticut's archaic cultural heritage resulted in the establishment of the State Historic Preservation Office during the 1970's and the Office of State Archaeology in the late 1980's to assist municipalities in planning for conservation of cultural sites, preparation of appropriate regulations and review. Within the local area comprehensive historical and archaeological preservation regulations have been adopted in Greenwich, Westport and Redding. A firm legal base for such regulations was established in 1993 when the Connecticut Supreme Court ruled that planning and zoning boards may consider historic and cultural resource preservation issues in their land use regulations and decisions, provided that the Town Plan specifically addresses local historic preservation concerns (Smith vs. Town of Greenwich Zoning Board of Appeals, 227 Conn. 71, 1993).[4]

Prior to 1996 only twenty-two archaeological sites had been discovered in Redding and reported to the State Archaeologist. Of these, seventeen were located on land of the Bridgeport Hydraulic (now Aquarion) Water Company; others were on the floodplain of the Aspetuck River, near the Five Points intersection (at Route 58/Sunset Hill Road/Hopewell Woods Road), and at Putnam Park.

Town-sponsored historical and archaeological assessment surveys were initiated in 1996 with adoption of regulations requiring reports on areas within subdivisions sensitive for historic or prehistoric remains. Since that time approximately ninety additional sites have been professionally investigated and documented, with significant findings about Native American cultural and Colonial life in Redding from many of the sites. Among the more significant historic sites that have been investigated, mapped and documented are the 1711 homestead site of Hon. John Read (Town founder), the 1733 original Town meeting house site, and the 1778-79 winter encampment of Putnam's division of the Revolutionary Army.

Areas of high sensitivity for evidence of early peoples generally occur along stream banks, on river terraces and in areas where rock shelters occur. Several sites have been documented in Redding, from recovered artifacts, which date from the Middle and Late Archaic Periods (1000 to 6000 BC). A map, Archeological and Historical Sensitivity, Redding, Connecticut, prepared for the Town in 1999 by Stuart A. Reeve Ph.D., Archaeological Consultant, provides guidelines with references to individual sites which are especially sensitive for cultural protection. Please refer to enclosed map titled "Significant Historic and Cultural Sites."

A Policy of Cultural Preservation

Despite growing public appreciation for the town's cultural heritage, and the bucolic impression that Redding gives to the visitor of a place where change happens slowly and carefully, many of Redding's historic cultural landmarks are in constant risk of destruction.

[3] "The Prehistory of Fairfield County", by Daniel Cruson, published by The Newtown Historical Society, 1991.
[4] "Municipal Planning Strategies For The Protection of Archaeological Resources in Connecticut", by Nicholas F. Bellantoni, William R. Haase and Deborah Winick, published by Office of State Archaeology (CT), undated.

One of the central purposes of the Town Plan of Conservation and Development is to set policies in place that will reverse this trend.

This is not a new vision for Redding; earlier Town Plans, and vigorous efforts by townspeople, community organizations, and the various agencies of the town government over the course of time have placed the preservation of cultural, archaeological, and architectural resources into a steadily higher position on the town's agenda and vision for the future.

For example, prior to the enactment of Cultural Resource Preservation requirements in the town's Subdivision Regulations, Redding's rich trove of evidence of earlier European and Native American settlement was being slowly plowed under by the bulldozers of home builders. One of the three main areas of the 1778 Revolutionary Encampment was destroyed for a housing subdivision. Now, the town has trend-setting methods in place for sustaining culturally sensitive sites - and for retrieving evidence when necessary - without unduly restricting the normal course of the development process.

The destruction of miles of original fieldstone boundary walls has accelerated in Redding as in other communities, due to the desirability of Connecticut Fieldstone as a decorative building material. The town's Scenic Road Ordinance has allowed the town to at least slow this trend, permitting the residents of a road to vote for a degree of historic protection for their walls. It should be noted that since these walls are the original method for denoting boundaries, they often straddle the property lines. Along roadsides they also are, in many instances, jointly owned by the town and resident.

The preservation of historic barns and outbuildings has long been one of the most daunting of preservation tasks, since they are poorly identified in the town's records and since there is little functional incentive toward their preservation as agricultural uses have diminished. However the National Register Historic District designation for Redding Center cites in particular the fact that the historic houses of the district have survived in many cases with their outbuildings intact, illustrating not only the architectural artifacts, but also a hint of the daily life of colonial Redding. To assure that this continues to be true, the town has undertaken a town wide survey of those barns and outbuildings that have survived, so that in the future our agricultural buildings will be on par with other structures when discussions of preservation occur.

A time line of Redding's past cultural preservation initiatives follows in Table 5-4.

Table 5-4

Completed Elements of the Town of Redding's Cultural Preservation efforts, over the course of two and a half decades.

1984	Town Plan advocates Historic Sites and Historic Districts
1986	Scenic Road Ordinance protects historic roadscapes
1987	Georgetown National Register Historic District
1988	Historic and Architectural Survey of Redding's Structures, Phase I
1992	Redding Center National Register Historic District

1997	Archaeological, Historical and Cultural Resources Preservation in Subdivision Regulations
1998*	Phase II Cultural Resource Survey of Redding, a continuation of Phase I * note- report was written in 1998, however not dated
1999	1998 Town Plan adopts 13-point program for protection of cultural resources
2004	Town adopts plan to return "Heritage House" to private ownership with historic preservation easement

But despite these past successes, a key task remains: finding a means by which to assure the continued presence of Redding's substantial stock of pre-Revolutionary and Federal era houses and other structures. As yet there are no protections, other than the love of individual homeowners for their historic homes, to assure that the town will continue to embody a living link to the breadth of American architectural and social history.

Pressures for the demolition or drastic remodeling of old homes and other buildings have intensified, in Redding and elsewhere, in recent years for several reasons:

- Age-related deterioration and loss due to natural causes;
- The high cost of authentic restoration;
- Functional obsolescence, and the accompanying problem of adapting historic structures to contemporary needs without leaving their historic value behind;
- Escalating land values, creating intense competition for new building sites and incentives for the construction of much larger houses.

While identification of historic structures is a significant task in itself, it is even more complicated to set in place active policies of preservation. Pragmatic concerns of function - and the legitimate prerogatives of property owners - are very real, and even an imposing honorary plaque noting National Register historic district designation serves only to identify, not to preserve. For this reason the Town of Redding has shifted its focus from attempting to enact active regulatory programs of preservation such as locally-administered Historic Districts, and has chosen instead to develop voluntary programs that can be implemented property by property, over the course of time.

In 2006 the Board of Selectmen initiated a multi-agency Historic Preservation Committee to guide a path toward active preservation of historic structures. A multi-stage plan was set in place, and this plan is now in the midst of implementation. The key elements of the plan are as follows:

- Initiate a stronger, self-identifying group of historic-house owners and enthusiasts.
- Assist the owners of historic homes in communicating with each other as well as in accessing specialized preservation services.
- Propose changes to the town's Zoning Regulations to provide special-permit-based zoning treatment for aiding the preservation and avoiding demolition of historic properties

- Create a pilot program for voluntary preservation of historic houses by means of Historic Preservation Easements, in cooperation with the Redding Preservation Society as the initial receiver/administrator of the easements. The pilot program has included the assistance of the Town in obtaining the services of historians and legal review on behalf of owners who seek to place easements on their properties to preserve them. The goal is to sustain the pilot program through the placement of easements on roughly 5-6 properties, as a precursor to a more permanent and ambitious program.
- Revise the town's existing demolition delay provision in the Zoning Regulations to a town ordinance conforming to the particulars of state statute as it has evolved over the years, including increasing the time period of the demolition delay to the maximum permissible under the statute (currently 180 days).
- Study the best means of utilizing property tax incentives for historic preservation, and propose these for adoption by the town.
- Seek "Certified Local Government" status for the Town of Redding from the National Park Service and the State Historic Preservation Office/State Historic Preservation Officer. This status will permit the town to be more pro-active in the preliminary screening of applications for State and Federal historic designations for structures in Redding.
- Establish a Historic Properties Committee, as a greater formalization of the Historic Preservation Committee after Certified Local Government status is achieved. This will permit the town to more directly participate in the preservation of structures that are designated on a local as well as a State or Federal level. It is anticipated that historic buildings owned by the Town of Redding would be the first to come under the jurisdiction of the Historic Properties Committee.
- As a long-term goal, establish in Redding a Historic Preservation Trust modeled on the structure of the Redding Land Trust and of historic preservation trusts that have been established in other communities. This trust should seek to establish through gifts, grants, and other means a fund by which to purchase historic houses that come up for sale, and to return them to market with appropriate historic preservation easements in place. It is expected that the presence of a "critical mass" of houses preserved through easements will gradually establish a specialized market, a specialized community of antique houses and their owners, and possibly higher property values and shorter sale times for historic houses. This will serve to strengthen the viability of historic houses as a living component of the community at large.

As the work of the Historic Preservation Committee proceeds, public information will be a key element of its work in order to both inform the public and to refine the town's programs.

Mark Twain at Stormfield

Historic postcard of Brookside Park

Gilbert & Bennett office building

Recommendations

5-1. Support and participate in the entire program of the multi-agency Historic Preservation Committee established by Redding's Selectmen. This includes the 10-point program for historic preservation as outlined in this *Town Plan* at the heading "A Policy of Cultural Preservation", above. This comprehensive program will include multi-agency coordination of programs and goals, serving as a resource for individual owners of historic properties and the resolving of regulatory problems faced by them, refinement of the town's demolition delay requirements, completion of the Pilot Program for historic preservation easements, obtaining of Certified Local Government status, progress toward the creation of an Historic Properties Committee and ultimately of an Historic Properties Trust Fund, etc.

5-2. Where public support is evident, encourage and directly assist in the establishment of State and/or Federal Register of Historic Places designations, including designations of Historic Districts per CGS 7-147(b) and/or individual structures or sites by designating Historic Properties per CGS7-147(p)-(y.)

5-3. Study the concept of "Village Districts", as enabled by Public Act 98-116, as a methodology for protection of the distinctive character, landscape and historic structures of designated areas. The map "Significant Historic and Cultural Sites" within this *Town Plan* identifies some of the sites that could be worthy of inclusion. Determine if sufficient protection of historic structures can be assured in the crafting of one or more Village Districts, and if so, make appropriate recommendations to the Zoning Commission for their enactment of such Districts.

5-4. Support the establishment of an Architectural Advisory Board to review plans for commercial, municipal and institutional construction in order to assure harmony with the environs in terms of scale and architecture and to protect public viewscapes.

5-5. Continue to adhere to the provisions of the State of Connecticut's *Plan of Conservation and Development* which address the preservation of rural landscapes and identifies Redding as a greenspace, watershed Town in which the rural landscape would be fittingly preserved.

5-6. Recommend amendments to Zoning Regulations to require a professional historical and archaeological survey before construction in areas designated as being more likely to contain historical or archaeological sites.

5-7. Study means to further codify and strengthen the protection, through zoning or Town ordinances, of large old trees, early stone walls, historic bridges and other significant historic landscapes.

5-8. Work with the Town Assessor and GIS Administrator to find an appropriate means for designating certified historic structures (i.e. those cited as qualifying for placement on the State or Federal Register of Historic Places) on the Assessor's Field Cards and on GIS mapping. Assure also that deed references to historic and scenic easement information are cited on the Field Cards where relevant.

5-9. Initiate and support Town funding for continued research on the historic, cultural and archaeological background of the Town of Redding as well as the preservation of vital historic records and artifacts.

5-10. Survey or redefine the "Onion Field" adjacent to the Lonetown Farm Museum to assure that the Historical Society 99-year lease extends westward to include the field and a sufficient treed buffer area at its western edge. Use of this field should be limited to civic events that do not require any modification of the field's preserved agricultural character.

CHAPTER 6: ECONOMICS

An Overview of Redding's Evolving Economic Life

From the town's beginnings in 1767 to the mid-nineteenth century Redding's economic livelihood depended principally on self-sufficient agriculture and small industries. From the mid-nineteenth century onward, however, local farming began a long and gradual decline as abundant western produce flooded eastern markets and as many of Redding's farmers moved west. At the same time the town's small water-powered local industries could no longer compete with the new steam-powered factories being built along the recently constructed railroad lines. Except for the Gilbert and Bennett Manufacturing Company, located in Georgetown beside the Danbury and Norwalk Railroad, the small industries faded and disappeared from the Redding scene over the several decades following the Civil War. By 1900 Redding's population had declined by 25 per cent from its 1850 peak and much of its farmland was reverting to forest.

Starting in the late 19th century, however, a major shift in the town's economic base began as it became a haven for weekend and country houses of people from urban areas, including notable arrivals of members of the New York intellectual elite. This began the trend, continued to the present day, of valuing the town's fallow farms as open space for scenic appreciation and passive recreation. The twentieth-century conversion of the Saugatuck and Aspetuck valleys into public water-supply reservoirs, with watersheds encompassing 89% of the town's land, has made permanent this transition from an actively-developed farm economy to a residential haven with limited potential for commercial development.

A concomitant shift in the town's economic base began during the 1920's as the automobile became predominant on the roads, and the State of Connecticut's Trunk Line Routes began to be implemented. As the roads developed, it became more and more practical for people employed elsewhere to take up year-round residence in Redding and commute to their jobs. It also was during the 1920's that the town saw the gradual installation of electricity and telephone service along the intercity conduits that the new trunk roads represented.

Since that time, Redding has grown fivefold in population and has evolved into a residential community in which most inhabitants depend on income sources or employment originating outside the town.

The percentage of agricultural and industrial workers, initially dominant in Redding, has declined steadily over the course of this 150-year history although such residents are still a presence in the town including a significant number of people practicing skilled construction and craft trades.

Ever since the post-Civil War evolution of Redding began, transforming the place from a farm town to a semi-rural haven, Redding has attracted well-educated professional and managerial persons along with people associated with leadership in the arts and letters. At the same time Redding is affected by the currently-accelerating trend toward income stratification from town to town in Connecticut, with a concentration of highly paid professional people in the low-density suburban towns of lower Fairfield County. As a result Redding's economic and demographic profile is in some respects influenced not by its geographic position and its immediately neighboring towns, but by the characteristics of

other low-density commuter towns to the south and west. This trend is noted because it is likely to continue and accelerate during the coming ten-year period; at present, however, Redding's economics and demographics are at its region's statistical center and demographic pivot-point. Not coincidentally, in a county stratified economically based upon each town's commuting distance from New York, Redding's geographic location at the center of the county corresponds to its economic position (see Table 6-A).

Median household income in Redding presently exceeds $128,000. To place this in context, median household income for Connecticut as a whole is less than $66,000, and for Fairfield County as a whole is slightly less than $80,000. By comparison, median household incomes for the seven commuter towns to the west of Redding average $154,460, while those of the nine towns to the east of Redding average $91,728. Median household incomes in Fairfield County's four cities are much lower, especially in Bridgeport. The average for the three cities of Norwalk, Stamford, and Danbury is $70,349, while the median for Bridgeport is $41,445.

While the calculation of median household income includes all the wage earners within a household, and includes many two-income households, it also includes many elderly and single person households and people living on fixed incomes. Despite the general affluence of Redding's population, the 2000 Census revealed that approximately 19% of Redding households had incomes below $50,000 a year and 8% had incomes of less than $25,000 per year.

Table 6-A

Towns and Cities of Fairfield County

Comparative Economic Data

Town	Median HH Income	Median House Sales	Eq Grand List Per Capita	Per Capita Tax	Per Capita Revenue
Weston	$185,377.00	$935,000.00	$378,992	$5,116	$5,713
Darien	$181,821.00	$1,330,000.00	$581,899	$4,075	$4,740
New Canaan	$178,651.00	$1,685,000.00	$594,091	$4,560	$5,236
Wilton	$176,384.00	$891,000.00	$396,311	$4,624	$5,286
Easton	$156,386.00	$745,000.00	$304,257	$4,092	$4,439
Westport	$150,940.00	$1,325,000.00	$564,397	$4,822	$5,653
Ridgefield	$134,367.00	$778,750.00	$325,318	$3,962	$4,607
Redding	$128,870.00	$700,000.00	$324,165	$3,825	$4,331
Greenwich	$122,849.00	$2,000,000.00	$799,928	$3,748	$4,836
Newtown	$110,346.00	$474,000.00	$208,211	$2,929	$3,483
Monroe	$103,737.00	$435,000.00	$178,672	$2,490	$3,176
Fairfield	$103,371.00	$618,000.00	$292,321	$3,096	$3,618
Brookfield	$99,196.00	$454,500.00	$221,267	$2,711	$3,047
Trumbull	$97,059.00	$460,000.00	$207,434	$2,880	$3,350
Bethel	$84,641.00	$378,500.00	$167,414	$2,329	$2,986
Shelton	$81,847.00	$380,000.00	$187,716	$2,049	$2,468
Stratford	$65,273.00	$285,000.00	$129,666	$2,434	$3,190
Stamford	$73,131.00	$695,000.00	$266,902	$2,674	$3,185
Norwalk	$72,756.00	$528,000.00	$187,081	$2,441	$2,971
Danbury	$65,161.00	$350,000.00	$141,606	$1,622	$2,303
Bridgeport	$41,445.00	$248,000.00	$74,920	$1,509	$3,134

Explanatory Note:

Data for Table 6-A is from 2008 Town Profiles by the Connecticut Economic Resource Center, Inc., and is included for comparative purposes among the communities of lower Fairfield County. The data may vary in some details from Tables 6-B through 6-F which have been derived from audited Annual Reports of the Town of Redding, or with the data of Table 4-E which reports US Census Data from 2000.

Table 6-A Comparative Economic Data (Contd)

Per Capita Expenditures	Per Capita Debt	Moody's Bond Rating	Actual Mill Rate	Equalized Mill Rate	% Grand List Commercial/ Industrial	Debt Svc as % of Expenditures
$5,427	$7,254	Aaa	22.05	13.24	0.7%	11.7%
$4,466	$4,451	Aaa	13.02	7.05	6.4%	10.1%
$5,021	$6,610	Aaa	13.39	7.51	5.1%	10.3%
$4,976	$3,946	Aaa	22.55	11.42	12.0%	10.2%
$4,299	$6,838	Aa1	25.12	13.62	2.2%	12.7%
$5,615	$6,741	Aaa	21.30	8.57	12.0%	12.3%
$4,479	$5,494	Aaa	23.42	12.02	8.8%	13.8%
$4,276	$3,605	Aa1	22.74	11.78	5.2%	4.5%
$4,395	$721	Aaa	11.51	4.72	10.1%	1.7%
$3,472	$2,361	Aa2	26.10	13.99	6.5%	8.2%
$3,217	$2,638	Aa3	24.05	13.53	6.5%	7.3%
$3,555	$3,420	Aaa	24.80	10.48	8.9%	9.1%
$2,959	$1,119	Aa2	23.90	11.98	15.0%	7.0%
$3,380	$2,066	Aa2	30.48	13.85	13.8%	13.6%
$2,967	$1,455	Aa3	26.48	13.68	13.5%	7.6%
$2,388	$1,018	Aa3	23.59	10.63	17.2%	7.7%
$3,197	$3,117	A1	26.98	18.46	15.4%	12.4%
$2,924	$2,812	Aaa	29.81	10.01	25.3%	10.8%
$2,957	$2,031	Aaa	25.10	13.24	18.6%	7.0%
$2,250	$1,014	Aa2	23.03	11.79	24.7%	4.7%
$3,176	$4,791	Baa1	40.32	19.93	17.0%	15.8%

Traditionally artists, actors, musicians and writers have been active participants in the town's social and cultural life and were early examples of what have come to be known as "knowledge workers" whose work is not tied to a specific worksite and thus can include a substantial amount of work at home. In today's developing trend toward integrated work and residential settings aided by computer and telecommunication technology, a premium can be placed on attractive surroundings over ease of commuting. Rising energy costs may tend to increase this trend of working at home in the coming years. Although it is true that most Reddingites commute to jobs in other communities, and though the town has minimal commercial districts for traditional employment, the single largest work destination for people in Redding is Redding itself (per Connecticut Economic Resource Center Inc.). This trend has a noticeable effect on such variables as family life, volunteer efforts, town services, and property values.

Another notable recent trend, which is related to and has affected the town concurrently with its growth in affluence, has been a recent rise in the number of younger families. This has led to increased demand for Town amenities and services (such as the new Community Center, additional playing fields and extensive additions to Joel Barlow High School). While the demographic "bubble" of 1980's births that led to this increased demand for services appears to have peaked, the town's increasing affluence is likely to continue and is likely to drive continuing high expectations for town services.

At the same time, public sentiment in Redding continues to strongly support the Town's efforts to sustain its rural character and to purchase significant tracts of open space land. There has been a longstanding recognition of the contribution that open lands make in stabilizing the demand for public services and in preserving the attractive rural character of the town.

During the next ten years, the demand for services and attitudes toward tax levels may shift significantly as the demographic "bubble" of 1980's births subsides, and the town becomes increasingly dominated by the needs of retiring Baby Boomers. This may result in a long-term shift in focus toward austerity in town services, while adding increased demand for senior-oriented services. The rising affluence of the town and the associated rise in property values may bring economic stress as overall affluence drives a continuing demand for services while an increasing percentage of Redding's households come to be dependent upon fixed incomes.

Town Finance: Current Trends and Reserve Capacity

The economic health of the Town of Redding -- particularly its ability to finance the facilities and services needed by present and future residents -- is critical to a sound Town Plan. State law directs the Plan to consider economic trends and requires that, "the plan shall be designed to promote with the greatest efficiency and economy the coordinated development of the municipality and the general welfare and prosperity of its people," (General Statutes, Section 8-23).

Redding's ability to finance both its infrastructure needs and the essential services it provides to its citizens is directly related to the size and growth of its Grand List. This list is the adjusted total of all taxable property, including real estate, motor vehicles and personal property, multiplied by the assessment rate (70 per cent), and is updated every

five years. The last town-wide revaluation was conducted in 2007 and will be reflected in the tax base for the 2008-09 fiscal year.

As is true of many Connecticut towns with a similar economic profile, in recent years town expenditures have increased more rapidly than growth in the Grand List. Over the twelve-year period between 1995 and 2008 the Town's Grand List grew by 74%, (see Table 6-B below) reflecting both revaluation and new construction, while per capita Town expenditures grew by 98% (see Table 6-C). Both revenues and expenditures are assumed to be equally influenced by inflation and so no adjustments for inflation are included. While a large portion of the Grand List growth occurred as a result of the approximately 380 new dwellings constructed during this period, there was one significant new project added to the tax base, Redding Life Care LLC (Meadow Ridge), currently assessed at $41.7 million.

Recent sharp increases in the price of petroleum products have altered the cost of operations of the town, and signs point to continued pressure from high energy costs in the future. The challenges that this will bring are in two areas: costs to the Town's operating budget, ranging from town vehicle fuel costs and heating of town buildings, to increased cost of supplies and petroleum products such as asphalt. Services contracted by the town will undoubtedly show increases to cover related costs borne by contractors. Already in 2008, the town has embarked on a four day workweek to control some of these costs.

The former Gilbert and Bennett property, traditionally the key major component of Redding's tax base, is temporarily off the ratables list as a result of the site's clearance for remediation and redevelopment. During the period covered by this Town Plan, capital and budgetary planning must account for both the short-term shortfall of revenue from this significant property and the eventual stream of revenue that will result from its development.

The sources of the funds actually used to operate the Town, with comparisons over the past twenty-year period, are shown in Table 6-D. A heavier burden of Town funding has been shifted to Town taxpayers over this period as the proportion of expense raised by property tax has increased from 83% to 91%, largely as a result of a sharp reduction in total State aid from 11% of Town costs to 2%. Since this decline in state funding has coincided with the decline in revenue from the Gilbert and Bennett property, the town is currently passing through a challenging period in its economic history - although the general rise in property values and in household incomes has to some extent masked this condition.

Table 6-B
TOWN GRAND LIST AND TAX REVENUE PER CAPITA
1995-2008

Fiscal Year	Grand List (1)	Mill Rate (2)	Adopted Budget (3)	Projected Tax Levy (4)	Levy Per Capita (5)
1995-96	$916,700,000	18.8	$18,500,000	$17,000,000	$2,100
1996-97	$929,700,000	19.0	$19,000,000	$17,700,000	$2,200
1997-98	$945,000,000	20.0	$20,100,000	$18,900,000	$2,300
1998-99	$961,800,000	20.9	$21,800,000	$20,100,000	$2,400
1999-00	$915,100,000	24.2	$22,800,000	$22,100,000	$2,700
2000-01	$949,700,000	25.4	$24,400,000	$24,100,000	$2,900
2001-02	$968,400,000	27.0	$28,200,000	$26,100,000	$3,100
2002-03	$994,600,000	29.0	$31,400,000	$31,200,000	$3,700
2003-04	$1,397,800,000	21.3	$32,400,000	$29,700,000	$3,500
2004-05	$1,431,700,000	22.0	$34,600,000	$31,500,000	$3,700
2005-06	$1,469,100,000	22.7	$36,500,000	$33,400,000	$3,900
2006-07	$1,515,500,000	22.7	$39,400,000	$34,500,000	$4,000
2007-08	$1,591,300,000	22.7	$41,100,000	$36,200,000	$4,100

Explanatory Notes (General):

All figures are rounded. Column (1), (3) and (4) figures are in millions of dollars. Data source: Town of Redding annual financial reports.

Column Notes:

(1) Grand List is the total of taxable real estate and personal property as of October 1 of the year that precedes the fiscal year. Tax-exempt properties are not included in the Grand List. Real estate assessments are generally fixed at 70% of fair market value as of the date of the last Town-wide revaluation, hence the large Grand List increase for 2003-04, reflecting the revaluation of October 1, 2002.

(2) Mill rate expresses the rate of taxation in dollars per thousand dollars of assessed property value.

(3) Adopted Budget is the total Town financial outlay, combining all expenditure accounts for the particular fiscal year (July 1 through June 30) as approved by the annual Town Meeting and referendum.

(4) Projected Tax Levy states the amount of tax revenue anticipated each fiscal year from the adopted tax rate applied to the Grand List of taxable property. This figure typically comprises more than 85% of the annual Town financial outlay; the balance of operating funds are derived from fees, grants, interest on invested funds, and other outside sources.

(5) Tax Levy Per Capita indicates the average Town tax obligation per each resident, calculated by dividing projected tax revenue (Column 4) by estimated Town population of that year.

Table 6-C
TOWN REVENUES VS. EXPENDITURES PER CAPITA
1995-2008

Fiscal Year	Revenues-Taxes	Revenues-Other Sources	Total Revenues	Revenue per Capita	Adopted Budget	Actual Expenditures	Expenditures per Capita
1995-96	$16,900,000	$1,800,000	$18,700,000	$2,300	$18,500,000	$18,600,000	$2,300
1996-97	$17,600,000	$1,800,000	$19,400,000	$2,400	$19,000,000	$19,000,000	$2,300
1997-98	$18,600,000	$2,000,000	$20,600,000	$2,500	$20,100,000	$20,500,000	$2,500
1998-99	$19,600,000	$2,300,000	$21,900,000	$2,700	$21,800,000	$22,100,000	$2,700
1999-00	$21,800,000	$2,400,000	$24,200,000	$3,000	$22,800,000	$23,800,000	$2,900
2000-01	$23,400,000	$2,700,000	$26,100,000	$3,200	$24,400,000	$26,200,000	$3,200
2001-02	$25,700,000	$2,800,000	$28,500,000	$3,400	$28,200,000	$28,000,000	$3,300
2002-03	$29,000,000	$2,700,000	$31,700,000	$3,700	$31,400,000	$31,400,000	$3,700
2003-04	$29,200,000	$2,700,000	$31,900,000	$3,700	$32,400,000	$31,900,000	$3,700
2004-05	$31,000,000	$3,100,000	$34,100,000	$3,900	$34,600,000	$34,300,000	$4,000
2005-06	$33,000,000	$3,500.000	$36,500,000	$4,200	$36,500,000	$36,700,000	$4,200
2006-07	$33,500,000	$3,000,000	$36,500,000	$4,200	$39,400,000	$38,900,000	$4,500
2007-08					$41,100,000		

Explanatory Notes (General):

All figures are rounded. Data source: Town of Redding annual financial reports.

In FY 2006-07 and 2007-08, Adopted Budget included anticipated transfers from Balance Sheet to cover anticipated shortfalls in Revenues. Balance sheet transfers are not tabulated here.

Table 6-D
CURRENT AND PAST REVENUE SOURCES

Source	1987-88		1997-98		2007-08	
Property Tax	$9,867,512	83.2%	$18,571,877	90.0%	$34,344,509.00	91.0%
Interest and Lien Fees and other Town Revenues	$696,425	5.8%	$1,578,346	7.6%	$2,553,877.00	6.8%
Transfers from other Fund Balances	$116	0.0%	$0	0.0%	$0.00	0.0%
Total Town Revenues	$10,564,053	89.0%	$20,150,223	97.7%	$36,898,386.00	97.8%
State Education Grant	$1,028,471	8.6%	$196,915	1.0%	$553,059.00	1.5%
Other State Grants	$294,664	2.4%	$287,675	1.4%	$276,856.00	0.7%
Total State Grants	$1,323,135	11.0%	$484,590	2.3%	$829,915.00	2.2%
TOTAL REVENUE	$11,867,188	100.0%	$20,634,813	100.0%	$37,728,301.00	100.0%

Source: Annual financial reports, Town of Redding.

The manner in which the Town allocates its current budget is itemized, by major categories, in Table 6-E. Total costs for education, both primary and secondary, continue to dominate overall expenditures, as they did ten years ago, at just over 70% of fiscal outlay. General Town government, employee benefits and debt service have each increased by fewer than two percent of the Town budget, while small decreases have occurred in proportional Town spending for public safety, public works and the capital reserve fund.

Table 6-E
TOWN EXPENDITURE ALLOCATIONS
For The Fiscal Years Ending 6/30/99 and 6/30/08

	1998-99		2007-08	
Board of Education (Elementary & Middle Schools)	$10,404,638	45.8%	$17,715,913	44.9%
Regional School District (Joel Barlow High School)	$5,627,161	24.8%	$9,959,078	25.2%
General Government (Town Depts., Agencies & Boards)	$1,063,840	4.7%	$2,504,699	6.3%
Debt Service (Bond and Note Retirement, Interest)				
Schools	$703,252	3.2%		
Other	$175,813	0.8%		
Subtotal	$879,065	3.8%	$2,052,599	5.2%
Employee Benefits (Town Share)	$685,678	3.0%	$1,905,293	4.8%
Public Safety (Police, Emergency response, etc.)	$1,112,332	4.9%	$1,735,930	4.4%
Public Works (Highways, Landfills and Recycling)	$1,072,109	4.7%	$1,520,572	3.9%
Park and Recreation (Facilities & Programs)	$482,731	2.1%	$870,008	2.2%
Capital Programs (Current Projects & Reserve Fund)	$834,981	3.6%	$690,495	1.8%
Human Services (Health, Social Services, Library)	$261,177	1.1%	$424,243	1.1%
Miscellaneous (Misc. Transfers & Contingency)	$340,538	1.5%	$65,650	0.2%
Total	$22,764,150	100%	$39,444,480	100%

SOURCE: Annual financial report, Town of Redding, Office of the Controller.

The ability of the Town to finance major capital improvements, such as roads, schools, athletic fields, business district parking, and public buildings, as well as desirable open space acquisition, depends in large measure on its ability to sell bonds at favorable interest rates. Table 6-F summarizes the Town's current debt position. As of June 2007 the Town had a total of 47.9 million dollars in bonds and notes outstanding, which represents 19.6% of its statutory debt capacity.

Table 6-F

CURRENT TOWN DEBT AND BORROWING CAPACITY

Town of Redding

a) Statutory Debt Limit (as of June 30, 2007)

Borrowing Category	Individual Debt Limit	Net Indebtedness	Reserve Capacity
General purpose	$78,574,759	$29,965,010	$48,609,749
Schools	$157,149,518	$17,967,505	$139,182,013
Sewers	$130,957,931	see notes below	$130,957,931
Urban Renewal	$113,496,874	$0	$113,496,874
Pension Deficit	$104,776,345	$0	$104,766,345

Explanatory Notes:

- The Town's debt limit for all purposes is fixed by the General Statutes at seven times the Town's annual receipts from taxation; currently $244,454,805.
- Figures reported above for Net Indebtedness include bond and note obligations of other municipal entities within Redding, such as the Georgetown Sewer District and the Fire Districts.
- Indebtedness includes bonds outstanding in addition to the amount of bonds authorized and unissued against which bond anticipation notes are issued and outstanding.
- Receivables on School building grants in the amount of $270,960 for bond principal are reflected as deductions in the computation of net indebtedness.
- Redding's combined debt of $47.9 million is well within legal debt limits.

b) Long Term Debt

- All long term liabilities are generally liquidated by the General Fund.
- As of June 30, 2007, the Town's outstanding General Longterm Obligations stood at $16,844,610, of which $10.160 million were general obligation bonds for Town improvements, $3.895 million were general obligation bonds for school improvements, a Clean Water Fund note in the amount of $629,000 and $2.160 million in Bond Anticipation notes.
- In addition, the Town participates with the Town of Easton in providing a regional high school for students residing in each town. Total outstanding debt of Regional School District No. 9 at June 30, 2007, which matures through 2025, amounted to $25,575,000. The related school building grant amounts due from the State of Connecticut were $28,977 and $1,563, respectively, for principal and interest. The Town of Redding's share of the debt, net of the related grant, was $14,343,215.

Data Source For This Table:

Comprehensive Annual Financial Report For The Town of Redding, Connecticut, by Blum, Shapiro & Company, P.C., Certified Public Accountants (Town Auditors), November 24, 2007, Exhibit D and related schedules.

Further evidence of a solid economic base is provided by referring back to Table 6-A above, which compares recent average sale values for residential property in Redding and the other communities of Fairfield County. The value of Redding's residential properties is increasingly influenced by the prices of properties in towns with which Redding shares demographic affinity (mainly to the south and west), and yet Redding's property values still fall at the bottom of the range for these towns. This suggests a high ceiling for future values in Redding especially as the financial services industry locates more jobs in Fairfield County within easier commuting range of Redding. Redding's longterm landuse policies have created a real estate environment within Redding that offers amenities of rural character and uncrowded conditions that are increasingly difficult to find in the traditionally higher priced communities, and these amenities balance against a lower level of town services in Redding.

Redding's property values are well above the average of the nine towns to its east, indicating an increasingly wide stratification of values between Redding and these communities.

Investment For Redding's Future

Ten years ago Redding had almost no debt but had a large backlog of deferred capital expenses. Today, much of Redding's basic infrastructure is sound and up to date, and debt, while having increased, is still at a moderate level. New playing fields have been created at Redding Elementary School and at Joel Barlow High School, the Town Hall has been extensively renovated, a new Community and Senior Center have been constructed, a substantial road reconstruction program has been initiated, and five major parcels of private land have been purchased for permanent open space.

And yet, one of the most important purposes of a Town Plan is to look into the future, anticipating the future needs that will arise for public facilities and other infrastructure investments. From the analyses of Town needs and goals identified in other sections of this Plan the projected list of potential capital investments, with approximate estimated costs in today's dollars, is summarized in Table 6G below.

Table 6-G
POTENTIAL CAPITAL RESOURCES NEEDS
2009 Through 2119

Project Description	Anticipated Schedule	Estimated Cost[1]
Recreation, Fields Development and Related Facilities	2009-2012	$6,000,000
Land Acquisition – Open Space (initial cost)	2009-2019	$6,000,000
Road Reconstruction, Phase 2	2010-2114	$6,000,000
Addition to Redding Center Fire House [2]	2010-2011	$1,000,000
Supplemental Offstreet Parking & Streetscape, Georgetown	2011-2014	$800,000
New Police Dept. & Communications Center	2013-2015	$2,500,000
Renovations to Former Police Building for Town Offices	2014-2015	$1,000,000
Additions to Highway Dept. Garage	2015-2018	$750,000
Projected Ten Year Program Total		$24,000,000
Less Potential Open Space, STEAP and other grants		$3,250,000
Estimated Capital Investment Required		$20,750,000

[1] All figures used for Estimated Cost are purely conjectural, based on anticipated size of project and approximate 2008 costs, with no allowance for inflation, contingencies or revised priorities. The purpose of this compilation is solely to identify approximate near future capital needs of the Town as a basis for planning and establishment of priorities.

[2] Addition to Redding Center Fire House is a capital project within Redding Fire District #1 (primarily Redding Ridge and Redding Center), and as such will have an impact mainly upon people living within that district.

In addition to the charted capital expenses outlined in Table 6-G, the town should initiate a review of its landholdings for the siting of future public facilities such as playing fields, a potential additional school, and other recreational and administrative facilities. In addition the need for Affordable Housing may necessitate the purchase of land for town initiated housing projects (see Chapter 9, Incentive Housing Zones). The town's recently completed building projects, the playing fields projects currently in the pipeline, and the future capital expenses anticipated in the near term, will result in full utilization of the town's existing buildable sites. As the number of large sites available in town diminishes, and as those remaining contain more marginal land for the kinds of uses that could be needed, it may be desirable to maintain a permanent outlook toward, and evaluation of, sites that could be made available functioning much as the town's Open Space Plan guides acquisitions of open space lands.

While Redding's moderate level of indebtedness indicates a solid economic base for the town, the fact that the past ten year period has reflected a growth of expenses significantly greater than the growth in tax revenues reflects a trend that cannot be continued indefinitely. During the coming years it will be increasingly important to match income with expenses. Fortunately, three factors should help to make this possible:

- The demographic "bubble" of 1980's births, which has brought increased school enrollments has also brought corresponding increases in the town's most expensive activities, but this demographic "bubble" is now subsiding;
- The tax revenues from the town's most intensively developed lands in Georgetown, including the town's main sources of nonresidential tax revenue, have been reduced dramatically during a period when calls upon tax revenue and borrowing capacity for capital projects have been high. However, the development of the Georgetown Land Development Company lands should reverse this trend in coming years as tax revenues from the newly developed site come on line.
- Residential property values in Redding, while currently declining from an artificial peak, are nevertheless likely to be sustained at a high level in the future, and values appear to be sustainable at a level at which the tax revenue from the average household will pay for the services consumed by that household (see Table 6-H below). This is a very significant shift from past experience, in which revenues from residential real estate traditionally did not cover the high cost for services (mainly education services) generated as houses were built. Since Redding is a town whose residences must serve as the source of a higher than usual portion of the total tax base, this rise in residential property values should serve to make balanced budgets easier to achieve in the future.

Despite these factors that mitigate the uncertainty of future Town revenues, there is no way to adequately lay out future revenues with any precision; this indicates that prudence is needed in planning new expenses so that funds will be available when and where they are needed. A "Pay as you Go" plan will be needed by which new Capital Expenses are not entered into until increased revenues can be realistically predicted.

Table 6-H
A COMPARISON OF RESIDENTIAL TAX LEVY AND RESIDENTIAL SERVICE COSTS
Town of Redding, 2007

a) Estimated Tax Levy Per Typical Single Family Dwelling, 2006-2007:

Average single family assessment tax rate, estimated tax levy

Average Residence Sale Value	X Ratio	X 22.74 mils	= Average Per Residence
$708,000	0.70	0.02274	$11,269.94

b) Residential Contribution to Total Town Services Cost:

Total Town Budget 2007-2008	X Proportion from Town Taxation	X Proportion of Taxation Derived From Residences	= Portion of Town Budget Supported by Taxation of Residences	% Total Town Budget (2007 -2008)
$39,444,480	.935	.871	$32,127,612.03	81.45%

c) Estimated Town Services Cost Per Typical Dwelling:

MAJOR BUDGET PROGRAM	2007-2008 BUDGET	AMOUNT FROM RESIDENTIAL TAX	ESTIMATED COST PER DWELLING
Education (Town & District 9)	$27,674,991	$22,541,280	$7,271
General Government	$9,716,890	$7,914,406	$2,553
Debt Service	$2,052,599	$,671,841	$539
TOTALS	$39,444,480	$32,127,527	$10,363

Explanatory Note and Analysis:

This table analyzes the degree to which the "typical" single family dwelling supports its share of services provided by the Town. Because 2006 and 2007 were peak years for residential sale values, it is likely that the ratio of tax revenue to service cost would be much closer to parity for prior years and also in 2008. The analysis also It is a fact that high value homes tend to be "tax positive", in effect subsidizing those of more modest value.

Source: Data from Table 6F and Town of Redding annual reports.

Recommendations

6-1) Carefully regulate development in line with long established Town standards. Conservation of the public water supply watershed is a mandated requirement in Redding, limiting the overall development potential on 89% of the Town's land area. Within this context Redding's ability to generate revenues from a mostly residential tax base will largely depend upon the increased valuation of existing properties rather than the generation of new land development, and upon sustaining moderate taxes rather than on a depth of Town services.

6-2) Actively pursue land acquisition for open space, recreation, conservation, water supply protection as a vital investment in the Town's future quality of life and financial stability. Existing partnerships in this effort, involving the Redding Land Trust, Redding Open Lands Inc., and the Nature Conservancy, should be actively continued.

6-3) Continue a close partnership with the Georgetown Land Development Company to achieve a successful redevelopment of the former Gilbert and Bennett factory site in conformance with the spirit of the public Charrette process that led to the current Master Plan. The project is important to both the tax base and the livable character of the community.

6-4) Continue the town sponsored redevelopment activity in the Main Street/Old Mill Road area of Georgetown, to increase overall business potential and tax base. As part of this the Town must be prepared to fund its future obligations to provide central business district parking in a manner similar to that provided in similar town centers. Following the example of the special tax district at GLDC, the Town should study methods by which the cost of providing such parking might be funded in part by a special taxing district covering the properties benefitting from these special services (this could follow the model already set at GLDC).

6-5) Encourage redevelopment of the existing central area of West Redding within an environmentally sensitive scale, to realize its full potential for commercial activity as well as for a wider variety of housing needs than are presently served. The Town should draw upon West Redding's existing infrastructure and transportation resources, and existing commercial uses, in a creative way for potential "smart growth" development including transit oriented projects.

6-6) Anticipate infrastructure investments on an orderly capital improvement schedule in order to minimize future capital outlay and bonding costs. The Town should establish a priority order for capital investments, and set in place a "pay as you go" program calibrated in such manner that the Town will normally enter into such investments only as expected improvements to the Town's tax base come on line. In addition, evaluations of the costs of capital improvements should include long term evaluation of any related costs such as increased operating expenses or personnel expenses.

6-7) Allocate prudent annual budget amounts to the Town capital reserve fund, along with effective fiscal management costs for administration and facilities.

6-8) Encourage and provide continued support for public interest organizations that provide services with limited calls upon the tax base. These organizations should

receive appropriate support from the Town in the form of operational partnerships and activities that utilize joint funding. Among these public benefit institutions serving the general public include the Mark Twain Library, the Redding Land Trust, recreation clubs such as the Boys and Girls Club, the Town's religious organizations, the Highstead Arboretum and others.

6-9) Pursue a limited quantity of suitable land available for the Town's future facility needs, or for potential town developed affordable housing using Incentive Housing Zones under the Connecticut Housing Program for Economic Growth. An organized process of identifying such sites for future purchase should occur. While not an immediate need, this process should be carried out in a manner parallel to the Town's traditional planning for open space acquisition.

6-10) Pursue measures for ameliorating rising fuel costs by means of investment in such things as vehicles with greater fuel efficiency, implementing of solar hot water and electric installations, bulk fuel or asphalt contract purchasing, and others.

CHAPTER 7: ROADS AND MOBILITY

Mobility in the Twenty-First Century

In little more than a century the ability of Redding residents to travel outside their local neighborhoods has expanded enormously. To reach nearby towns a century ago required an arduous journey, measured in hours, by horse and buggy over dusty roads. More distant destinations at that time required daylong or longer journeys by one or more connecting rail lines.

Today local residents travel to nearby centers in minutes and to major cities, in this country and abroad, in hours. The revolution in mobility, generated by technological advance in all forms of transportation – but especially in automobiles, high-speed rail and jet air travel – has brought Redding and all of southwestern Connecticut within easy reach of major employment centers, central city cultural attractions and international airport facilities.

A key factor in the increase in long-distance mobility is the omnipresent private automobile, which is directly responsible for the explosive growth of suburban Fairfield County and semi-rural areas such as Redding. As population has quadrupled throughout this area over the past five decades, automobile registration has leapt upward by an even greater amount. In Redding, as in most of the adjoining towns, two or three automobiles are now present in over eighty percent of local households. For this growing and decentralized population, longer trips to various destinations for employment, shopping and other services have been an unavoidable necessity.

Consequently Redding is experiencing a significant increase in both local and intertown traffic volume on all of its state roads, and also on many of its primary Town roads. Early morning and late afternoon hours now exhibit relatively high traffic volumes at Routes 107 and 53 where a signalized intersection is planned, at Newtown Turnpike and Glen Road, at Routes 57 and 107 in Georgetown, and along many connecting roads.

Currently evolving transportation and communication technologies are likely to have an impact on Redding in the future. Among these, new inter-modal transportation facilities and high-speed rail are planned for nearby centers and a trend toward home-based workstations and offices made possible by teleconferencing and telecommuting is already underway. Vehicles with greater fuel efficiency and advanced guidance systems are predictable, but unfortunately there appears to be no end in sight to the growth in vehicles per household or residential growth of still rural towns to the north. It is therefore probable that intertown traffic volumes will continue to increase on local roads for the foreseeable future.

Regional Transportation Needs and Plans

Redding is no longer on the fringe of a suburban area but lies rather in the midst of rapidly developing southwestern Connecticut. Major expressways lie just north (Interstate 84) and south (Merritt Parkway and Interstate 95) of the town. Immediately to the west and east of Redding are major arterial roads, Routes 7 and 25, each of which is now a controlled-access expressway in its southerly portion. The existing Route 7 roadway has recently been widened to four lanes from Route 35 in Ridgefield (near northwest Redding) to Danbury, and construction is currently

underway to widen Route 7 to four lanes from southern Wilton to Cannondale. A special traffic study of the remaining two-lane section of Route 7, which includes the Georgetown and Branchville sections and is jointly sponsored by the South Western Regional Planning Agency (SWRPA) and HVCEO, is scheduled for 2009. This study will help determine future plans for the "gap". Both of these roads are heavily congested on a daily basis and will require additional capacity unless relieved by alternative forms of transportation in future years. Such alternatives may include expanded mass transit, special bus lanes on major roads, van pooling, bikeways and alternative workday or work hour scheduling.

There are five State highways which traverse various sections of Redding. One of these, Route 7, Ethan Allen Highway, extends for about two-thirds of a mile along Redding's western border and is the only major arterial route within the town. It is also the most heavily traveled route, directly connecting Interstate 95 and the Merritt Parkway in Norwalk with Interstate 84 in Danbury. Route 7 is presently burdened by an estimated 18,000 to 24,000 vehicles per day and extensive roadside commercial development.

The other four State highways, Routes 53, 57, 58 and 107, serve primarily local intertown traffic and are almost entirely residential in character. For example, the three miles of Black Rock Turnpike (Route 58) from the Easton town line to John Read Road is fronted by 112 dwellings, many quite close to the road, as well as by several small commercial and institutional uses. Another example is the two-mile section of Redding Road (Route 107) from Glen Hill Road to just south of Blueberry Hill Road, fronted by approximately 60 dwellings.

Increasingly intensive traffic through such residential areas, and along other roads where houses are at roadside, is a direct threat to the comfort, safety and property values of affected residents. Preservation of the character of many older Redding neighborhoods depends on minimizing traffic impacts along such roads. The policy of the 1998 Town Plan is reiterated and endorsed:

"The challenge of the Town Plan is to devise a strategy which, through the use of environmentally-sensitive improvements, protects the rural, residential quality of Redding roads while accommodating increasing traffic and safety demands."

"Such a strategy will require intensive collaboration with State and Regional agencies to plan and locate regional transportation systems, such as rail and highways, where they will have the least impact on Town residential and water supply watershed areas."

In order to preserve the residential and low-density character of Redding, especially its frontages along Routes 53, 57, 58 and 107, the 2008 Town Plan strongly endorses major widening and capacity improvements in existing Routes 7 and 25, the principal arteries immediately west and east of Redding. Maximizing the capacity of existing Route 7, in particular, will benefit the redevelopment of the center at Georgetown and alleviate traffic pressures on such secondary roads as Routes 107, 57 and 53. Permanent abandonment of once-proposed plans for a "Super Seven" expressway is strongly endorsed by this Town Plan, consistent with similar recommendations by the Housatonic Valley Council of Elected Officials (HVCEO) in their 2007-2035 Regional Transportation Plan for the Greater Danbury Area.

The reasons why a Super Seven expressway would be ill-advised, and plans for it should be permanently cancelled, are numerous and compelling. These include:

1. The route through Redding would traverse a much longer path across the Saugatuck River public water supply watershed with consequent adverse impact on the quality of this vital public water resource.
2. Projected traffic increase induced by an expressway, estimated at 33% in existing environmental impact statements, would intensify urban sprawl and decentralization of development in southwestern Connecticut and to the north, contrary to the "smart growth" principles which underlie both State and Regional plans for the area.
3. The excess of jobs over available housing which exists in the South Western Region will intensify housing pressures on Redding and other towns remote from employment centers, as an expressway promotes faster but longer commutation and results in housing shortages in outlying areas. Greater fuel consumption and loss of transportation efficiency are additional undesirable impacts.
4. An expressway "solution" to corridor transportation needs would not only be costly and environmentally destructive but would undercut public investments in urgently needed public transit facilities, such as an upgraded Danbury Branch rail line." An expressway entering Rt. 95 would exacerbate the current overflow of traffic on that highway.

Roads in Redding, as in the other nine towns of the Housatonic Valley Region, are classified in HVCEO's regional transportation plan according to their most appropriate function. This plan strongly influences State policy on funding for State and local transportation projects.

The regional transportation plan and the Connecticut Department of Transportation classify all roads within five functional categories:

- Expressway – All Interstate routes and controlled access intercity routes (e.g., Interstate 84).
- Principal Arterial – Major traffic carriers and intra-region connectors (e.g., Routes 7 and 25).
- Minor Arterial – Connectors of lesser volume, which serve more limited areas and allow more emphasis on roadside access (e.g., Routes 53, 58 and 302 within Bethel).
- Collector (Major and Minor) – Roads which serve both local and intertown traffic, but with lower volumes than arterials, and also provide access to local neighborhoods. This classification now includes as major collectors Routes 53, 58, 107 (except in Georgetown) and Long Ridge Road in Redding, and as minor collectors Cross Highway, Diamond Hill Road, Old Redding Road, Church Hill Road, Poverty Hollow and Sport Hill Roads in Redding.
- Local – All roads not classified in one of the categories above; generally these roads primarily serve for access to properties along their frontage.

Sustaining the natural environment of Redding, and the quality of life of its residents, is a goal intrinsically tied to the task of solving regional transportation problems

associated with the growth of urban and suburban areas beyond the town's borders. Redding must work closely with HVCEO and the State to strengthen the Routes 7, 25 and I-84 transportation and mass-transit corridors, to upgrade rail service on the Danbury branch of Metro North, to control curb cuts on existing Route 7, to implement a train station at Georgetown, to promote regional bikeways along major and minor collector roads, and to implement traffic-calming measures for protection of established residential areas. These measures are critical elements of the Town Plan of 2008.

Redding's Local Road System

Roads in Redding not only carry volumes of daily traffic but also play a role in defining the character of the community. They make possible the widely-separated, low-density, large-lot residential pattern of the town, the country-like insularity which creates the visual frame of Redding, the view which residents appreciate of their surroundings as they travel through the town. Not least in importance, they tie the 32 square miles and 8,000 inhabitants of Redding together into a definable community. The rural character of this area – now just a memory in many other parts of Fairfield County – has been maintained not only by Town policies relating to land use and open space, but also by assiduous efforts to retain the character of old, residential town roads.

The Town's Highway Department is responsible for maintenance of some 169 Town roads, totaling approximately 94 miles of roadway. 86 of these roads were created by post-World War II subdivisions, each road paved and two lanes wide. Most of the primary local roads have been improved to two full lanes as well, and these provide adequate access to all sections of the community.

The Town has recently completed a major program to resurface 33 miles of roadway, of which 26 miles were substantially reconstructed with needed drainage, all financed by a $5.4 million bond issue. An additional 12 to 15 miles of Town road are deemed in urgent need of substantial repair or reconstruction. A road and drainage reconstruction program has been begun, targeted to problem areas, and Phase I of this program has been completed.

Many of the more picturesque Town roads are narrow within meandering alignments bordered by stone walls, and surprise the traveler with abrupt grades and sharp turns. Examples include Peaceable Street, Wayside Lane, Poverty Hollow Road and Stepney Road. Twelve entire Town roads and major portions of three other Town roads have been officially designated as "Scenic Roads" pursuant to the Town Scenic Roads Ordinance adopted in 1986. This ordinance protects each of these roads against alterations which would significantly affect its existing character. The fifteen Town or Scenic Roads, all shown on the Town Land Use Map, are (in order of designation): Topstone Road, Whortleberry Road, Old Hattertown Road, Lee Lane, Limekiln Road, Sherman Turnpike, Wayside Lane, Marchant Road, Poverty Hollow Road (paved portion), John Read Road, Pine Tree Road, Cross Highway, Mark Twain Lane, Side Cut Road and Umpawaug Road.

A Redding Road

Traffic and Safety on Local Roads

Over the next decade it is evident that Redding will face increased traffic burdens from its own residents as well as from through traffic. The empirical data and technical discussions contained in this chapter depict a growing management issue resulting from quantitative changes in traffic volumes, yet the driving force for the Town's planning efforts is the qualitative experience of Redding's residents, the task of sustaining the town's overall quality of life.

The frequent calls and letters to the Redding Pilot, Planning Commission, Police Department, and Selectmen with concern about Redding's roads - their condition and the traffic on them - indicate that things could be better in the eyes of the town's residents. With traffic volumes increasing in the future, and these factors left unaddressed, conditions can only deteriorate.

Redding must redouble its efforts and plan strategies for reducing unguided traffic volumes, excessive speeds and roadside drainage problems, as well as avoiding unnecessary changes to the natural character of its roads through their occasionally unwarranted widening and straightening. Adopting the recommendations in this chapter will aid in preserving Redding's quality of life, and will help to assure that Redding's history and natural beauty remain evident to visitors.

A Suburban Style Road

A Rural Road

The extent to which motor vehicle traffic has increased on Redding's state roads over the past twenty years is outlined in Table 7-A.

While current traffic volumes on Redding's four major collector highways (Routes 53, 57, 58 and 107) are substantially less than the 18,000 to 24,000 ADT currently estimated for Route 7, volumes on these roads have nonetheless increased within a range of 24% to 73%. These figures reveal a distinct pattern of growing volume toward Georgetown and southwest Fairfield County from areas north of Redding; the greatest increases occurred on the portions of Routes 107 and 53 oriented in that direction.

A recent proposal to increase the vertical clearance of the railroad overpass on Route 53 from 11 feet, 4 inches to 13 feet, 9 inches, endorsed in the 2007 Bethel Town Plan, is opposed by Redding because such a clearance increase will inevitably induce a significant increase in traffic of large trucks through residential neighborhoods in Redding along Route 53 and its feeder roads. Because Route 53 in Redding is residential in character, close to the Saugatuck River, has hazardous intersections, is fronted by a public school, and is roughly parallel to Route 7, such expansion for heavy truck traffic would be extremely deleterious to the town and its environment. In addition, increasing the clearance would remove an effective traffic calming device.

Limited statistics currently available on the minor collector roads (Table 7-A) show 15% to 24% increases on three of the five roads. The 100% increase indicated for Stepney Road may be inaccurate since the 1995 volume for that road was an estimate.

The tables 7-B and 7-C summarize Redding's motor vehicle accident history for 2006 and 2007 from the records of the Redding Police Department. As in previous analyses records show that driver error – excessive speed and other moving violations – accounts for the majority of all accidents, dramatically pointing to the need for traffic calming measures on many roads to alter driver psychology for greater safety. Interestingly, "Roadway

Topography" – Redding's large array of sharp turns, narrow travel ways, and irregular road alignment – accounted for only 5% of accidents, suggesting that the physical limitations of most Redding roads is not a significant accident factor. It is common knowledge that many deer and animal collisions are not serious enough to be reported; hence the low number shown, yet this remains a safety problem, particularly in regard to deer strikes.

Managing future traffic safety on Redding roads while preserving residential amenity and the town's environment in the face of escalating traffic volumes will be a major challenge over the next ten to twenty years.

There is a strong and articulate preference among Redding citizens and land use boards for "non-structural" means of resolving hazards and traffic conditions created by increasing traffic volume on both major and minor roads. In general, while not all measures are applicable to all situations, such measures may include:

a) Traffic Calming –Modify the psychological environment of the driver by use of such devices as rumble strips, reflectorized center lines, optical lane narrowing and techniques illustrated in the Sample Traffic Calming Devices section below.

b) Safety – Enhance safety by use of guard rails, gravel or grass shoulders, removal of a painted center line where 2-way traffic is not feasible and conversion to one-way roads where other means of control or alignment prove ineffective or environmentally destructive (e.g. Newtown Turnpike from Cross Highway north to Black Rock Turnpike).

c) Sight Line Requirements – Re-establish sightline requirements to create a more direct relationship between 80th percentile road speeds and sightline requirements for new driveways and roads. This would rationalize the well-established relationship between reaction time, road speed and stopping distances. Studies from the Transportation Research Institute at Oregon State University have established that 1.5 seconds is a conservative sight-decision distance for rural roads such as those in ours. Currently, all new roads and driveways in Redding have a uniform sightline distance, whether on a narrow dirt road or a heavily travelled State route.

d) Signage – Subject to the authority of the Connecticut Department of Transportation and the Redding Police Department, post three-or four-way stop signs or traffic signals at dangerous and high-accident frequency intersections (advance warning signs and rumble strips are potential enhancements if warranted). Where there is negative impact from truck traffic, authority to place "No Through Trucks" signs may be requested from the Connecticut Department of Transportation; Neighborhood Watch programs also may assist police in monitoring.

e) Speed Limits – Periodically review, and rigorously enforce, posted speed limits on sections of roads that are constricted by narrowness or severe curves and where blind spots exist. More frequent stop signs also can be used to slow traffic, subject to state limitations and the authority of the Redding Police Department.

f) "T" Intersections – Redesign dangerous intersections to a "T" configuration to slow traffic and increase safety. Within this context street it is desirable for corners to be maintained with as small a radius as is safe, both to bring approaching traffic to a controlled stop, and to reduce the turning speeds of traffic not having a stop or yield

sign (such realignment effectively slows through traffic and may reduce excess paved area).

g) Employ constables to direct traffic when groups must cross Town roads to reach a scheduled activity.

h) Shuttle Buses – Utilize buses to remedy parking problems at organized events in town, by transporting people from overcrowded facilities to adequate parking areas.

i) Business Parking – Develop parking facilities to serve the Old Mill Road and Main Street commercial area of Georgetown. Due to zoning changes the town has incurred the responsibility to provide parking facilities of adequate scale to serve local business requirements. These facilities should be developed and maintained in cooperation with local businesses under the guidance of the Town's Parking Committee, with parking availability being gradually increased in a manner calibrated to the growth of business activity.

j) Undertake traffic studies, fully funded and on a regular basis to track volumes, speeds and time of day patterns to assist in the Town's planning and remediation efforts.

There are a number of locations on Town roads where minor realignment could improve safety by reducing speeds and traffic conflicts while enhancing roadside aesthetics, and are illustrated schematically on the Recommended Town Plan Map.

Table 7-A
TRENDS IN TRAFFIC VOLUMES
Town of Redding

Average Daily Traffic, State Roads

	1985	1995	2005*	% Change 1985-2005
Redding Road:				
Route 107 @ Wilton Town Line	9,800	12,100	12,200	+24.5
Route 107 South of Peaceable Street	5,900	8,600	9,800	+66.1
Route 107 West of Glen Road	4,700	6,400	7,100	+51.1
Routes 107 and 53	7,100	9,500	10,200	+43.7
Route 53 South of Side Cut Road	4,500	6,700	7,100	+57.8
Route 53 @ Bethel Town Line	7,300	8,700	9,200	+26.0
Hill Road:				
Route 107 West of Great Oak Lane	3,800	5,800	6,300	+65.8
Route 107 in vicinity of Police Department	2,300	3,100	3,800	+65.2
Lonetown Road:				
Route 107 North of Gallows Hill Road	2,600	3,100	NA	--
Putnam Park Road:				
Route 107 West of Black Rock Turnpike	1,500	2,100	2,600	+73.3
Newtown Turnpike:				
Route 53 @ Weston Town Line	3,800	4,600	5,300	+39.5
Glen Road:				
Route 53 between Newtown Tpke. & Route 107	3,100	3,500	NA	--
Black Rock Turnpike:				
Route 58 South of Cross Highway	4,300	6,200	5,400	+25.6
Route 58 between Cross Highway and Route 107	3,300	4,300	4,600	+39.4
Route 58 @ Bethel Town Line	4,400	5,300	5,700	+29.5

Source: Average Daily Traffic (ADT; average number of vehicles per midweek day) is calculated from machine recorded traffic counts conducted by the Connecticut Dept. of Transportation. 2005 data were not available (NA) for two of the counting stations listed above. 1985 ADT for the Redding portion of Ethan Allen Highway (Route 7) is not available; the 2005 count for this section of roadway was 17,500 vehicles. All figures rounded to nearest 100.

***** Figures listed in the 2005 column are means (averages) from counts conducted in 2004-2006, in order to correct for variations caused by construction, revised count locations and other factors.

Table 7-A (Continued) Average Daily Traffic – Selected Town Roads

	1995	2007	% Change 1995-2007
Church Hill Road	1,900	2,357	+24.1
Diamond Hill Road	650	752	+15.7
Lonetown Road (@ Cross Hwy.)	1,300	1,567	+20.5
Long Ridge Road	2,300	2,380	+3.5
Stepney Road	650	1,304	+100.6

Source: 2007 ADT figures are based on actual counts, provided by Redding Police Department. Current volume data on other Town-maintained roads is not presently available from State or Town sources. 1995 ADT figures are Town Police Department estimates made that year.

Table 7-B
RECENT MOTOR VEHICLE ACCIDENT HISTORY
Town of Redding

Accident by Type	2006	2007	Total
State Highways:			
Fatality	0	0	0
Injuries	28	29	57
Property Damage	86	83	169
Deer/Animal Related	31	25	56
Total Accidents (State Hwy.)	145	137	282
Town Highways:			
Fatality	2	0	2
Injuries	20	14	34
Property Damage	154	148	302
Deer/Animal Related	14	20	34
Total Accidents (Town Hwy.)	190	182	372
All Accidents:			
Fatality	2	0	2
Injuries	48	43	91
Property Damage	240	231	471
Deer/Animal Related	45	45	90
TOTAL, ALL ACCIDENTS	335	319	654

Table 7-C
CONTRIBUTING FACTORS IN MOTOR VEHICLE ACCIDENTS, 2006-2007*
Town of Redding

Cause	%
Excessive Speed	24%
Other Moving Violations	51%
Weather Conditions	9%
Evading Responsibility	6%
Roadway Topography	5%
Foreign Object in Roadway	5%
Total	100%

Source: Accident statistics as compiled and reported by Redding Police Department.

*Contributing factors are determined in each case by Redding Police Department from report of investigating officer. "Other Moving Violations" include improper turns, failure to grant right of way, crossing center line, etc. Weather conditions include snow, icy pavement, fog, restricted visibility. Roadway topography includes sharp curves, steep hills, and blind spots. Foreign objects include animals (all types) as well as other objects.

Traffic Calming

It is important to note that measures to improve safety and reduce vehicle speeds must always be tailored to the specific characteristics of each site for optimum results. Context-Sensitive Design is an approach which recognizes and preserves as fully as possible the unique environmental and aesthetic assets of a specific site. This CSD approach is vital to the preservation of Redding's overall rural character, and should be an essential underpinning of any design process undertaken to address traffic issues.

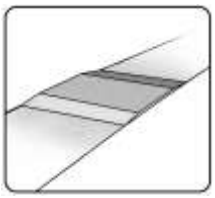
Sample Traffic Calming Devices

Applicable to Redding Roads

Speed Humps:

These are asphalt humps, typically constructed to be 3 to 8 feet to traverse and 3 to 4 inches high, creating an abrupt transition for fast moving vehicles to surmount. The disadvantages are that vehicles with low ground clearance can be damaged since both pairs of wheels can straddle the hump and harm their mufflers and undercarriage. Also, vehicles with long suspension travel can cross these humps at higher speed and their suspension will "soak up" the hump, thus defeating the feature's purpose.

Speed Tables:



A speed table is essentially a longer, flat-topped speed hump. Also, whereas speed humps are typically paved, speed tables are constructed with a textured material. Ramps start from 6 feet on each side of the table and lead to a 10 foot long top. These dimensions result in an overall length of 22 feet. The elevation profile of a speed table is either parabolic or trapezoidal with a height of 3-4 inches depending on the desired speed reduction. As with speed humps, the primary purpose for installing speed tables is to reduce travel speeds.

Speed tables have been shown to be effective in reducing travel speeds by 5-10 mph, though the speed reduction is dependent upon the design and profile of the table.

Textured Pavement:

This treatment provides a coarse and uneven surface on the road itself. The non-smooth surface texture provides a vibration that causes motorists to slow down. Typical materials used include concrete papers, asphalt enrobed gravel, stamped concrete, brick and cobblestones. Although these materials are effective in producing lower travel speeds, these materials can cause trip step hazards for pedestrians and a bumpy ride for bicyclists. Additional noise can result as well.

In a positive sense, the textured surface's effect is to reduce vehicle speed. Also these materials add a visual cue about the function of the road, indicating that the area is unique. The section of road is no longer viewed as a highway only for vehicles, but a shared environment, requiring greater attention by the driver.

Utilization of Existing Topography:

Redding's hilly topography itself provides a natural traffic calming condition. The narrow sections, curves, camber changes, undulations, rises and dips present on many of

Redding's roads are natural traffic calming features while also being defining parts of the rural character of the town. Retention of these features during road maintenance and repaving is critical to maintaining reduced traffic speeds in town.

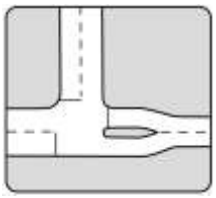
Optical Lane Narrowing:

This strategy, which has been proven to work in several studies, relies upon the use of vegetation or striping along the shoulder of the road to create the optical perception of a narrower travel way. This in turn signals a need for caution to drivers and results in lower speeds. Mowing practices along Redding's roads may need review in light of this approach. Optical methods have the lowest cost of all the imposed solutions for traffic calming.

Chicanes:

Chicanes are shoulder extensions that alternate from one side of the road to the other to create a repeating curvilinear alignment to replace a straight section. The resulting alignment forms the series of smooth flowing S curves. The shoulder extensions perceptually narrow the road, and add more green space to the streetscape. The purpose of chicanes is to reduce travel speeds along an entire section of road. When new roads are built to incorporate chicanes, long straight sections and excess width are avoided as part of an overall strategy.

Gateways:

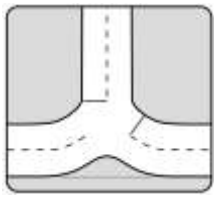


A gateway is a physical geometric landmark that indicates a change in the environment from a high-speed arterial to a low-speed residential or commercial area. Gateways send a clear message to drivers that they are entering a special or unique place and should slow down.

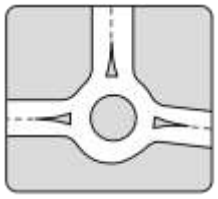
Many of the traffic calming treatments, when placed near the entrance to a neighborhood or village area and enhanced with landscaping and textured material, are referred to as gateways.

Roundabouts, traffic circles, neck downs, center islands, and raised intersections are types of treatments that can be enhanced to function as a gateway.

Modified or Realigned T Intersections:



This intersection treatment changes the alignment of the through road at a T intersection to eliminate the straight maneuver. A bend is added to the approach with the intent of forcing vehicles traveling along the straight segment of the intersection to deviate and turn, causing a reduction in speed for through traffic. Although this measure is not very common, it is one of the few that are effective at T intersections (this technique recently has been implemented at the intersection of Marchant Rd. and Simpaug Tpke).



Modifying the alignment of a T intersection can also be useful in reducing cut through traffic because it impedes the free flow of traffic. However, if not properly designed, the bends within the intersection can cause driver confusion regarding priority of movement.

Source: Portions of the text on the two pages of this description are excerpted, with appreciation, from Traffic Calming & Pedestrian Facilities, a report published by the Greater Bridgeport Regional Planning Agency, October 2002, material in turn extracted primarily from reports on traffic calming and pedestrian facilities published respectively by the Institute of Transportation Engineers and the US DOT.

Preservation of Rural, Historic and Quasi-abandoned Roads

Much of Redding's charm and character derives from its picturesque, narrow, winding roads and lanes, both paved and unpaved. Over a dozen of these roads which are still in active use have been officially designated and protected as Town "Scenic Roads" under the Scenic Roads Ordinance (adopted in 1986). These are shown on the Land Use Map. A number of others which are recommended for scenic designation because of their outstanding natural roadside beauty or exemplary scenic character are shown on the Town Plan Map.

One stretch of State road in Redding – Route 53 from the Weston line to Route 107, along the Saugatuck Reservoir and Redding Glen – has been accorded a State "Scenic Road" designation.

It may be highly desirable to seek state Scenic Road designation along other state routes in Redding, in order to establish a stronger rationale for preserving these roads without major alteration as well as for desirable "traffic calming" effects.

Still in existence on various older Town maps and in property deeds are a number of once-public highways or rights-of-way, usually bounded by old stone walls, which have never been, or have long ceased to be maintained by the Town or actively used by the public. These are shown on the Land Use Map as roads of "Uncertain Status." Many of these old rights-of-way constitute a Town liability, and may in fact invite speculative subdivision along their "frontages." Virtually all would require extensive construction work to be made serviceable or safe for vehicular travel and some could never be made to meet any reasonable modern road standard.

It is recommended that a study be conducted to determine the legal status of these quasi-abandoned roadways, and that wherever feasible such roadways be officially discontinued. Pedestrian easements for passive recreation and other minor forms of use should be retained wherever possible. Measures that would eliminate the right of way entirely from town maps or from minor use will serve to destroy the town's land patterns for future generations, and so these should be avoided where possible.

Recommendations

7-1) Support State and Regional classification of existing Routes 7 and 25 as Major Arterial Roads, and seek reclassification of Routes 53, 57, 58 and 107 as Minor Collectors. Investigate and, if found to be advantageous, press for return of selected State roads to Town control, especially where predominantly residential in character. Continue to support local efforts to both abandon plans for "Super 7," and to increase funding for the widening of Route 7 so as to complete construction earlier than currently scheduled.

7-2) Continue to monitor State, Regional and adjoining areas' road plans and development policies. Work to minimize traffic impact on Redding and to protect the residential and environmental quality of the town. Oppose any plan to increase the vertical clearance of the Route 53 rail overpass, noting the 2000 Regional agreement

between Redding, Bethel and HVCEO that no increase in the clearance of this bridge should be permitted.

7-3) Support upgrading of commuter rail service, private van pooling and other forms of mass transportation which reduce private automobile dependence. Research possible sites for additional commuter parking facilities at key locations for future use. Plan and support pedestrian paths, bikeways and greenways for non-motorized travel wherever feasible.

7-4) Seek traffic calming measures on State and Local roads. Where appropriate, support Town traffic calming action, including optical lane narrowing strategies, physical speed control features, signage, signals and "T" intersections wherever feasible.

7-5) Encourage preservation of the character of Redding's officially designated Scenic Roads, along with its other historic roads by the following measures:

a) Limit the widening or straightening of such roads or sections of roads as a combined traffic calming and historic preservation strategy.

b) Carry out safety and drainage improvements only at identified problem locations with careful attention to minimal environmental or scenic disruption.

c) Make structural improvements only where non-structural alternatives are unfeasible.

d) Actively propose additional historic Redding roads for designation as scenic roads under the Town's scenic road ordinance (see Town Plan of Conservation and Development map for roads recommended for such future status).

e) Add a standard information field in the Town Assessor's Field Card Database, to record those property parcels having Scenic Road frontage.

7-6) On specific roads where there is documented negative impact from truck traffic, request that the Redding Police Department seek State authority to place "No Through Truck" prohibitions with assistance in monitoring by Neighborhood Watch Groups where feasible.

7-7) Update the Town Road Regulations and Subdivision Regulations to eliminate inconsistencies. Establish standards appropriate for safety and adequate service in relation to levels of traffic, and for consistency with the Town's rural character.

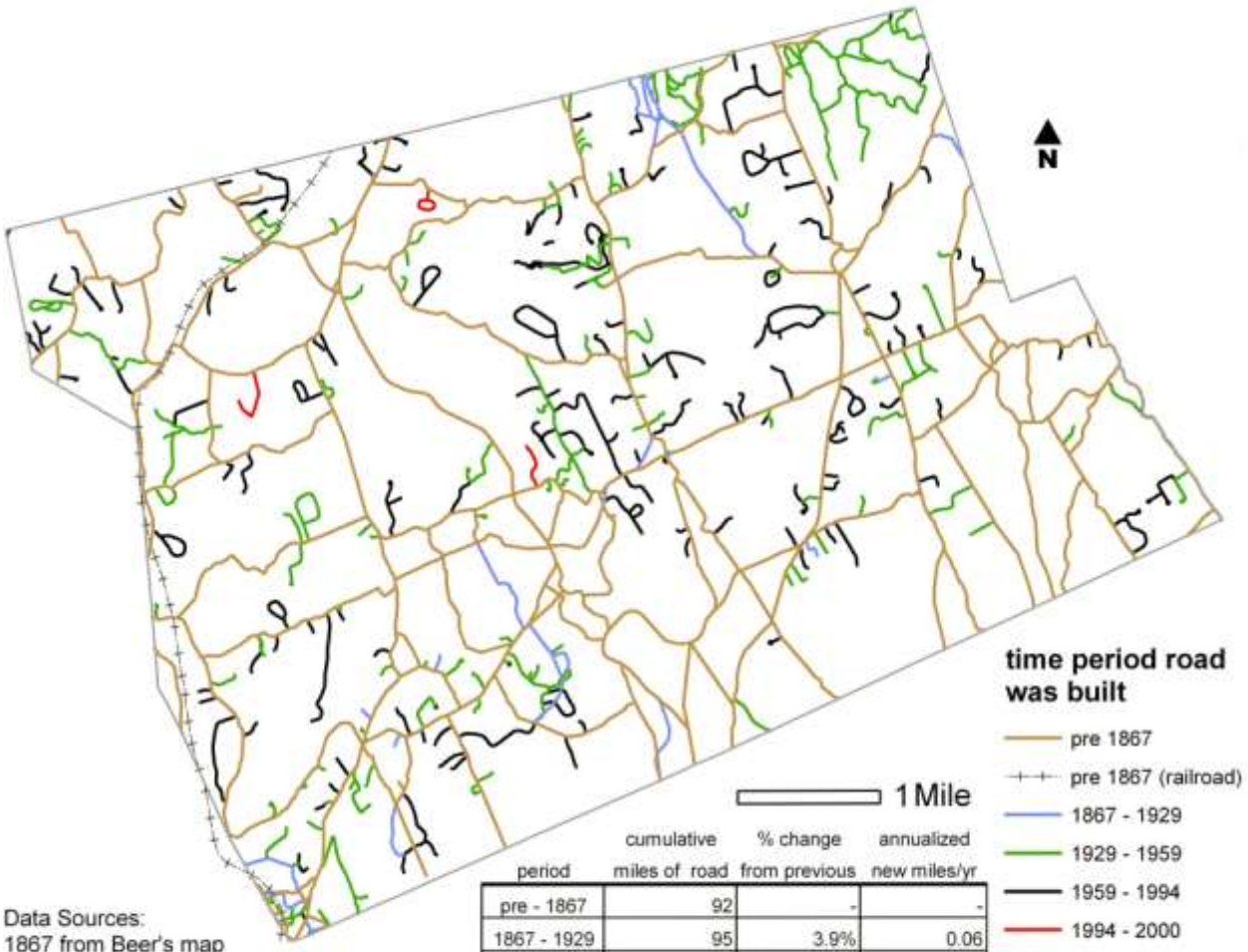
7-8) Recommend that the zoning commission re-examine current sightline requirements for new driveways and roads. This study should determine if sightline requirements based upon a 1.5 second sight-decision distance at the 80th percentile road speed would be a more appropriate safety standard.

7-9) Recommend that the Selectmen adopt the Roadway Maintenance Guidelines for the Town of Redding, a component of the Town Road Regulations recently prepared by the Town's engineering consultant to guide repair and restoration work on Town roads.

7-10) Recommend that the Selectmen amend the Town Ordinance, "Procedure for Making Changes in Roads," to require notice by Certified Mail to abutting property owners in advance of any road repairs or changes., and to require that any plans for

significant road alterations be referred to the Planning Commission for review as provided by Section 8-24 of the General Statutes.

7-11) Research and document roads with special character or need for protection, including roads with outstanding scenic qualities, roads long unused and eligible for discontinuance (including the possibility of their retained use for passive recreation or other minor use), and roads suitable or desirable for roadside pedestrian paths or bikeways. Work with the Town and local civic groups to develop plans and secure funding for appropriate projects, for additional scenic road designations (both State and Town), and for other measures to conserve the character of local roads and byways.



period	cumulative miles of road	% change from previous	annualized new miles/yr
pre - 1867	92	-	-
1867 - 1929	95	3.9%	0.06
1929 - 1959	111	16.3%	0.52
1959 - 1994	151	36.0%	1.14
1994 - 2000	152	0.9%	0.24

Data Sources:
1867 from Beer's map
1929 from Dolph and Stewart Atlas
1959 from USGS topographic map
1994 and 2000 from CT DEP road layers
Map made by Brian Hall at the Harvard Forest.

CHAPTER 8: PUBLIC FACILITIES AND UTILITIES

An Evolving Community

In its gradual evolution from a country town to an upscale exurban residential community over the past six decades, Redding has undergone dramatic changes in its civic needs and public infrastructure.

At the end of World War II, with a population of 1800 residents, Redding's town government functioned with three paid officials, a single office at the Old Town House, and a four-room elementary school. There was no Town garage, no local high school, and except for Putnam Park, no public recreation facilities. Police protection existed only at a distance, from State Police barracks. Volunteer fire companies were well organized but working with buildings and equipment primitive by modern standards. Most of the commissions and professional staff positions which today govern the Town and serve many diverse interests had not yet come into existence.

Now, some 60 years and 6,800 residents later, the Town of Redding employs 60 full-time personnel in 17 departments, not including the school system. Public facilities include the four municipal buildings in Redding Center, the new community center, three schools, four fire stations, active recreation facilities at several locations, and town highway garage, recycling and sewage treatment facilities. The town's major public facilities and sites are described in Table 8-A.

Redding has a well established tradition of volunteerism in public services. In addition to its three volunteer fire companies, approximately 140 citizens serve without compensation on various boards, commissions and committees of the Town and its three fire districts. Numerous organizations provide essential services to the town population, and the continued presence of these organizations is a vital part of the life of the town. Among these private institutions are the Mark Twain Library, Redding Boys and Girls Club (youth programs), Lonetown Farm and New Pond Farm (historical and educational museums), Highstead Arboretum, the Redding Country Club, and ten religious institutions (churches, synagogue, monastery), all of which are located on the 2008 Land Use Map.

Civic and public institutions are accorded special zoning privileges. They are permitted in residential zones and are the only category of use permissible in virtually any zone. Along with special privileges, however, come special obligations. The Zoning Regulations recognize them as distinct from residential uses and require "Special Permit" applications in residential zones to assure the protection of adjacent neighbors through the same high standards of land conservation, historic preservation, density, intensity, sustainability and appropriateness as are applied to residential land uses.

The Town Plan proposes that vital services required as the Town grows toward its full population capacity should continue to be provided in a constructive partnership between the Town and its many civic organizations and institutions. While certain of these functions, such as recreation, roads, law enforcement and land use regulation, are clearly public responsibilities, this plan encourages public and private collaboration, working in harmony, toward a shared vision of the future community. Such constructive collaboration may include recreation programs, social service programs, services to the elderly and needy, historic preservation, civic beautification, emergency medical and disaster response, trails development in open space lands, cultural events and many other areas of civic need.

Strong encouragement should be given to continued voluntary participation by townspeople in all aspects of community service. Redding's future quality of life and civic character depend on contributions by talented citizens.

Recent Growth in Infrastructure

In the mid-1990s, while the 1998 Town Plan was being prepared, Redding was on the cusp of a major program of expansion of public facilities, made necessary by the massive population growth of the prior several decades.

Over the past ten to twelve years the following significant accomplishments – many recommended in the 1998 Town Plan – have been realized:.

- Construction of a new Redding Community Center on the former Burritt Farm incorporating a new senior center, recreation center and public meeting space.
- Extensive additions to John Read Middle School and Joel Barlow High School.
- Complete renovation and interior reconstruction of the Town Hall, including additional parking, a gazebo, and parade path.
- New playing fields (3) at the Burritt/Redding Elementary School site and at Joel Barlow High School (4).
- Sale of the former Gilbert & Bennett factory site and initiation of plans for a major redevelopment project including a Georgetown train station and expanded sewage treatment plant.
- Establishment of an independent Town Police Department.
- The old Heritage House retired and returned to residential use in the Redding Center Historic District.
- Acquisition, in a collaborative partnership with The Nature Conservancy, of six major open space parcels, totaling over 350 acres.

In addition to these Town-sponsored projects several major projects completed by the State and by private utility companies will leave a lasting impression on the town. Foremost among these was action by the State, in concert with The Nature Conservancy, to acquire permanent development rights to the entire watershed acreage in Redding and adjacent towns of lands formerly held by Bridgeport Hydraulic Company, now permanently protected as the "Centennial Watershed State Forest". Another State project brought to fruition a significant restoration of Putnam Memorial State Park, including a new visitor center in the restored pavilion. The largest utility project was the construction across the town, for 6.1 miles, of a new high voltage (345 kV) electric transmission line, which utilized the old power line right-of-way for 2.8 miles with new higher towers, but placed the southerly 3.3 miles of line underground. Other utility projects included the introduction of public water service to central Georgetown by Aquarion Water Company, and three new cellular communications towers at Dittmar Road, Wayside Lane and Redding Ridge. Redding's roads are also now underlain by two important fiber optic communication trunk line systems.

Town Growth and Future Facility Needs

The extent of long term facility needs reflects both existing deficiencies and anticipated Town population growth.

From the most recent land use survey of the town (2007) and the analysis of its realistic growth potential (Table 4C), Redding's likely "ultimate" population size has been projected at between 11,500 and 12,000 persons. It will take several decades, at least, based on recent rates of growth, to reach that size. Although the central Georgetown redevelopment project is likely to induce a brief upswing in the rate of population increase between 2010 and 2015, the long-term trend is for slower growth due to gradually declining average household size, a growing proportion of elderly persons and a diminishing supply of land which is free from development constraints. Recent school enrollments and projections tend to confirm the trend toward slower growth in Redding during the coming ten year period.

While there are various areas in which existing public facilities are clearly inadequate, the Town is fortunate in that it does not face explosive growth and can plan needed facilities within moderate parameters for additional growth.

As a familiar proverb says, "prudence is foresight" and the Town Plan 2008 recommends that the Town undertake two programs to insure its future capacity to meet unforeseen needs. These are:

- Rebuild the Town's Capital Reserve Fund to provide financial capacity for future infrastructure not presently needed or predictable, whether schools, roads, utilities or other unavoidable costs, and
- Acquire a reserve of land or sites, strategically located, to accommodate future facility expansion wherever and whenever such may be needed. Examples could include undeveloped land adjacent to Town, civic, school or recreational facilities in the central area of the town, or land for future off-street parking in Georgetown.

Existing Facility Sites

Table 8-A lists the sites of major existing public facilities in Redding and analyzes the additional development capacity for each. The extent of the site area already developed – including buildings, septic areas, parking, playfields etc. – has been measured, as have these factors which inhibit additional development such as wetlands, slopes above 20% and reservation for another use (e.g., Town Green or Historical Society leasehold). The result is the estimate of "Developable Reserve" area given for each site in the table.

Land which is permanently dedicated to public open space serves an important function in providing for environmental protection and passive recreation, and is not part of this "Facilities Sites" analysis. These lands include all of the Open Space and Public lands shown on the current Land Use Map. Examples include "The Rock Lot", "Saugatuck Falls Natural Area" and the "Ground Pine Sanctuary", all owned by the Town.

From the analysis in Table 8-A, it is clear that public land available and usable for expansion of such essential facilities as Town Administration, public schools, public safety and active recreation is quite limited. The Plan proposes efficient utilization of available

existing space and early action to acquire additional key areas of land where needed for future facilities.

Subsequent sections of this chapter list five broad areas of public service responsibility and propose programs to meet civic needs in these areas. Included are:

- Town government and social services
- Public education
- Public safety
- Parks and recreation
- Utility services

Community Center Entrance

John Read Middle School Addition

Joel Barlow High School Addition

Mark Twain Library Addition

New Pond Farm - Indoor Learning Center

Table 8-A
MAJOR PUBLIC FACILITY SITES
Town of Redding

This table analyzes site capacity only. For facilities evaluation see the following sections of this chapter. See explanatory notes at the end of the table.

SITE	Site Area in Acres		
Location (Ownership/Use)	Total:	Developed	Developable Reserve
Town Hall 100 Hill Road (Town/municipal offices)	2.64	1.7	Minimal. Restricted by septic fields, zoning setbacks, essential parking space. With Town Hall green and 1998 building additions, site is now fully utilized.
Town Hall Annex 10 Lonetown Road (Town/municipal offices)	0.52	0.5	Little or no additional capacity, due to septic & setback limitations. Enlarged parking area 1998, also serves Town Hall.
Old Town House Cross Hwy. @ Lonetown Road (Town/municipal offices)	0.03	0.03	None. Entire building perimeter adjoins roads and Congregational Church property.
Community Center Lonetown Road, at rear of Redding Elementary School (Town/senior center, public community room, offices, gymnasium, playfields)	22.7*	20.5	Approximately 2.2 acres in two locations, adjacent to building and to fields at northeast corner.
Lonetown Farm Museum 43 Lonetown Road (Town, 99-year Lease to Redding Historical Society/house, barn and field)	3.5*	0.9	Entire site restricted by 99-year lease. Open 2.6 acre field used regularly by Society for its activities.
Redding Elementary School 33 Lonetown Road (Town/public school, auditorium, playfield, parking, septic fields)	35.7*	35.7	Site fully developed after deducting area for Community Center and Lonetown Farm Museum.
Police Dept. & Emergency Communications Center 96 Hill Road (Town/police station & "E-911" office)	0.71	0.7	Minimal. Entire site in use for buildings, setbacks, septic and parking.
Hill Road Vacant Lot 99 Hill Road (Town/light woodland, adjacent to Center firehouse)	4.01	--	2.5 acres, after deducting wetlands, setbacks and portions unusable due to lot shape. Potential site for new public safety/police building.
John Read Middle School 486 Redding Road (Town/public school, playfield)	24.3	13.5	Approx. 2.0 acres around existing school building. Restricted by septic fields, wetlands, setbacks.
Joel Barlow High School 100 Black Rock Tpke. & 70 Turney Road (Regional School District 9/senior high school, 2 gymnasiums, tennis courts, 6 multi-purpose playfields)	118.1	64.0	Approx. 8 acres in 2 sections, west side of site. Developed area includes extensive building, parking, septic and recreation areas. Balance of site is mostly wetland, ledge and steep slope.
Topstone Park Topstone Road & Old Redding Road (Town/public recreation pond w. swimming facilities)	274.9	6.0	Approx. 7 acres, near entrance drive and pond; limited potential for small-scale recreational facilities. Remainder of tract is rugged, ledged terrain and wetland, used for passive recreation with 3.7 miles of hiking trails.
Redding Center Fire Station 105 Hill Road (Fire District #1/firehouse)	1.38	0.4	0.3 acre, after deducting developed area & setbacks.
Redding Ridge Fire Station 186 Black Rock Turnpike (Fire District #1/firehouse, meeting rooms and cell tower)	0.84	0.8	None. Entire site in use for building, septic, parking and setbacks.

SITE	Site Area in Acres		
Location (Ownership/Use)	Total:	Developed	Developable Reserve
West Redding Fire Station 306 Umpawaug Road (Fire District #2/firehouse, meeting rooms and recreation field)	4.55	0.8	1.7 acre, after deducting developed area and setbacks.
Georgetown Fire Station 6 Portland Avenue (Georgetown Fire District firehouse & meeting rooms)	0.47	0.47	None. Entire site in use for building and parking.
Town Garage 28 Great Oak Lane (Town/Highway Dept. garage, salt shed, equipment storage area)	6.5	5.5	Minimal. Vacant woodland adjacent to Great Oak La. is compost area and residential buffer. Setbacks required from adjacent stream. Sloping hillside behind building. Site close to full development.
Transfer Station and Recycling Center 84 Hopewell Woods Road (Town/solid waste transfer facility & closed landfill site)	13.87	11.0	1.2 acres, adjacent to transfer/recycling complex. Closed landfill occupies most of remainder of site.
Georgetown Sewage Treatment Station Redding Road (Town/wastewater treatment facility)	0.18	0.18	Minimal. Entire site in use for treatment plant. Site being enlarged as required for plant expansion to serve future development & Meadow Ridge.
West Redding Rail Commuter Station 3 Long Ridge Road (Conn. Dept. of Transportation/ Metro North RR parking lot)	2.05	1.3	0.3 acre (reserve area lies in R-2 Zone and requires setback variances for parking use).
Vacant Lot, West Redding Center 6 Side Cut Road (Town/light woodland)	1.0	--	Approx. 0.4 acre after deducting wetlands & setbacks. N.W. corner lies in NB Zone, balance (0.6 acre) in R-2 Zone.

Explanatory Notes

The twenty sites analyzed in the Table are tracts owned or leased by Town, State or other public agencies to provide essential local infrastructure services, such as Town government, public schools, recreation, fire and police protection and utility services. Privately owned institutions, utility services and public open space lands are not evaluated here. The purpose of this analysis is to determine the approximate capacity of existing public infrastructure sites to accommodate future facility growth.

Developed area for each site was calculated or estimated from available site plan, survey map and land use information, and generally includes area occupied by buildings, service yards, activity areas, accessory structures, parking and driveways, septic fields and utility areas.

Developable Reserve area excludes existing developed area, zoning and wetland "setback" areas and area severely limited for development due to such natural constraints as wetland, flood plain and steep slopes.

* Site area determined by approximate extent of the facility use within the overall Town-owned tract of 72.9 acres. Site allocations above do not include approximately 11.0 acres of buffer land at rear of tract.

Town Government and Social Services

As a result of investment by the town in new facilities over the past dozen years much has been accomplished to alleviate problems cited in the 1992 Redding Center Supplement to the Town Plan and in the 1998 Town Plan.

In 1998 construction was completed on a major renovation and addition to the Town Hall, increasing floor area by approximately 1,900 square feet and providing enlarged meeting space, office areas and code compliance. The enlarged Town Hall building provides adequate office space for the foreseeable future for the seven Town departments currently established there, as well as a spacious meeting room capable of accommodating up to 95 persons. Public hearings are frequently held at the meeting room.

The Redding Community Center building was constructed on approximately five acres of the "Burritt Farm" site in 2001-02. Opening in August 2002, the facility provides much needed facilities for all ages. The structure, which houses a large community room for meetings and election day polling, is flanked on one side by a new Senior Center with offices for Social Services staff and on the other side by offices and gymnasium facilities serving the programs of the Park and Recreation Commission.

Across the street from the Town Hall, the 1 1/2-story Town Hall Annex continues to house the Redding Center Post Office and three Town Departments – Building, Zoning, and Health—in extremely cramped conditions for each of the Town offices. Two of these departmental offices are accessible only by means of a steep staircase, conflicting with fire safety and handicapped access requirements. Although this building's basement also had served in the past for dead storage of town records, this has been discontinued due to destructive flooding of the basement. Parking was expanded on this half-acre site in 1998 to jointly serve the Annex and the main Town Hall, but this still remains inadequate at times of peak use.

A new public safety building is planned eventually to replace the present Police Station and Emergency Communications Center at 96 Hill Road. It is recommended that, at the time when this becomes possible, the existing Police Station should be renovated and enlarged to accommodate the Building, Health and Zoning Departments in more functional and code-conforming quarters.

It should be possible for the existing Annex building to accommodate the Redding Center Post Office into the foreseeable future as well as to eventually provide a more secure location for dead file storage and necessary parking capacity for the Town Hall.

The Old Town House, facing the original Town Green at Cross Highway and Lonetown Road, is an historic structure that has served Town Government since 1834. It presently serves the Land Use Office and provides file storage and meeting space for the Conservation and Planning Commissions. An off-street parking area at the rear, shared compatibly with the adjacent First Church of Christ Congregational, works well. The arrangement provides adequate space for these two departments for the foreseeable future and should be continued.

Public Education

Redding Elementary School in its central two-story portion, dates from 1948.A memorial gymnasium/auditorium was constructed on the north side of the original building about 1949-50.

Successive additions in the early 1970 have created two large classroom wings on the south and west sides of the original building. Originally planned as an eighth grade school, Redding Elementary School now serves pre-kindergarten through Grade 4 pupils. Overcrowding which had developed by the mid-1990's was alleviated in 1999 by transfer of the fifth grade to John Read Middle School. Present enrollment at Redding Elementary School (2008-2009 school year) is 734 students, an increase of 16% over the past eight years. However, the middle-range enrollment projection by consultants to the school's administration forecasts a decline in Pre-K through Grade 4 enrollment by 35% to an estimated 475 elementary school students in the 2015-16 school year. Redding's slow rate of growth and a demographic phenomenon, the passage through the system of an above-average number of children born during the 1980's and early1990's, account for the anticipated decline. This reduction in enrollment pressure will allow the administration to focus on implementing a three-year technology program and various physical improvements needed for energy efficiency in the building and other work on the site.

John Read Middle School, which serves Grades 5 through 8, opened in 1966. Its compact two-story original section was doubled in capacity almost immediately with an addition in 1967-68. Further additions, consisting of a one-story six-classroom wing at the rear and a library wing at the front were completed in1999. In its present configuration the middle school is expected to fully accommodate the Grades 5-8 program for the foreseeable future. Student enrollment at John Read Middle School reflects the same trends noted in elementary school enrollment; over the past eight years the number of students has declined by 5% to 575, the present enrollment. This number is projected to decline further to 426, a 26% smaller student body by 2015-16. The middle school is sound and functional.

Joel Barlow High School serves Grades 9 through 12 for Regional School District 9, comprised of the towns of Easton and Redding. The original section was built in 1959, on a 35-acre site off Black Rock Turnpike for a capacity of 650 students. A major addition, designed to provide for a student capacity of 1,000 opened in 1971-72. In 1974 the District purchased the 83-acre "Blaha" tract adjoining on the south, creating a total site of 118 acres. A complex of athletic fields, parking and tennis courts (about 25 acres) was built on this portion of the site in the latter 1970's. A large-scale and complex building project, commenced in 2001 and completed in 2005, has created 26 additional classrooms and laboratories as well as renovation of existing classrooms, auditorium, cafeteria, laboratories and offices. Site improvements simultaneously constructed a new competition field, new multi-purpose fields, a new cross country course, eight new tennis courts, and additional parking facilities. In its enlarged capacity for 1,200 students, Joel Barlow High School is now capable of accommodating the maximum probable enrollment which would occur when Easton and Redding reach their design population size, or "holding capacity", of 21,000 persons for the two towns. The current enrollment (2007-08) at Joel Barlow High School, 962 students, is projected to remain nearly level at 957 students in 2015-16.

For many years the Regional School District administrative offices have functioned from rented commercial space in Monroe. The offices will soon relocate within the District, in the space recently vacated in the former Staples School in Easton.

Recent and on-going physical improvements at each of the three schools, Redding Elementary School, John Read and Joel Barlow, have resulted in sound facilities and ample capacity for projected enrollments. However age and obsolescence in the older portions of these schools may require attention in future years and planning should be done to evaluate options for improved efficiency and the flexibility of interior space required by new technology.

While Pre-K-8 enrollments are not expected to increase in the foreseeable future an eventual increase is likely in this age group as the town grows to its capacity population. Such growth could result in an additional 400 to 500 students in the Pre-K-8 system. There is no realistic additional expansion capacity at John Read School due to septic limitations, high water tables and adjacent wetlands. The Redding Elementary School site, now reduced to about 35.7 acres as a result of development of other portions of the former property for the Community Center and several playfields, is essentially fully developed with little reserve space for new building or septic fields. It is therefore urgent that studies be conducted to identify and secure a site or sites wherein additional elementary school facilities may be constructed in the future if needed. Centrality of location, suitability of soils, and topography suitable for play spaces and parking are the prime determinants for a site.

Public Safety

The Redding Police Department has been an independent municipal police force since July 2002 when the Town adopted an ordinance creating the department under the professional direction of a Chief of Police. In addition to the chief, the staff includes one lieutenant, four sergeants, eleven officers, five full-time and five part-time dispatchers, and two animal control officers. The department also maintains an auxiliary force, comprised of ten citizen volunteers who assist with traffic control and various town-wide events as needed. The Communications Division of the department operates the Town's 24-hour 7-day emergency service for police, fire and medical emergencies (9-1-1 calls) for all sections of Redding.

At present the Police Department and the Emergency Communications Center are housed in a small building at 96 Hill Road adjoining the south end of the Town Hall green. This 0.71-acre site also accommodates a departmental garage, a radio tower and a small parking lot. Conditions at both the building and site are extremely crowded.

Relocation of the Police Department and Emergency Communications Center to a new Public Safety building, to be erected on Town property at 99 Hill Road is recommended in the 1998 Town Plan and is strongly reiterated in this Plan. The 4.01 acre site on the west side of Hill Road adjoins the Redding Center fire station and is ideally situated central to the town, on a wide road with excellent accessibility, and offers potential for direct coordination with emergency fire and rescue services.

A "Space Needs Assessment" prepared in 2004 for the Redding Police Department examined current and future building and site needs for effective operation. This study determined that a 9,680 square-foot building should be planned, plus a 2,200 square-foot storage/garage building. With parking space and 10,000 square feet of expansion space, the potential site development area required would total 1.7 acres. The potentially developable site area of the lot at 99 Hill Road is 2.5 acres.

Redding's four fire stations are well located for strategic coverage of the town's extensive territory. Site space is available for expansion as needed at the Redding Center and West Redding firehouse sites.

Three all-volunteer fire companies, each established within a legally constituted municipal fire and tax district, provide fire, rescue and emergency medical services to all residents. Redding Volunteer Fire Co. #1 (Redding Fire District #1) operates from two firehouses at Redding Ridge and Redding Center, and covers approximately half the town. The West Redding Volunteer Fire Company (Redding Fire District #2) and the Georgetown Volunteer Fire Company (Georgetown Fire District) serve the remainder, the latter including adjacent areas in Weston, Wilton and Ridgefield. Each fire company is well equipped and holds weekly training sessions that have resulted in most active volunteers attaining the level of Medical Response Technician or higher. Nonetheless, there is a severe shortage of trained personnel available for emergency response at various times, typically weekdays when many volunteers are at work outside Redding. This is especially problematic in Districts 1 and 2. Each company responds to between 200 and 300 emergency calls per year. A mutual aid plan enables each company to call for back-up assistance from one of the adjoining fire companies, or from a department in an adjoining town, in the event of a major fire or disaster. To supplement the work of volunteers, Fire Districts 1 and 2 have contracted for a back-up ambulance service and rapid-response paramedic service from an outside source. Growing emergency response needs, especially for medical assistance, coupled with a growing shortage of available volunteer personnel, have created an urgent need for the recruitment of additional volunteers.

In the spring of 2008 Redding Fire District #1 announced plans for a major addition to the Redding Center fire house located at 105 Hill Road. The addition will more than double the size of the present building, providing two additional bays and conference and storage rooms.

Additional measures needed to sustain and enhance the Town's effectiveness in fire response include:

- Implementation of requirements for the inclusion of fire sprinkler systems in new houses having higher risk of loss from fire (i.e. large houses, isolated sites, high-density zones, etc.).
- Continued inclusion of underground underground water tanks serving hydrants in new residential subdivisions
- Establishment of access to more ponds capable of providing ready refilling of the Fire Districts' tanker trucks.

Parks and Recreation

Redding's active recreation facilities took a giant leap forward in mid-2002 when the new Community Center opened with staff space, a large gymnasium and other facilities for the many programs sponsored by the Park and Recreation Commission. In 2004 three new playing fields, located adjacent to the Community Center, came on line, considerably alleviating the critical shortage of playfield space.

The Park and Recreation Commission is served by a professional director and four staff persons who oversee a wide range of programs, on a four-season schedule, for all age

groups. Youth athletics, concerts on the Town Hall Green, exercise classes, crafts instruction, special excursions, summer camps, adult tennis, swimming in season at Topstone Park, and the "Extended Day" program at Redding Elementary School are but a sampling of the programs offered.

In 2006 the Park and Recreation department assumed the maintenance responsibility for all of the Town recreation fields, including those at the Community Center and at the John Read and Elementary Schools. The department also maintains Topstone Park and the Town tennis courts.

Despite the recent advance in athletic fields and program facilities the Park and Recreation department staff has identified a number of still unmet needs. These include:

- A storage room addition for gym supplies, at the Community Center; 800 square feet needed.
- Additional athletic fields; 2 desirable including a practice field and an all-purpose field, to allow existing fields to recoup from heavy use; an artificial turf field preferred.
- An additional meeting room for daytime programs and to avoid disruption of scheduled programs when Town events pre-empt the Community Center common room.
- Other items either requested by the public or seen by staff as highly desirable include bleachers for the gymnasium, a playground and a pavilion for Topstone Park, a fitness center, outdoor lighted basketball courts, and replacement of the presently aging tennis courts.

The recent expansion of Joel Barlow High School has provided several new athletic fields, new tennis courts and a running track, all of which are available when not pre-empted by school schedules for use by town residents. In addition several private recreation facilities function in Redding, with extensive programs for members, most notably the Jesse P. Sanford Boys &Girls Club of Redding and the Redding Country Club.

Utility Services

Repair and maintenance of the Town's system of roads, bridges, storm drains and various public grounds is the essential responsibility of the Highway Department, which has an operational base on a 6.5 acre tract off Great Oak Lane, adjacent to the southwest corner of Redding Elementary School. Department equipment is housed in two large garage buildings. Adjoining the garage buildings are a sand and salt storage shed, an office, and a large work/storage yard. A wood chip and topsoil storage area is located to one side of the entrance driveway, near Great Oak Lane. Due to the large size of new highway equipment, and additional storage needs, an enlarged garage will be needed in the near future.

The Town's Transfer Station and Recycling Center is located at the front portion of the former Town landfill site, a 13.9 acre tract on Hopewell Woods Road near the Newtown line. A permit system is in effect for Town residents. About two acres are in use for several buildings which house recyclable materials, reusable goods and a small office. Storage bins and enclosed trailers for paper and other bulky commodities are located adjacent to the buildings. The Center accepts a wide range of recyclable materials which are sold to private

recycling contractors, and is a transfer station for solid waste which is transported to regional reprocessing facilities. Hazardous waste must be transported out of town to a designated collection center at owner expense.

In 1996 the new Georgetown sanitary sewer system and treatment plant began service to residents and businesses located on Old Mill Road, Main Street and small adjacent portions of Redding Road, Brookside Road and Portland Avenue. The sewage treatment plant is located on a site at the south side of Redding Road adjacent to the railroad spur and is under lease from the developers of the former Gilbert and Bennett property. Redevelopment now underway of this G& B site, to create an urban village of mixed uses, will significantly expand the existing sewage treatment plant from its present capacity of 75,000 gallons per day to 245,000 gallons per day in order to serve the new village. A modest surplus capacity is incorporated in the design of the new high-tech plant.

Private utility companies, regulated by the State Department of Public Utility Control and the State Siting Council, provide electric, telephone and cable services to all Redding residents.

Recommendations

8-1) Move toward full implementation of the Plan for Redding Center, based upon findings and recommendations of the Redding Center Supplement of 1992, the Town Plans of 1998 and 2008, and studies by the Redding Interior Space Committee (RISC).

8-2) Proceed with plans and construction for needed new public safety buildings (police, fire, emergency response) at 99 and 105 Hill Road, as shown on the 1998 and 2008 Town Plans.

8-3) Plan and construct, when the site becomes available, new and remodeled Town offices at the 96 Hill Road site presently occupied by the Police Department. Relocate the Building, Health and Zoning offices to this location with improved parking layout and a pedestrian walk to the Town Hall.

8-4) Survey or redefine the "Onion Field" adjacent to the Lonetown Farm Museum to assure that the Historical Society 99-year lease extends westward to include the field and a sufficient treed buffer area at its western edge. Use of this field should be limited to civic events that do not require any modification of the field's preserved agricultural character.

8-5) Establish an Architectural Advisory Board to review plans for commercial, municipal and institutional construction, to ensure harmony with the environs in terms of scale and architecture and to protect public viewscapes.

8-6) Create an overlay zone of protective regulations for Historic Districts such as Redding Center.

8-7) Plan for future land acquisitions as may be needed for civic purposes, including education, active recreation, and the various operations of the Town government. An organized process of identifying suitable sites for future purchase should occur. Because additional playing fields are seen as the most immediate need, the planning for land acquisition should be accompanied in the near term by implementation of

additional field space or an artificial turf field at either the Community Center or John Read Middle School.

8-8) Expand the Community Center north wing by a sufficient amount to create urgently needed storage, locker and "Daytime Programmable" meeting space.

8-9) Plan and budget for maintenance and replacement of existing fields, tennis courts and other facilities which are heavily used, in order to preserve their viability and safety.

8-10) Plan and construct the enlarged Redding Center fire station, at 105 Hill Road, and the new Public Safety building, at 99 Hill Road, as proposed above and shown in the Town Plan.

8-11) Implement, at Town expense, a continuous training program to assure that all police officers, emergency dispatchers, volunteer firefighters and other key Town personnel are and remain certified to Medical Response Technician levels. Continuing education for fire marshals, building officials and other appropriate Town administrative personnel in fire safety, public health and safety issues is strongly recommended, as is adequate staffing for code enforcement.

8-12) Provide basic life-saving equipment (oxygen, bandages, automatic defibrillators, etc.) for police cars and places of public assembly, (schools, senior center, churches, town auditorium) for MRT use in medical emergencies.

8-13) Encourage coordinated training and operations of the several fire companies, the Town Police and Highway Departments for maximum effective utilization of available resources in emergencies, particularly the limited number of personnel available for public safety service.

8-14) Given the reliance of the Town on volunteer fire departments, the projected growth of the Town and the trend toward large dwellings, it is recommended that new fire protection measures be initiated including the following:

a) Amend the Subdivision Regulations to increase the availability of water resources in proximity to all newly-constructed houses.

b) Study potential amendments to the Zoning Regulations to require that all new dwelling units having higher risk of loss from fire (i.e. large houses, isolated sites, high-density zones, etc.) are protected by automatic fire suppression (i.e. sprinkler) systems.

8-15) Monitor long-range plans of commercial utility services for system improvements and new facilities. Support legislative and other efforts to ensure protection for the residential and natural environment of the town.

8-16) Support strict adherence to the Zoning Regulations that require low level lighting at public, institutional and commercial facilities as well as private residences.

8-17) Explore development of a Town policy to encourage, assist, and where feasible require, underground installation of all new and upgraded power and communications cables, in collaboration with respective utility companies, with special emphasis on Historic Districts, Scenic Roads, areas of dense development and for commercial and institutional uses.

8-18) Maintain satisfactory operations at the Town Recycling Center and Town Public Works Garage, as at present. Update and modernize as required for safety and efficiency.

8-19) Continue to recruit and encourage voluntary participation by able townspeople as members of various Town boards and commissions, as emergency responders, and as active participants in civic and social organizations that contribute to both needed public services and the quality of community life in Redding.

CHAPTER 9: RESIDENTIAL TRENDS AND HOUSING OPPORTUNITIES

A Residential Town

Over the past century, as small home enterprises and farming declined in Fairfield County and as transportation technology made longer commutes possible, the portion of Redding outside the village of Georgetown has become steadily more fully dedicated to residential uses. Redding's natural beauty and quality of environment initially made the town an attractive weekend refuge for urban dwellers including artists, writers and other creative persons, and the town has gradually evolved into a permanent home for commuters, despite its relatively long distance from jobs and urban centers.

Since 1950, with the rise of suburban centers of professional employment, Redding along with neighboring towns has experienced a large influx of new residents seeking homes in peaceful, spacious, semi-rural surroundings. In 1950 the town, including Georgetown, contained fewer than 600 dwellings; today (2008) the number of all dwellings is approximately 3,300. Of this number roughly 93% are detached single-family dwellings on individual lots.

About 89.5% of Redding's land surface lies on the watersheds of four public water supply reservoirs and one well field, all operated by the Aquarion Water Company[1]. Protection of this vital water resource, which serves a regional population of approximately 520,000 persons, is a fundamental necessity of Town land use policy as well as an imperative expressed in the State Policies Plan 2004-2009 and policies of the several regional plans of the area. Much of Redding's land area, moreover, is characterized by steep slopes and shallow soils over ledge, interspersed with numerous wetlands. In recognition of these limitations, 97.4% of the town's area is zoned for single-family residential use on minimum lots of two acres or larger.

The sensitive lands located within the public water supply watershed serve to limit Redding's housing density in most of the town. And yet, the portion of Redding that is permitted to use these public water resources is limited to the 5% of town land area comprising the central part of the village of Georgetown (Georgetown lies within the Norwalk River valley and hence is not within a public water supply watershed area).

Within central Georgetown, since the time of the 1998 *Town Plan* the public water supply franchise area has been enlarged and a sanitary sewer system has been installed, both to resolve longstanding environmental issues in the business district and to facilitate residential and mixed-use development on specific, targeted sites. The sewage disposal plant that serves the Georgetown business district and the Meadow Ridge assisted living complex has been redesigned and expanded by Georgetown Land Development Company (GLDC) to serve their redevelopment project on the former Gilbert and Bennett factory site.

Within Georgetown, the 88 acres comprising the RV (Village Residential) and HMC (Historic Mill Center) Zones, residential townhouses and apartments are permissible at a density of 7 to 8 units per gross acre of site area. Surrounding this old village center are approximately 200 acres of R-1/2 and R-1 Zone (single family residential at one-half acre and one acre per lot, respectively), both zones nearly fully developed.

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[1] In addition to the Saugatuck Reservoir in Redding and Weston, these include the Aspetuck, Hemlocks and Easton Lake Reservoirs in Easton and Coleytown Well field in Westport.

Redevelopment planned for the former Gilbert and Bennett site in Georgetown is expected to create more than four hundred new dwelling units, including freestanding houses, attached town houses, conventional apartments, and loft apartments. Fifty-five dwelling units are scheduled to conform to State guidelines for the creation of officially-certified affordable housing.

Throughout the town, the Redding Zoning Regulations have since the 1980's authorized the creation, by special permit, of a 600 square-foot apartment accessory to a single-family dwelling in any residential zone. At present Redding has 164 accessory residential apartments, of which 94 are attached to a principal dwelling and 70 are in detached structures, according to records of the Town Assessor.

As noted in earlier chapters new residential construction in Redding peaked during the period between 1960 and the latter 1980's. New houses erected in that era were typically single –family dwellings containing three or four bedrooms, most with attached one-car or two-car garages. In more recent years however, rapidly escalating land values and construction costs have inflated average dwelling prices to more than twice the 1980 levels. The consequent result has been a shift in the type of dwelling currently being constructed in Redding to a luxury style residence, much larger than formerly and typically with five or six bedrooms, a three-car garage and many special features.

Redding's Present Housing Complexion

Although more current data will not be available until after the next census in April 2010, the 1990–2000 data clearly portray several significant and longstanding trends. Reflecting the town's desirability and growth in new homes, the proportion of home ownership increased by 4%. Average household size continued its forty-year trend of decline, albeit only slightly in the 1990-2000 period. Not surprisingly, household incomes shifted upward, but disproportionately. Low income households, those under $20,000 (8.1%) remained virtually the same as in 1990 (8.9%) while the proportion of high income households, those above $100,000 (53.2%) increased substantially over 1990 (36.6%). Over the same period the cost of housing tended to increase faster than incomes for both owners and renters. Homeowners paying 30% or more of their income for housing rose from 28.8% to 30.6%, and renters paying 30% or more of income rose from about 34% to 37%.

The general characteristics of Redding's housing stock, as measured by the U.S. Census in 1990 and 2000, are summarized in Table 9-A[5]

[5] It should be noted that Census-based housing data are not as current as some of the other data sources used in the *Town Plan*, but the Census as a source provides a greater statistical validity on certain types of data including housing data.

Table 9-A - HOUSING CHARACTERISTICS - 1990 and 2000

Town of Redding, Connecticut, per US Census Reports

	1990		2000	
	Number	Percent	Number	Percent
Dwelling Units				
Single-family	2,843	95.10%	2,945	95.40%
Other: 2 or more families per unit or dwelling + apartment	147	4.90%	141	4.60%
Total	2,990	100.00%	3,086	100.00%
Ownership and Tenancy				
Owner-occupied	2,429	81.20%	2,629	85.20%
Renter-occupied	341	11.40%	289	9.40%
Vacant (for sale, for rent)	220	7.40%	168	5.40%
Total	2,990	100.00%	3,086	100.00%
	1990		2000	
Average Household Size:	Persons		Persons	
Owner-household	2.93		2.89	
Renter household	2.39		2.30	
Town Average	2.86		2.83	
Household Occupancy By Type:				
Single person	13.40%		13.50%	
Married couple family	75.50%		75.70%	
Other family/unrelated persons	11.10%		10.80%	
Total Households	100.00%		100.00%	
Household Incomes				
Below $10,000	2.30%		1.50%	
$10,000 - $24,999	6.60%		6.60%	
$25,000 - $49,999	20.60%		10.50%	
$50,000 - $99,999	33.90%		28.20%	
$100,000 - $149,000	18.20%		23.90%	
$150,000 and over	18.40%		29.30%	
	100.00%		100.00%	
Housing Cost as Proportion of Household Income				
Owner Households:				
Less than 20%	49.50%		44.40%	
20% to 29.9%	21.70%		25.00%	
30% and over	28.80%		30.60%	
	100.00%		100.00%	
Renter Households:				
Less than 20%	16.80%		38.20%	
20% to 30%	41.80%		24.80%	
30% and over	34.50%		37.00%	
Not reported	6.90%		n/a	
	100.00%		100.00%	

It is expected that during the period since 2000, since land values, the prices of newly-constructed houses, and resale prices of existing houses have increased at a rate faster than the rise in personal incomes, current statistics would show that Redding's residents are expending steadily-larger portions of their resources on shelter.

Of 2,377 homeowners reporting in the 2000 census, 1,872 (78.8%) carried mortgages, about one-fourth for $500,000 or more. Slightly over 10% of Redding householders had resided in the same dwelling for 30 years or more and nearly 38% had resided in the same dwelling for less than 5 years.

The age of Redding's dwellings closely parallels the periods of town growth. Of the 3,086 dwelling units counted in 2000 approximately 9% were constructed between 1990 and 2000, and over half, 54%, were constructed in the thirty-year period between 1960 and 1990. Approximately 20% of Redding dwellings pre-date World War II (1939 and earlier). Fewer than 15% of Redding dwellings could be termed "small" (5 rooms or less). Larger dwellings, 8 rooms or more, constitute over 40% of homes in Redding.

Fire Safety - A Growing Concern

The number of building fires in Redding is not large, and the town is well provided for volunteer fire response with three fire companies and four fire stations. Nevertheless the low-density nature of the town creates special difficulty in the mission of protecting life and property, when one of Redding's relatively large and isolated wood frame houses catches on fire. There is a differing, but equally important set of concerns related to existing and currently-planned wood frame dwellings in the high-density areas of Georgetown.

Private dwellings are a key fire protection issue within Redding, because they generally are of combustible construction, have the fewest code-mandated fire protection technologies, and some of the largest houses are likely to be located furthest from the fire station. A fire may start small within a single room, and it may not be detected immediately. However, both before and after detection the room will incubate the fire, and once the temperature in the room reaches the point of ignition for fabrics, paper, etc., the fire will "flash" to fully engage the room. The entire structure will quickly become engaged, once this has occurred.

While having reliable sources of water supply is an important resource in fighting large fires, the task of detecting and reporting a fire, mustering fire fighters, arriving at the scene, setting up hoses, and entering the house almost always exceeds the incubation time for the fire to fully engage its room of origin and attack the overall structure. Thus, in order to limit losses and increase public safety, the time of response must be reduced beyond that which can be achieved by increased manpower or material resources.

A decade ago, the Fire Chiefs of Redding's three fire companies studied this problem and noted the changing fire protection problems in town. These included:

- The construction of much larger houses containing greater quantities of combustible materials;
- A growing population with increased expectations for public services including life safety and fire protection;
- The exponential growth of a fire once flaming combustion occurs;
- The absence of a municipal water system or a system of fire hydrants;
- The narrow roads and driveways which slow fire apparatus response;
- A decreasing pool of volunteers accompanied by increasing training demands upon the time of existing volunteers.

Understanding these limitations, and recognizing a growing trend across the country, the Fire Chiefs submitted a recommendation, endorsed at that time by the Planning Commission, that newly constructed one and two family houses with large floor areas should be equipped with fire suppression sprinkler systems in accordance with accepted national standards for such systems. No action has been taken as yet on this recommendation.

Since that time, the International Code Council, which is the source of the State of Connecticut's Building Code, has stated their intent to include in an upcoming code revision a requirement for residential fire sprinkler systems to be installed in all newly-constructed one and two family houses.

It is unknown when this code revision will appear, or whether the particular revision will be adopted or excluded by the Codes and Standards Committee of the Connecticut Department of Public Safety. Also, there is immediately development pressure in higher-density areas of Georgetown that suggest a need for clarity on this issue. Thus it is recommended that revisions be considered to the Subdivision and Zoning Regulations by which to require residential fire sprinkler systems in all new-construction one and two family dwellings having special fire risks. Among the special fire risks that should be included are:

- houses on long driveways or isolated sites;
- large houses and houses of more than two living levels;
- houses and apartments in higher-density zones.

Along with the discussion of fire sprinklers, the Planning Commission in recent years has requested the advice of the Fire Marshall when subdivisions have been planned, and water storage with hydrants for firefighting has been mandated for installation in most cases. However the basis in regulation for this is general rather than specific in nature, leading to the discussion of the need for more-specific requirements. It is thus recommended that specific language be developed for providing tank-fed hydrants in new subdivisions and developments that are outside the franchise area for public water supply. This language should be incorporated into the town's Subdivision Regulations and coordinated between the Subdivision Regulations and the Zoning Regulations.

Diversity and Affordability, a Challenge

The current construction trend toward larger and more costly homes, in Redding as well as in neighboring towns, presents several concerns related to the demographic diversity that has long been part of Redding's tradition. For example, the median sale price for house sales in 2007 represented more than five times the size of the median household income. Despite Redding's relative affluence this price level exceeds normal standards of affordability for the median household. For lower-income Reddingites, including especially the town's oldest and youngest households, current price levels are simply out of reach.

The State of Connecticut has documented similar trends throughout the state, representing a key challenge in sustaining a high quality of life and in attracting young people to remain in Connecticut's workforce. Statewide, recent-year statistics are readily accessible and they bode ill for the state's towns and cities (source of data- CT Partnership for Strong Communities):

- Housing prices increased 66% between 2000 and 2006 and have not diminished significantly despite a national downturn. Households earning median income are unable to qualify for homes at the local median sales price in 154 of the169 towns and cities in Connecticut.
- Nearly 21,000 one- and two-bedroom dwellings have been lost since 2000, while four-, five-, and six-bedroom houses have increased by 31,000.
- A higher percentage decrease of population in the 25-34-year-old age group has occurred in Connecticut than in any other state.

A primary challenge to Redding's housing policy, and one noted as long ago as the 1971 Town Plan, is to offer housing for a variety of family incomes and age brackets, thereby providing a more diverse town. Of immediate concern is the fact that most dwellings in Redding are now priced out of reach of many persons who serve the community in essential ways, such as police, trades people and volunteer firefighters – not to mention the sons and daughters of local families seeking a first home or senior citizens unable to afford to remain in their longstanding family home.

A related - and sometimes disturbing - challenge in regard to housing diversity has been the "teardown" phenomenon in which older dwellings are fully or substantially demolished in order to build much larger replacements on the same sites. This trend toward replacement reflects an economic cause and effect that occurs when land of high value underlies structures that are fully depreciated, in need of substantial renovation, and of a size and type that cannot achieve maximum economic value.

While teardowns are understandable on an economic level, and while they do serve to renew the investment in and condition of the town's housing inventory, this practice disrupts the fabric of the community. Smaller and older houses traditionally have provided housing opportunities for young families and for people of moderate means, and high land values make the creation of new housing of this type unlikely on a conventional market basis. In addition, while many of the teardowns are development houses from the 1950's and 1960's that have no established historical or architectural value, other towns have seen sizeable numbers of historic dwellings lost to the teardown phenomenon. While Redding has lost only a small number of historic homes so far, these losses are not reversible and

they serve to discard the long continuum of a community's history, turning the town into a monument to short-term real estate market factors. Thus the teardown phenomenon, inevitable though it may seem, is in large measure an economically and culturally destructive trend for the community at large.

State Framework for Affordable Housing:

Connecticut's General Statutes (Section 8-23) require each municipality to address housing concerns in preparing its *Plan of Conservation and Development (Town Plan)*. The *Town Plan* must "… make provision for the development of housing opportunities for multifamily dwellings, consistent with soil types, terrain and infrastructure capacity . . ." The same law requires the *Town Plan* to "…promote housing choice and economic diversity in housing, including housing for both low and moderate income households…"

Most initiatives for creating affordable and workforce housing opportunities are based upon utilizing higher densities than exist generally in Redding. Thus Georgetown, where sewer, water, and transportation resources make higher-density housing more feasible, is the locale where most higher-density housing attention has been focused for Redding in recent years. This focus continues in looking forward during the coming ten years, although this edition of the *Town Plan* seeks to expand the discussion of higher-density development to include the central part of the hamlet of West Redding due to its transportation resources and its resulting potential for transit-oriented development. It should be noted, though, that West Redding's lack of public water and sewer and its sensitive location at the headwaters of the Saugatuck River may turn out to be limiting factors.

The State of Connecticut has two affordable housing frameworks established by statute that require the town's attention. These programs, with Redding's approaches in utilizing them, are as follows:

1. Connecticut "Affordable Housing Land Use Appeals Act (CGS Sec 8-30g).

Since 1989, housing diversity and affordability have been mandated by the State of Connecticut's "Affordable Housing Land Use Appeals Act" (General Statutes, Section 8-30g). Under this law, the term "Affordable Housing" has become a legal term of art reflecting the specific incentives and sanctions arising from the statute. In brief, state-certified Affordable Housing units are dwellings that are either: a) part of an income-limited public housing project, or b) owner-occupied and financed by a CHFA (Connecticut Housing Finance Authority) mortgage, or c) income-regulated within an Affordable Housing Development. Each town in Connecticut is mandated to work toward a goal of having 10% of its total inventory of housing units as certified Affordable Housing units.

In Redding there are no public housing projects, and price levels in Redding generally exceed the maximums for use of CHFA mortgages. Thus the focus in Redding, as in other area towns, has been construction of Affordable Housing Developments. These developments must be designed, constructed, and managed according to formulas set forth in the statute setting requirements for the percentage of total housing units that must be certified as Affordable, the income levels for which the units must be priced, and management standards for how the Affordable Housing units are to be advertised, marketed, and leased or sold.

The statute's development standards generally make Sec. 8-30g inapplicable to existing dwellings, and instead they create incentives for private for-profit and non-profit development of newly constructed multi-family townhouse and apartment-style dwellings at very high suburban densities of 12-18 units per acre.

Sec. 8-30g provides for several differing types of Affordable Housing Developments, with differing requirements regarding income targets, mixes of market-rate and affordable units, and the lengths of the required deed restrictions. Among the housing types set forth in the statute are conventional family housing, age-limited elderly housing, and accessory apartments within single-family dwellings. In Redding, a typical family-housing project under Sec. 8-30g must dedicate 30% of its housing units to Affordable Housing, with half of the affordable units limited to families having incomes at 80% of State Median Income and half at 60% of State Median Income. Deed Restrictions are required to codify the projects' requirements, as well as to set expiring time periods for the requirements (this time period is 40 years in most cases, 10 years for Accessory Apartments).

As a sanction for towns that might resist approving Affordable Housing Developments, an applicant whose land use application has been denied approval has the right to appeal the denial to a state court whose judicial mandate is modified by statute to: a) place the burden of proof upon the town, and b) favor approval unless the town can demonstrate a compelling health and safety need, the importance of which supersedes the acknowledged need for affordable housing.

As a positive incentive for accepting Affordable Housing Developments, under current rules a town earns a three-year moratorium from appeals under Sec. 8-30g when a qualifying Affordable Housing Development is completed.

The Affordable Housing Land Use Appeals Act has been controversial through almost twenty years of operation, since it provides for a critical need but in so doing may foreclose the possibility of considering broader planning issues. Modifications have been studied by two Blue Ribbon Commissions and by numerous interest groups including small towns such as the Town of Redding.

Although very few applications have been made in Redding for Affordable Housing Developments, and although two Affordable Housing Developments have been approved without as yet reaching fruition, Redding currently is the only town in Connecticut having no DECD (Dept of Economic and Community Development)-certified Affordable Housing units. Not coincidentally, Redding's neighboring town of Easton also has a very low count of Affordable Housing units, and these towns are among the Connecticut communities most heavily dominated by lands within public water supply watersheds. The rugged landscape of Redding, the lack of public utilities within the town, and the presence of development constraints on behalf of the water resources of other communities, make an environment seemingly recognized by the town and by developers alike as problematic for the kinds of large-scale, high-density suburban multifamily housing projects incentivized by Sec 8-30g.

This special challenge, which Redding faces in complying with legislative affordable housing mandates while respecting natural resource limitations, is amplified by the policies of adopted State and regional plans. The State Conservation and Development Policies Plan 2004 – 2009 and the draft 2008 HVCEO (Housatonic Valley Council of Elected Officials) regional plan both recognize

Redding as being part of the low-density residential rural fringe significant to the preservation of regionally important watershed, natural habitat, and open space resources. Nevertheless, Redding is required to meet the seemingly-conflicting goals of accommodating high-density new-construction housing developments of the type incentivized by Sec. 8-30g.

2. Connecticut Housing Program for Economic Growth

In 2007, in response to a growing perception that the Connecticut economy was being jeopardized by high housing costs and that Section 8-30g was failing to resolve the problem, the Connecticut General Assembly enacted a new initiative sponsored by the "Home Connecticut" campaign to promote affordable workforce housing. The keystone of this new approach, which is based on well-established Smart Growth principles and is titled the "Connecticut Housing Program for Economic Growth", is the provision of incentives to municipalities to voluntarily create Incentive Housing Zones (IHZ's). The statute requires that IHZ areas be designated in town centers or where Smart Growth considerations are present such as access to transportation and services.

As of the time of the writing of this *Town Plan*, the statutory requirements for IHZ's include ensuring that at least 20% of the housing units in each development will be affordable for residents earning 80% or less of Area Median Income (this is in distinction to Sec. 8-30g, in which a lower figure for Statewide Median Income governs eligibility in Redding). In addition, IHZ dwellings must be deed-restricted to sustain affordability for at least 30 years. The maximum size for any IHZ is 10% of a town's total land area, and the maximum for all IHZ's taken together is 25% of the town's land area.

Predictably, the use of increased housing densities is a part of this program. At present the minimal densities qualifying for grants and for certification as Affordable Housing in an IHZ are:

- For single-family detached houses: 6 units per acre;
- For Duplexes or Townhouses: 10 units per acre;
- For multifamily apartments: 20 units per acre.
- In any IHZ: IHZ overlay must increase density by at least 25%.

In contrast to Sec. 8-30g, this new legislation gives municipalities control over the location, quantity and design standards for the new housing, and is intended to facilitate locally-based planning to position needed housing in Smart Growth locations where essential infrastructure is available, or can be economically provided, to support greater densities.

Along with creative planning and design solutions, the legislation encourages the use of non-profit housing development and assistance organizations. For example, if a project is built on land owned by the town or by a specialized non-profit entity, and is to contain entirely Affordable Housing units, then the town may request to waive the density requirements. This may be a key ingredient in successful implementation of an IHZ plan in Redding.

The State of Connecticut's Office of Policy and Management has begun a program of direct grants to localities to provide incentives for the creation of IHZ districts and the implementation of housing within those districts. These grants presently include:

- *Planning Grants* to initiate local planning for Incentive Housing Zones. This program has a streamlined application procedure and few pre-ordained requirements as to the outcome of the planning process.
- *Zone Adoption Grants* to reward the enactment of Incentive Housing Zones. These grants are structured as a dollar amount for each unit allowable in the IHZ
- *Building Permit Grants* to reward the actual construction of Affordable Housing units. These grants are structured as a dollar amount for each building permit issued within the IHZ.

The use of Incentive Housing Zones incorporating Smart Growth development techniques may also call for the use of Cluster Development techniques. State statute requires the Town to consider the appropriate use of Cluster Development in its town plan. It has been longstanding policy in Redding to see a history containing both environmental benefit of abuse of intent in the implementations of cluster housing in the state, and so previous Town Plans have endorsed cluster concepts within very strict limits.

Cluster development is acknowledged as a means for achieving the conservation of open space land, consistent with the Town's goals for housing diversity, environmental sensitivity, and the preservation of underlying cultural resources such as historical and archaeological artifacts. However, in Redding much of the land has an already-low carrying capacity for development, and so it has been town policy that cluster development should be implemented only if shown to be a means of increasing the environmental quality of development, rather than as a means of justifying densities higher than those conventionally reached through existing Planning, Zoning, and Conservation regulations. Clustering may be of more immediate utility in Redding if residential densities are increased in certain areas of the town through the use of an IHZ plan. Clustering would, in effect, assure that along with sufficient land for the placement of dwellings, a development site would also have adequate areas of environmental buffer to avoid negative impacts.

For Redding the formulation of an IHZ plan represents a significant opportunity to simultaneously address its housing need and to further apply the Smart Growth principles that underlie such recent Town initiatives as the redevelopment of central Georgetown, and support for expansion of the Metro North rail service. In addition, while Georgetown remains the most likely venue for an IHZ plan, this concept also may be a means of bringing creative housing solutions and greater commercial viability to the hamlet of West Redding if the significant environmental issues in that district can be resolved, mindful also that public water and sewer are not available.

Because of the development constraints outlined earlier in this chapter - related to public water supply watershed, lack of public water and sewer in most areas of Redding, rugged terrain, and a rudimentary road network - the use of

Incentive Housing Zones must be carefully configured. Higher density housing units should be located in the limited areas where they can meet the program's goals of Smart Growth and Transit-Oriented Design, and can avoid the pitfalls of excessive urbanization on the public water supply watershed.

Local Initiatives for Meeting State Affordable Housing Goals

1. A Self-perpetuating Problem:

The arithmetic of affordable housing in Redding represents a self-perpetuating problem, in which even the prescribed solutions begin by enlarging the degree of difficulty involved. The arithmetic can be daunting. Redding today has 3,410 dwelling units, of which 341 are mandated to be affordable under Sec 8-30g, and the existing inventory of such dwellings is zero. 341 may seem like a large number of new dwellings for the town to absorb - but in reality the challenge is much larger than this. Since the state mandate requires only 30% of the units in an Affordable Housing Development to be Affordable Dwelling Units, 70% of the newly-constructed dwellings will be market-rate, profit-making housing. Thus the real-world outcome is that to achieve its mandated goal Redding would have to permit the construction of 1,137 dwelling units, all of them in the form of dense, urbanized apartment and condominium housing. This would increase the Town's housing inventory not by 10% but by roughly a third

But the problem does not stop there. As 341 affordable dwellings and 796 market-rate dwellings are added to the town, the total housing inventory rises to 4,457 units. Now, the 10% affordable calculation calls for the town to have 445 Affordable Housing Units. . And in meeting that goal by building more housing, the same 30% affordable/70% market rate will apply, bringing the requisite 104 new affordable units along with 346 new market-rate units. No matter how hard the town might try to meet the state Affordable Housing goals, these goals will remain maddeningly just beyond its reach.

When the fact that 89.5% of Redding's land area is sensitive public water supply watershed land is factored into this housing supply equation, it becomes clear that if the Town relies upon typical for-profit development formulas to provide its affordable housing, the benefit of having new affordable housing units must be balanced against the very large number of non-Affordable units simultaneously created and the associated environmental problem of dramatically urbanizing the town and in particular its public water supply watershed lands.

2. Solving the Problem:

The preceding discussion may seem like a textbook policy matter in which the broad public interest in drinking water resources would predominate. Unfortunately this is not true; Redding continues to be at risk for successful Affordable Housing appeals under Sec. 8-30g because the risk of negative impact on regional health and safety resources such as the public water supply watershed has not as yet become fully recognized in the case law or statute related to land use appeals under Sec. 8-30g.

Because Sec. 8-30g is a statute aimed at appeals on land use decisions (i.e. planning and zoning decisions), environmental concerns - especially those related to the impact of intensive development in public water supply watershed areas - are difficult to bring to bear in defending a local decision. Despite the State of Connecticut's recent advances in pursuing Responsible Growth, and Low-Impact Development, Affordable Housing appeals are being lost more than they are being won by towns that seek to protect fragile and essential natural resources.

The 1998 Town Plan dealt with this affordable housing conundrum by recommending that the Town work toward modifications to Sec. 8-30g, and that it take small but creative steps to build an inventory of DECD-certified housing units. This has not been a successful strategy. Thus, while these features are included in the 2008 Town Plan, a new town initiative on affordable housing also is recommended in which the major focus must be on the production of Town-initiated, non-profit Affordable Housing Developments consisting of 100% affordable units. The affordable housing should be constructed on town-owned land, and deed restricted in perpetuity to preserve affordability. This may in fact be the only way to generate an adequate number of DECD-certified affordable units without excessive urbanization of the town's sensitive lands.

Moreover, each time a successful Affordable Housing Development is completed in conformance with the Town Plan, a 3-year moratorium on appeals under Sec. 8-30g is generated. Thus a successful series of town-sponsored Affordable Housing Developments will inoculate the community against forced failure of its stewardship role in the public water supply watershed by permitting the Town of Redding to control how, where, and in what form its Affordable Housing will take shape.

The choice for Redding is stark and simple: provide DECD-certified Affordable Dwelling Units as required by statute, or others will provide them for you in a form that will do damage to the Town's most basic planning priorities.

The use of Incentive Housing Zones appears to be the best means by which Redding might provide affordable housing tailored to the town-center locations envisioned by the statutory language of the Connecticut Housing Program for Economic Growth. Application for a planning grant under the IHZ program is recommended as the first step in utilizing the IHZ concept, but as a key part of this recommendation it is noted that the creation of Incentive Housing Zones must be undertaken with extraordinary care to avoid unanticipated consequences. Careful study, budgeted adequately to assure thoroughness, is an essential ingredient for Redding in responding to the attractive opportunity of the Connecticut Housing Program for Economic Growth.

In Redding, even areas that are deemed appropriate for higher densities because of proximity to services and transportation may be subject to environmental challenges. For this reason Incentive Housing Zones should be configured in Redding only in one of the following two ways:

- as an overlay for carefully crafted, self-limiting zone areas related to priorities of smart growth, transit oriented development, and environmental management.

- as a more broadly defined overlay zone for sites under Town of Redding ownership and for use only with non-profit or publicly-financed development of projects having 100% Affordable Housing. The town of Redding should include in its capital-expense planning an ongoing program of seeking, evaluating, and purchasing sites appropriate to this class of IHZ affordable housing.

It is recommended that the town create a series of town-owned Affordable Housing Developments, utilizing non-profit development and containing 100% Affordable Housing Units. These must be carefully situated throughout the town, in varying densities, but with a particular focus on the use of Smart Growth techniques, transit oriented neighborhoods, and sustainable technologies. The end-users of these dwellings could be renters and/or purchasers, in a manner conforming to the provisions of Sec. 8-30g.

Land acquisition will be necessary, and a small administrative infrastructure will be needed. Affordable housing cannot be built without subsidies of some kind, and under this recommended plan the subsidies will have to come from the Town of Redding. To some extent, the use of non-profit development will provide a subsidizing effect in lowering the cost of development, but bond funding is likely to be required. It should be noted also that money spent on affordable housing is an investment, not a dead expense. Most of the funds invested will return to the town from either operating income or resale of the affordable dwelling units.

If these Town-owned Affordable Housing Developments are absorbed by the Town at a reasonable pace over time, the resulting completions should generate moratoria on Affordable Housing Appeals by others under Sec. 8-30g, and this will sustain the Town's goal of exercising prudent stewardship over its sensitive lands and open space resources, along with its role in protecting the public water supply watershed.

3. Locally-Applied Techniques to Supplement State Framework:

To aid in responding to the State of Connecticut's mandates for housing diversity and affordability, Redding's Town Plan includes a number of recommendations for local Town action intended to function alongside the formalized state programs. These recommended actions represent a determined local response to housing needs, mindful of the unique considerations that apply to a semi-rural town, with very limited areas served by public sewer and water and with difficult land forms and roads of limited capacity.

In using any locally-developed Affordable Housing programs, however, it is critically important that the Town be mindful of state-sourced definitions. Along with the real need for housing diversity in Redding, there is a concurrent need to achieve an inventory of dwellings that are certifiable for inclusion on the DECD Affordable Housing list. These two needs are not completely consistent with each other, but it is recommended during the period of applicability of this *Town Plan* that the DECD list take precedence.

In discussing techniques outside the realm of existing state-mandated programs, it should be noted again that affordable and workforce housing cannot be built in our region without some form of subsidy. The two major state programs

envision this subsidy arising from the development process itself: higher density is permitted in order that the profit on the additional housing units can be used to provide a limited number of less-expensive units. A key limitation in Redding, given the town's environmental limitations and lack of infrastructure, is that densities are difficult to meet. This the key reason why Redding has failed to provide certifiable housing units based upon the process set forth in Sec. 8-30g. It is recognized in Redding that alternative techniques of subsidy must be found, before substantial numbers of affordable dwellings will be found in the town. Among the techniques under study that do not rely solely upon increased density are the following:

a.) *Seek Changes to Sec. 8-30g Provisions for Accessory Apartments:* In the 1998 *Town Plan*, the Town of Redding recognized that affordable accessory apartments might be a promising avenue for realistically achieving Affordable Housing, since the town already has a large inventory of accessory apartments, with rents that in many cases already meet the standards set by the Affordable Housing Land Use Appeals Act. Redding currently has 70 "in home" or attached apartments, and over 90 detached accessory apartments in its single-family zones. The town identified the state-required deed restriction as a key reason why homeowners had not availed themselves of this concept.

Redding has actively worked with other small towns as well as with the Housatonic Valley Council of Elected Officials (HVCEO) to propose legislative changes that would permit non-deed-restricted accessory apartments to be certified as Affordable Housing units. This would require the creation of an alternative means of administering limits relating to rent levels, tenant income levels, etc. Such a modification would achieve a solution more feasible to the particular environment of Redding and other towns like it, and could lead to the certification of and regulation of a significantly enlarged pool of Affordable Accessory Apartments.

Although this proposal has not been successful, Redding intends to continue pursuing innovations along these lines. It is clear, though, that other solutions relevant to the town of Redding must be sought, and active collaboration will continue to be necessary with HVCEO, state legislative representatives, and the other small towns and watershed towns throughout the state.

b.) Seek changes to Sec. 8-30g related to Public Water Supply Watershed Lands: The Town of Redding has supported past legislative efforts, and should support future efforts, to exclude public water supply watershed lands from land use appeals under Sec. 8-30g. Since public water supply watershed lands represent a key resource for the overall development of the state, and since high-density residential development has been shown to be incompatible with the fragile character of the watershed, this initiative would resolve a key conflict between Sec. 8-30g and current "best practices" as commonly recognized for Smart Growth/Responsible Growth. Further, to enact such an exclusion would bring the 20-year-old language of Sec. 8-30g into coordination with the State of Connecticut's more-recent Affordable housing initiative, the Connecticut Housing Program for Economic Growth (the more recent program specifically excludes a wide variety of fragile and rural lands as being incompatible with best practices for Smart Growth).

The proposal to exclude public water supply watershed areas from appeals under Sec. 8-30g is an active and on-going initiative in Connecticut's legislature, although it has not been successful up to now. This initiative, however, is parallel to a successful initiative to exclude certain types of industrially-zoned lands from Sec. 8-30g appeals. It is a reasonable expectation that, with vigorous efforts by affected towns such as Redding, the state's legislators eventually will see the future-oriented wisdom of more fully protecting the shared water resources upon which the economic viability of the state will increasingly depend.

c.) *Changes to Local Regulations for Accessory Apartments:* The Town's regulations related to Accessory apartments predate the Affordable Accessory Apartment provisions of Sec 8-30g, and so there is no coordination among the provisions of these two sources of regulation. It would be a significant benefit if the Town's Zoning Regulations could be fully coordinated with state Affordable Accessory Apartment standards.

Along with this, it would be possible to provide a model of the Town's proposals for changes to Sec. 8-30g by creating a renewable, locally administered "affordability covenant" by which to assure that affordable accessory apartments will achieve stated goals including rent levels and tenant income levels consistent with State Affordable Housing statutes, along with owner occupancy of the primary residence. To provide further incentive for owners to create and maintain such apartments, the Town's assessment policy could be modified to value accessory apartments governed by "affordability covenants" at lower rates, in recognition of their contribution to Town housing needs.

d.) *Aging in Place:* Nationwide polls confirm that aging in one's own home is the preferred choice of the elderly population. As a group, these households in Redding pay considerably more in taxes than they consume in services. Tax relief, assisting the non-affluent elderly to remain in their homes, represents substantial savings when compared to the development cost associated with proposals for publicly owned senior housing. At the same time the town benefits from the skills and enthusiasm of retired residents who offer their wisdom and energy to the town's governance and its charitable institutions at the highest rate of any age group.

And yet, in a high-housing-cost environment such as Redding, older people on fixed incomes face particular difficulty staying in their homes. Even if they own their homes outright, the cost of real estate taxes can be a key impediment in a time of rapidly-escalating land values.

The Town can have a significant impact on this problem. Redding has long maintained a Senior Citizen tax credit, by which real estate taxed are reduced for older homeowners irrespective of need. This credit should be sustained, and its value should be reviewed on a regular basis to assure that its relevance is sustained as housing costs escalate. It is recommended that this credit be matched by a rent assistance grant for older residents who rent their homes.

Consideration also should be given to home-sharing for the non-affluent elderly. Under this concept, existing elderly residents would be permitted to share their homes with one or two elderly in-home tenants.

In addition, a proposal is recommended for review by the Town as a whole, to provide deeper assistance based upon need. Under this proposal, older residents with demonstrated need would be entitled to obtain relief from all property tax payments, with the Town assuming equity in their home in an amount equal to the amount of relief. Residents who avail themselves of such a program would be permitted to remain in their homes until the ends of their lives, with the Town recouping its equity in a required sale (or buyout by heirs) after the death of the resident owner.

e.) *Direct Purchases of Existing Dwellings by the Town:* Another program worthy of further study - especially for family and workforce housing - is the direct purchase by the Town of existing dwelling units, and rental or (preferably) resale to families or individuals qualifying for Affordable Housing. It would be possible under a program such as this to create certifiable Affordable Housing units under Sec 8-30g without having to enter into the difficult process of finding sites for new construction of high-density development projects. Deed restrictions on income levels of the residents, and of rental and/or resale values, should meet the standards set in Sec. 8-30g.

It should be noted that a purchase/resale or purchase/rental program to meet affordable housing needs would be a locally-funded housing subsidy, requiring substantial funding from the town. However this funding may be less than will be required to provide town services to larger Affordable Housing developments, which can be imposed by the actions of developers independent of the town's planning priorities.

End-users for this housing could include rental tenants, or preferably would be purchasers under the CHFA mortgage program. Dwellings incorporated into the program could include blocks of apartments in existing developments, or scattered single-family houses. This program could be of particular value if mortgage foreclosures due to current economic conditions bring hardship to Redding's households.

Another important use for this program would be the preservation of existing smaller homes, which may become "teardown" sites if not preserved through appropriate subsidy.

f.) *Affordable Lots in Subdivisions:* In larger subdivisions, (encompassing more than ten lots), a program of special Affordable Housing Lots could be set aside. This program could be treated as an alternative to the town's existing open space set-aside program by which the impact of development is offset by providing a public benefit component in the subdivision. Houses built on these Affordable Lots would be required to meet the requirements to be certified as Affordable Housing Units under Sec. 8-30g, including income levels, resale price restrictions, and a deed restriction in perpetuity for the Affordable Housing provisions to remain in effect. A suggested program could provide for 10% of lots to be designated for Affordable housing, just as the norm for open space set-aside's calls for a dedication of 10% of the land area.

g.) *Real Estate Conveyance Tax:* The State of Connecticut's real estate conveyance tax brings a stream of unrestricted income to the Town of Redding, largely

related to residential transactions. Each of the other housing initiatives noted in the Town Plan will require at least some degree of funding, and so it could be seen as a fitting dedication of the Conveyance Tax income, or a portion of it, to use it as the core of a fund for use in meeting the Town's need for housing diversity and affordability.

Recommendations

9-1) Enhanced Residential Fire Safety- Study potential changes to the life-safety provisions of Redding's land use regulations, including the following:

a) Amend the Subdivision Regulations, and suggest coordinated changes to the Zoning Regulations, to increase the availability of water storage for fire-fighting in proximity to all newly-constructed houses.

b) Work with the Zoning Commission to study Regulation changes requiring that newly-constructed dwelling units having higher risk of loss from fire (i.e. large houses, isolated sites, long driveways, high-density zones, etc.) be protected by automatic fire suppression (i.e. sprinkler) systems.

9-2) Provide Town-Initiated Affordable Housing using Incentive Housing Zones- Create a Town-administered program, adequately funded for operational overhead, by which to initiate and execute non-profit Affordable Housing Developments on Town-owned land. This program should include the following:

a) Initial planning studies should lead to adoption of one or more Incentive Housing Zones under the Connecticut Housing Program for Economic Growth. Any IHZ's should not present risks to the public water supply watershed, and in order to conform with Smart Growth principles should have or be able to be provided with water and sewer service, local and regional transportation resources, and convenient access to shopping and other essential services.

b) The Town should seek grant funding to the maximum extent applicable from the Connecticut Housing program for Economic Growth as well as from other relevant sources.

c) IHZ's should be configured to apply to Town-owned properties or to properties having potential for town purchase, using non-profit forms of development, and with100% of dwellings created under the IHZ being deed-restricted in perpetuity as Affordable Housing Units.

d) The town of Redding should include in its capital-expense planning an ongoing program of seeking, evaluating, and purchasing sites for the creation of non-profit IHZ affordable housing.

9-3) Work to modify Affordable Housing Statutes- Encourage legislative changes in the State of Connecticut's statutes related to Affordable Housing, in order to recognize the special needs of small towns and watershed environments such as Redding. The following currently active proposals are noted to be of particular importance:

a) Support proposals that recognize existing accessory apartment units as certifiable Affordable Housing Units under Sec. 8-30g. A key goal is to achieve

less-onerous deed restriction requirements, such that existing accessory apartments can be certified on a calendar-term basis rather than through deed restriction, and a more-realistic incentive will exist for the creation of additional certifiable units.

b) Support legislative proposals to enhance the Connecticut Housing Program for Economic Growth by restoring the provisions that were a part of the originally-proposed statute but were not included in the version that was finally enacted. These included a 15-year reimbursement to towns for additional school costs resulting from implementation of an IHZ plan, and a project-based 30-year rental assistance plan for IHZ projects that price 25% of their housing units to be affordable by residents earning 50% of the Area Median Income or less.

c) Continue to support legislative proposals to exclude lands within public water supply watershed areas from land use appeals under Sec. 8-30g.

9-4) Survey Existing Lower-Cost Housing Units- Conduct periodic surveys to obtain the accurate number of dwelling units, for rent or sale in Redding, that meet the cost-of-housing standards of the State of Connecticut's Affordable Housing programs.

9-5) Housing Support Programs- Conduct a study to determine how many people are in need of various forms of assistance and methods which have been used elsewhere to provide economic support of housing for elderly individuals.

9-6) Pursue Local Initiatives for Housing Diversity and Affordability- Fully develop a program of local initiatives for Housing Diversity and Affordability as outlined herein. These initiatives are noted briefly as follows:

a) Property tax relief for Aging in Place, including sustaining the existing Senior Citizen Tax Credit, extending this credit to apply to renters, permitting home-sharing by the non-affluent elderly, and potential reverse-equity mortgages for low-income seniors.

b) Direct purchase and resale and/or rental of existing dwelling units, with local subsidy to establish these dwellings as Affordable Housing Units under state definitions.

c) Designation of 10% of the lots in subdivisions of 10 units or more as "Affordable Housing" lots with the resulting houses to meet state definitions for certification under Sec. 8-30g.

d) To provide a more fully-developed model for suggested changes to Sec. 8-30g, coordinate the Town's zoning provisions for Accessory Apartments with state definitions for Affordable Accessory Apartments. Along with this, provide for a renewable "Affordability Covenant" as an alternative model for sustaining the dwelling unit as an affordable unit.

e) To provide further incentive for owners to create and maintain such apartments, the Town's assessment policy could be modified to value accessory apartments governed by "affordability covenants" at lower rates, in recognition of their contribution to Town housing needs.

f) Apply local revenues from the state Real Estate Conveyance Tax to the creation of a fund for achieving the housing diversity and affordability initiatives outlined herein.