

Springfield Town Plan

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Springfield Town Plan

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Chapter 1 – Introduction

The Town Plan is the principal statement of policy for the Town of Springfield. It presents a vision of the Town's future, and defines a series of strategies for achieving that vision. The Plan guides the Town's efforts in land use planning and growth management; the provision of public facilities and services; environmental protection; economic development; energy conservation and the protection of cultural resources. The Plan is implemented through various Town ordinances and regulations, through participation in federal and state programs, and through the Town's approach to capital budgeting, including a capital improvements plan. As part of their efforts in implementing the Town Plan, the town boards and commissions will consider the goals and objectives found at the end of each chapter of the Plan. All development, conservation, or social groups engaged in activities that affect the town are encouraged to consider the provisions of this Plan.

The Town Plan was updated in 2003 to reflect changes that have occurred in town since the last major plan update in 1993. Since 1993, the town has undergone the steps necessary to receive an official Downtown Designation, making it possible for the Town and businesses in the downtown to receive grants and incentives to implement downtown revitalization projects. Several of the remaining machine tool businesses closed in the last ten years, leaving hundreds of thousands of square feet of vacant industrial space, and hundreds of people unemployed. But the community has worked hard to overcome the challenges of a struggling economy. Town officials and members of local and regional organizations worked with an economic consultant to develop the Southern Windsor County Strategic Economic Development Plan. Hundreds of residents turned out to participate in a visioning workshop that resulted in a list of "dreams" for the future of the town. The Toonerville Trail, a multi-purpose recreational path, was completed and has become a valuable resource for people of all ages. New streetlights have brightened up the downtown. And, planning is underway on a number of other improvements to revitalize the downtown and vacant or underused industrial buildings throughout the community.

The Plan incorporates Census 2000 data to illustrate demographic changes that have occurred in Springfield since the 1990 Census. Each chapter was sent to local and regional groups and individuals who shared an expertise in the particular subject area. Planning Commission meetings became focus group sessions for some chapters, and feedback was incorporated into the language of the Plan.

This Plan provides a long-range guide to assist local decision makers in meeting the future needs of the community. It provides a central theme, yet allows for flexibility in its application for daily decision-making. The Plan addresses each of ten topic areas and identifies goals and objectives developed through the efforts of the Planning Commission in cooperation with many citizens of the Town of Springfield. This Plan provides a foundation upon which future planners may build. It is recognized by present day planners that this Plan, like Springfield itself, will grow and change with the needs and desires of the Town and its Citizens in the future.

Springfield intends to provide a superior environment and quality of life for its residents, yet it also pursues economic growth. True economic growth does not harm environments or people, but depends on them. The quality of Vermont's environment is what attracts people to live and

work here. The reputation of our environment lends value to the name of products made in Vermont. This Town Plan keeps this perspective in mind. The individual sections of this town plan have goals and objectives that support the overall goal of attaining viable economic growth while promoting wise use of environmental resources and a high quality of life.

Statutory Authority

The authority to prepare and implement the Plan is granted to the Town through the Vermont Planning and Development Act, Title 24 of the Vermont Statutes Annotated, Chapter 117. The purpose of the Act is to "encourage the appropriate development of all lands...in a manner which will promote the public health, safety against fire, floods, explosion and other dangers; to promote prosperity, comfort,...convenience, efficiency, economy and general welfare; and to provide a means and methods for the municipalities and regions of this State to plan...and to implement those plans...".

Chapter 2 — Cultural and Historic Resources

Historic and cultural resources contribute to the Springfield's identity, character, and quality of life. Historic buildings and districts lay the foundation for the scale and patterns of future development. Archeological resources offer a glimpse of the earliest settlement patterns. And cultural resources — which include historic resources as well as art, music and theater — contribute to the quality of life in the present day. This chapter presents an inventory of Springfield's cultural and historic features and establishes goals for the preservation and/or enhancement of these resources.

Historic Sites and Structures

The majority of Springfield's historic sites and structures are located in areas where settlers established homes, farms, and industries. In pre-colonial times, the Black River corridor was known as the “Indian Road” since it provided a connection between the Connecticut River valley and the Lake Champlain area to the northwest. The lowlands along the Connecticut River were used by Native Americans as temporary villages while they fished at the nearby falls.

The early Springfield settlements were focused along the Crown Point Road, the first village was established in what is known as the Eureka area. Settlements soon followed in the Parker Hill area, the Dutton District, and the Spencer Hollow area. Today these upland hilltop areas with their open fields and numerous historic sites offer some spectacular scenic vistas of Mt. Ascutney to the north and Okemo Mountain to the northwest in the Green Mountain range.

With the coming of the industrial revolution, settlements in the Black River valley began taking advantage of the power provided by the waterfalls on the river. The historical Gould's Mills area and downtown Springfield blossomed during this period. The precision machine tool industry, which reached its peak during World War II, caused Springfield's economy to flourish and brought with it the development of many stately homes as well as worker housing and cultural centers. Today many of these historic buildings and sites remain intact, providing current and future residents and visitors with a flavor for Springfield's cultural heritage.

A Historic Sites and Structures Survey, completed for the Town in 1997, led to the placement of most sites onto the State Register of Historic Places. A listing of these sites (74 sites and the Springfield Downtown Historic District) is combined with sites listed in the “Tour of Historic Places in Springfield” by Frederick Richardson (1992) and is included in Appendix A. Several sites, including the Lewis Morris House, Hartness House, Stellafane, and the Springfield Downtown Historic District are also included on the National Register of Historic Places.

In 2000, Springfield received an official Downtown Designation from the State of Vermont. This designation enables the Town to receive grants for improvements within the downtown, and allows owners of historic buildings to receive tax credits for building renovations. As part of the designation process, the Town was required to adopt either a design control district or local historic district. The Town chose to adopt a Design Control District covering the same area as the downtown district. The purpose of the Design Control District is to maintain the historic character and scale of the structures within this district. There has been some interest expressed in the development of a historic preservation commission to ensure the preservation of the historic integrity of structures and sites within the downtown Historic District and in the rest of

the town as well.

Stellafane

The Springfield Telescope Makers holds a convention of amateur telescope makers every year at Stellafane, on Breezy Hill. The Springfield Telescope Makers is the oldest group of amateurs in the country devoted to building and using astronomical telescopes and other scientific instruments. The Stellafane clubhouse and observatory were built shortly after the club formed in 1923. Under the leadership of Russell Porter, the club members completed the construction of a large sixteen-inch reflecting telescope in 1930. This telescope stands today as the world's only reflecting turret telescope.

Archeological Features

Information on archeological features provided by the Vermont Agency of Environmental Conservation indicates that the corridors of both the Black River and the Connecticut River are classified as “known archeological sensitivity.” Two categories of archeological site information are mapped: areas *known* to be of moderate to high archeological sensitivity and areas *expected* to be of moderate to high archeological sensitivity. This information is not available for specific sites so the entire river corridor is included in the boundaries. One archeological site on the Connecticut River, known as the Skitchewaug site, has provided insight into the lifestyles of the Sokoki people who inhabited the region in the centuries immediately preceding European settlement. The Springfield Art and Historical Society has been working with the State Archeologist to research an early chamber site on their property. Three archeological sites have also been identified on Elm Hill.

Cultural Resources and Events

Resources that promote the arts and bring the community together, including facilities for performances and plays, exhibit space for promotion of local artists and display of historic artifacts, space for outdoor performances and events, and community art, contribute to the culture, education, and quality of life of any community. In addition to its rich history, Springfield’s cultural resources include facilities and organizations which promote the enjoyment of fine arts, crafts, music, and theater. The Miller Art Center hosts the Springfield Art and Historic Society. The historic structure in which the organization is based also serves as classroom space and a museum that is open during summer months. The Center hosts classes and programs in the arts, living history (re-enactments), museum studies, and historical artifacts. It also offers a children’s art camp in the summer and a speaker series, and serves as a geneology resource center.

Many cultural opportunities are available at the Springfield Library, which works with the Vermont council on the Humanities to provide a speaker series. The Library also displays a collection of historical paintings. The Vault gallery displays work of regional artists and craftspeople and is located on Main Street. The Vault also offers lectures and workshops by regional artisans. The organization is working on becoming a nonprofit arts organization.

The Southeast Council on the Arts coordinates performers and presentations in towns throughout southeastern Vermont. In Springfield, past events have included a foreign and independent film series.

The Community Players is a community theater group that presents plays at its building on South

Street. This facility is small and in disrepair. A larger facility in a more centralized location would improve the town's cultural resources and would help to bring people into the downtown. The Town Band offers performances in the summer and is in need of a permanent location for such performances. Arts and cultural organizations in town have voiced a need for a public space that is flexible enough to accommodate performances as well as exhibits and conventions.

The Region hosts numerous fairs and festivals that draw visitors from outside, including the Windsor County Agricultural Fair and the Springfield Apple Festival. Fourth of July celebrations, air shows and musical performances have been offered at the Hartness Airport in recent years. The Springfield Friends of the Arts, a coalition of community and arts organizations, coordinates events and activities in town. Such events are encouraged as ways of bringing the community together and bringing culture and new ideas to the community.

Goals

1. Preserve historic and archeological resources in order to maintain continuity with the past that enriches the present.
2. Promote cultural tourism as a means of economic development that will celebrate Springfield's rich history and highlight its historic sights and structures.
3. Develop programs and facilities that offer residents and visitors opportunities for entertainment, education, and experience of cultural diversity through the arts.

Objectives

1. Form an Historic Preservation Review Commission in part to enable the Town to have a greater say in the treatment of local historical and archaeological resources. The Town should request assistance from the Division for Historic Preservation in forming the Commission.
2. Pursue the option of becoming a "Certified Local Government." The State administered federal program will make the town eligible for federal funds and give more local control over historical and archaeological resources.
3. Develop a centrally located facility that will offer space for musical or theatrical performances, exhibits of fine arts and crafts, and educational opportunities for children and adults.
4. Encourage the development of information about and public access to historic sites in part to assist with efforts to promote tourism. This is applicable to all historic areas but is particularly pertinent to the Black River corridor and along the designated Connecticut River Scenic Byway (Route 5 and Route 11 into downtown Springfield).
5. Place appropriate identification on historic sites and buildings and provide directional signs to these locations.
6. Support the School District in the expansion of the local history element in the curriculum, including field trips to historic sites and cemeteries.

7. Ensure that developments within the corridors of the Black River and the Connecticut River are sensitive to the historical and archaeological heritage found along those river valleys. Coordinate the review of development proposals within the sensitive river corridors with the State archaeologist and the Division of Historic Preservation to ensure local review processes provide for adequate consideration of historical and archaeological resource values.
8. Protect known archaeological sites through establishment of a protective buffer around the site and by encouraging the use of a cluster development pattern. Excavation or disturbance of a known archaeological site should be supervised by an archaeologist qualified in accordance with Section 106 of the National Historic Preservation Act.
9. Promote performances and events as a means of bringing the community together.
10. Promote the Connecticut River Scenic Byway and the Machine Tool Trail as destinations for cultural tourism.
11. Take advantage of media resources such as public access television (SAPA TV) and Vermont Public Television to promote cultural events and resources, and to record oral histories of town residents.

Chapter 3 — Natural and Scenic Resources

The health and vitality of Springfield's natural and scenic resources are critical to the quality of life of current residents and to the attractiveness of the town for prospective residents and businesses. This element of the Town Plan outlines the various natural resources in Springfield, presents some of the issues related to those resources and provides goals and policies for their future enhancement and protection.

Surface Water

Springfield lies within the Connecticut River watershed. Much of the town also lies within the Black River Watershed (Basin 10), a subwatershed of the Connecticut River. The northeastern part of town lies within Basin 13, which includes the watersheds of smaller tributaries to the Connecticut River, including the Spencer Brook watershed (basin 13-09) which drains into the Connecticut just north of the Black River.

The Black River and Connecticut River were important resources for early power and transport. Major industry was located on the Black River where it could draw power for automated processes. Commercial and residential development grew up around these early industries both for the proximity and to take advantage of the gentler topography in the river valley. This development and former discharges into the river present challenges to the water quality of the Black River. In addition, the town's wastewater treatment facility was inadequate for the treatment of phosphorus for a number of years. Algae blooms often occurred in the mouth of the Black River in summer months, and the water was not safe for contact recreation from the downtown to the mouth. The Town has made major improvements to its wastewater treatment facility that decrease the amount of phosphorus discharged into the river. Although the water still may not be safe for swimming, it is on the road to recovery.

Because Springfield is located in the lower portion of the Black River watershed, it is critical that the Town work with other towns in the watershed in order to improve the overall health of the river. The Black River Watershed Action Team (BRAT) has been organizing river cleanup days on the Black River in Springfield, and is working with the Southern Windsor County Regional Planning Commission to expand membership to other towns in the watershed. The Town should support these efforts, as well as continuing to participate in the activities of the Connecticut River Joint Commissions that looks after the interests of the Connecticut River and its tributaries.

Today, the town of Springfield sees both the Black and Connecticut Rivers as major scenic and recreational resources. The Connecticut River has been designated an American Heritage River, and Routes 5 and 11 (into downtown Springfield) are part of the Connecticut River Scenic Byway. The recent construction of the Toonerville Trail on the former railroad bed next to the Black River offers bicyclists and pedestrians a recreational resource with scenic views of the river. Further upstream, the Riverside Middle School has planned a river access area in order to teach kayaking on the river. The level topography in the river valley also allows the corridor to function as a transportation and utility corridor. Many historic and archeological sites may be found in both the Black River and Connecticut River corridors (see Cultural and Historic Resources Chapter). The floodplain terraces along the Connecticut River provide an agricultural area that is unique in the town and a resource that is diminishing up and down the Connecticut

River valley.

Access to both the Black and Connecticut Rivers is limited. One access area for fishing is available at Hoyt's Landing on the Connecticut River, but there are currently no access areas on the Black River for recreation. The Town should continue to investigate areas to allow for public access and enjoyment of the Rivers, and should prioritize areas for conservation in order to protect the natural and scenic resource values that these rivers provide.

The Town has adopted a Riverfront Protection Overlay District which protects the shorelands, and resulting water quality, of the Connecticut River and the Black River up to Goulds Mill Falls. Similar protections should be considered for the remaining length of the Black River and its tributaries. Maintaining minimum development in floodplain areas is particularly important for protecting built resources as well as water quality in rivers and streams. When a river has access to its floodplain, it has a better chance to reach a stable state, causing less erosion and damage to structures and property. The floodplains of the Connecticut River and the Black River have been mapped as part of the National Flood Insurance Program by the Federal Insurance Administration of the US Department of Housing and Urban Development. These Flood Insurance Rate Maps (FIRM) became effective on December 4, 1979. The Flood Insurance maps for the Connecticut River and the Black River as far as Goulds Mills were updated in 1999, and those for the rest of the town are in the process of being revised.

Where floodplain protection is not possible, buffer areas of native vegetation should be maintained wherever possible. Steeper slopes and unstable soils require larger buffer areas in order to prevent river bank erosion and ensure the greatest amount of infiltration before overland flow reaches surface waters. The State of Vermont recommends 100-foot buffers next to larger rivers and ponds, and 50-foot buffers next to smaller streams and wetlands.

There are only two ponds/lakes in Springfield. The only natural pond is Bloodsucker Pond located in the northeast corner of town. The other water body is the impoundment above the North Springfield Flood Control Dam which was completed in the early 1960s. The North Springfield Dam retains about 90 acres of water surface area and provides multiple outdoor recreation opportunities including boating, fishing, picnicking, hiking, swimming, nature study, and camping.

Point and Nonpoint Source Pollution

For the most part, direct discharges or "point sources" of pollution have been regulated on all water bodies in the State. While they have not been eliminated altogether, point source discharges are allowed only if permitted, and must be treated before they are discharged into a river. "Nonpoint source" pollution, generally that which is carried over land throughout the watershed into surface waters, is currently the greatest cause for concern in rivers, streams, lakes and ponds. Failed septic systems, also often difficult to pinpoint, may also contribute to high bacteria levels in surface waters.

The Town of Springfield has been in the process of upgrading the Wastewater Treatment Facility to reduce the amount of phosphorus that is discharged into the Black River. The upgraded plan will treat effluent so that it meets State standards for the level of phosphorus that may be discharged each day.

Stormwater runoff is one of the greatest vehicles for nonpoint source pollution. Water from storm events flows quickly over impervious surfaces such as roads and parking lots and may carry pollutants and sediment directly into surface waters if not diverted. Higher elevation headwater streams are most sensitive to pollutants and should be buffered from development activities. Similarly, steep slopes are both prone to erosion and unable to slow water flow from impervious surfaces, and should therefore be avoided when planning for development. In less densely populated areas, site planning techniques may be adopted to reduce the amount of impervious surfaces and slow down the flow as it travels over developed areas. In 2003, the Southern Windsor County Regional Planning Commission (SWCRPC), in cooperation with the Black River Watershed Action Team (BRAT), mapped the impervious surfaces within the 100- and 200-foot buffer area of the Black River. Recommendations for areas where improvement of vegetation in the buffer or better stormwater filtering techniques could improve water quality will be provided to the Town and to property owners at the conclusion of this study.

In the area of town served by the Wastewater Treatment Facility, downtown Springfield and North Springfield, stormwater is funneled into storm drains located in roadways and parking lots. The Town has separated most stormwater runoff from wastewater in order to reduce occurrences of overflow at the wastewater treatment facility. Unfortunately, this means that stormwater is released directly into the Black River. The basins (storm drains) are designed to catch sediment before it enters the river, decreasing the amount of solids that enter surface waters. For new development, natural methods of filtering and slowing water flow before it enters storm drains should be adopted wherever possible in order to decrease the amount of pollutants entering waterways. Currently the roof drains of several large buildings in the downtown drain into the wastewater treatment facility. If the stormwater separation project does not do enough to decrease the amount of overflow at the Wastewater Treatment Facility, stormwater from roof drains will have to be separated from wastewater as well. Should these efforts be implemented, it is advisable that stormwater from roof drains be naturally filtered (in catch basins or man-made wetlands) before entering waterways.

Wetlands

Wetlands fulfill a variety of functions, including erosion control, flood storage, removal of pollutants, and wildlife habitat. The State of Vermont recognizes the importance of these functions in 10 V.S.A. §905. In 1990, the Water Resources Board issued the Vermont Wetlands Rules which classify all wetlands according to their functions. According to the Vermont Wetlands Rules, wetlands are:

. . . those areas of the state that are inundated by surface or ground water with a frequency sufficient to support significant vegetation or aquatic life that depend on saturated or seasonally saturated soil conditions for growth and reproduction. Such areas include but are not limited to marshes, swamps, sloughs, potholes, fens, river and lake overflows, mud flats, bogs, and ponds, but exclude such areas as grow food or crops in connection with farming activities.

The major functional values of wetlands are:

- Storage of flood water and stormwater runoff
- Protection of surface and groundwater through filtration of pollutants
- Habitat for fish, wildlife, migratory birds, hydrophytic vegetation, and threatened/endangered species
- Natural science education and research
- Recreational value; open space; aesthetics
- Erosion control through binding and stabilizing of the soil

The degree to which a particular wetland fulfills the above functions, rather than size, determines its significance. The wetlands mapped on the Natural Resources Map include the National Wetlands Inventory prepared by the US Department of the Interior and smaller wetlands mapped by the SWCRPC from aerial photos. Wetlands on the NWI maps include Class I and II wetlands (generally those over five acres in size). Class III wetlands are smaller or not deemed significant by the Vermont Department of Environmental Conservation. These smaller wetlands are not protected under the Vermont Wetlands Rules, but may be protected in an Act 250 review or by Section 404 of the Clean Water Act (review required for large or federally funded projects).

An important local wetland is the North Springfield Bog which is owned by the Town and managed by the Mt. Ascutney Audubon Society. This bog has been zoned as a Natural Resource Preservation District with access for pedestrians being the only use allowed.

Vernal Pools

Smaller, seasonal or “vernal” pools, are generally defined as depressions with no inlet or outlet. Because these depressions fill up with water either from snow melt or rainfall, most seasonal pools are only wet in the Spring months (vernal pools) and dry up during the summer months. Vernal pools may be overlooked in site evaluations because they are only wet for a few months out of the year. However, these pools provide critical breeding habitat for many amphibians and invertebrate species. The Town should consider mapping important vernal pools in order to protect these valuable habitat areas.

Groundwater Resources

The Town’s public water supply comes from an aquifer serving the Town's shallow well field in North Springfield. Extensive research was completed in the late 1980s to designate an alternate public water source, but did not succeed in locating one. Protection of the existing water supply is critical to the health of current and future residents. Development of a new water supply would be costly and could involve the use of chemicals and a treatment facility. The Town is currently in the process of delineating more precise boundaries for the North Springfield aquifer and has developed a Source Protection Plan (SPP) for the well field. The SPP identifies potential threats to this well field include the existing Vermont State Armory facility and the Public Works Department garage. Both of these existing facilities pose threats to this groundwater resource because of potential gas and/or oil spills/leaks from vehicles. Although the Town Garage has recently been added onto the town wastewater system, the Armory still has an on-site septic system, as does a residential property within the boundaries of the aquifer. Failure of either of these systems could potentially contaminate the water supply and threaten public health. Additionally, the potential exists for a gasoline or other hazardous material spill to occur along Fairground Road, and contamination from former underground storage tanks on a manufacturing

facility in the area has not been remediated.

In addition to the public water supply in North Springfield, there are two other water systems in town serving multiple households, according to the Groundwater Division of the Vermont Department of Environmental Conservation. These include the water supply wells for the Valley Mobile Home Park and the Windy Hill Acres Mobile Home Park. A “public community water system” is a water system which serves ten or more residential units. A wellhead protection area 300 feet in diameter around each well is protected from encroachment from incompatible uses. These three wellhead protection areas are identified on the Natural Resources Map in the appendix.

Resource Lands

Agricultural and forest lands have multiple functions that all contribute to the town’s character and quality of life. Open land that is maintained in agricultural uses also provides scenic open views and rural character. Similarly, forest land that is managed for wood products or as wildlife habitat can have recreational and scenic attributes as well. In order to plan for future growth, the Town should consider the valuable scenic and resource lands in town and develop priorities for their protection.

Agricultural Resources

There are several areas of Springfield which warrant consideration for preservation of agricultural resources. The first is the river flood plain terrace along the Connecticut River north of the Charlestown Bridge. This area with its very flat topography and good access has the attributes which make it prime for development. The Town has adopted a Shoreline Overlay District which limits development in the area next to the Connecticut River and up to the 400-foot contour line.

Other areas in Springfield which merit consideration for protection of agricultural resources are the hilltop pasture areas such as Parker Hill, Dutton District, Eureka, and Spencer Hollow; and open pastures on Town Farm Road, Highland Road, Barlow Road, and Randall Hill Road. These hilltop pastures intermixed with historical buildings and sites provide scenic open spaces which help create a very desirable rural character. Land use regulations and/or other means should be adopted to ensure that future development is sited so that agricultural functions and scenic values of these areas are preserved. This may be accomplished through siting new development on the edge rather than the middle of open fields, clustering of multiple unit developments, and preserving maximum open space or conserving land through the assistance of a land trust or other land conservation organization. *Growing Greener*, by Randall Arendt, offers methods of subdividing land that maximize the amount of open space protected while not giving up the number of houses allowed through normal density allowed through zoning.

Forest Resources

The other resource land cover category is forested land. Throughout Vermont, about eighty percent (80%) of the land cover is forested with about twenty percent (20%) open land. Springfield is estimated to have somewhat more open land than the state average because of all the open fields in areas such as Parker Hill, the Dutton District and Eureka. Conversely, it is estimated that Springfield has less forested cover than the statewide average.

The Weathersfield Reservoir Municipal Forest encompasses about 86 acres and contains the Weathersfield Reservoir which was part of the former water supply for Springfield. This Town Forest, owned by the Town of Springfield, is currently being managed for timber and wildlife uses. Wildlife monitoring by Keeping Track, Inc., found that six important indicator mammals — black bear, bobcat, fisher, otter, mink, and moose — regularly use the reservoir and its watershed. Indicator mammals are those which are very sensitive to habitat change; their presence on the Weathersfield Reservoir land indicate that the habitat is healthy enough to support the presence of these animals. Volunteer monitors for Keeping Track have monitored the area’s mammals for three years. The Ascutney Mountain Audubon Society, a local chapter based in Springfield, has indicated interest in promoting wildlife habitat at the reservoir property through wildlife monitoring, removal of invasive plants, and planting native species of value to wildlife.

The other little used municipal forest is Meeting Waters Municipal Forest which is also known as the Bryant Forest. The primary use of this 197-acre forest is for forest management. Some limited use of the property has been made in the past few years for snowmobile trails and nature trails. The deed restrictions placed on the use of the property when it was conveyed to the Town of Springfield preclude uses other than recreation on the property; otherwise ownership of the property reverts to Dartmouth College.

Of the three town forests, Hartness Park has been developed with a network of trails and a picnic area; however, the Weathersfield Reservoir Municipal Forest and the Bryant Municipal Forest are under-utilized as recreational resources.

Urban Forest Resources

More and more communities are beginning to recognize the very tangible benefits that trees provide in the urban environment. Healthy trees reduce air and noise pollution, provide energy-saving shade and cooling, furnish habitat for wildlife, enhance aesthetics and property values, and are an important contributor to community image, pride, and quality of life.

In Springfield, the Friends of Trees group organized in 2001 as a part of the Vermont Urban and Community Forestry program. The focus of its efforts is care and planting of trees in the downtown, but it is also working with the Town to develop town-wide tree care policies. Other activities are aimed at increasing public awareness of the value of trees and how to care for them.

Land Enrolled in Current Use

Almost thirty percent of Springfield’s total land area is enrolled in Vermont’s Current Use Program. This program, in which enrolled land is taxed at its “use value” rather than its development or fair market value, is an effective incentive for landowners to manage their lands for forest or agricultural purposes. As Table 3.1 shows below, Springfield has more enrolled agricultural land (almost 6% of the town’s total land area) than any other town in southern Windsor County. Almost 22% of the town’s total land area is enrolled as forest land. In order to plan for conservation of agricultural and forest land in the future, the Town may want to map areas that are currently enrolled in Current Use. The greatest benefits to wildlife habitat, resource planning, and agricultural functions occur when large contiguous areas of forest and/or agricultural land are maintained.

Table 3.1 - Southern Windsor County Current Use Program

Town	Total Acres	Forest	Non-Productive* Forest	Agricultural	Non-Productive* Agricultural	Total Enrolled Acres	% of Total Acres
Andover	18,432	2,881.3	45.75	326.23	0	3,253.28	17.7%
Baltimore	3,008	997.8	4	146.7	0	1,148.50	38.2%
Cavendish	25,344	5,945.04	147.66	609.72	.1	6,702.52	26.4%
Chester	35,776	11,196.8	142.09	1,133.91	4.4	12,477.20	34.9%
Ludlow	22,912	2,416.44	11.76	212.13	0	2,640.33	11.5%
Reading	26,560	7,450.61	131.1	628.41	0	8,210.12	30.9%
Springfield	31,552	6,878.96	151.6	1,796.4	2	8,828.96	28.0%
Weathersfield	28,032	4,368.16	95.35	1,479.53	0	5,943.04	21.2%
West Windsor	12,544	1,257.29	54.9	358.47	0	1,670.66	13.3%
Windsor	15,808	1,665.42	58.7	623.54	0	2,347.66	14.9%

* Conditions which cannot adequately support those uses due to steep slopes, ledge, or wet soils.

Source: State of Vermont, Division of Property Valuation and Review, August 2001

Critical Habitat Areas

The State maps points where threatened or endangered plant and animal species have been identified as well as critical habitat areas for larger mammals such as deer and bear. The Natural Heritage Inventory indicates locations of threatened and endangered species, but does not identify what those species are. These points may be used as areas to avoid when planning for development or other activities. In addition to several Natural Heritage Inventory sites being located in town, the town hosts one “Important Bird Area” (IBA) designated by the Mount Ascutney Audubon Society as part of the Vermont Audubon Society’s Important Bird Area Program. This site, on Skitchewaog Mountain, is nesting habitat for Peregrine Falcons and Ravens. Designation of a site as an IBA is both a tool for assisting private landowners and public land managers and a rationale for preserving habitat from threats.

Deer Wintering Areas

The boundaries of existing winter deer yards have been mapped by the Department of Fish and Wildlife (see the Natural Resources Map in the Appendix), but are subject to change due to fluctuations in environmental conditions. Deer wintering areas need to be protected from indiscriminate logging, residential and commercial development, and intensive winter recreation. Through Vermont’s Act 250, some protection is available under Criterion 8(A) - Wildlife Habitat and Endangered Species, which provides a detailed system to weigh evidence for a project and determine if a permit can be allowed.

Contiguous Forestland and Travel Corridors

Large mammals such as moose, bear, deer, and bobcat, and a variety of songbird species rely on large contiguous areas of forest for food, shelter, breeding grounds, and migratory stop-overs. The fragmentation of such land can result in decreases in the number of species and the sizes of populations of many species. A variety of songbirds reside in wooded areas that are

characterized by less intense human use. Moose also require large wooded areas, with home ranges as large as four to ten square miles. The Connecticut River Valley is a flyway for migrating songbirds. Maintaining a wide buffer next to the River is important for the preservation of this important travel corridor.

Invasive Species

Invasive species include plant species and other organisms, such as zebra mussels, that are a problem throughout the town, threatening surface waters as well as forest and wildlife habitat. Invasive, non-native species alter habitats by displacing native species on which organisms depend, while being of little use to those organisms themselves. This can be particularly detrimental to rare, threatened, and endangered species, which often require specialized environments to ensure their survival. Recreational opportunities may also be impaired by the proliferation of invasive species.

Most invasive plants seem to be concentrated around rivers, streams, and wetlands in the area. Eurasian watermilfoil is an aquatic species, which can be found at the confluence of the Black River and the Connecticut River, above and below Hoyt's Landing. Purple loosestrife, the familiar beautiful flowering perennial plant of wetlands, is invading cattail marshes along the Connecticut and elsewhere. On the streambanks and along roadsides, Japanese knotweed, commonly referred to as bamboo, is quite widespread, notably along the Black River in the area of the North Springfield Dam.

Exotic honeysuckles, barberries, and buckthorns are all invasive shrubs or small trees that monopolize the understory of forests, both along the streams and farther upland, especially where the ground has been disturbed, as in logging. Buckthorn is considered to be a major threat to the survival of future timber stands. Invasive insects, such as the Hemlock Woolly Adelgid, pose a serious threat to forested riparian zones that are often comprised of significant quantities of eastern hemlock.

Air Quality

Springfield does not have a heavy industrial base or concentrated population that has led to an air quality problem. Accordingly, the town's air quality constitutes an environmental resource that has aesthetic as well as human health benefits. Elements that could negatively impact air quality include: smell, light, particulate matter (dust, smoke, fumes), radiation, and chemical vapors.

Air quality becomes an issue when projects or facilities emit pollution into the air or when traffic increases combine with air inversions to reduce dispersal of exhaust and other pollutants. Pollutants may also travel into the town from other areas, such as acid rain resulting from high stacks in the mid-western states.

Springfield's ambient air quality should be maintained. The town should set an example in not causing pollution through radiation, excessive noise, odor, or air-borne contamination. Town policies and activities should be made within the perspective of keeping our air quality high. Town equipment should meet emission standards. The effects of traffic congestion should be monitored when air quality degrades. The town should be zealous in responding to complaints about open air burning or other activities that violate state air pollution control regulations. The town should take an active role in the review of development proposals or plans that could

adversely affect air quality.

Noise and Light Pollution

Noise and light pollution from development can negatively impact the rural character and quality of life of much of Springfield. The Stellafane amateur astronomers gather in Springfield every year to look at the stars from the historic Stellafane observatory, and are particularly concerned with excess light pollution emanating from structures in the downtown. The Town has established an overlay district to protect the areas around two working observatories from light pollution. In addition, standards have been set for lighting on developments in other areas of town. Lighting levels should be a balance between aesthetics, security, and energy efficiency.

Noise pollution at certain levels can dramatically alter the character of a neighborhood. The town should be aware of the noise levels of its own activities, and should work to establish appropriate noise thresholds for the review of proposed developments.

Mineral Resources

Springfield has deposits of mineral resources of varying size and quality. These resources may have the potential to contribute to road maintenance, the manufacture of building materials, and other enterprises. Earth resources are a non-renewable resource which should be used judiciously. Reclamation plans for areas where mineral resources have been extracted need to assure safety, aesthetics and use for future generations.

In order to plan for the most efficient use of Springfield's earth resources, the Town should complete an inventory of resource areas. The town should take an active role in the local and state review of development proposals that potentially affect earth resources. If projects are proposed to add new areas for extraction of Earth Resources, it is very important that review procedures are in place to address impacts on neighborhoods, the environment, and the ability to reuse the land.

Goals

1. Protect healthy headwater streams from impacts of development and improve conditions for impaired or threatened surface waters.
2. Develop programs to improve water quality in the Black and Connecticut Rivers in order to maximize their scenic and recreational resource values.
3. Participate in watershed level planning activities for the Black and Connecticut River watersheds
4. Protect wetland functions, including filtering of pollutants, wildlife habitat, flood control, education, aesthetics, and erosion control.
5. Protect public water supplies from contamination and plan for potential future public water supply needs.
6. Identify and protect rare and endangered species and their habitat areas from being disturbed or destroyed.

7. Maintain and improve critical habitat areas for all native wildlife populations.
8. Protect important scenic resources for future generations.
9. Protect deer wintering areas from encroachment.
10. Maintain high standards of air quality.
11. Ensure that future development does not negatively impact community character or quality of life by developing standards for light, noise, odor, and dust.
12. Encourage the care and improvement of the urban forest.
13. Identify and remove non-native invasive species from public forest land in order to protect native species and habitat.
14. Identify and map vernal pools in order to protect critical habitat areas for amphibians and invertebrate species.
15. To utilize the Connecticut River Corridor Management Plan as a guide for the protection of the Black and Connecticut Rivers.

Objectives

1. Identify important wetlands for inclusion in the Natural Resource Preservation District and/or implement buffers next to designated (NWI) and non-designated wetlands. The North Springfield Bog has been designated as a Natural Resource Preservation District. This district or category could be appropriate for other wetland areas.
2. Establish land use planning policies which require applicants for subdivision and zoning permits to detail the locations of all wetlands, vernal pools, and perennial streams and to meet specific guidelines for setbacks and protection of these resources. Such guidelines could be developed by a Conservation Commission in cooperation with the Planning Commission.
3. Maintain buffer areas of native vegetation next to rivers and streams wherever possible. Steeper slopes and unstable soils require larger buffer areas in order to prevent erosion and ensure the greatest amount of infiltration before overland flow reaches surface waters. The State of Vermont recommends 100-foot buffers next to larger rivers and ponds, and 50-foot buffers next to smaller streams and wetlands.
4. Maintain the Weathersfield Reservoir and land as a potential future water supply as well as habitat area for a number of large mammals. Maintenance may include upgrading the dam and storage capacity if and when needs justify the expenditure. Consider designating the Weathersfield Reservoir as an alternative source of drinking water.
5. Continue efforts to reduce the phosphorus loading at the discharge point from the waste water treatment plant in order to improve downstream water quality.
6. Protect the existing groundwater aquifer in North Springfield area by minimizing the potential for adverse impacts from existing development and restrict land subdivision and development projects which could be incompatible with aquifer protection within the

recharge area.

7. Efforts should be continued to ensure protection of wellhead areas through relocation of the Town Garage and State Armory. Consider locating and establishing an alternative source of drinking water.
8. Maintain valuable agricultural lands in the Connecticut River valley to preserve agricultural land and archeological resources. Techniques may include clustering of development, conservation subdivisions, agricultural zoning, etc.
9. The Town should continue to investigate areas to allow for public access and enjoyment of the Black and Connecticut Rivers, and should prioritize areas for conservation in order to protect the natural and scenic resource values that these rivers provide.
10. Continue to actively support current use programs and/or local tax stabilization agreements for working farms and forest land. Consider special districts where adjacent land owners have designated their land to land reserve efforts.
11. Encourage the formation of a Town Conservation Commission. Create resource mitigation policies which allow for certain lands to be developed while protecting critical resources. Such policies might include creative development techniques such as cluster housing and/or the designation of land reserve zones which would be large enough to protect the critical nature of the resource.
12. Improve access and use of Springfield's three municipal forests.
13. Pursue planning and implementation of recreational uses of the land such as trails for hiking, snowmobiling, mountain biking, and cross country skiing.
14. Continue working in cooperation with the Vermont Department of Forests, Parks and Recreation in developing and implementing long-range multiple-use management plans for all three Town Forests.
15. The Town needs to proceed cautiously in interpreting with the Bryant heirs the definition of "development" as it relates to improvement for recreational uses.
16. Protect deer wintering areas and other wildlife habitat areas in order to maintain the resident wildlife as well as maintaining a long-term viable deer population.
17. Continue efforts to identify and protect rare and endangered species.
18. Noise and odor pollution at certain levels can dramatically alter the character of a neighborhood. The town should be aware of the noise levels of its own activities, and should work to establish appropriate noise and odor thresholds for the review of proposed developments.
19. In order to plan for the most efficient use of Springfield's mineral resources, the Town should complete an inventory of resource areas and develop review procedures to address impacts on neighborhoods, the environment, and the ability to reuse the land.

20. Develop policies for the protection and maintenance of trees on town property and in public rights of way. Coordinate policies with those of the public utilities. Allocate funds and pursue funding opportunities for tree planting and care.
21. Incorporate provisions in the town zoning ordinance that encourage the preservation and planting of trees.
22. Discourage residents from planting invasive plant species that threaten native plant and wildlife habitat. Develop educational programs concerning invasive species.

Chapter 4 — Recreation

The Recreation Department, Springfield Trail and Greenways, the Department of Public Works, and many individuals volunteering countless hours of coaching, being officials, maintaining facilities, and planning sites and events make recreation a vital part of the life of the Town of Springfield. This Recreation Element of the Town Plan recognizes the achievements of these entities and persons and sets forth the existing and future opportunities afforded by them in the Town of Springfield.

The Town and the Springfield School District share most of their recreational fields and facilities. The Town Recreation Department uses the School's gym facilities in the winter, and the School uses the Town's outdoor facilities, especially those at Riverside Park, for some of the School athletic events. In addition, the School has an excellent physical education and interscholastic sports program, including its fine recreational ski program, in which students learn to ski or ride and expand their skills on school ski days at Okemo Mountain, in Ludlow. The working relationship between the Town Recreation Department and the School's athletic departments is excellent and translates into an efficient use of the Town and school resources and facilities, and expanded recreational opportunities for all the residents of the Town of Springfield.

An adjunct to the Recreation Department, the Springfield Senior Center, is located in the Community Recreation Center. This Center is open weekdays for people 50 years and over. The activities include: strength training classes (beginner and maintenance), line dancing, walking club, horseshoes, pool, ping pong, shuffleboard tournaments, rollercize, Senior Songsters, ceramics, bridge, cribbage tournaments (singles and doubles), many card parties and special Wednesday afternoon events of great entertainment. The Center also holds free monthly blood pressure clinics and yearly flu clinics, Spring Fling Bazaars, and Christmas Bazaars. Many wonderful trips are organized by the Center, including: six one day bus trips, two small overnight trips and one large trip yearly (past trips have included Hawaii in 2001 and in 2002 the Seniors are headed to England, Scotland, Wales and Ireland).

The building housing the Community Center is in great need of improvement. Repairs or improvements on this building and/or a move to another location should be considered in capital budget and programming efforts.

The privately organized Springfield Boys and Girls Club operates out of the Springfield Community Center on Main Street. The Mission statement of the Boys and Girls Club is as follows:

To inspire and enable all young people, especially those from disadvantaged circumstances to realize their full potential as productive, responsible and caring citizens.

The five core program areas of the Boys and Girls Club include: 1) character and leadership development; 2) education and career development; 3) health and life skills; 4) the arts; and 5) sports, fitness and recreation. The Springfield Boys and Girls Club is an important, vital

recreational and educational asset for the Town.

Recreation Property and Facilities

The Recreation Resources Inventory in Appendix B summarizes information on the various recreation properties located within the community. Information on each property/facility includes the name of the property or facility, the approximate land area, the current land owner and the facilities and/or the functions served by the facility. The location of these properties is shown on the Base Features Map.

Riverside Park is the hub of Springfield outdoor recreation activity. It provides ball diamonds, sports fields, swimming pool, tennis and basketball courts, skateboard park, playground and a place for festivals and gatherings. Capital reinvestment is needed for recreational facilities located at the Riverside Park. The softball and baseball diamonds, the tennis courts, municipal swimming pool, and the large grass oval, which holds numerous athletic fields, need refurbishing. Needed outdoor pool improvements include possible new membrane or lining the pool and upgrading/refurbishing pool locker room facilities. Reinvestment in these recreational assets directly affects the recreational opportunities available to both Springfield's youth and adults and indirectly affects the economic development efforts as a quality of life issue.

The only town recreational facility in North Springfield is the North Springfield School Park which has a youth soccer field and a warming hut used in conjunction with the winter skating rink. This property is owned by the School District, and could be in jeopardy should the School District decide to sell the property. The other youth league/softball field in North Springfield is located on a parcel in the North Springfield Industrial Park owned by Ellsworth Ice Cream. With the flat topography and good access, the site provides an excellent location for both recreational or industrial uses. Currently, the parcel is being used by the town through the benevolence of the current landowner with no long-term commitment to continue the recreational use on the property. A change in ownership or development of the property for industrial use may result in displacement of recreational facilities from the North Springfield Industrial Park.

Recreation Trails

The Toonerville Trail, Springfield's bicycle and walking path, is a paved path that skirts the Black River for three miles from its parking area near Grappone on Clinton Street to the Toll Bridge and Hoyt's Landing on the Connecticut River.

Other trails information is found on the Base Features Map. This map includes a composite of trails information covering hiking, snowmobile, cross-country skiing, and bicycle paths.

The Agency of Natural Resources working in cooperation with the local snowmobile chapter of the Vermont Association of Snowmobile Trails (VAST) has identified the current network of snowmobile trail corridors in Springfield.

In addition to the snowmobile trail network, hiking trail information has been provided by the

Recreation Department for the Town Forests and by the US Army Corps of Engineers for the North Springfield Reservoir property. Additionally, the Class IV road information provided by the Public Works Department is included on the Base Features Map in the Appendix.

The Class IV roads could be better utilized and preserved to provide the opportunity for more organized use for hiking, cross-country skiing, mountain biking, and/or snowmobile trails. It is of particular importance that the Town keep those Class IV roads, which will interlink these uses, and which intersect existing trails. Those roads suitable for such use need to be identified, mapped, and held in Town ownership in order to ensure use by Springfield residents in the future.

The Crown Point Road, now a combination of maintained and unmaintained roads and trails, holds historic significance and would provide opportunities for recreationists if preserved. The Town should investigate the feasibility of conserving the Crown Point Road through easements or acquisition in order to preserve this important historic resource.

Connecticut River Access

A fishing and boating access are available to the public at Hoyt's Landing. It is maintained by the Vermont State Department of Fish and Wildlife. The access provides a boat launch area, fishing from shore, picnic area and parking.

Planned Recreation Facilities

Planning and initial construction is currently underway for the development of a regional recreation center in Springfield. Located in the former foundry building on Clinton Street, this facility will serve as the Gateway to the downtown. With thousands of dollars of donated materials, cash, and volunteer time, as well as a grant from the State to offset the negative impact of the new Southeast Vermont Correctional Facility, the Recreation Center will be a significant asset to the community.

The opportunities for recreation in the Town may be expanded through cooperation with the YMCA, Hockey Club, Booster Club, Springfield Trails and Greenways (STAG), Schools and other groups, which could provide other facilities and programs for residents.

Goals

1. Maintain existing recreation facilities so that they are safe and usable for all Springfield residents.
2. Ensure that recreation areas continue to be available in North Springfield.
3. Develop new recreational opportunities for Springfield residents.
4. Develop a fund for maintaining and expanding the Town's recreational resources, through capital reinvestment (timber sales), private donations, and grant funds.
5. Include recreational facilities in capital budget and programming planning.

6. Develop a system for improved communication between town boards, the Parks and Recreation Department, Schools, and private recreation committees all working toward the same ends.
7. Encourage and expand the use of recreational facilities, Class IV roads, and legal trails for recreation through outreach and education.
8. Improve access and use of parks, town forest lands, and rivers in accordance with the Natural Resources chapter of this Plan.

Objectives

1. Encourage private efforts within the community to maintain and improve the appearance and condition of recreational facilities.
2. Map all large parks and produce a trail map for the town parks and forests.
3. Improve Hartness Park to provide better access, maintenance, trash removal and security to promote its use by the public for passive recreational uses.
4. Improve and maintain the existing facilities at neighborhood parks such as the Commons and Freedom Park (on Loveland Street).
5. Improve access to and use of the Weathersfield Reservoir Area with the development of hiking trails, picnic area, parking facilities and directional signs, in consultation with and the assistance of groups such as STAG and the Audubon Society.
6. Investigate funding for repair of the dam at the Weathersfield Reservoir in order to enhance this area for recreation and as a possible alternative water supply.
7. Support the development of new recreational opportunities for Springfield residents.
8. Improve access to and use of the Black River.
 - a. Continue to support STAG's efforts to secure funding for expansion and maintenance of the Toonerville Trail along the Black River.
 - b. Promote scenic opportunities offered by the river within the Town center by focusing on the river as an important amenity.
9. Educate local citizens about Class IV town roads and legal trails and their value for recreational activities, including snowmobile and hiking trails.
10. Map and protect the Class IV Town roads that have some recreational value from being thrown up and deeded back to abutting landowners, and promote the recreational opportunities currently available to the public along these routes.
11. Through land-use planning and regulation maintain and encourage the linkage that Class IV roads provide between hiking, cross-country skiing, and snowmobile trails.
12. Investigate the feasibility of conserving the Crown Point Road through easements or acquisition in order to preserve this important historic resource.

Chapter 5 — Housing

According to the US Census, the population of Springfield has continued to decline since 1980, in contrast to increasing populations in surrounding towns. In 1970, the Town's population was 10,063. It then showed a slight increase to 10,190 in 1980 when the machine tool industry was still fairly strong. In 1990 the population dropped to 9,579, and in 2000 it dropped further to 9,078. In spite of the decrease in population, the number of households increased from 3877 in 1990 to 3886 in 2000, reflecting the changing nature of household size that is consistent with trends throughout the state and the nation as a whole. During the same period, the number of housing units decreased from 4,256 in 1990 to 4,232 in 2000. This may reflect the removal of units at Westview, a subsidized housing development.

Table 5.1 - Summary of Households and Housing Units 1990-2000

The number of owner-occupied housing units increased between the 1990 and 2000 Census, while the number of renter-occupied housing decreased. This is consistent with a trend that has occurred throughout the region and the state as a whole — fewer rental units are being built, and more buildings are being sold and turned into ownership properties.

Housing Types

Springfield has a highly diverse housing stock. Single family dwelling units account for 2,782 of Springfield's housing units. Another 1,450 units, over one-third (1/3) of the total, are in multi-family units of various sizes (see Table 5.2). Many of these units (450) are subsidized through Section 8 vouchers or through the management of community land trusts (see Table 5.3). Over 11% of Springfield's housing stock is affordable to families with incomes below 80% of the median family income.

There are 218 mobile homes, a slight drop from the 248 mobile homes that were counted in 1990. Mobile homes make up 5% of the town's total housing stock. Although most mobile homes in Springfield are not subsidized or guaranteed to be affordable, they are generally affordable to lower income groups.

Table 5.2 - Housing Units by Type

2000 Units by Type (see note)									
Location	Total Units	Single Family		Multi-Family		Mobile Home		Other	
		Total	%Total	Total	% Total	Total	% Total	Total	% Total
Vermont	294,382	203,309	69.1%	67,768	23.0%	22,631	7.7%	674	0.2%
Windsor County	31,621	22,135	70.0%	7,003	22.1%	2,410	7.6%	73	0.2%
Andover	350	322	92.0%	17	4.9%	11	3.1%	n/a	
Baltimore	113	91	80.5%	10	8.8%	12	10.6%	n/a	
Cavendish	852	630	73.9%	117	13.7%	100	11.7%	5	0.6%
Chester	1,611	1,242	77.1%	245	15.2%	116	7.2%	8	0.5%
Ludlow	3,001	1,682	56.0%	1,175	39.2%	144	4.8%	n/a	
Reading	404	346	85.6%	12	3.0%	36	8.9%	10	2.5%
Springfield	4,232	2,782	65.7%	1,232	29.1%	218	5.2%	n/a	
Weathersfield	1,315	971	73.8%	34	2.6%	310	23.6%	n/a	
West Windsor	716	587	82.0%	117	16.3%	12	1.7%	n/a	
Windsor	1,611	945	58.7%	596	37.0%	70	4.3%	n/a	
Region	14,205	9,598	67.6%	3,555	25.0%	1,029	7.2%	23	0.2%
Notes: Single family units are attached or detached from other buildings; multi-family units are structures containing 2 or more residential units;									
Other unit used as permanent residence: including campers, vans or other structures not included in any other category									
ALL FIGURES REFER TO THE NUMBER OF HOUSING UNITS NOT STRUCTURES									
Source: U.S. Census Bureau, 2000 Decennial Census									

Seasonal Housing

Seasonal housing in Springfield continues to represent just over 2% of the total housing stock in 2000 based on the US Census information. This is much lower than the regional average of 21%, down slightly from the 23% of 1990. In the region, one home of every five is a seasonal unit — in Springfield, only one in forty is a seasonal unit.

Assisted Housing

Assisted housing is defined to include permanent rental subsidies, HUD Section 8 Certificates and Vouchers. The purpose of these programs is to insure that low income people do not pay more than approximately one-third (1/3) of their income toward their housing costs. As Table 5.3

indicates, Springfield has almost 60% of the subsidized housing in southern Windsor County but only 37% of the total households in the same geographic area. The contrast in Windsor County as a whole is more dramatic: despite having only 13.4% of the total housing in Windsor County and 16.1% of the population, Springfield has 36% of the County's assisted housing units. By contrast, the largest community in the County has 17.4% of the total housing in Windsor County, 18.4% of the population, yet it has only 20.7% of the County's assisted housing units (See Table C5 in Appendix C). In addition, 11.7% of Springfield's housing units are assisted as compared with 5.1% in the County's second largest town. Many communities provide no assisted housing for their residents.

In spite of the large percentage of assisted units in Springfield and the fairly low rental rates, managers of subsidized developments continue to report low to zero vacancy rates, indicating that a need for these units still exists.

Table 5.3 - Subsidized Housing in the Southern Windsor County Region

Town	Total Households	% of total	Subsidized units	% of total
Andover	215	2.03%	0	0
Baltimore	92	0.87%	0	0
Cavendish	617	5.82%	6	0.79%
Chester	1,296	12.23%	66	8.70%
Ludlow	1,060	10.00%	74	9.75%
Reading	286	2.70%	0	0
Springfield	3,886	36.68%	450	59.29%
Weathersfield	1,167	11.01%	0	0
West Windsor	456	4.30%	0	0
Windsor	1,520	14.35%	163	21.48%
Total	10,595	100.00%	759	100.00%

While the overall vacancy rate for rental and ownership properties is higher than the vacancy rates in surrounding towns, several properties are deteriorating and not fit for habitation. These properties, particularly those in the downtown, should be the focus of revitalization efforts.

In the past several years, the Rockingham Area Community Land Trust and local government efforts have resulted in the renovation and rehabilitation of a number of multifamily units, including the large Southview development on South Street and the Westview property. Realty Resources purchased the Westview property, removed a number of buildings, completely rebuilt and renovated remaining structures, and provided several parcels for future building.

Elderly and Handicapped Accessible Housing

Over one-third of Springfield's assisted housing units, or 4% of the total housing units, are specifically for the elderly. Of those 171 units, 18 are handicapped accessible. Fifteen percent of

the total households in Springfield have householders who are 65 or older. The number of householders 65 and over increased by 8.2% from 1990, when only 13% of householders were 65 and older. The elderly population is expected to continue growing as “baby boomers” reach retirement age and beyond. Housing for the elderly must take into consideration access to health care, services, and retail that does not require automobile transportation. Access to public transportation and the ability to walk to shops and services should be high priorities when planning for elderly households.

Homeless and Transitional Housing

Currently the Springfield Family Center serves as a day shelter for the homeless and a food shelf for those who are unemployed or underemployed. The Family Center estimates that 400-500 households take advantage of its services. Two local private funds, the Packer Fund and the Woolson Fund also provide services to homeless or very low income residents. Springfield does not have a full-time homeless shelter, but accesses shelters in Brattleboro, Claremont, and White River Junction. There is a need for transitional, service-based housing. This is housing for those who are in need of housing but may need some assistance from social service agencies in order to locate and become eligible for assisted housing.

Springfield Housing Authority

The Springfield Housing Authority (SHA) consists of a five-member board, appointed by the Board of Selectmen. The Housing Authority has been very active in the area of assisted housing especially with elderly housing. To date, SHA has not been active in assisting private property owners in rehabilitating the existing housing stock in Town.

Current activities of the Housing Authority include the following:

- SHA currently owns and operates three elderly housing projects, the Huber Building consisting of 60 assisted units, the Whitcomb Building consisting of 72 assisted units, and The Maples located on South Street consisting of 28 units.
- The Housing Authority also manages Mountainview, which consists of 72 units of mixed (elderly and family) housing, 50 of which are subsidized; and Westview Terrace, which consists of 58 units of assisted family housing.
- The SHA administers 61 Section 8 certificates throughout the Town.

Wages and Income

Compared to most other towns in the Southern Windsor County RPC region, employers in Springfield pay higher wages. The average wage in Springfield in 2000 was \$29,477. After the plant closings in 2000, the average wage decreased to \$28,919 in 2001. However, Springfield still had the highest wage of any town in the Region. The median household income, on the other hand, was the next to the lowest in Springfield compared to other towns in the region in 1999 (see Table 5.5). This data suggests that those who work in Springfield do not necessarily live in town, but commute from surrounding towns. In order to keep those with moderate or higher incomes in town, the Town may need to address issues other than housing, such as quality of life, education, recreational resources, and the revitalization of the downtown.

Table 5.4 - Average wages 1995 and 2000

	1995	2000	% Change 1995-2000	2001
Andover	\$17,991.00	\$31,414	75%	\$27,997
Baltimore	NA	NA		NA
Cavendish	\$15,473.00	\$23,651	53%	\$24,563
Chester	\$15,762.00	\$23,866	54%	\$25,132
Ludlow	\$14,664.00	\$21,766	48%	\$21,865
Reading	\$20,161.00	\$16,100	-20%	\$17,090
Springfield	\$20,730.00	\$29,477	42%	\$28,919
Weathersfield	\$17,409.00	\$23,745	36%	\$25,953
West Windsor	\$16,799.00	\$22,559	34%	\$22,128
Windsor	\$19,609.00	\$24,919	21%	\$26,817

Table 5.5 - Income – Southern Windsor County Towns

Housing Needs in the Springfield Labor Market Area

In 2002, an Upper Valley Housing Needs Analysis was developed for the region covered by the Hartford, Lebanon, Claremont and Springfield Labor Market Areas (LMAs). The firm of Applied Economic Research of Laconia, NH was contracted to complete the study. The Housing Needs Analysis summarizes the housing situation in the Springfield LMA (includes the towns of Andover, Baltimore, Cavendish, Chester, Ludlow, Plymouth, Springfield, Weathersfield, and Windham) is as follows:

Housing is less expensive in the Springfield Labor Market than in either Claremont or Hartford/Lebanon. That does not mean, necessarily, that housing is more affordable. Wages in the Springfield Labor Market are low and in the absence of strong growth in the manufacturing and other higher paying categories, the area is losing ground to the more prosperous areas in Vermont and New Hampshire. Our assessment indicates housing affordability issues for the region’s lower paid service and retail workers. Furthermore, the economy is not strong enough to offset housing deterioration. As a result, the area’s housing

stock is depreciating in both value and usefulness. - from the Upper Valley Housing Needs Analysis: Summary Report, (August 2002), by Applied Economic Research of Laconia, NH.

According to the Housing Needs Analysis, there was an affordability gap in the Springfield Labor Market Area of approximately 1,700 units for very low income (less than 60% of median) and 52 units for moderate income (60 to 80% of median) residents in the year 2000.

In the entire study area (Lebanon, Hartford, Claremont and Springfield LMAs), the AER report projects a total need of 9,815 units over the next decade. This number is more than double the 4,158 units that were produced between 1990 and 2000. In the Springfield LMA, the projected need for year-round housing is for 389 ownership units and 253 renter units between 2000 and 2010, and 1,090 ownership units and 354 renter units between 2010 and 2020.

Although the AER study reports that there is little or no connection between the residents of the Springfield Labor Market Area and the strong employment centers in Lebanon and Hanover these connections appear to have grown stronger. House sales are on the rise and more and more people are commuting from Springfield to the Hanover/Lebanon area. The housing demand in the Hartford and Lebanon LMAs is extremely high, as are housing costs. Increasing use of the Park and Ride lots in Ascutney and Hartland (Exits 8 and 9) indicate that more and more commuters are heading north.

Goals

1. Revitalize deteriorating neighborhoods and phase out marginal housing.
2. Encourage property maintenance and improvement.
3. Achieve a greater diversity of housing types and income levels of residents in all neighborhoods.
4. Ensure that residents of all income levels can find housing that is affordable and meets state and federal standards of quality and livability.
5. Preserve single family neighborhoods.
6. Develop policies that will ensure adequate parking, landscaping and recreational facilities for multi-family dwellings.
7. Promote a balance of residential, commercial and industrial properties to prevent overwhelming educational, municipal and infrastructure services costs.
8. Work with surrounding towns to establish a fair share housing policy for assisted housing units.
9. Ensure that new housing projects pay their fair share of taxes and impacts on local services and infrastructure.

Objectives

1. Complete an assessment of deteriorating housing stock and develop priorities for areas where the need for revitalization is the strongest. Work with Housing Vermont, the Springfield Housing Authority, and Rockingham Area Community Land Trust to redevelop and revitalize high priority buildings and developments.
2. Investigate programs to start up revolving loan funds for owner-occupied rehabilitation of existing housing.
3. Encourage establishment of low-level commercial activity such as "mom and pop" stores to foster neighborhood identity.
4. Housing which is identified by specific criteria as marginal and substandard by federal, state or local housing programs, should be renovated or vacated and torn down. (For the record, a similar recommendation was made in the *1946* Master Plan.) As this is accomplished, the Town should meet affordable housing needs in other ways.
5. Work with area legislators, the Springfield Housing Authority, Vermont State Housing Authority and private property owners to better monitor the condition of all housing in Springfield to ensure that units comply with State health and safety codes, and that deteriorating conditions do not have an adverse impact on residential neighborhoods.
6. Encourage local banks to make low interest loans to qualified owners for the purpose of improving properties. Develop local ordinances which will discourage property deterioration. Develop local programs which will encourage property maintenance and improvements.
7. Continue to preserve the integrity and character of single family housing neighborhoods, by limiting new multifamily projects, and by phasing out commercial and industrial uses from the existing residential zoning districts except for appropriate businesses such as home occupations and mom and pop grocery stores.
8. In zoning districts which allow multi-family dwellings, minimum lot size requirements and minimum unit size requirements should be monitored to achieve adequate area for parking, landscaping and open space. New or converted large-scale housing projects should be carefully evaluated to meet these goals.
9. Prior to getting approval for large-scale housing developments and large residential subdivisions, developers must show that the impact of growth from these projects can be absorbed by the Town. It should also be shown that the Town's share of associated costs are not grossly disproportionate in comparison with the County as a whole. Projects that do not meet these criteria should not be developed.
10. The Town of Springfield should work with the appropriate local, regional and state organizations to develop a "fair share housing study" aimed at providing measurable criteria for determining "fair share" standards for all towns within a defined study area. Based on the inventory statistics, until such study is completed, no additional assisted housing units or projects should be newly constructed in the community. After the study is completed, and

criteria is available, assess the status of housing in Springfield as it relates to fair share, and ensure that Springfield is within its fair share determination. If it is above or below its fair share, take appropriate steps to alleviate the discrepancy.

11. Ensure that new housing projects pay their fair share of property taxes and the costs of utilities and services through the establishment of impact fees.

Chapter 6 — Education

The Town of Springfield has achieved many of the goals included in the last version of the Town Plan. Since 1993, when the plan was adopted, the number and breadth of educational opportunities in the town have expanded. The plan called for expansion of the Southern Vermont Education Center, opportunities offered by Community College of Vermont (CCV), and higher educational and master opportunities at the Education Center provided by UVM and other colleges; and access to and facilities for post secondary education for adults to acquire marketable skills. All of these goals have been met.

The Town’s current challenges include falling enrollments at all levels and a decrease in the population of school-aged children in town. These decreases are accompanied by lower levels of State funding through Act 60 and potentially higher tax rates to support overhead for a smaller number of students.

Table 6.1 - Town of Springfield Population by Age Group

1990		2000	
Total Population	9,579	Total Population	9,078
Population by Age Group		Population by Age Group	
Under 5 years	627	Under 5 years	486
5-20	2,062	5-19	1,850
21-24	392	20-24	358
25-44	2,788	25-44	2,354
45-64	1,872	45-64	2,302
65+	1,838	65+	1,728
Median Age	36.2	Median Age	41.6
Total Households	3,877	Total Households	3,886
Persons Per Household	2.43	Persons Per Household	2.31

Public School K-12

The Springfield School District serves students from Springfield and surrounding towns that do not have school systems. Students from the town of Baltimore attend Springfield elementary and high schools, and students from Weathersfield attend Springfield High School. A few students from other towns without high schools attend the high school as well, but these numbers are limited. The mission of the Springfield School District is as follows:

The Springfield Schools will empower individuals to think, learn and act intelligently; to develop self-worth; and to conduct themselves with integrity and concern for others.

Springfield schools begin with Early Essential Education, a preschool program which currently enrolls 26 children. The Head Start program, which is federally funded, is available for eligible pre-school students. Elementary education is offered at three schools: Park Street School, Elm Hill School and Union Street School. The Riverside Middle School serves grades 6 through 8. Springfield High School is co-located with the district’s River Valley Technical Center.

Park Street School, built in 1895, housed grades 1-12 until 1965 when the middle school opened, followed in 1968 with the move of the high school students to the new high school. By 1970, kindergarten was offered at all neighborhood schools. Park Street School may be replaced and a new school or new classrooms built to replace it. The Springfield School District has gathered the relevant data on options for replacement or refurbishing the facility and will make this data available to the public and will further deliberate and decide the fate of Park Street School in the Spring of 2002. The Park Street enrollment for the 2001 - 2002 school year is approximately 295.

Elm Hill School, whose cornerstone was laid in 1948, was fully returned to K-5 this year and has approximately 121 students. Union Street School, which opened for students in 1951, has approximately 165 students this school year. The Elm Hill School is close to capacity and would have to be added onto in order to accommodate additional students.

Facilities for art and music in the current elementary schools in Springfield are somewhat limited. While the Park Street School has separate facilities for art and performances, Union Street and Elm Hill Schools make do with one stage which is used for both art classes and performances. Park Street School is scheduled to be closed and the District is mulling ideas for the new combined elementary school. In that school, art and drama facilities, separate as they are at Park Street should be seriously considered.

Total Elementary School enrollment in the Springfield School District was 563 in fiscal year '01 and 581 currently, and a projected 576 students for '03, as stated School Report of the fiscal year 2001 Town Report.

Riverside Middle School, opened as Riverside Park School in 1956 and also known as Riverside Junior High, had 389 students in fiscal year '01 and 348 in fiscal year '02 and is projected to have 339 students in the year '03, as stated in the Town Report.

Springfield High School was built and ready for students in 1968, but the building was destroyed by fire that year. Rebuilt, Springfield High School was opened for grades 9 through 12 in 1969. In 2001 the enrollment at the High School was 630 and 589 for fiscal year '02, and is projected at 525 for fiscal year '03. These enrollment figures include the Springfield students attending classes at the Technical Center as part of their curriculum. There were an additional 35 Springfield students in the Special Education programs at the High School.

The old East School on Summer Street in Springfield houses the Gateway Program for students in need of Special Education Programs, because they need more individual attention or are unable to thrive in large classrooms in their K-12 school settings. Students are transported from their home schools to the site everyday. They come from Bellows Falls, Chester, Londonderry, Ludlow, Windsor, West Lebanon, NH and Claremont NH, and all parts in between. The school can accommodate 35 students in 5 classrooms, with no more than 7 students per classroom. This allows close and personal learning and teaching from which these students grow and find success.

Table 6.2 – Springfield School Enrollment and Capacity*

School Name	Capacity (approx.)	FY 01 enrollment	FY02 enrollment	FY03 enrollment	FY04 (current) enrollment	Excess Capacity (est.) FY04	FY05 Projected Enrollment
Park Street School (K - 5)	320	305	295	289	271	49	286
Elm Hill School (K - 5)	125	114	121	118	114	11	110
Union Street School (K - 5)	225	157	165	169	175	50	177
Total	670	576	581	576	560	110	573

School Name	Capacity (approx.)	FY 01 enrollment	FY02 enrollment	FY03 enrollment	FY04 (Current) enrollment	Excess Capacity (est.) FY03	FY05 Projected Enrollment
Riverside Middle School (6-8)	450	389	348	339	297	153	294
Springfield High School (9-12)	700	630	589	525	564	136	494
River Valley Technical Center	466	297	320	360	343	122	Not Available
Holy Family School (K-5 in FY02, K-6 in FY03)	75	59	73	90**	48	27**	Not Available
Park Farm School***	10	5	8	10	N/A	0	0

* Source - Superintendent of Schools Office, River Valley Technical Center, Park Farm School, Holy Family School

** Holy Family School is applying for a permit to expand their current facility. If permitted, the addition will expand total capacity to 160 students.

*** The Park Farm School is no longer in operation.

In addition, the River Valley Technical Center provides technical training to high school students and adults from Springfield, and the sending towns of Chester, Bellows Falls, Ludlow, and Fall Mountain. The courses provided at the Center are based on approved industry and national standards and provide entry level training for employment or programs of study for college. The Center’s enrollment of students from sending towns was 95 in ‘01, 122 in ‘02. Current enrollment for ‘03 is 180. In addition to the Technical Center, the Howard Dean Education Center offers other options for high school students. Students may take college level courses through the various institutions that operate at the site (see Howard Dean Education Center, below).

Private Elementary Education

Holy Family School — Holy Family School is the parish school for the Maternity of the Blessed Virgin Mary parish in Springfield, Vermont. It provides an atmosphere in which Catholic teaching and values are instilled in a cooperative community. It promotes knowledge, thinking skills, self-understanding, adaptability and a love of life-long learning. The development of a

Catholic School in Springfield grew out of the desire of parents in this parish to provide their children with the experience of Catholic Christian community, a foundation in Catholic Christian values and a strong grounding in their faith. Enrollment for this year for K through 5 is 73 students, and is expected to be 89 for K through 6 in the fall of 2002. The School has submitted an application for a permit to put an addition on the school which will bring the total capacity to 160. The plan is to expand the school by one grade each year until the school serves students in grades K through 8.

Home Schooling — Ten elementary school students and three high school students were home schooled in the 2000-01 school year. It is expected that home-schooled students will continue their education outside the Springfield school system. However, schools may want to structure some activities to include home-schooled students.

Higher Education and Technical Training — Howard Dean Education Center

In the previous Town Plans the Town has put a priority on the creation and expansion of opportunities for higher education and training in the Springfield area. As a result of the Town's efforts to fulfill that goal, Technical Training, Adult Continuing Education, Employee Development Training, and College Educational opportunities are well provided at the Howard Dean Education Center (HDEC), located on South Street in Springfield, adjacent to the Springfield High School.

Located in this modern facility, which opened in the fall of 2001, are:

- **The River Valley Technical Center (RVTC)**
RVTC, in its School to Work programs, offers the opportunity for high school students and adults to learn through a variety of practical experiences by providing daytime training, on a space available basis, in fifteen technical fields in the areas of construction, engineering, graphic communications, horticulture, hospitality and tourism, human services, information technology and protective services (fire, police and ambulance personnel). The number of students, both high school age and adults, taking advantage of these opportunities, is currently about 300. The school is regional in nature, serving students from 25 towns – 20 in Vermont and 5 in New Hampshire. The school serves the Bellows Falls, Green Mountain, Black River and Fall Mountain School districts.
- **Adult Continuing Education (ACE)**
Afternoon, Evening and Weekend Courses run continuously throughout the year and offer a wide variety of courses from, for instance, a one day seminar on fibre optics to fifteen week courses on computers. Courses can be developed by the staff for any topic in which there is sufficient community interest. In addition, these courses can be used by employers for staff development. ACE will tailor classes for employers to train their employees in specific tasks.
- **Vermont Technical College (Springfield campus)**
In September of 2001, Vermont Technical College, whose main campus is located in Randolph, began offering selected morning, afternoon and evening courses at the HDEC.
- **Community College of Vermont (CCV)**
The Community College of Vermont moved its Springfield campus to the HDEC in the fall of 2001. Enrollment in CCV is currently approximately 300 students per semester. The Spring semester course offerings include 36 courses of study in 16 disciplines from

Accounting and Art to Science and Sociology in daytime and evening courses. CCV offers basic skills assessments, financial aid and financial aid workshops, easy access to textbooks, and offers assistance in its Bridge to College course, which increases the students chances of success in college, by building skills and confidence in college level education.

New England Culinary Institute operates a 125-seat restaurant at the school and offers courses in the culinary arts.

University of Vermont, Vermont State Colleges, and Vermont Interactive Television are also using the facilities of HDEC. Vermont Interactive Television has a studio and teleconferencing rooms within the facility and is using it steadily for municipal officer and commissioner training.

UVM and the State Colleges offer courses at the HDEC as an off-campus outreach to their students. While the current focus is on the two-year degree programs, Vermont State College, through Johnson State College, offers its “External Degree Program”* (sometimes called “Distance Learning”) courses to upperclassmen (junior and senior levels of college education) through the Vermont Interactive Television and classes taught on site at HDEC. A full four-year program has not been developed in Springfield to date, but it is the intent of the principal participants in the HDEC to develop such a program at this site in the near future.

School to Work Program

Programs at the River Valley Technical Center are oriented toward preparing students for work. The Center’s School to Work program, or Career Pathways program, includes a sequence of courses around broad occupational categories that include virtually all jobs from entry through professional levels. Career pathways represent clusters of occupations and careers that are grouped together because many of the people in them share similar skills, interests, and strengths.

They also provide a way for schools to organize instruction and student experiences: and, to present students with a clearer picture on how their courses relate to careers and life after high school.

Implications of Act 60 for Springfield Schools

Act 60, Vermont’s Equal Education Opportunity Act, has benefitted the Springfield School District by providing a source of funding beyond the local property tax. Because it is a “receiving town,” the Town receives more money for programs and capital improvement than it would otherwise be able to raise in local property taxes alone. For every student attending the Springfield schools, the town receives a specified amount of funding. Therefore Springfield’s declining enrollment means that the schools will see less funding for maintenance and improvements.

Childcare

High quality childcare services provide important benefits to Springfield and the region. The availability of affordable, high quality childcare contributes to early childhood development, enables parents of young children to enter or remain in the workforce, enhances the productivity of working parents, and contributes to the expansion of the local and regional economies. In addition, facilities that are located near residential clusters, schools, the workplace, or public transportation may reduce automobile trips and congestion.

Chapter 117 now includes as a specific purpose to be furthered by municipal and regional planning: *To ensure the availability of safe and affordable childcare and to integrate childcare*

issues into the planning process, including childcare financing, infrastructure, business assistance for childcare providers, and childcare workforce development.

The State of Vermont Child Development Division maintains a list of all registered homes and all licensed providers in the State. This list does not include informal arrangements. In general, the State simply regulates childcare-providers requiring they meet the basic standards for children's health and safety. Many programs achieve a higher standard through accreditation by a national program. In Springfield there are 21 registered homes and 12 licensed providers. For an up to date listing of licensed providers and registered homes in Springfield or the region by town, visit [.brightfutures.dcf.state.vt.](http://brightfutures.dcf.state.vt.), select a Town and hit "Go."

Childcare expenses can deter some families from seeking safe and convenient services. The Childcare Subsidy Program, which is based on gross monthly income and family size, is a program established by the Vermont Agency of Human Services, and can assist some low-income families with the cost of childcare. There are also some tax credits available for both businesses and employees and employer childcare subsidies, but many are under utilized. For example, an employer may offer dependent care assistance programs (DCAP), which provide child, care subsidies, reserve slots at childcare centers, and incentives to build onsite childcare.

Goals

Education

1. Continue to provide high quality educational opportunities and amenities to all students residing in Springfield and the surrounding region.
2. Provide quality facilities for students from dysfunctional or disadvantaged home environments.
3. Expand opportunities for college education, adults and nontraditional learners, in order to provide extensive and convenient educational opportunities for residents in the Springfield region.
4. Expand technical and other education opportunities at the Howard Dean Technical Center so that the facility is utilized to its full potential.

Childcare

1. Continue to encourage a town-wide approach to childcare and early education found in these homes and centers.
2. Monitor the Child Development Division inventory of licensed and registered childcare facilities in Springfield and the capacities of each, conducting a needs assessment should capacities reach the maximum number of licensed and registered providers.

Objectives

Education

1. Address needs for new or upgraded facilities for elementary school students, including facilities for art and music.
2. Continue to work with the school board on capital development programs for buildings and other structures. The revitalization or replacement of the Park Street School, and the

monitoring of needs for the expansion of the facilities at Elm Hill and Union Street Schools should be addressed in the near future.

3. Continue to support the advancement and expansion of educational and career training opportunities at the Howard Dean Educational Center and encourage and support the expansion of the programs offered by Community College of Vermont, Vermont Technical College and University of Vermont at the HDEC.
4. Develop the use of Vermont Interactive Television to its full potential.
5. Acquire more land near the Howard Dean Educational Center, to facilitate future expansion of school facilities if necessary, including providing housing opportunities for visiting students.
6. The Town should encourage the State of Vermont to expand degree programs and course offerings at the Howard Dean Center. This development would be a natural expansion of the Distance Learning Program currently available.
7. Encourage and cooperate with private and public efforts to keep Springfield's work force up to date with continuous staff development at the HDEC, and coordinate this effort with regional and state efforts and initiatives.
8. Work with the Department of Employment and Training to plan and coordinate the curriculum at the various elements within the HDEC to meet the needs and opportunities for employment within the community and region.

Childcare

1. Encourage and cooperate with private and public employers to keep up the quality, accessibility and availability of childcare homes and facilities.
2. Encourage the fostering and expansion of the existing support for childcare services and early education services found among the business, school, hospital and nonprofits within the community.

Chapter 7 — Transportation

Transportation networks influence patterns of land use and development. Likewise, location and types of land uses can have a profound effect on the adequacy and efficiency of roadway infrastructure and traffic patterns. In Springfield, the first major road through Town was the Crown Point Military Road which extended from Charlestown, NH to Crown Point, NY. Later, roads and railroad spur were located in the flat Black River valley due to the topography of the surrounding hills and the use of waterways for powering early industry.

The roadway network in Springfield is largely the same as it was 100 years ago. A few local roads have disappeared, several have been improved and paved, but the pattern remains very similar. Three major transportation developments influenced the modes of transportation in town. In 1868, Springfield interests contributed time and labor to cut through a hill and build a railroad to reach Sullivan County at a point closer to the Cheshire Bridge than Charlestown. This point became known as “Springfield Station” — on what is now Mineral Street — and thereafter became the destination to which most Springfield freight was delivered. The railway and its tracks have long since been removed and were recently replaced with the Toonerville Trail, a bike and pedestrian path. The second major addition to the Springfield transportation network was Hartness State Airport, constructed in the early 1920s. While this airport is little used for commercial air transportation, it was an important addition for the machine tool industry that was for many decades the center of Springfield’s economy. The third addition to the transportation infrastructure, and the most important in terms of its impact on the current land use and economy was the development of Interstate 91 and the Exit 7 interchange in 1965.

The location of the interstate in relation to industrial areas impacts the number of trucks and heavy vehicles using Route 11 through the center of town. In addition, the increased number of automobiles on the road; automobile-centered retail development; more dependence on truck delivery with larger vehicles; and increase in commuter traffic through town to and from I-91 have created peak hours of heavy traffic. In the downtown the location of Routes 11, and the main connecting side streets, the intersection misalignment, the varying road widths, and the inadequacy of signals and signage adds to the traffic circulation congestion and delays during the peak hours.

This chapter examines the existing transportation infrastructure in Springfield and discusses possible solutions to transportation problems. In congested areas, the principles of access management may be used to increase mobility, safety, and access for pedestrians, bicyclists, and motorists. Access management allows proper and economically sound development of land use along these corridors, while maintaining the functional capacity and efficiency of the abutting highways. Alternative forms of transportation, and the facilities to accommodate and make these alternatives possible, can relieve congestion by allowing motorists to leave their motor vehicles home and still get to work, shop or play on public transit, bicycles or as pedestrians. Rearrangement of intersections, construction of roundabouts, and better signage may also be used to relieve congestion and allow traffic to move more smoothly on existing roadways.

When the roads of the Town of Springfield have been improved using the tools mentioned above, they will accommodate more traffic, more efficiently on the same street widths. This has the

potential for economic and commercial growth with less congestion and more efficient use of the same road network that has existed for 100 years.

Roads and Bridges

The Town of Springfield maintains 123.55 miles of Class I, II and III town roads and owns an additional 5.05 miles of Class IV roads that are not maintained. Routes 5, 11, 10, 106, 143 and I-91 are State Roads (see Map 1) which serve the Town of Springfield. These Class I and Class II State Highways are under the jurisdiction of the Vermont Agency of Transportation (AOT), except for those portions within the urban compact lines which are municipally maintained.

Road Classification

<u>Highway Class</u>	<u>Class Definition</u>	<u>Mileage</u>
Class I	Primary Town Highways	2.88
Class II	Secondary Town Highways	19.94
Class III	Municipally maintained roads	100.73
Class IV	Non-maintained roads and trails	<u>5.05</u>
	TOTAL	<u>128.60</u>
	TOTAL CLASS I - III (maintained) Roads	<u>123.55</u>
<u>State Interstate</u>	Interstate Highway No. 91	9.03
<u>State Highways*</u>	State Route 5	9.12
	State Route 10	0.83
	State Route 11	5.38
	State Route 106	<u>3.74</u>
	<u>TOTAL NON- INTERSTATE STATE HIGHWAYS</u>	<u>19.07</u>
	<u>TOTAL STATE HIGHWAYS</u>	<u>28.10</u>
	<u>TOTAL TRAVELED HIGHWAYS</u>	<u>151.65</u>

*These are Class I State Highways. Route 143 is a Class II State Highway. It is on the State Capital Budget for reconstruction (Five Year VTrans Program), as part of the "Correctional Facility Agreement" with the State.

Road Condition

The Public Works Department maintains a database with road and bridge conditions and schedules maintenance based on that data. Of the 123.55 miles of Town maintained road, 85.39 miles have a condition rating of 71 (out of a possible 100) points or better. The Public Works Department last surveyed the Town roads in 1998, and since that time have repaved, rebuilt or added gravel to approximately 44.72 miles of road (27.11 miles rebuilt and repaved, including state aided paving, 17.39 miles gravel added). After this work these sections of the Town roads are rated 80 points or better.

The Criteria for Evaluating Road Sufficiency are based on structural condition, service, and safety are as follows:

Criteria	Total possible points	Description
Structural Condition	50 points	Structural condition describes the physical state of the highway and its ability to carry its present traffic load. Points are deducted for problems with the road foundation, earth slides, drainage, and pavement conditions.
Safety	25 points	Safety evaluations consider design characteristics, such as roadbed width, surface width, sight distances, consistency of alignment and grade, as well as, accident frequency.
Service	25 points	Includes factors such as the efficient movement of traffic, excessive grades, surface width, restricted clearance or any other combination of elements that curtails service to the motorist.

The Road Sufficiency of the Town highways is:

<u>Road Sufficiency Rating</u>	<u>Mileage</u>
Town Highways Rating 71 points or better	85.39
Town Highways Rating 51 to 70 points	27.63
Town Highways Rating 50 points or less	<u>10.53</u>
Total Town Highway miles (Class I - III)	123.55

Bridge Condition

There are 41 Town bridges or culverts exceeding 36 inches in diameter, with a span of less than 20 feet in length, and 17 Town bridges with a span exceeding 20 feet. In addition, there are two state maintained bridges of less than 20 feet and 6 state bridges exceeding 20 feet.

The Criteria for Evaluating Bridge Sufficiency are as follows:

Criteria	Total possible points	Description
Structural Adequacy and Safety	55 points	Condition of the superstructure, substructure or culvert to support traffic.
Serviceability and Functional Obsolescence	30 points	Evaluates other maintenance and performance issues, the volume of traffic that the bridge serves, and the ability of the bridge to accommodate current traffic demands.
Essentiality for Public Use	15 points	Evaluates the impact of retiring the bridge in terms of traffic volume and length of the consequent detour.

The Springfield Public Works Department categorizes the bridges, based on the above criteria, as follows:

Points	Category
0-50	Poor: Eligible for replacement
50-80	Fair: Eligible for rehabilitation
80-100	Good.

The town bridges are on average in the “Fair” category, with most of them in the 60 to 90 point range. Since 1998 five bridges have been reconditioned. There are five remaining bridges in the low “Fair” category. The design plans for the reconditioning of these five Town bridges are completed and Springfield is awaiting funding for the repairs.

The Paddock bridge is an historical Town-owned bridge. Because of its “historical” designation, there is 100% non-Town funding to rehabilitate this bridge, which should be completed by 2005.

Two state-assisted, on-system bridges in need of reconditioning are the McDonald’s Bridge and the Community Center Bridge, both on Route 11. The McDonald’s Bridge is in the State Capital Budget for reconditioning within the next two to three years. The Community Center Bridge is not yet in the State’s Capital Budget.

Intersection Congestion

Peak morning and afternoon traffic congestion and conflict of movement occurs at three signalized intersections: 1) Main/Park/Summer Hill in the downtown, 2) at Clinton and South Streets, and 3) in the area of the Springfield Plaza at both the Plaza signal and at the intersection of Routes 11 and 106. In addition, there is concern about potential traffic problems, especially with turning movements, at the new intersection at the Correctional Facility and Route 11.

Main/Park/Summer Hill

The narrowness of Summer Hill and Park Streets and the westbound Main Street at this intersection, as well as on-street parking on Main Street in both directions, cause congestion at this signal. The location of the State Office Building on nearby Mineral Street adds to the traffic count and conflicting turning movements at this intersection.

The narrowness and on-street parking make solutions difficult. Parking is at a premium at this location. If the on-street parking were eliminated on Main Street for a short distance on both approaches to the intersection, the added width could be used for a dedicated right turn lane for Main Street traffic onto Park and Summer Hill Streets. This could relieve some of the back up on Main Street in both directions.

The current signal delay on Main Street, which allows eastbound traffic to turn left onto Summer Hill before allowing westbound traffic to proceed, is the source of conflict and concern. It may resolve congestion for the eastbound traffic, but left turning westbound motorists are not warned that their left turn is in conflict with the westbound through traffic. Upgrading the west and eastbound signal with a left turn arrow, vehicle activated, would more safely allow for left turn movements in both directions.

The Traffic signal at this intersection is on a three-phase cycle for traffic with a fourth phase for pedestrians. Taking the pedestrian cycle off the phases, unless activated by a button, would enhance the level of service of this intersection. In addition, loop detectors, installed on Park and Summer Hill, would lengthen the green cycle for Main Street until the presence of a vehicle activated the loop detector and its respective green light.

Clinton Street/South Street/Mineral Street

The Clinton Street/South Street/Mineral Street intersection has a very confusing set of islands, a constant blinking yellow light, and an abrupt change in direction for main traffic flow. Turning movements from Clinton onto South or Mineral Streets are dangerous. For instance, a motorist turning left off of Clinton onto South or Mineral streets has to note the intentions of motorists oncoming on Clinton and South and Mineral Streets and, at the same time, make sure the motorist turning right from Clinton onto South Street is going to stop at the sign.

A “round about” solution at this intersection would put all the cars into the same counter-clockwise movement and eliminate opposing turning movements, resolving much of the confusion here. Other possible solutions are the activation of the signal, or realignment of the intersection.

Springfield Plaza

The location of the Springfield Plaza, McDonald’s intersection, and the number of turning movements in and out of these location, plus the alignment of the Route 11 and Route 106 creates congestion. This situation is aggravated by the lack of a dedicated right turn lane into the Plaza for eastbound vehicles on Route 11. A realignment or reconfiguration of Route 106 southbound as it approaches this intersection may be a remedy to the congestion here.

Correctional Facility & Route 11

This intersection was thoroughly discussed with VTrans in the Act 250 hearings. The Town still has its concerns. The grade of the Correctional Facility road at Route 11 is steep for large vehicles exiting the facility, especially in icy road conditions. The width of Route 11 and poor sight distances make turning movements, especially left turns into and out of the facility, potentially dangerous.

Traffic signals at this intersection may not be warranted, but a dedicated left turn lane into the facility and a flashing yellow light, warning Route 11 traffic of the danger at the intersection, would ameliorate the potential traffic problems as the facility begins to generate more traffic.

The town would greatly benefit from collecting information on traffic counts along local roads, turning movements at the main intersections, and parking usage at the municipal lots. Presently, data on traffic volume on municipal roads or the usage of municipal parking areas is not available. It is important to know if and how any of these are changing, to identify areas needing improvements, and to plan the implementation of improvements according to a needs priority.

Exit 7 Interstate Interchange

The Exit 7 Interchange serves several purposes. It is the gateway to the town for commuters, tourists, goods transporters, and those who are traveling through town to other destinations. The interchange area also serves travelers on Interstate 91 who need to stop for fuel, lodging, and food. Although some services for those traveling on the Interstate are desirable, commercial

activities located at the interchange should complement rather than compete with those located in the downtown. Particular attention should be paid to retaining the present natural and scenic characteristics of the interchange area, and traffic should continue to move efficiently to take people from the Interstate to the downtown.

As employment centers in the Upper Valley continue to expand, more and more commuters are expected to drive from locations to the north and south of the Hanover/Lebanon areas. In order to decrease the amount of commuter traffic and save energy, a park & ride lot and connection to public transportation would likely be well used.

The Toonerville Trail bike and pedestrian path crosses under the Interstate. Any development activities that take place in the area should ensure the safety of bicyclists and pedestrians using this path. In order to address the issues of concern around the Exit 7 Interchange, the town could consider the following: 1) an access management program that would control curb cuts; 2) expanded site plan review that would include lighting, noise, aesthetics, signage, landscaping and screening, parking and open space; and 3) a park & ride lot.

Downtown

Parking

While the number of parking spaces in the downtown may be adequate for the needs of local businesses, parking on Main Street is at a premium. There are two factors that cause the parking crunch: inadequate signage directing drivers to nearby parking, and owners and employees parking in spaces that were planned for their customers and patrons.

There is a need for clear and visible directional signs and better line markings for the parking lots behind the Bank Building, and across the Park Street bridge. There is also a need to designate certain areas for employee parking for both downtown businesses and the State office building, and others for short-term parking for customers of Main Street businesses. The State employee parking lot that lies between Mineral Street and the river is underutilized. Likewise, the parking lot behind the Bank Building is underutilized and could accommodate business owners, employees and their customers. The lot on the westerly end of the Park Street bridge is often used by State employees, whereas it would be an ideal location for short-term overflow parking for customers of Main Street businesses.

Recently a parking enforcement officer was authorized by Springfield. In addition, two-hour parking limit signs have been restored to the downtown area streets. This, along with the cooperative effort of owners and employees to park in the proper off-street lots, should assist in keeping the street parking available for customers and patrons.

Traffic Flow and Emergency Response

Traffic flow through downtown is congested during peak hours and is exacerbated by the lack of directional signs. Factors which have an impact on westbound traffic are: two lanes reducing to one lane at the easterly end of Main Street; on-street parking; and traffic signalization at the Main Street/Park Street/Wall Street intersection. Factors impacting the flow of east bound traffic entering downtown from the head of the Square are: no left turn lane for the movement to Elm Street and Valley Street; and, on-street parking.

If an incident causes congestion anywhere along Main Street, River Street and the Old Chester

Road, response by fire, ambulance or police personnel is extremely difficult, as there are no alternative routes or a bypass around the congestion.

Ski Traffic and Commerce

While congestion is a problem in downtown Springfield during the week, at other times businesses in the downtown would like to see more traffic travel through town. Much of the ski traffic to and from Okemo Mountain and Killington bypasses Springfield, using Route 103 through Chester and Rockingham instead of Route 11 through Springfield. Signage on I-91 giving motorists the information that Okemo can be accessed from Exit 7 and signage at Gassetts, emphasizing that I-91 can be reached by a left turn onto Route 10 might bring more skiers through Springfield. Additionally, after Ludlow, there is little opportunity for inbound skiers to grocery shop and for outbound skiers to stop and eat on the way home. There are businesses and services unique to Springfield and not available in Chester or Ludlow. By routing traffic through Springfield, all businesses are exposed to more persons, who may return during their visits to Okemo or Killington to shop in Springfield.

Signage

Traffic flow and congestion, traffic safety, touring motorists, truck delivery services, and emergency services could all benefit from better signage in the Town. Street and Highway names and numbers, lane directional arrows, directions to I-91, State Building, Town Offices, Police, Fire, Emergency Rooms, Schools, Community Recreational Centers and Parks, to name a few, could be more obvious and placed more conveniently to give motorists earlier notice and clearer directions to these facilities.

E-911 addresses are now assigned to all locations. These numbers should be clearly and prominently located on all parcels, rural and downtown, to allow efficient and timely response for emergency services.

Scenic Roads

Route 5 on the eastern side of town and Route 11 from the Exit 7 Interchange to the downtown have been designated scenic byways as a result of the Connecticut River Scenic Byway feasibility study that was completed in 1997. The Connecticut River Scenic Byway corridor includes roads on both sides of the Connecticut River from Massachusetts to northern Vermont and New Hampshire. State designation of scenic byways allows towns access to funds for protection and enhancement of resources along the named roads. Scenic views along these and other scenic roads should be identified and protected in order to maintain the scenic nature of these roads and the rural character of the town. Local scenic roads, such as Eureka Road, Highland Road, Cherry Hill Road, and Elm Hill Road should be identified as scenic on the Future Land Use Map and managed for their scenic qualities.

Alternative Forms of Transportation

Public Transit

Connecticut River Transit, which recently replaced Town and Village Bus, serves the Town of Springfield with in-town services and connecting service to Chester, Bellows Falls, Ludlow, Okemo Mountain, as well as Lebanon, Dartmouth College and Dartmouth Hitchcock Medical

Center.

Connecticut River Transit also provides van service to the elderly and disabled for medical appointments, shopping, personal trips, Adult Day program and to the Senior Center. This can be arranged by the rider by calling 24 hours ahead of time to make the arrangements.

Vermont Transit

Vermont Transit has existing facilities in the Springfield Plaza for ticket sales. The Vermont Transit bus provides convenient service from Springfield to Rutland, Burlington, Montpelier, White River Jct and points in between, as well as transit to more distant cities, such as Boston, MA. There is, however, no terminal or shelter for waiting passengers.

Park and Ride

Park-and-ride lots are effective in reducing single-occupant vehicle use when they are located along routes that are used by the majority of commuters in a given area, and combined with stops by the local and inter-community public transit providers. The 1995 Regional Transportation Plan used 1990 Census data to evaluate the commuting patterns in the Region. According to the study ride-sharing and the use of park-and-ride lots is most likely to be utilized when commuters are traveling longer distances and the potential financial savings are greater. Therefore, external commuting patterns (those trips with destinations outside the Region) were given the greatest weight in determining locations for effective park-and-ride facilities.

Springfield is one of three towns in the Region, which are major sources of persons commuting out of the area for work in, most commonly, Claremont, NH; Lebanon, NH; Rockingham, VT; Hanover, NH; Woodstock, VT; Hartford, VT; and Rutland, VT.

A survey of park-and-ride users, taken by the Southern Windsor County Region Planning Commission at the Ascutney facility in August and September of 1999, showed the majority of the park-and-ride users arrived alone at the lot and then left with one other person. Sixty-one percent of respondents were bound for the White River Junction/ Hanover/ Lebanon area and just under 44 percent began their trip from Weathersfield.

As a major starting point for commuters out of the area, Springfield should look into a park-and-ride lot. As the Interchange area is easily accessible to the greatest number of commuters, a park-and-ride facility at the intersection of VT Route 11 and I-91 is needed. Plans to accommodate the facility in the interchange area should be proposed and promoted by the Town. The cooperation of Town and Village Bus to schedule stops at such a facility, as well as the promotion of the use of ride-share programs at the facility, is encouraged.

Bike and Pedestrian Facilities

The Toonerville Trail bike and pedestrian facility which runs from the Connecticut River to the Nortrax property on Clinton Street, is the first of three stages of a bike and pedestrian way through the Town of Springfield. Eventually, the path will connect the Connecticut River in the southeast to North Springfield in the northwest, and then continue on to the Chester town line. The next portion of this path, now in the discussion stage, is from the Nortrax_ property to the State Building on Mineral Street. Non-motorized, vehicular access from one end of town to the other is a priority.

There are plans for a pedestrian walk, referred to as the Springfield Riverwalk, to be constructed in the existing parking space between Main Street and the Black River, easterly of the foot bridge to the Fellows plant. This will accommodate pedestrians, provide parking, and be fully landscaped to make an appealing park at the river's edge. Access Management techniques are incorporated to greatly reduce the access points and turning movements from Main Street to this popular parking spot.

Pedestrian access to most of Springfield via sidewalks is excellent, but the condition of concrete and paved sidewalks is not universally good. A plan for maintaining and improving sidewalks was completed in 2002 by Dufresne and Associates. Conclusions of this plan should be incorporated in a comprehensive Capital Budget and Program for the Town.

Rail Service

The convenience and efficiency brought to the trucking community by the construction of I-91 ended the need for rail transportation for the movement of most goods. Though rail service is no longer available in Springfield, the New England Railroad (NER) maintains freight lines across the Connecticut River in Charlestown, NH. Amtrak service is available in Bellows Falls and Windsor, VT. Green Mountain Railroad freight service, which runs between Bellows Falls and Rutland, VT along the VT Route 103 corridor, is available at its terminus and interface with NER in Bellows Falls, and could be accessed in Chester and Gassetts, VT.

Hartness Airport

Facilities at Hartness State Airport are among the best in Vermont. Built in the 1920s, Hartness was host to Charles A. Lindbergh shortly after his Trans-Atlantic Flight in 1927. Hartness is the home of the first Vermont Civil Air Patrol Squadron, founded in 1941, and once had regularly scheduled airline service. The airport's primary runway, Runway 5/23, at 5,498 feet, is, after Burlington International, the second longest runway in the state. Hartness is served by a crosswind runway, Runway 11/19 of 3000 feet. The airport accommodates corporate jets.

VTrans, Maintenance and Aviation Division has a Capital Improvement Program, which has recently spent more than \$2 Million for the refurbishing of the runways at Hartness, and has in excess of \$1.3 Million of capital improvements earmarked for Hartness over the next 5 years. Plans also include marketing to jet charters (business, tourism and ski enthusiasts), providing pads for the construction of more private hangars, and card-lock fuel available 24 hours a day. State and federal funding, a 10/90 match, is prioritized among the ten airports based on points awarded for meeting various criteria. One of those criteria is the existence of an Airport Zone in local zoning regulations. Springfield should consider such a zone for the benefit of the town and the airport.

There are approximately 30 mostly small, single-engine and a few twin-engine aircraft based at the Hartness Airport. Several local businesses have customers or suppliers that use general aviation and Hartness to reach them on a regular basis, especially for precision machined parts to keep out-of-state assembly lines supplied. Those knowledgeable of the airport operations state that as much as 50% of the annual flight operations are business related. The airport is also used by many second home owners who fly between Vermont and their primary residence on a regular basis.

The airport supports medical emergency flights (both helicopter and fixed wing), on-call organ transplant flights, state police drug enforcement operations, Springfield Police operations, Air National Guard helicopter operations, search and rescue operation of the Civil Air Patrol and state police. Soaring clubs operate at the airport all summer, and host an annual soaring competition. The facility is used for various community sponsored events. In addition, aviation fuel, including jet fuel, air mechanic services, and flight school are available.

In 2002, the VTrans Aviation Council contracted for an economic impact study for all of its airports, including Hartness. In addition to mentioning the airport's use for businesses and second home owners, the report lists additional benefits that the airport provides in the form of events. The airport hosts the International Aerobatic Conference twice a year, and the Town holds its July celebration at the airport.

The airport has seen fluctuating periods of usage over the years. It remains one of the best aviation facilities in Vermont for the movement of goods and people. Though it is not utilized to its full capacity, it remains a significant economic asset for Springfield.

Access Management

Highways perform the dual function of enabling mobility for regional public transit, truck and automobile traffic, and providing access to adjacent land uses. As traffic volumes grow and adjoining land is developed, there is a natural conflict between these two transportation objectives.

The goal of access management is to continue or generate a safe and efficient flow of traffic along a roadway while preserving reasonable access, and therefore land use, to abutting properties. Achieving this goal requires a careful balancing act in the application of access design standards and regulations.

The need for better access management is most obvious in strip commercial areas. If there are too many driveways, drivers can be confused about the turning movements into and out of the many access points. Where there are no turn lanes, each turning vehicle slows traffic and reduces the carrying capacity of the road. By managing access to the highway system during project planning stages, safe access can be provided while preserving traffic flow. Unfortunately, once an access management problem is obvious, it is often too late to correct.

Access management can benefit properties in all communities and along all types of roads. Its principles have been a part of roadway design for many years. Freeways function to move large volumes of traffic at high speeds for long distances because access is limited. In contrast, residential streets function primarily to provide access to homes and low speeds. The key to effective access management is linking appropriate access design to roadway function. Successful access management protects and enhances property values and potential land use, while preserving the public investment in our roads.

Access management is a cooperative effort on the part of local zoning and planning agencies and VTrans, which has defined the process and set forth guidelines in its "Access Management Program Guidelines" July 1, 1999, Revised July 17, 2000.

Sections of highways in the Town where access management principles should be carefully

considered in future land use decisions and applied to the project are:

- Clinton Street (Route 11) between South Street and the Interstate;
- Chester Road (Route 11) from Route 106 to Snide Road in North Springfield;
- Main Street (Route 11) from Elm Hill Road to North Main Street;
- River Road (VT Route 106) from Main Street (VT Route 11) to its intersection with VT Route 10.

It is in these areas of the town where access management guidelines can reduce driver confusion and the number of turning movements made. Access management can also preserve the functional capacity of the road, maintain travel efficiency and related economic prosperity, and ensure the safety of roadways for motor vehicle users, bicyclists and pedestrians. Of particular concern in these areas are the parking lots with open curb lines and no set access points (e.g. Main Street between Elm Hill Rd and North Main Street as it now exists before “Riverwalk”), as well as the need to connect existing parking to allow access to many sites from the same access point without the necessity of entering and exiting the highway (e.g., several River Street parcels have provided such a connection, but there are several examples in this same area where the parking lots could, but do not, connect.) On Clinton Street, preservation of the “frontage road” at the Jones and Lamson plant, encouraging the sharing of access points, and discouraging new access points along this street would further the objectives of Access Management.

Goals

1. Improve the safety and levels of service on the main road through the downtown.
2. Ensure that intersections are safe and efficient for the movement of traffic.
3. Limit the number of access points on major roadways to improve safety and reduce sprawl.
4. Ensure that alternative modes of transit of persons and goods are included in design, maintenance, and reconstruction of town and state highways and in land use abutting these highways.
5. Develop a plan for parking in the downtown that will accommodate the needs of downtown businesses and residences.
6. Improve traffic flow through downtown Springfield.
7. Encourage increased use of public transportation and ride sharing.
8. Develop a traffic-counting schedule to collect accurate data on a regular basis.
9. Enhance the facilities at Hartness State Airport and encourage additional usage of these facilities.
10. Continue to participate in regional transportation planning efforts through participation in the Transportation Advisory Committee of the Southern Windsor County Regional Planning Commission.
11. Identify and protect scenic roads to maintain the rural character of the town.

12. Prioritize transportation needs so that most important problems and issues are addressed early.

Objectives

1. Review the traffic impact of development proposals including the impact on the level of service of affected intersections. Development proposals should not cause undue congestion or delay at intersections. A minimum Level of Service Rating "D" should be maintained at all intersections.
2. Ensure that access management principles are applied to new use and development of parcels abutting town and state highways.
3. Monitor the present level of congestion at intersections of concern (including Route 106/11, Main Street/Park Street/Summer Hill, Clinton/South Street, and the Southeastern Correctional Facility and Route 11).
 - Route 106/11: At a minimum, the State should be encouraged to investigate the realignment of this intersection. The timing of this signal should be optimized for peak hour traffic volume and the light at the entrance to the plaza should be coordinated so that traffic can move smoothly through both intersection.
 - Main Street/Park Street/Summer Street: This signal could function with less congestion if the timing were optimized for the peak hour traffic volume.
 - Clinton Street/South Street: This intersection is very confusing. Before taking any action this intersection should be surveyed for the peak hour traffic volume and the directionality of traffic so that the correct alignment and light timing can be installed. Improvements considered for this intersection could include:
 - a. reconstructed and realigned into a standard three-way intersection;
 - b. repave the intersection;
 - c. consider removing the blinking light and replacing it with a STOP sign or make the signal fully operational;
 - d. other geometric alterations such as "round about" arrangements.
4. Gather information on parking lot use, customer preference on parking location, and maximum walking distance recommended for different uses. Springfield should consider establishing a Parking and Transportation Board consisting of merchants, town employees, and citizens to study and monitor this situation. Then only if additional parking is proven to be warranted should the town consider constructing more parking. The necessity and location of all on-street parking should be carefully analyzed.
5. Collect data and evaluate capacity needs for roadways through conducting traffic counts on local roads, turning movements at main intersections, and parking usage at the municipal lots. For areas that are in need of improvement, low cost improvements such as signing and pavement marking should be evaluated as well as more drastic options such as geometric changes, rotary arrangements and signalization.
6. Support Connecticut River Valley Transit in its applications for funding to support its in-

town public transit system in Springfield with inter-town connections. Ridership should be closely monitored to determine whether or not the system serves residents' needs for access to medical services, shopping, recreation, and employment.

7. Continue to upgrade the computerized database which evaluates road maintenance needs based on the municipal road construction standards, municipal road maintenance methods, and municipal road maintenance priorities.
8. Maintain and utilize a yearly construction schedule providing for improvement of the town's entire road network.
9. Expand the Toonerville Trail to North Springfield through innovative funding sources. This path preserves a portion of the former railway right-of-way for the future if rail service were to be restored to this Town.
10. Work with the Agency of Transportation to install a new sign on I-91, south of Exit 7 along the northbound lane. Some suggestions are: Signs with phrases like: For Central Vermont Ski Areas Use Exit 7 or For Killington and Okemo Ski Areas Use Exit 7, and Improvement of the To I-91 signage at Gassetts to encourage southbound traffic to use Routes 10, 106 and 11 to access the Interstate.
11. Support the Airport Commission's efforts to maximize and expand the use of the facility.
12. Create an Airport Zone, which will increase the potential for state and federal funding at the airport.
13. Review development proposals along Route 5 and other roads designated as scenic to ensure the scenic quality of the roadside and views from the road are not significantly impacted.
14. Changes to scenic roads, including filling, grading, re-alignment, and tree removal should be accomplished in a manner that does not degrade the scenic quality of the road or roadside. Bicycle and pedestrian paths should be treated as scenic roads.
15. Any plan to improve the flow of vehicles should not adversely affect reasonable and safe use by pedestrians and non-motorized vehicles.

Chapter 8 — Utilities and Facilities

Springfield is a full service Town, providing administrative, school, water and sewer, police, fire, ambulance, public works, parks and recreation and library services to its citizens. The Town, School and State should take a lead in making sure that buildings and property are well maintained, in order to enhance the abutting neighborhoods and to protect the investment of public funds in these structures and facilities.

For at least 30 years, the town has maintained a capital improvements budget/plan using short-term and long-term upgrade/replacement schedules. The following is an inventory of those properties/structures which are directly maintained by the Town. Those facilities owned and maintained by the Town School District are covered in the Education section of this Plan.

Municipal Facilities

Town Hall

Constructed in 1857 with major interior reconstruction in 1979-80, this building has evolved from the traditional Town Hall with a large, open meeting area and balcony to a modern office building housing administration, finance, Town Clerk, assessment, planning/personnel and the police department. The areas previously occupied by the fire and ambulance service were reconstructed to better house the administrative and police departments. This structure has maintained its historic character even with the many interior alterations.

There continues to be discussion about an alternative location for the Police Department. There is general agreement that it needs more space and needs to move out of the basement at the Town Hall. The new correctional facility includes space for local lock-up needs.

Fire/Ambulance Department

A new structure for the Springfield Fire Department and Ambulance was constructed in 1978-79 as a part of a bond project to house the fire and ambulance services. The building is located on a large, flat piece of land which has experienced improved accessibility through the replacement of an old iron bridge and upgrading of a major intersection.

Community Center

A converted wooden industrial building of 1800s vintage, the Community Center is located on Main Street and has very little off street parking available. This building houses the very active Senior Center as well as facilities for basketball, bowling, pool and other organized activities. The structure is in need of interior and exterior modernization. The renovation of the building is necessary if it will continue to be used as a Senior Center and for other community activities. Otherwise, relocation of the Community Center to another building should be considered. [See the Recreation Chapter of this Plan.]

Library

Henry Harrison Spafford donated \$20,000 for the construction of the Springfield Library in 1890. The original library included the reading room and part of the children's room. In 1977 the balcony was added, the floor was lowered in the Barnard Section and an addition was made at the back. With all of the additions and renovations, the Library has retained its historical flavor.

There is a concern that in the near future more shelf space will be required to expand the library and preserve the quality of the collection.

Public Works Garage

The Public Works Garage has been situated on Fairground Road for the last 38 years. The building is devoted to the care and maintenance of Town equipment and vehicles. There has been discussion in previous Town Plans concerning the need to move the town garage in order to protect the aquifer. Since that time, the Public Works Garage has been connected to the sewer system, eliminating the danger of a failed on-site septic system contaminating the water supply. The underground storage tanks have been removed from the site, and all materials which had the potential for contamination of the aquifer are no longer stored in this area. Although the building needs more room for administration, this site remains a good site for the Town Garage.

Wastewater Treatment Facilities

The Town's wastewater treatment plant was constructed in 1959 and upgraded in 1977. It is currently undergoing additional upgrades to separate stormwater runoff from the sewerage, and for general capacity to include removal of phosphorous from the discharge. The first phase of the separation project was completed in the summer of 2002, and the second phase will be completed in 2003. These stages include the upgrade of pump stations 1, 2, and 3; bringing the facility up to the electrical wiring code; elimination of sewage overflows into the Black River; and provision for emergency power systems for the pumps. The upgrade of the facility to an average daily flow of 2.4 million gallons with the proper handling of phosphorous is estimated to be completed in 2004. In 2002 the average daily flow was 1.2 million gallons per day with a capacity of 2.2 million gallons per day.

The composting of solid waste from the waste water treatment facility continues to be a service to the residents, reducing the cost of removing and disposing of this solid waste. When using this method of sludge disposal, measures should be taken to ensure that composted waste does not include any contaminants such as heavy metals, etc. that may have made their way into the wastewater treatment system.

Solid Waste Management

Springfield disposes of its solid waste at the Wheelabrator facility in accordance with the Vermont-New Hampshire Solid Waste agreement. That arrangement will end in the year 2007. The Vermont-New Hampshire Solid Waste District, of which Springfield is a member, has hired a consultant to update the Vermont District Solid Waste Plan to address the needs after 2007.

The Springfield Recycling Center serves as a collecting point for most recyclable items, including: clear (soda) and opaque (milk, liquid soap, etc.) plastic bottles, tin cans, scrap metal, appliances, glass, aluminum, office paper, newspaper, magazines, catalogues, and more. Fluorescent light bulbs and other household hazardous wastes are collected on special collection days. The Recycling Center is supported, in part, by the Town of Chester. The Town should continue efforts to investigate markets for additional products, and should provide maximum feasible accessibility to the public in order to increase the volume of recyclables collected.

Infrastructure

Highways

An obvious factor pertaining to all Vermont roads is topography, and Springfield is no exception. Early roads were expanded foot trails and some still retain that character. Village roads were established based on population and land use. Farms were established on the hills and along the Connecticut and Black Rivers. Working populations settled along the terraced hillsides near the river and factories, creating steep and narrow accesses. The Town has approximately 155 miles of highway, and the Town maintains 125 miles of that system. These are Class I, Class II and Class III highways. Class IV roads are not regularly maintained by the Town, but there have been discussions about whether they should be. These roads are an important recreational resource whether or not they are maintained. The Town has adopted the Vermont Local Roads Model Road and Bridge Standards and new construction is in compliance with those standards. The Town has in place a ten-year program for resurfacing paved roads. However, funding for this purpose has often been determined not to be priority in nature. Many roads require repaving at a greater rate than every 10 years because roads were paved without first rebuilding the road base.

The programs for minimum construction standards, as well as the care and maintenance of highways, need to be adhered to. Gravel and dirt roads are subject to the unexpected weather conditions which often require emergency repairs. The question concerning the need to pave some gravel roads should be considered when major repair or maintenance of any road is being planned.

The Exit 7 interchange was designed to provide efficient access from I-91 to the State Highway Route 5, 11, and 106. It functions to provide services for trucking firms and long distance travelers seeking fuel, food and other related amenities. Although the provision of goods and services is an important service, the primary function of an interchange is to provide efficiency, safety, capacity and movement of vehicles to interconnecting roadways.

Development adjacent to the interchange and along the Charlestown Road has been intentionally limited by the design and conditions placed upon the extension of sewer and water to the prison, and by the adoption of a special zone to regulate construction and use in the area of the interstate.

Accessory Infrastructure

Replacement of sidewalks, guardrails, and bridges; bridge maintenance; and tree removal have all been addressed in scheduled programs. The Springfield Friends of Trees are working to develop policies for maintenance and replacement of trees in the downtown.

The Toonerville bike and pedestrian path, constructed in 2001, along the Black River from the Nortrax property to the Connecticut River, is a welcome addition for the recreational pursuits of local residents and visitors. This was the first of three phases for the bike and pedestrian path from the Connecticut River to the village of Gassetts in the town of Chester. Citizen interest, as well as conceptual plans, for completing the other two phases (the town center phase and River Road to North Springfield phase), await the availability of funds.

Wellheads/Water Supplies

Presently the Town water supply comes solely from the wellheads located on the Fairground Road. This wellhead area accesses the only recognized viable aquifer producing enough water to meet the demands of the Town. The average daily demand is 800,000 gallons. The wells are capable of producing 1.6 million gallons. Demand is at 75% of capacity.

The wellhead protection was enhanced by moving the salt storage to another site and by extending the waste water system to the Town Garage. The National Guard Armory and a residential building, also located in the Wellhead Protection Area, are still on their own septic systems; some provisions should be made to connect these buildings to the Town wastewater system in order to protect the public water supply.

The Weathersfield Reservoir has been out of service as a public water supply for many years, but is still owned by the Town. The reservoir dam is in need of repair. The Reservoir and the land surrounding it is an important resource both as a secondary water supply and as a recreation area. In addition, several species of large mammals, including bear, moose and bobcat, have been identified as using this area for habitat. However, it is not anticipated that the dam will be reconstructed with a new treatment plant for water consumption by Springfield citizens in the near future.

In light of the multiple uses provided by the Weathersfield Reservoir, the Town should look into the cost and feasibility of repairing the dam and constructing a water treatment facility to regain a secondary public water supply as well as to enhance the area for recreation.

Water Mains

The Town's water system was started in 1903 with construction of a reservoir and installation of cast iron lines at a cost of \$161,739.00. In October 1903, Summer and Seminary Hills received their first water through the lines. Many of these lines are in poor condition and many leak. An upgrade of the system that will replace corroded pipe and provide sufficient water pressure is currently underway. The Town has long-range plans for a new pump station and to increase storage capacity and water pressure for the system as a whole.

The water main extension to the prison has been completed. The connection to this main is limited to the prison, with an additional allocation for the proposed industrial park, in order to eliminate the likelihood of strip development along Route 11. Existing businesses at the Exit 7 Interchange are either connected to the Charlestown water supply or use their own wells. In addition to getting drinking water through the public water main, the prison will have a 100,000 gallon tank for a backup firefighting supply.

Sewer Mains

In 1885, Springfield had no general sewer — few places did. However, W. H. Wheeler, M.L. Lawrence and B.F. Aldrich improved their personal situations by laying a sewer from their houses on Pleasant Street to the Valley Street Brook. The current sewer system is approximately 75 years old and is experiencing problems associated with age. Most of the mains are being upgraded in connection with the separation of stormwater and sewerage project, which should be completed in 2003. The remaining old and existing mains will be replaced on an ongoing basis. The connection of the prison facility to the sewer system has been completed, and is limited to the prison, with allocations for the proposed industrial park and existing businesses at the Exit 7 Interchange should they choose to connect.

Parks/Public Lands

The Town maintains several parks: the Commons, Riverside, Freedom Park, North Springfield Field, Westview Park, and Hartness Park. The Bryant Forest, also known as Meeting Waters

Municipal Forest, at the confluence of the Black and Connecticut Rivers, is restricted to recreational use. The Weathersfield Reservoir is also considered an important recreational resource, as well as animal habitat and a possible secondary public water supply. This area should be managed with these functions in mind. [See the Recreation Chapter of this Plan.]

Cemeteries

Springfield maintains nine cemeteries covering approximately forty acres. If the present rate of burials is maintained, the Town has burial space for approximately eight to ten years. There is no urgent need for new cemetery land, but the Town should remain aware of lands abutting cemeteries, which comes up for sale.

Stormwater Systems

Springfield contains two main types of stormwater drainage systems: 1) individual swales, basins, ditches and culverts on municipal property, and 2) stormwater collection via inlet grate on the highways, roof drains, etc. All of the stormwater that was directed into inlet grates and roof drains used to be funneled directly to the wastewater treatment plant. The Town is in the process of upgrading the system so that storm drains are separated from other wastewater. The Town has long-term plans for separating runoff from the roof drains of large buildings from entering the wastewater treatment facility as well.

Equipment

The Public Works Department, the Fire/Ambulance Department and the Parks and Recreation Department maintain a replacement schedule for all equipment and vehicles. The purpose is to have safe maintainable vehicles and equipment on line at all times.

Public Utilities

Central Vermont Public Service Corporation and Green Mountain Power provide electricity to Springfield. Springfield was built because of the abundant water and the falls of the Black River. Most of the dams along the Black River were abandoned in favor of cheap electric power. During energy crisis in the 1970s, however, revitalization of the dams became an issue, first to the Town and then for Central Vermont Public Service and Westinghouse. Four dams are once more producing power for sale: Fellows Dam, Lovejoy Dam, Comtu Falls and the Slack Dam.

Telephone service and television cable service are provided by private companies. Springfield Area Public Access (SAPA) TV is a cable station located in the Howard Dean Education Center and dedicated to local news and events.

Wireless Communication Facilities

The use of cell phones and the federal Telecommunications Act of 1996 has led to the proliferation of telecommunication towers and facilities in response to the purpose of the Act, which was to make telecommunication possible from anywhere in the United States to anywhere in the world. In order to preserve scenic resources as well as to provide telecommunication services, some of the following standards should be adopted in town regulations:

- towers should be shared through co-location or placed on existing structures,
- tasteful stealth and camouflage technology in context with the aesthetic environment should be used wherever possible

- the least intrusive alternative for the location of the tower should be proven by the applicant
- FCC emission limitations should be met,
- experts hired by the Town to check the applicant's technical data and compliance with FCC limitations should be paid by the applicant,
- any part or all of the tower and/or facility should be removed when the tower and/or facility is no longer in use. A bond for removal of all or a part of the tower and facility should be required of the applicant.
- site plan review should be required of all tower applications

The Town should identify ridge lines and viewsheds to be preserved and should amend regulations to reflect these locations. Some of these requirements are addressed in the land use chapter of this plan.

Other Governmental and Private Facilities

Springfield contains State and non-municipal utilities and facilities that provide a public service. For example, the Springfield Hospital with its 57 bed in-patient care, out-patient services and emergency room, and the Springfield Health and Rehabilitation Center with 102 beds, are vital services to the community and surrounding area. In addition, the State offices, including the Agency of Natural Resources, Department of Motor Vehicles and the Department of Employment and Training, provide local services to the needs of residents of the Town and the surrounding area. Finally, the addition of the new Southern Vermont Correctional Facility near the I91 interchange has necessitated expansion of the capacity of facilities and additional personnel to meet the requirements of this large facility. The quality of public and quasi-public services and facilities is tied into the quality of life in the community.

The Base Features map in the Appendix shows the inventory and distribution of utilities and facilities as well as educational, recreational and other public sites, buildings, and facilities, including hospitals, libraries, power generation facilities, transmission lines, and water and sewer services. These maps are incorporated herein by reference as part of this town plan.

Goals

1. Maintain all buildings, utilities, and facilities on a regular schedule; institute energy conservation measures to ensure that repairs will increase the efficiency and energy savings wherever possible.
2. Ensure that all Town, School and State properties are well maintained and attractively landscaped including those properties which are leased.
3. Ensure that the Administrative Services offices remain in the Town Hall.
4. Repair and maintain the parks and recreation facilities and fields. [See the Recreation Chapter of this Plan.]
5. Maintain the highway system in a safe condition and to the Vermont Local Road and Bridge Standards as adopted by the Town.
6. Maintain the existing characteristics of Exit 7 which function to provide for the safe and

efficient movement of goods and services from the interstate to the state highway system. [See the Transportation and Land Use Chapters.]

7. Develop a maintenance program for sidewalks, bridges, guardrails, retaining walls, and all other accessory infrastructure in a safe and economic manner through scheduled maintenance and replacement.
8. Ensure the adequacy of existing lands for use as cemeteries and provide for future acquisition of abutting lands as the need becomes apparent.
9. Develop a comprehensive capital improvements plan to guide the planning for utility and facility changes. The plan should include future needs, priorities, costs, and financing methods.
10. Provide residents, commercial enterprises, and visitors with the economic, social, and cultural benefits of a modern, integrated wireless telecommunications network, while minimizing the economic, environmental, health, aesthetic, and cultural costs of its development.
11. Guide the construction of telecommunication facilities so that they meet communication needs without negatively impacting scenic and natural resources.

Objectives

1. Support the ongoing repair and maintenance of historic buildings and structures.
2. Continue the upgrade of the Waste Water Treatment Facility to increase its efficiency and capacity.
3. Develop a plan for upgrading of the Library facilities to expand shelf space, in order to maintain the quality of the collection and accommodate new books and publications.
4. Gradually upgrade substandard, paved and gravel highways so that we can maintain our highways in an economically prudent manner.
5. Locate and secure additional viable water sources, as needed.
6. Continue the current upgrade of the water system, which is addressing the problems of inadequate flow capacity, low pressure and leaks.
7. Continue to monitor the need for new cemetery space, especially in abutting parcels.
8. Continue to implement the separation of sewerage and storm water.
9. Develop and implement a plan which will ensure there is adequate capacity for municipal stormwater collection, treatment and discharge, and which will meet federal, state and local standards and regulations.
10. Continue efforts to maintain and replace equipment and vehicles to ensure that they are all in safe operable condition.
11. Maintain procedures to purchase equipment and vehicles in the most economic manner.

12. Maintain close communication with public utilities that provide electric power, telephone service and television cable to coordinate projects including tree cutting, underground cable laying and installation of new utility poles and lights, to ensure that duplication of efforts and expenditures are avoided.
13. Amend the Town Regulations to provide for telecommunication towers, which serve the needs of the public for access to the telecommunications network, while preserving the environmental, aesthetic, scenic, health and economic resources of the Town and its residents.
14. New wireless communications facilities should be sited, constructed or modified only as necessary to meet the changing needs of the Town and its abutting Towns or changes in technology. Such facilities should not be sited, constructed or modified where adequate communication coverage can be obtained through use of existing structures, including structures that are located in other Towns.
15. New or expanded wireless communications services must co-locate on existing facilities or be sited on existing structures and employ “stealth” design and structural techniques whenever possible. Owners or operators of existing tower space should facilitate the sharing of that space unless sharing or co-location is prohibited due to frequency interference, adverse aesthetic impacts or a demonstrated risk to public health.
16. An applicant for installation of new communications facilities, whether at new or existing sites, must demonstrate that public exposure to RFR will not exceed the applicable FCC standards for human exposure. Assessment of possible health effects shall be based on the cumulative effects of all RFR emissions at any given location and should include both preconstruction and post-construction monitoring.
17. Siting and design of new wireless communications facilities must minimize impacts on wildlife habitat and corridors, wetlands, rivers, streams, and other natural, scenic, and aesthetic resources. Siting wireless communications facilities on ridge lines will be discouraged; however, where such a location is considered necessary under the TCA requirements, “stealth” technology must be used in the design, construction, and maintenance of the facility.
18. At the time of the application the applicant for a new or an addition to an existing wireless communications facility should provide the municipality with a plan for the reclamation and restoration of the site and a cash bond or surety bond or letter of credit in an amount sufficient to execute the plan should the applicant or its successor refuse or be unable to do so. In light of inflation and rising costs, annual proof of the sufficiency of the bond to pay for executing the plan and annual and reasonable proof of the liquidity and financial stability and adequacy of the bond writer or the institution on which the letter of credit is drawn should be required of the applicant or its successor(s) in interest by the municipality.
19. To minimize negative impacts on cultural, scenic, wildlife, and natural resources, the design, construction, and maintenance of new or existing wireless communications facilities should comply with the following standards:

- Protection of view corridors from highways, residential areas, historic districts, public use areas, and outdoor recreation areas such as hiking trails, rivers, lakes, and ponds should be paramount in the design and siting permitted.
 - New wireless communications facilities should be of “stealth” design (employing materials, architectural design, color schemes, lighting fixtures or enclosing the facilities entirely within, for example, an existing steeple or silo). If “stealth” design is not feasible, at least the lower portion of the facilities should be sufficiently screened.
 - All new wireless communications facilities sited on a ridge should be located below the ridge so that the tops of any such facility are below the site lines of persons using the highways or in the residential areas and historic districts. At a minimum, the tops of such facilities must not exceed the elevation of the immediate ridge.
 - New access roads should be designed for minimal ground disturbance and clearing, follow the land contours, and avoid open land to minimize visual and ecological impact. Once construction of the facilities has been completed, roads should be removed or reduced to their smallest necessary footprint, since only smaller vehicles will be needed for maintenance and repair.
 - If new wireless communications facilities are added to existing wireless communications facilities on peaks or ridges, such existing facilities should be retrofitted or maintained in a manner to minimize any negative visual impact.
 - At the site of wireless communications facilities, the existing vegetation and tree cover should be maintained to the maximum extent possible.
 - Prior to the application hearing, a demonstration of the visual impact of the tower must take place to inform the public (by simulating the silhouette of the facility by raising a dark colored balloon to the height of the top of the proposed facility, or other reasonable simulation).
20. Support efforts by Springfield hospital to meet the needs of the community. Identify other facilities such as the Community College of Vermont and the various State Offices, be aware of the services they provide, and promote the enhancement and use of these facilities.
21. Continue efforts to increase markets for recycled additional products and composted sludge. Provide more hours of accessibility to the recycling center and expand the number of materials collected as markets allow.

Chapter 9 — Energy

Historically Springfield had one natural asset which distinguished it from many communities, substantial water power. While not large compared with Bellows Falls, it was a valuable source of energy, especially in a community where the alternate source, coal, arrived with a six mile team haul as the final part of an already too long journey. The water power in the village totaled in availability about 700 horsepower, of which a maximum of about 350 horsepower was developed at eight dam sites.

The plants were all “run of the river;” that is, there was no substantial storage behind any of the dams. They delivered little power in times of drought; and were generally inoperable in time of flood, because the high water in the tail races — the lower side of the dam — drowned out the head. As what would now be called firm power they were worthless, never the less in the days of high cost thermal power and before electric transmission lines these dams were a real catalyst for industrial establishment. In 1970 none of the plants were operating and most of them had been dismantled.

The rising cost of sufficient energy to maintain a viable community has led to efforts to conserve existing energy resources and to search for alternative solutions to energy problems. The Town of Springfield is meeting these challenges with policies and strategies for greater energy efficiency.

Electric Power

Central Vermont Public Service Corporation and Green Mountain Power provide electricity to Springfield. Springfield was built because of the abundant water and the falls of the Black River. Most of the dams along the Black River were abandoned in favor of cheap electric power. During energy crisis, however, revitalization of the dams became an issue, first to the Town and then for Central Vermont Public Service and Westinghouse. Four dams are once more producing power for sale: Fellows Dam, Comtu Falls, Slack Dam, and the Lovejoy Dam. CVPS has a total of four stations in Springfield, serving all of the households that have electric power. The number of households not served by electric power (“off the grid”) is unknown. (Refer to the Base Features Map for detail of transmission lines.)

The dams that are currently in operation produce power that is sold to CVPS and then is sold back to customers. If local industries could directly access and use or store hydroelectric power, it would make this power source a far more efficient and profitable one for the Town. Proposals for re-licensing of hydroelectric generators should consider local uses of the power generated as well as environmental factors such as fish passage.

Alternative Energy Resources

Like most of the electric power that is available to Springfield residents, fuel oil, gasoline and propane must be imported from other places. Wood is another source of fuel for heat and may be harvested from forests in town as well as from nearby towns. It is the goal of the Town to conserve these resources and to promote alternative energy resources.

The Sustainable Valley Group is a Springfield-based organization whose mission is “to promote the generation and implementation of ideas to bring about a financially and environmentally sustainable economy.” The main focus of the group is to promote sustainable technologies such as biodiesel and other sources of alternative energy and green technology. One goal of the Southern Windsor County Strategic Economic Development Plan (see Economic Development Chapter) is to develop an incubator for businesses that are pursuing renewable energy and other sustainable technologies.

Wind and solar power are potential alternative sources for generating electricity. Building location and design are very important for taking advantage of these resources. Installation of insulation and weather-tight windows and doors and highly efficient appliances can dramatically reduce the amount of conventional fuels needed and/or ensure efficiency of alternative sources of energy. Passive solar energy and solar cells that generate electricity generally are most effective in southern and western exposures. Passive solar energy makes immediate use of the sun’s light and heat through windows and skylights, while solar cells store energy in batteries and convert it to electricity for later use.

Wind is an excellent alternative source of energy for providing electric power to homes, under the right conditions. Wind generators must be mounted on towers above treeline and need an average wind speed of nine miles per hour (mph). Better conditions can require shorter towers and smaller turbines, creating less of an impact on scenic views. In more remote locations, the impact caused by wind towers should be weighed against that caused by the clearing that extension of power lines would require. Any new infrastructure required for generation or transmission of electric power should be sited so that it takes advantage of renewable resources with the least possible negative impact on natural and scenic resources.

Energy Conservation and Efficiency

The Town of Springfield should take the initiative in promoting energy efficiency. The use of energy in Town buildings can be reduced through such cost-effective measures as weatherization and energy efficient heating sources to reduce oil dependency, efficient lighting of public buildings and parking areas and, where feasible, the use of alternative energy efficient resources. An energy audit should be made to determine specific energy conservation measures to improve efficiency in town buildings.

In 2000, Efficiency Vermont contracted with the Vermont Public Service Board to become the State’s first energy efficiency utility. The utility provides technical assistance to businesses, builders, and homeowners and operates an incentives program available to commercial, industrial, agricultural and institutional electric service customers.

Measures to achieve reduction in energy demand in residential areas include the use of cost-efficient alternative energy resources, including renewable resources, for both new homes and additions/renovation of existing homes; the construction of energy efficient new homes; increasing public awareness among town residents of the link between cost savings potential and the practice of energy conservation and the use of alternative energy resources. Currently, Act 250 requires an energy efficiency element for all projects that come under environmental review.

The Town should examine the potential for providing incentives or tax credits for energy efficiency in residential development. Architects and builders should be encouraged to examine alternative energy resources in the design and construction phases of residential development. Where feasible, the placing of residential units should maximize the energy benefits to be gained and should take advantage of existing infrastructure.

Transportation and Energy Use

According to the 1991 Vermont Comprehensive Energy Plan, energy use in the home and for transportation are projected to account for the greatest anticipated demand over the next 20 years for motor fuels and heating oil. Along with residential consumption energy use for transportation is anticipated to account for the greatest demand over the next 20 years.

Efforts to reduce transportation demand should focus on reducing single passenger transportation, reducing the costs in infrastructure development for the construction and maintenance of the town road network, maintaining public vehicles and roads, and public education. In an effort to minimize energy costs the expansion of roads should be limited and public vehicle maintenance should be cost effective and maximize efficiency. In addition, the Town should promote the use of energy efficient vehicles, assist and encourage car and van pool programs, and investigate the feasibility of additional commuter lots.

Energy consumption can also be reduced by promoting the potential for pedestrian and non-motorized traffic through the development of pedestrian walkways, the location of goods and services in close proximity to higher density residential areas, and the development of bikeways and greenways.

Energy and Land Use Patterns

When land use patterns do not relate to existing infrastructure and development, energy can be lost through excessive transportation distances and unnecessary expansion or extension of facilities and systems. Wherever possible, development should be concentrated in order to reduce the costliness of dispersing energy over large geographic areas. The location of community service structures, retail sites, public utilities, day care centers, State and municipal offices, and other frequently visited sites should be encouraged within walking distance of residential areas. In addition, the design and location of new roads and other utilities should be located, when feasible, to coincide with existing and recommended land use patterns as set forth in this document.

Goals

1. Encourage citizen participation in energy planning and implementation.
2. Increase the usage of locally grown fuel wood (as compared to that which is imported from other towns) wherever possible in order to improve the local economy and conserve resources.
3. Promote enrollment of working forests into the Current Use program in order to promote local production of fuel wood and other forest products, foster good forest management, and ensure the availability of these resources for future generations.

4. Increase the use of renewable resources for heating and electricity in municipal, commercial, and residential buildings.
5. Promote energy awareness and education.
6. Support the development of renewable energy technologies in Springfield.
7. Reduce energy consumption in town facilities.
8. Reduce transportation energy consumption.
9. Encourage non-motorized vehicles and pedestrian traffic.
10. Encourage energy efficient residential development.
11. Promote efficient delivery of energy services.
12. Promote compatibility between land use, energy delivery and consumption.
13. Encourage land use patterns that promote the most efficient use of energy.

Objectives

1. Develop a directory of local fuel wood providers and educate residents about the benefits to buying wood locally. In conjunction, the Town should review the potential for using the wood gasification process as an alternative municipal energy source.
2. Promoting this program will help to stimulate fuel wood production and improve forest management.
3. Where feasible, the development of renewable energy resources such as woodlands, solar energy devices, hydro generators, and wind should be encouraged. An investigation of the potential for additional dam sites and the possibility of developing hydroelectric power would identify an additional renewable energy resource.
4. Provide informational material and promotion of the use of solar and wind energy resources. Increase awareness among town residents by providing information concerning alternate resources and methods of reducing energy consumption in the home (such as weatherization and upgrading to energy efficient appliances).
5. Conduct an energy audit to determine specific energy conservation measures to improve efficiency in town buildings. Evaluate the suggested energy improvements for cost effectiveness.
6. Promote the use of energy efficient vehicles, assist and encourage car and van pool programs, and investigate the feasibility of additional commuter lots.
7. Maintain public vehicles and roads, and educate residents about the importance of maintaining their own vehicles. In an effort to minimize energy costs the expansion of roads should be limited and public vehicle maintenance should be cost effective and maximize efficiency.

8. Promote the potential for pedestrian and non-motorized traffic through the development of pedestrian walkways, the location of goods and services in close proximity to higher density residential areas, and the development of bikeways and greenways.
9. The town can encourage less driving through the development and/or maintenance of an interconnected system of sidewalks and walking/bicycle trails, linking residents to schools, stores, work and home.
10. Encourage the use of cost-efficient alternative energy resources, including renewable resources, for both new homes and additions/renovation of existing homes.
11. Encourage the construction of energy efficient new homes.
12. Increase public awareness among town residents of the link between cost savings potential and the practice of energy conservation and the use of alternative energy resources.
13. Examine the potential for providing incentives or tax credits for energy efficiency in residential development.
14. Architects and builders should be encouraged to examine alternative energy resources in the design and construction phases of residential development.
15. Where feasible, the placing of residential units should maximize the energy benefits to be gained and should take advantage of existing infrastructure.
16. The town should ensure that proposed construction of additional transmission or distribution lines within Springfield are in the best interest of the Town's citizens. Such construction should take natural and scenic resources into account and should not adversely impact fragile soils.
17. Encourage the concentration of energy intensive facilities, housing, and other uses to reduce the costliness of dispersing energy over large geographic areas.
18. The location of community service structures, retail sites, public utilities, day care centers, State and municipal offices, and other frequently visited sites should be encouraged within walking distance of residential areas.
19. New roads and other utilities should be located, when feasible, to coincide with existing and recommended land use patterns as set forth in this document.

Chapter 10 — Economic Development

In this chapter, “Economic Development” is more than creating business, jobs, housing, airports and infrastructure. The term is used in the broadest sense. It is a process of “building a community’s capacity for shared and sustainable improvements in the economic well-being of the residents of Springfield.”¹

Much of this chapter was derived from the Southern Windsor County Strategic Economic Development Plan (SEDP), developed by Economic Policy Resources and a diverse committee of representatives from local and regional planning and economic development organizations.

Springfield’s economic history has been a major factor in growth patterns; thus a brief review is presented here. Statistical information is based on past trends up to and including 2000.

The water power from the Black River encouraged industrial growth next to the river. Around those industries essential housing and public and private services for workers were established. In outlying areas, agricultural growth occurred. With increased mobility, residential areas developed in North Springfield and other outlying locations.

The manufacture of machine tools dominated the town’s economic picture from the early 1900s to the mid-1970s. As a result, during most of the Century the major resource and economic engine of Springfield was its residents, highly skilled engineers and precision machine tool operators, who made up the manufacturing work force. The industry that sustained this town for all those years is largely gone, yet the skilled employees remain. Because of this loss, the challenge is to rekindle the economic growth of the town’s and the region’s economy; retrain and re-employ the skilled workers; and provide opportunity, advancement, sustained growth and retirement security for its population.

The economic history of the Springfield region is very different from the rest of Vermont and much of New England for that matter. Deep business cycles, and steep growth centered on the war years dominate the picture. In 1970, the Town’s population was 10,063. It then showed a slight increase to 10,190 in 1980 when the machine tool industry was still fairly strong. In 1990 the population dropped to 9,579, and in 2000 it dropped further to 9,078. In spite of the decrease in population, the number of households increased from 3,877 in 1990 to 3,886 in 2000. This may reflect the aging of the population in Springfield (See Table 6.1 in the Education Chapter). When Springfield’s growth was leveling off and then decreasing, the State’s growth was accelerating.

Social, economic and political factors, many of them beyond the control of local interests, have caused the local capital goods industry and employment by the private sector to diminish. A corresponding increase in other economic activity has provided alternative employment and has added greater diversity to Springfield’s economy. The loss in the number of jobs between 1980 and 1990 has been reversed and employment opportunity has increased. However, the quality,

¹ From *Local Partnerships for Economic Development, Executive Office of Communities & Development, State of Massachusetts* (1994)

and pay scale, of the additional employment opportunities, in retail and hospitality for instance, are not on a par with the jobs that have left the community.

In addition, the increase in the population, the number of jobs, and the per capita income of Springfield and the southern Windsor County region has not kept pace with the increase in the state or the rest of Windsor County.

The economic well-being of the people of Springfield, both individually and collectively, depends heavily on a moderate steady growth of job opportunities with rising salaries and reduced sensitivity to business cycles.

It is important to note that there has been a significant regional effort to analyze the current economic situation and develop comprehensive strategies for future improvement. This effort has culminated in the publication of the Regional Strategic Economic Development Plan. Much of the facts and conclusions drawn in this strategic plan are expressed in this chapter. Although much of the analysis conducted on the regional level is relevant to Springfield and any local action should compliment regional initiatives, this economic development plan is based on the needs of Springfield residents and their unique vision for the future.

Current Perspective

Economic and Demographic Trends: *Where Are We Now?*

A number of macro- and micro-economic trends have emerged over the last decade. Understanding these trends and their effect on the local economy is essential to developing a viable economic development plan. In addition, we must also understand the current economic situation of our residents, the current, local economic structure and what key industries dominate our local economy. With these facts in hand we will then be able to develop informed strategies for improving our economic future.

Macro Trends

In today's increasingly global economy, there are several factors influencing the local economy and they will continue to do so over the coming decade. Although these factors will have a significant impact locally they are external forces in national or global scale. Locally, we cannot steer these forces but rather we must adapt and learn to operate in their context. Through the Strategic Economic Development Plan (SEDP), five key "extra-regional" trends were identified and are outlined below.

MACRO-TREND 1: MARKETS ARE BECOMING INCREASINGLY GLOBAL

Economic development policy must be made considering national—if not global—economic factors for many of Springfield's key employers. It cannot be made in isolation of these still-unfolding events.

MACRO-TREND 2: TECHNOLOGICAL INNOVATION IS ADVANCING RAPIDLY

Technological innovation is making us more productive and changing the way goods and services are made. Continued growth in productivity is key to the local economy's ability to compete in the future, and economic development policy should be oriented toward that outcome.

MACRO-TREND 3: THE “NEW ECONOMY” HAS FUNDAMENTALLY CHANGED THE COMPETITIVE LANDSCAPE

Despite the recent downturn in certain areas of information technology, the widespread adoption of information technology means a “new economy” competition is here to stay. Springfield must be able to apply knowledge and technology to the production process better than its competitors.

MACRO-TREND 4: THE POPULATION IS AGING AND POPULATION GROWTH HAS SLOWED EVERYWHERE, PARTICULARLY IN THE WINDSOR COUNTY REGION

The average age and the rate of aging in the local population and the local working age population are higher than the average for both the State and nation as a whole. In this environment, we must actively identify where new workers will come from in the future.

MACRO-TREND 5: THE AGING BABY-BOOM POPULATION IS MORE DEMANDING OF QUALITY-OF-LIFE

As the population ages, more and more people will enter their peak earning years. They are demanding more in the way of “quality of life,” and this is increasingly becoming the key to workforce attraction and retention.

Local Trends

Along with the national and global factors that influence the local economy discussed above, there are several regional factors that also affect how the local economy fares. These factors are thought to be unique to the greater Springfield area. They are characteristics that can either be: (1) targeted as assets and used to enhance positive change, or (2) issues that may lead to continued impairment and need to be addressed by policy.

- a. The strong influence of nearby metropolitan areas offers new opportunities for tourism and economic development linked to the positive recreational-tourism experience that decision makers may have in the region.
- b. The area has a substantial amount of “facilities assets” that are available for development without adversely impacting open land assets.
- c. As an area undergoing economic change, the number of home businesses has increased in the region. Economic development policies should look at this as a positive opportunity.
- d. As a Vermont town, Springfield operates with a tax burden disadvantage relative to towns just across the Connecticut River in New Hampshire. Policy needs to be sensitive to and/or potentially address this reality.

Local Situation-Performance Analysis

In addition to analyzing the national, global and regional/local trends that affect Springfield’s economy, we must also strive to more thoroughly understand the reasons behind the area’s poor economic performance over the past 20 years and identify opportunities and challenges afforded by the local economy’s current structure and composition. The following are observations made with regard to these two important questions:

- a. The area is home to a mobile work force that appears willing to travel significant distances for quality job opportunities.

- b. The economy of the area, since 1979, has not kept pace with either statewide average growth or the growth in the national economy.²
- c. Since 1979, a major reason behind Springfield’s lagging economic performance rests in the manufacturing sector—mostly traditional machine tools manufacturing—that has experienced a dramatic 73.0% decline since the hey-days of the late 1970s to early 1980s.
- d. The 1979-89 period accounted for the overwhelming majority of the Machine Tool job loss in the area (at over 8 of every 10 jobs lost over the entire 1979-2000 time span). This sector continues to decline, as does the infrastructure that supported the industry.
- e. Entrepreneurs are an important part of both the local and state economies. However, the growth in the number of entrepreneurs in the area has declined more dramatically in this region in the 1990s than in either the State or the U.S. economies.
- f. Population statistics indicate that Springfield is losing a disproportionate share of its young population, indicating the possibility of a “brain-drain.”

What this review of the region’s economic performance means from an economic development perspective is that:

1. Successful economic development strategies for the region are likely to reflect a mix of development and redevelopment initiatives.
2. It is likely that a significant period of time will be needed to reverse this overall decline.
3. This indicates a need for a constant and consistent commitment to long-term economic development strategies and an extraordinary level of regional patience while waiting for real and sustainable results of implemented policies to emerge.
4. Strategies that work to assist in improving the “quality of life” and the perception of an “improving quality of life” will be key to addressing the critical regional issue of improving work force recruitment and retention.

What is the Local, Economic Structure?

The composition of the Springfield economy today is a reflection of the dramatic changes, economic and otherwise, which have occurred over the past two decades. The area’s dependence on manufacturing declined sharply and is now below average while its dependence on Services and Governmental employment (including the VA hospital, State government jobs) has grown significantly. Other findings include:

1. The region has above average dependence relative to the State in Non-Durables manufacturing (mostly Printing-Publishing and Food Manufacturing), Construction, Hotels & Motels (SIC 70), Engineering & Management Services (SIC 87), and Federal Government employment.
2. The region’s current structure is the result of the substantial “economic pain” since 1979 that has been highly concentrated among a relative few, generally higher than average paying employment categories, and largely occurred over the late-1980s through early 1990s time

² Corresponding to the period covering the past two complete business cycles. Cycle #1 occurred between 1979 and 1989. Cycle #2 covered the period 1989-2000.

period.

3. This has resulted in a regional economy that is currently more diversified than it was in 1979, and is now significantly less susceptible to the risks of just a few major sectors or employers.
4. While the unusually high dependence of the region on federal government and state government employment provides a good near-term and stable job base for economic development, it also elevates the risk of the region to “appropriations policy” in those sectors.

What are the Key Industries of the Local Economy?

The next step in assessing the factors contributing to Springfield’s economic well-being involves identifying a listing of key sectors in the regional economy. This list was generated based on sectors’ relative wage level and their job growth performance over the last two business cycles. This winnowing process has resulted in the identification of the following sectors which have been grouped according to their market orientation (i.e. export-oriented or locally-oriented):

Table 10.1 - Key Industries and Enterprise Grouping

<p>Specialty Food Products Defined as: Product development, marketing and/or distribution functions associated with food products targeted to niche consumer markets. <i>Representative Regional Firms: Putney Pasta, Harpoon Brewery, Vermont Country Foods, Green Mountain Gringo</i></p> <p>Publishing Defined as: Firms specializing in the development, publishing, marketing and distribution of products consisting of intellectual property and or data. <i>Representative Regional Firms: Newsbank, The National Survey</i></p> <p>Engineered Products and Design Support Defined as: Fabricated specialty plastic and metal goods including the engineering and design required to satisfy customer specific needs and specifications. <i>Representative Regional Firms: Hancor, Mack Molding, Ultramotive</i></p> <p>Traditional Machine Tools Defined as: Firms engaged in the design, manufacture, repair and rebuilding of metal forming machines and machine tooling. <i>Representative Regional Firms: Vermont Machine Tool, Lovejoy Tool, MacDermid Equipment</i></p> <p>High Value-added Professional, Scientific and Technical Services Defined as: Firms specializing in selling professional, scientific and technical knowledge and skills primarily to other industry clients and customers. <i>Representative Regional Firms: Dufresne and Henry, Concepts NREC, Precision Valley Communications</i></p> <p>High Tech and Specialty Manufacturing <i>Representative Regional Firms: IVEK</i></p> <p>Destination Family Resorts and Recreation <i>Representative Regional Firms: Okemo Mountain Resort, Mt. Ascutney Resort</i></p>

Developing an understanding of why these sectors may have or may have not been successful in the region holds the key to building the competitiveness. For successful parts of the economy, the task of this plan is to find ways to build on and potentially replicate this success. For struggling sectors, there is a need to develop a job retention strategy to defend (and potentially re-invent) the region’s

current employment base. In addition to the firms listed above, a number of local businesses not listed above are also important to Springfield's economy. Table #10.2 lists the largest employers in Springfield and surrounding towns.

Table 10.2 – Largest Employers in Southern Windsor County – over 50 employees

Economic Development Resources Inventory Assessment

The purpose of this assessment was to inventory what Springfield currently has that supports economic development and business growth, and determine what our strengths were, and/or what we are lacking or needs improvement.

Overall, it was determined that Springfield is in fairly good shape in terms of our resources. However, there are a few significant exceptions. A summary of the results of this assessment is found below.

Strengths:

- _ An available workforce
- _ Access to very good quality and affordable educational resources
- _ Available and affordable telecommunications
- _ Superb environmental quality and access to recreational resources
- _ Good quality schools
- _ Abundant industrial and commercial sites
- _ Good access to health care
- _ Excellent quality of life for families
- _ Good access to major market areas
- _ Good access to capital, primarily loans
- _ Incentives for business expansion
- _ Willing and active local governments pursuing economic development

Weaknesses:

- _ Limited availability of higher end skills
- _ Inflexibility of much of our workforce
- _ Limited equity and venture capital resources particularly for technology related companies
- _ Varying perceptions of educational quality in the region
- _ A widely perceived problem with the predictability and ease of obtaining state approvals and permits (much of this is beyond the scope of our region to address and needs leadership from State political office)

- _ Limited resources for technology related companies dependent upon higher educational resources
- _ Large, older industrial buildings
- _ The challenges associated with Springfield’s emergence as a bedroom community (i.e. having more residential than commercial or industrial development can have a negative impact on the tax base. This can also have a negative impact on retail businesses because their customer base is leaving town on a daily basis).

The Factors Underlying Regional Economic Performance

As part of this plan, a significant primary research effort was undertaken to identify sectors of the economy experiencing a combination of employment growth success (or struggles) and wage growth success. Two objectives were thought to be important: (1) helping to design competitiveness-enhancing policies and directing resource investments for all levels of government—both inside and outside Springfield, and (2) helping to identify and amend policy proposals that might in some way impede Springfield’s economic success and competitiveness. The following section highlights the results of this phase of the planning process.

The following were determined to be essential features of a key employer in Springfield:

1. Produce “dollar importing” high-value goods and/or services.
2. Offer employment opportunities that possess desirable labor-productivity attributes.
3. Exhibit desirable capital investment characteristics
4. Utilize regional natural resource endowments to gain competitive advantage
5. Offer job opportunities to under-served populations in the greater Springfield area.

Ideas for the Future — What is Important to Springfield?

As we develop our strategies for our economic future we must keep in mind those values important to local residents. Below is an overview of some of the concerns, values, ideas for the future that local residents expressed at public meetings held during the SEDP process.

Economic Health

It is safe to say that most residents in the area believe that economic health is a necessary ingredient to a high quality of life. We must have a healthy economy with plenty of well-paying jobs and benefits for local residents. This economy should be diverse and limit its vulnerabilities as much as possible. A healthy economy creates a healthy tax base to support priorities in the community such as education, human services and maintenance of our aging infrastructure. Although there are many ways to reach economic health, there are many other values held by local residents that should guide our actions toward that end.

The manufacturing sector has been a strong presence in town and residents would like to ensure the viability of this sector. Although some of the macro- and micro-trends reviewed before suggest this industry must adapt to survive, this is a viable goal. Adaptations must include shifting from machine and large product production to high-tech manufacturing.

In addition to maintaining this sector and the jobs it holds, there is a growing desire among

residents to develop new types of business. As echoed by comments at public meetings, local businessmen have recently gathered and expressed interest in developing renewable energy technologies. Capitalizing on this emerging industry was expressed as an important goal for both our environmental and economic health. In addition, much interest was voiced for further developing high-tech/internet based business and expanding our recreation, tourism and cultural opportunities along with our marketing efforts. Throughout the comments, there was a common desire for the local economy to be developed through local, small businesses.

Education and Employment

Two other themes, undeniably linked to one another, emerged through the public comments: education and employment. As our population ages, local residents are concerned with maintaining a high quality of education in our primary, secondary and post-secondary schools. Successful educational institutions will empower younger generations to embrace the challenges ahead and make Springfield a community of success. Residents also noted that educational opportunities should not be limited to classrooms. Mentoring programs, leadership roles for young people and safe, attractive, recreational opportunities are all ways people identified to contribute to improving education for our young people.

After school, students should not only have local opportunities for a job but also, more importantly, a successful career. Graduates should know that there are jobs available in Springfield even though they may choose to work elsewhere. Many residents agreed that graduates should have to turn down a Springfield job before taking a job outside the area. Obviously, a good job market depends on healthy, expanding businesses adequately diversified and buffered from external threats.

In addition to opportunities for graduating students, any economic growth should immediately provide employment opportunities to local residents.

Community

Above all, residents showed that a strong investment in community dominated their vision for the future. Developing opportunities for commerce and gathering in the downtown, affordable, high-quality day care for local families, recreational options for residents and high-quality jobs were just a few of the important values expressed. It is clear that local residents want to build a strong economy that provides not only economic prosperity but also strengthens the local community and provides a high quality of life for community members.

Goals

1. Focus economic development efforts on key industry sectors in the Region.
2. Aggressively recruit and retain businesses in key industry sectors.
3. Enhance and expand access to affordable capital.
4. Develop a pro-active approach to state and local permitting.
5. Create a strategic partnership collaborative to enhance work force skills and grow new local businesses.
6. Maintain and enhance a globally competitive workforce.

7. Promote excellence in education and work-based learning.
8. Develop incubators in strategic industry sectors.
9. Maintain and enhance “quality of life” in Springfield.
10. Develop more housing options for Springfield’s residents over the full range of affordability.

Objectives

1. Focus on building sustainable competitiveness in the highest-return, export-oriented sectors of the local economy called “strategic industries” in order to drive activity in other sectors.
2. Pursue strategic partnerships with local and regional development organizations and State and Federal agencies.
3. Work with partners to develop 120 jobs per year in key industry sectors in the Region.
4. Undertake development and implementation of recruitment-retention effort focused on building on Springfield’s current sources of economic success and diversifying the local economy.
5. Build local capacity to efficiently and cost-effectively access sufficient sums of capital to: (1) provide Springfield with options to support entrepreneurial activity, new business development, and expansion of the current business base, and (2) to develop alternatives for protecting against potential job losses associated with acquisitions of locally owned firms.
6. Create and/or partner with investment capital pools.
7. Supplement existing public and private funding sources.
8. Create opportunities to grow and train businesses.
9. Create alternatives to outside capital sources and possible outside influences.
10. Identify suitable sites for growth and development.
11. Review permit process to reduce unnecessary delay for developers seeking to invest in areas where economic development is encouraged.
12. Offer local technical assistance to businesses seeing to develop in growth areas.
13. Participate in private-public partnership to develop and coordinate the operations of five “Centers for Innovation” in the Southern Windsor County region over the next 5 to 10 years.
14. Encourage development of the following key regional industries (not in priority order) in Springfield:
 - Specialty food products
 - Publishing
 - High value-added specialty products
 - Engineered products and design support
 - High value-added professional, scientific and technical services (including information

science.)

- Emerging regional industry – Renewable Energy

15. Expand the efforts of the School District, the Three River Valley Business Education Partnership and the Howard Dean Education Center Partners to improve student career awareness, career exploration and the knowledge and skills needed for success in the modern workplace.
16. Support new and existing “School-to-Work” initiatives.
17. Take advantage of existing web pages offered by the Chamber of Commerce and Springfield on the Move, including profiles of the schools, community, and amenities of Springfield in order to attract new businesses.
18. Encourage the development of business incubators to encourage entrepreneurial activity and new business development that focuses on key industry sectors.
19. Work to improve the quality of life in Springfield by creating opportunities for young people; protecting natural, scenic and historic resources; and improving recreational opportunities.
20. Improve the living environment in the area by increasing the number of affordable housing options for the existing and potential work force.

Chapter 11 — Land Use

Transportation routes and industry have long been the drivers of land use change in Springfield. The founding of Fort #4 in Charlestown, New Hampshire and the construction of the Crown Point Road brought early settlements along the Crown Point Road and to Eureka and Spencer Hollow. In the early century, Isaac Fisher changed that pattern by building mills and the first machine shop on the Black River falls. Current land use patterns reflect the outgrowth of the early industrial era, with older industrial buildings, business and housing in the valley, and farm sites on the surrounding hills, although the increased use of automobile transportation has also brought commercial and residential development along main transportation routes.

Major transportation routes developed along the Connecticut and Black River valleys, first in the form of railroads, then roads and highways, and finally the Interstate system. This encouraged further development of the Black River valley. Today, a visitor to Springfield driving along Routes 11 and 106 gets the impression that Springfield is pretty well built-up, with a mixture of industrial, commercial, and residential uses (much like many places in New England). The visitor does not see that most of the town is still rural, with scattered housing, fields, woods, and scenic views. Driving along I-91 and Route 5, one sees this rural aspect of Springfield, with views of the Connecticut River, Spencer Hollow, and Skitchewaog Mountain.

Recent Land Use Trends

The land use changes that have occurred in Springfield over the last decade have primarily been a result of a changing economy. Over one million square feet of vacant industrial space remains after plant closings that began in the late 1980s and continued through 2002. These large vacant or underused industrial buildings impact their surrounding neighborhoods. Once the economic generators of the community, they have become economic detractors. It has become a priority for the Town to redevelop these properties and bring life back into the downtown and the gateway to Springfield.

The construction of the Southeastern Vermont Correctional Facility near the Exit 7 interchange and the extension of water and sewer to the site was another major change that occurred since the last Town Plan was adopted. In the interim, the Planning Commission adopted changes to the Town Plan and Zoning Bylaws in order to prevent sprawl along the new utility corridor and to address concerns in the interchange area. These issues have been elaborated upon in this new Town Plan.

The over-reliance on cars and the availability of land on major roads outside the downtown have lead to a sprawling development pattern in some parts of Springfield. This “spreading out” of commercial areas is often referred to in negative terms such as “strip development” or “sprawl.” The low cost of land and high traffic volumes that lead to this type of development create negative impacts on the more centralized commercial areas and detract from the traditional character of the community.

According to the Vermont Forum on Sprawl, “Sprawl is dispersed, auto-dependent development outside of compact urban and village centers along highways and in rural countryside.”

Figure 11.1 – Characteristics of sprawl from the Vermont Forum on Sprawl

Sprawl is typically characterized by...

- Excessive land consumption
- Low densities in comparison with older centers
- Lack of choice in ways to travel
- Fragmented open space, wide gaps between development and a scattered appearance
- Lack of choice in housing types and prices
- Separation of uses into distinct areas
- Repetitive one story development
- Commercial buildings surrounded by acres of parking
- Lack of public spaces and community centers

Careful attention to directing future patterns of growth will help to reduce the negative impacts that the existing sprawl and strip development has had on the town.

Existing Settlement Patterns

The Land Use/Land Cover map in the Appendix shows the existing land use patterns by breaking down different uses (residential, commercial, industrial, etc.) and land covers (transitional/shrub, forest cover, surface water, etc.). By examining current land use patterns, important natural and scenic resource areas (on the Natural Resources map), the Town can make decisions about what kind of land use patterns it would like to see in the future to preserve the qualities that make Springfield an inviting place to live and work.

Commercial/Retail Areas

Although some new stores have opened or expanded in the downtown in recent years, there is still some vacant commercial space in both the downtown and the plaza. Strip development has occurred on Route 11 (Clinton Street) between the Jones & Lamson complex and the downtown, and on much of Route 106 (River Street) between McDonald's and North Springfield. While, in the past, there was an emphasis on developing these outlying areas, the Town has developed a renewed interest in the downtown. In order to draw shoppers from surrounding communities, the downtown must have an attractive and diverse mix of businesses. Those businesses that cannot locate in the downtown should share access points and parking with neighboring establishments wherever possible, and should be accessible by alternate forms of transportation.

Commercial Development in Residential Neighborhoods

Areas served by infrastructure are attractive to commercial and industrial interests as well as higher density residential development. In some neighborhoods, commercial and industrial development can be harmful to the quality of life and character of the neighborhoods. While home occupations and small commercial establishments that serve residential areas should be encouraged, steps should be taken to continue to prohibit larger commercial or industrial development in residential neighborhoods.

Vacant Industrial Property

The evolution of Springfield's industry has had a significant effect on the land use patterns that exist today. Springfield's booming precision machine tool industry began in the center of town and next to the Black River, the major source of power in the earliest days of the industry. The development of the North Springfield Industrial Park in the mid-1970's created space for new businesses to move into town when the downtown industrial buildings were full to capacity. With the downturn of the machine tool industry that began in the late 1980's and continued into the 2000's, businesses closed or moved out of town leaving large vacant buildings behind. Many of these properties have remained vacant or underused for years due to real or suspected contamination from former industrial uses, or due to the changing economy and need for greater diversity of smaller companies in smaller spaces.

The Town's priority is to fill existing industrial space in the North Springfield Industrial Park and to revitalize former industrial properties in the downtown and on Clinton Street. Those properties on Clinton Street and in the downtown would be best suited for light, clean industrial or mixed use development. Retail uses should be encouraged in downtown properties and in the plaza, but should be more limited on Clinton Street. Revitalization of dilapidated buildings in the downtown is also a priority.

Land in the vicinity of the new Correctional Facility has been set aside for industrial development. This area is ideal for industrial uses that require a lot of trucks and quick access to the Interstate.

Historic and Archeological Resources

Springfield is noted as the home of many industrial and mechanical inventions and has a legacy of associated structures and sites. The downtown has many historic buildings whose enhancement would improve the downtown image and, subsequently, promote economic development and revitalization. Other historic resources which merit protection through inventory or designation as historic districts or resources include the Parker Hill neighborhood and the Crown Point Military Road. The latter is also an important recreational resource. Review, renovation, and protection of historic resources should be a priority in reviewing plans for construction or reconstruction in historic areas. The Town may wish to consider the formation of a Historic Preservation Commission or incorporate the functions of such an organization within an existing organization. The Town should investigate the feasibility of being designated a Certified Local Government in order to protect historic resources and access funding for this purpose.

All of the undisturbed lands along the Connecticut River, the Black River, and in the French Meadows area have high potential for archaeological sites. Historic sites and structures are also, almost by definition, archaeological sites. An important land use issue is to achieve the conservation of significant archaeological resources while still promoting prudent development.

Natural Sites and Resources

The Land Use/Land Cover map demonstrates that much of Springfield's land cover consists of forest lands and open fields. The Natural Resources maps show areas that the State has determined are important wildlife habitat (deer wintering areas and sites where threatened or endangered species have been identified), wetlands, and surface waters. Many of these resources represent an important element of what makes Springfield an attractive place to live and work.

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With these principles in mind, there are a number of actions that Springfield can take to plan for future growth. The investment and placement of public services such as water and sewer lines, utility lines, roads, and public buildings can be particularly influential on where private development will be located in the future. Public investment in parks, schools, libraries, museums, water and sewer service, roads and utility lines, should be wisely planned and strategically placed to occur in areas where growth is desirable.

Growth Centers

Designating growth centers is one method of directing growth. The Vermont Planners Association (VPA), defines a growth center as *“one (or more) area(s) of a community designated by that municipality in its Municipal Plan(s), and/or designated by the Regional Planning Commission in its Regional Plan, to accommodate a significant amount of the growth anticipated by the municipality over the next twenty years, and which is a distinct, centrally oriented organization of uses, densities, circulation, structures, and other elements.”*

State agencies have begun to use the growth center concept in many of their funding decisions. The Municipal Pollution Control Priority System Rule establishes criteria for funding of wastewater treatment facilities through the Vermont Agency of Natural Resources. Amendments in 2001 require that, in order to be eligible for funding, proposed projects must only serve locally designated growth centers unless there are severe health and environmental problems located outside of a community’s growth center(s). If the latter is the case, or if sewer lines serving growth centers must be located outside of the designated growth center, the municipality must demonstrate that the impacts of growth resulting from the infrastructure can be adequately managed, and that scattered or strip development will not result from the state’s investment in the community.

The State’s Downtown Program, developed in 1998, prioritizes funding for projects in “designated downtowns” and designated “village centers.” While the boundaries of a growth center are likely to extend beyond the boundaries of a designated downtown, this program has

encouraged communities to prioritize development and revitalization of higher density downtowns before considering public investment outside of these areas. Springfield's downtown area became a "designated downtown" in 2000.

In Springfield, areas where growth is encouraged include the following:

- **Downtown** — Springfield's downtown consists of very concentrated development, but lacks areas for parking and open space such as parks. Several parking studies have been completed that lay out possible solutions to Springfield's parking issues (see Transportation chapter). Additional efforts could be made to resolve parking issues for residences on the upper floors of downtown buildings. Existing structures that are dilapidated or underused should be priorities for removal or investment of public funds for redevelopment and revitalization. A mix of retail establishments should be promoted to create a vibrant downtown that is attractive to residents and visitors. The Springfield Circulation and Streetscape Plan (1995) identified specific areas where parking lots could be reconfigured or additional parking added to accommodate the businesses in the downtown.
- **Clinton Street former industrial area** — The existing infrastructure and structures on Clinton Street south of the downtown make this area a logical expansion of the downtown or a separate growth area. This area should allow a mix of uses, including concentrated housing, commercial, and light or clean industrial development. A planning study that looks at alternatives for various uses, layout of structures and landscaping is encouraged for the former industrial properties on Clinton Street. The challenge the town is faced with is how to promote development in this area that will not have a negative impact on the downtown.
- **North Springfield Industrial Park** — The North Springfield Industrial Park was developed for industrial uses and should continue to focus primarily on industrial uses. The priority for growth in this area is the reuse of existing structures for industrial purposes. Large truck access in this area is a problem because of the small residential streets leading to the industrial area. Therefore, uses that do not require large truck access are preferred in this area.
- **North Springfield** — The village of North Springfield has easy access to water and sewer and would be a logical growth area for higher density housing and commercial establishments that serve residential areas. The Town should delineate boundaries the area that is most suited for higher density use so as to reduce the potential for strip development between downtown Springfield and North Springfield.
- **"Springfield East" Industrial Park** — An area has been set aside for industrial development next to the Southeast Vermont Correctional Facility. This area has quick access to Interstate 91, and is therefore suited for industry with large volumes of trucks.
- **River Street** — This area is zoned for commercial use, and is one of the few areas that has land open for commercial development. In order to make this area an enhancement to Springfield's commercial mix, access management policies and design standards should be adopted for the corridor.

Access Management

Access management policies can help to alleviate the pattern of strip development that is beginning in Springfield along some of the major roadways. Numerous curb cuts can cause dangerous traffic conditions. Shared driveways and parking, adequate provision for pedestrian and non-motorized vehicle access, and parking behind buildings wherever possible would contribute to more desirable development. Long-term planning and monitoring of these developments should be encouraged to ensure adequate traffic flow and concentration of economic activity.

Access management policies should be adopted for the following areas:

- Route 11, from the Exit 7 interchange to downtown
- Route 106 (River Street) between downtown and North Springfield
- Route 11 west of the Plaza

Design and Site Plan Review

In areas where strip development has already occurred, or where existing structures create a “gateway” to the community (on Clinton Street, for example), design guidelines and/or site plan review procedures could encourage better landscaping, screening, lighting, and site layout. Good design standards could also encourage buildings that are of similar scale and character to existing historic structures. Existing and proposed development along Clinton Street and River Street could benefit from such guidelines, as well as a review of allowed uses. There is currently an overabundance of used car lots in both corridors.

Design standards developed by the Vermont Forum on Sprawl are appropriate for Springfield, especially in consideration of the existing development constraints. These design standards include such things as: reduced building setbacks from the road with parking behind the buildings, clustering buildings around common access roads, reducing the number of access roads, consideration of appropriate scale of buildings in relation to nearby structures, and providing appropriate signs and visual buffers. This information may be found in *Growing Smarter: Best Site Planning for Residential, Commercial and Industrial Development*, published by the Vermont Forum on Sprawl (2001).

Areas that would particularly benefit from such expanded site plan review as well as Access Management include:

- Clinton Street (Route 11) between South Street and the Interstate;
- Chester Road (Route 11) from Route 106 to Snide Road in North Springfield;
- Main Street (Route 11) from Elm Hill Road to North Main Street;
- River Road (VT Route 106) from Main Street (VT Route 11) to its intersection with VT Route 10.

Access to and Protection of the Black and Connecticut Rivers

The Black River is a key natural, scenic and cultural resource for Springfield. Historically, it was used for power; now that use has declined, the river still has important land use functions. The

river's shorelines and access should be enhanced to improve aesthetics and promote economic development. While this Town Plan does not recommend specific development for these areas, attention should be given to improving the quality of existing land use, planning for stormwater runoff, and incorporating buffers in site plans in the river corridor in order to grow without compromising water quality. Existing development such as the Springfield Plaza and former industrial buildings along the river should, to the greatest extent possible, be improved to capitalize on the river's resource potential.

In addition to looking at feasible uses for the former industrial property on Clinton Street, future plans should consider how best to capitalize on the Black River as an aesthetic land use resource.

In addition, the number of gas stations and other uses that could threaten water quality should be limited along roads in that area adjacent to the rivers.

The Connecticut River is also an important natural resource for the town of Springfield. The agricultural land next to the Connecticut River and part way up the Black River has been protected to some degree by a River Protection Overlay District. Conservation of agricultural land next to the river and additional protections in the overlay district could ensure that the river and the scenic agricultural resources next to the river are protected for future generations.

Protection of Scenic Views and the Night Sky

Springfield has numerous scenic views among its hills and in the Black and Connecticut River valleys. Proper land use should take advantage of these scenic views without unduly compromising them. Skitchewaug Mountain, and its companions which front on the Connecticut River in Springfield, are an important part of the overall view up and down the Connecticut River valley. In order to protect these views, development along ridgelines should be prohibited or given height limitations so that structures would not stick out above treelines. (See Natural and Scenic Resources chapter for identification of certain scenic view areas.)

A common element to many views is open pasture and field lands. These can be protected through policies that encourage clustering and good design. Developers can be encouraged to leave open fields open, preserving them as common lands, placing housing in wooded areas at the edge of open fields, and other context-sensitive planning. Planning manuals such as *Growing Greener* and *Conservation Design for Subdivisions* by Randall Arendt include recommendations for zoning and subdivision language that will encourage the preservation of open space and increase density so as to protect valuable scenic and natural resources. Springfield should consider forming a Conservation Commission to deal with this and other recommendations. Viewshed management zones may be a land use tool worth further exploration.

The annual gathering at Stellafane for amateur telescope makers has highlighted the importance of preserving the dark night sky. Lighting standards have been incorporated into the Springfield zoning bylaws, and an overlay district has been established for the protection of the night sky in the vicinity of the Stellafane observatory. Lighting standards should be reviewed and strengthened to minimize additional impacts on the night sky.

Interstate 91, Exit 7 Interchange Area

Since the building of Interstate 91, the area around the Exit 7 Interstate Interchange has primarily served interstate traffic. Important natural resource and recreation areas are also located near the

interchange, especially since the completion of the Toonerville Trail (for bike and pedestrians) which connects Route 5 with downtown Springfield. With the completion of the new correctional facility, and the planned development for the “Springfield East” Industrial Park next to the correctional facility, it is likely that traffic around the interchange area will increase, and development pressure will also increase. The Interchange area provides an important first view of Springfield. Careful attention should be paid to retaining the present natural and scenic characteristics of the area, the efficient flow of traffic due to limited highway access points, the safety of users of the Toonerville multi-use trail, avoiding high traffic commercial generators and the location of businesses adjacent to the interchange that complement businesses in the downtown. This latter concern has been addressed with the Exit Seven (7) Zoning District.

Using The Future Land Use Map

The land use category definitions that follow are descriptions of the areas shown on the Future Land Use map. They are meant to serve as a guide to the types and intensities of uses appropriate for each area by describing the values, or “functions,” that it provides for the Region. The definitions do not prescribe or prohibit a specific use or set of uses for any category; the actual uses of land will have significant overlap between categories. For example, forestland will continue to support rural residential development, conservation land will support many types of recreation, and some recreation land will support forestry use. Planning for future development should take into account the functional viability of various land uses. If a particular land use is significantly compromised so that it cannot function in a sustainable manner, inevitably the larger whole will be impacted. It makes sense that this potential cost is weighed in advance, rather than after the fact. Development is inappropriate if, alone or combined with other uses in the area, it threatens the values described below.

The Future Land Use Map is general in nature, and the boundaries of different areas were drawn with this in mind. They are not meant to be detailed representations of present conditions, nor are they intended to be precisely bounded areas of completely segregated land uses for the future.

Categories

1. *Agricultural*

Agricultural land is important to the town’s economy, food supply (in the form of local farmers markets), cultural heritage, and rural character. It is a major contributor to the land use patterns and aesthetic qualities that make Springfield a desirable place to live, work, and visit. Land in agricultural use, and idle open land with agricultural potential both possess these values. The potential for agricultural use and production should be maintained in designated agricultural areas wherever possible.

2. *Forest*

Forest resources are valued for their ability to provide wildlife habitat; protect air and water quality; support timber production and forest products economies; and provide opportunities for outdoor recreation. In town forests, public access and educational and recreational value should be the highest priorities, therefore these areas are noted as both forest and recreation on the map. In some areas, especially those served by existing roads, forest areas will also accommodate residential and agricultural uses.

3. Recreation

Public and private indoor and outdoor recreation opportunities are a vital part of the Springfield's quality of life. Publicly accessible recreation opportunities should be enhanced where possible, and should not be significantly diminished. Designated recreation areas should retain their recreational value to the public; where development would reduce recreational opportunities, alternatives should be provided whenever feasible.

5. Conservation

Conservation areas are lands that possess outstanding value or potential as wildlife habitat, recreation areas (according to individual management plans), educational resources, fragile natural areas, protection of water supplies, or aesthetic resources. Conservation lands represent relatively pristine areas of Springfield that residents wish to preserve in their natural state for future generations, and should receive the highest level of protection from development. Special care should be taken in any resource management or extraction plans to maintain the character and value of these areas. Conservation areas are especially beneficial when surrounded by compatible uses such as forest and agriculture.

6. Mixed Use

Mixed use areas should be used for a combination of higher density residential, a variety of commercial, and some light industrial uses. These uses should also be surrounded by and interspersed with public and recreational uses. Development in these areas should be of the highest density, and should facilitate development of a circulation system that accommodates pedestrians and other non-vehicular travel.

7. Industrial

Industrial areas are meant to accommodate heavier industrial uses that may not be appropriate for mixed use areas, as well as concentrations of lighter industrial uses. Industrial areas should be used both to isolate industries incompatible with commercial and residential areas, and to congregate industrial uses where traffic and other impacts can be lessened by planning and mitigation techniques.

8. Institutional

Institutional areas represent substantial areas of land that should continue to be used for government, transportation, educational, and other similar facilities.

Special Considerations in all Land Use Categories

There are several important resources that may occur within any of the land use categories, and which merit special attention and protection. They include: Public Water Supply Source Protection Areas; floodplains; slopes; vegetated areas next to surface waters; wetlands (as defined by the Vermont Wetland Rules); Natural Heritage Inventory sites; critical deer wintering habitat and bear habitat as defined by the Vermont Agency of Natural Resources; regionally significant historic sites; and other locally defined sensitive natural areas and scenic resources. Development should avoid and minimize negative impacts to these resources.

Goals

1. Minimize the negative impacts of sprawl and strip development that is occurring on major roads outside the downtown.

2. Encourage the adaptive reuse of underutilized and vacant structures and lands.
3. Encourage smart growth in the community through the identification and mapping of optimal growth areas.
4. Preserve the character of residential neighborhoods.
5. Preserve scenic views, productive forests and agricultural land via cluster development and effective design practices. [See *Growing Greener* and *Conservation Design for Subdivisions* by Randall Arendt].
6. Promote revitalization and redevelopment of the former industrial properties on Clinton Street in a way that does not negatively impact businesses in the downtown and the Plaza.
7. Encourage all development along the Black River to capitalize on the river's aesthetic, land use, resource potential.
8. Retain the present natural and scenic characteristics of the Exit 7 interchange area.
9. Enhance public awareness of historic buildings and sites in Springfield's downtown, whose enhancement would improve the downtown's streetscape and promote economic development and revitalization.
10. Promote a greater awareness of Springfield's archaeological heritage.
11. Enhance the overlay districts which protect the farmland along the Connecticut River, and create an overlay district for development next to the Black River.
12. Create a Conservation Commission to oversee the protection of important natural and scenic areas.
13. Retain and improve access to and use of public lands, and ensure that any development adjacent to public and semi-public lands will not unreasonably affect the beneficial public use of these lands.
14. Preserve the use of the Hartness Airport and enhance the airport area to protect the abutting uses, while promoting the airport, which benefits the residents of the region.
15. Improve and clarify review procedures for regulation amendment and adoption.
16. In the Regulations, consider the use of incentives, rather than limits, to promote desired development, conservation, and economic growth.

Objectives

1. Develop additional design and site plan review specifications for areas that are already impacted by strip development in order to reduce negative impacts of such development.
2. Develop standards for access management, expanded site plan review and conditional use criteria which promotes shared access to multiple sites and interconnection of adjacent development along major highways, and provides for the needs of bicyclists and pedestrians.
3. Adopt performance standards for commercial and industrial development, which set specific limits on noise, air pollution (dust, ash, fumes, vapors, gases), hazardous and flammable

materials use or storage, light, vibration, odors, and distance from residential units for use in permitting and site plan review.

4. Adopt and maintain design specifications for commercial development, which include such things as: reduced building setbacks from the road with parking behind the buildings, clustering buildings around common access roads, reducing the number of access roads, and providing appropriate signs and visual buffers. [See *Growing Smarter: Best Site Planning for Residential, Commercial and Industrial Development*, published by the Vermont Forum on Sprawl (2001)].
5. Maintain the downtown as the heart of Springfield through the use of financial and non-monetary incentives, and targeted municipal investment.
6. Maintain the economic vitality of the Springfield Plaza and continued development and marketing of the plaza for new business, while encouraging safe traffic patterns, access, parking, and further aesthetic improvements.
7. Ensure that most commercial uses are not located in residential areas, but rather are limited to the downtown or designated commercial areas; those uses that would improve neighborhood character, such as "mom and pop" stores and home occupations should be allowed in residential neighborhoods.
8. Improve the quality and condition of existing housing in the downtown and encourage housing as one of the redevelopment options for dilapidated or underused buildings.
9. Identify sites for future growth based upon the Principles of Smart Growth listed in this chapter.
10. At the Exit 7 interchange, prohibit the expansion of new businesses adjacent to the interchange, and allow for the expansion of existing businesses to uses which will not compete with businesses in the downtown.
11. Retain the Exit Seven (7) Zoning District, and implement measures that could be used to address the following interchange issues, namely, an access management program that would control curb cuts, and expanded site plan review that would include strict requirements for lighting, noise, aesthetics, signage, landscaping and screening, parking and open space and non-vehicular traffic
12. Evaluate the number and participation on volunteer boards/commissions in Springfield to ensure the most efficient distribution of volunteer time and energy. Consider whether some of these groups could take on tasks associated with a Historic Preservation Commission and/or Conservation Commission. Investigate the potential for Springfield pursuing and attaining the status of "Certified Local Government program" for historical resources.
13. Enhance the preservation of scenic views and forestry and agricultural land in the Town Zoning Regulations through Land Reserve zoning and an expanded Riverfront Protection Overlay District along the Black and Connecticut Rivers.
14. Encourage housing developments that preserve scenic resources through clustering or careful siting of building lots, and other context-sensitive planning. (See *Growing Greener*, by Randall Arendt.)

15. Undertake a planning study for Clinton Street that includes revitalization of former industrial areas as well as alternatives for enhancing access and appreciation of the Black River.
16. Form a Conservation Commission to inventory and conduct studies of important natural resources, assist the planning commission and zoning board of adjustment on the environmental impact of projects on the town's resources and provide and assist the town on matters affecting the local environment.
17. Review and improve regulations and policies to improve and ensure the continued access to public lands, and require any development adjacent to public and semi-public lands to continue to provide access to these lands.
18. Study and design a zoning district for the area around the Hartness Airport to preserve and enhance the uses of the airport.
19. Examine current land use patterns, to determine future land use from a long term, cost/benefit perspective, in order to avoid additional costs to the town's infrastructure, unwanted sprawl, and the loss of cultural, historic, economic, agricultural, scenic and aesthetic resources.
20. Expand site plan review criteria and increase the variety of uses subject to the review, in order to more readily achieve the goals and objectives of this Town Plan.

Chapter 12 – Implementation and Relationship to other Plans

Plan Implementation

The Town Plan serves as a guide for the future planning efforts of the Planning Commission and local officials. The Plan can also be used to justify and prioritize the use of state and federal funds for community development, transportation improvements, natural resource protection and management, and other investments. In addition, Act 250 requires that developers show that projects conform to local and regional plans.

Many of the strategies for implementing the goals of the Springfield Town Plan are included in the “Objectives” section of each chapter. The Planning Commission has selected the following activities as priorities for the implementation of the Town Plan:

1. Develop a comprehensive Capital Budget and Program to incorporate all utilities and facilities maintenance and upgrade projects as outlined in the Utilities and Facilities chapter of the Plan.
2. Update zoning bylaws and subdivision regulations to reflect the revised goals and objectives outlined in the Town Plan.
 - Enhance the preservation of scenic views and forestry and agricultural land in the Town Zoning Regulations through Land Reserve zoning and an expanded Riverfront Protection Overlay District along the Black and Connecticut Rivers.
 - Develop additional design and site plan review specifications for areas that are already impacted by strip development in order to reduce negative impacts of such development.
 - Develop standards for access management, expanded site plan review and conditional use criteria which promotes shared access to multiple sites and interconnection of adjacent development along major highways, and provides for the needs of bicyclists and pedestrians.
 - Adopt performance standards for commercial and industrial development, which set specific limits on noise, air pollution (dust, ash, fumes, vapors, gases), hazardous and flammable materials use or storage, light, vibration, odors, and distance from residential units for use in permitting and site plan review.
 - Adopt and maintain design specifications for commercial development, which include such things as: reduced building setbacks from the road with parking behind the buildings, clustering buildings around common access roads, reducing the number of access roads, and providing appropriate signs and visual buffers. [See *Growing Smarter: Best Site Planning for Residential, Commercial and Industrial Development*, published by the Vermont Forum on Sprawl (2001)].
 - Maintain the economic vitality of the Springfield Plaza and continued development and marketing of the plaza for new business, while encouraging safe traffic patterns, access, parking, and further aesthetic improvements.
 - Encourage housing developments that preserve scenic resources through clustering or careful siting of building lots, and other context-sensitive planning. (See *Growing*

Greener, by Randall Arendt.)

- Retain the Exit Seven (7) Zoning District, and implement measures that could be used to address the following interchange issues, namely, an access management program that would control curb cuts, and expanded site plan review that would include strict requirements for lighting, noise, aesthetics, signage, landscaping and screening, parking and open space and non-vehicular traffic.
 - Study and design a zoning district for the area around the Hartness Airport to preserve and enhance the uses of the airport.
3. Undertake a planning study for Clinton Street that includes revitalization of former industrial areas as well as alternatives for enhancing access and appreciation of the Black River.
 4. Evaluate the number and participation on volunteer boards/commissions in Springfield to ensure the most efficient distribution of volunteer time and energy. Consider whether some of these groups could take on tasks associated with a Historic Preservation Commission and/or Conservation Commission. Investigate the potential for Springfield pursuing and attaining the status of “Certified Local Government” for historical resources.
 5. Form a Conservation Commission to inventory and conduct studies of important natural resources, assist the planning commission and zoning board of adjustment on the environmental impact of projects on the town’s resources and provide and assist the town on matters affecting the local environment.
 6. Work with public and private entities to help them design development or resource management plans in ways that will further the goals of this Plan.
 7. Support projects that improve the quality and condition of existing housing in the downtown and encourage housing as one of the redevelopment options for dilapidated or underused buildings.

Relationship to Local and Regional Plans

Springfield is sensitive to its role as a neighbor in a larger community of towns. Accordingly, as we work towards the goals and objectives of this plan, we do so in view of the surrounding towns. Some of the results of actions taken to implement this plan will have regional consequences. Action taken by surrounding towns, as well as the state, also have an impact on the Town of Springfield. Each jurisdiction needs to work toward a coordinated effort. The regional planning commission can play a role in helping to coordinate plans, policies and development that affects neighboring towns.

Neighboring Towns

In order for Springfield to carry out its land use planning goals, the Town must evaluate the Town Plan in relation to plans of neighboring towns and the region. Springfield is surrounded by the towns of Weathersfield, Chester, and Rockingham, and is located across the river from Charlestown, New Hampshire. The Town of Baltimore shares only a corner with Springfield, but sends students to Springfield schools because of its accessibility. All of the towns surrounding Springfield have town plans and zoning ordinances. None of these plans is in conflict with the

Springfield Town Plan.

The town of Weathersfield, to the north of Springfield, is currently working on updating its Town Plan. The future land use map, as it is currently adopted, does not conflict with the future land use map of Springfield. Weathersfield has designated the area around Stoughton Pond and the Springfield Reservoir for recreation, and the land that encompasses the airport for institutional use. Other areas that meet the boundaries of Springfield are designated for forest or agricultural use. These uses coincide with Springfield's goals for the northern part of town, which has primarily been designated "forest" on the future land use map. The land surrounding the Springfield Reservoir is owned by the Town of Springfield but is located within the Weathersfield town boundaries. Town plans for both towns describe this area as being important for both wildlife habitat and recreation.

Chester is also in process of adopting its Town Plan. On the proposed future land use map for the town, the area that abuts the town of Springfield is designated for residential use. The town has similar planning concerns to those in Springfield, and overall the goals are compatible with those in the Springfield Town Plan.

The town of Rockingham's plan for future land use does not conflict with the land use planned for Springfield on the southern end of town. In Rockingham, most land that borders Springfield is designated as forest preserve, resource, or rural. The Rockingham Town Plan acknowledges Springfield's role as an employment center, stating that impacts on jobs in Springfield impact towns beyond its borders.

Springfield's Role in the Region

Springfield serves as a regional center for many towns in southern Windsor and northern Windham County. The town has historically been an employment center for many towns beyond those that share its boundaries, and is home to state offices for the region, the Howard Dean Education Center, and a planned regional recreation center. The town is served by the District 2 Environmental Commission, and is located in Vermont Agency of Transportation District 2. Springfield participates with

The 2002 Southern Windsor County Regional Plan identifies Springfield as a Regional Center. This document provides broad guidelines for planning, coordination and review of the natural, cultural, social and economic features of the Southern Windsor County region. The Southern Windsor County Regional Plan, Regional Transportation Plan and Regional Bicycling and Walking Plan are companion documents to the Springfield Town Plan, providing a broader framework and context for local planning efforts. The Town Plan should support and complement the land use and development goals of these regional planning documents.

In addition to partnering with the Southern Windsor County Regional Planning Commission (SWCRPC) in the planning process, the town works with the Springfield Regional Development Corporation and Springfield Chamber of Commerce (and Regional Marketing Organization) on economic development issues. The economic development chapter of the Springfield Town Plan was based on the Southern Windsor County Regional Strategic Economic Development Plan, a document that was developed through a partnership with all of these regional entities as well as representatives from other towns in the region.

The Town of Springfield will continue to partner with these organizations in order to implement the goals of the Town Plan.

Appendix A — Historic Building and Sites Composite Inventory List

This listing is not to be considered as all inclusive as there may be other significant sites and structures to add.

Composite Historic List #	Name of Historic Building or Site	Historical Significance
1	Brown/Holt/Whitcomb House - 1802	Original use - Tavern and Hotel. Was rehabilitated to an apartment.
2	Brown/Field House - 1797	Built by Elisha Brown.
3	Spindler House - 1815	Federal style - the first Methodist Parsonage.
4	Covered Bridge	The covered bridge is now located beside the Eureka Schoolhouse. Originally, it was located across the Great Brook in North Springfield. This is the last covered bridge in Springfield.
5	Olney House - 1830	Greek Revival. Temple Portico Porch. The first Congregational Parsonage.
6	Hall/Comstock House - 1803	Federal style - originally a farm house. Purchased by Federal Govt. in WWII. Was in the Hall family from 1835-1952. Built by Leonard Walker.
7	Dana/Stone/Hopkins House - 1809	Called Stoneholm. Built by Captain Thomas Dana.
8	Wood/Dartt/Smith/Rogers - House - 1842	Stone house, built by Jeremiah Wood. Stone quarried from nearby Scrabble Four Corners.
9	Walker/Crawford/Hamilton House - 1800	Also known as Shedd Hill. Builder unknown.
10	Davis/Adams/Clark/Farnsworth	Federal style - built in 1810 by Davis. House - 1810
11	Fletcher/Dutton/Snell House - 1811	Federal style - built in 1811 by J&H Davis.
12	White/Burr/Ginter House - 1820	Federal style stone house.
13	Fletcher/Cutler/Eldridge House - 1790	Georgian style - 1790 by Fletcher. Originally a Tavern and Hotel
14	Damon/Davis/Baker House - 1792	Built by Samuel Damon. Cape Cod style with central chimney.

15	Gould/Hadwen/Baker House - 1823	Federal style - 1825c. Built by William Gould who owns "Gould's Mills"
16	Fletcher/Tanner/Luce House - 1790	Built by Philip Safford - Georgian type.
17	Eureka Schoolhouse - 1785	Oldest in Vermont. Dismantled and stored in 1959, then re-erected in 1968.
18	Site of John Nott's First Home - 1752	Located just south of the mouth of the Black River.
19	Cheshire Bridge	The first bridge, wooden, built in 1806 by Isaac Fisher. The present bridge was built in 1930.
20	Ferry House - c.1775	House was part of package including ten acres of land when ferry rights were granted by Governor Wentworth for the ferry-keepers and their families. Originally was located near the river bank.
21	Wentworth Ferry	Ferry rights granted to Simeon Olcott in 1772. Ferry connected Fort #4 and the Crown Point Road.
22	French Meadows	This area supposedly got its name by the fact that a few Frenchmen came to visit and live with a tribe of Abenaki Indians during the French and Indian Wars.
23	Blockhouse Location	Located next to the river bank, about one mile north of the Black River, at the start of the Crown Point Road built in June, 1760. Because of erosion of the river bank, the foundation no longer can be seen.
24	Lewis R. Morris House - 1795	Georgian style. Unusual features are: 1st floor hall and the cellar. Erected for Morris - 1795c. Built by Samuel Lewis.
25	Spencer Hollow Schoolhouse - 1800	Built as early as 1790. Brick load bearing construction. Repaired in 1974.
26	Fulling Mill	First in Springfield operated by William Griffith, located in Spencer Hollow on the Spencer (Sartwell, Button) Brook.
27	John Nott's "Mansion" Home	Site location at the southern intersection of the Crown Point Road and Spencer Hollow Road.
28	Arms/Whitcomb/Estey House - c.1773	Served as a tavern during the Revolutionary War. Located along part of original Crown Point Road.

29	Woolson House - 1815	Federal style.
30	Sartwell Hill Settlement - 1753	The first settlement in Springfield, by eleven families. Location was just south of Bishop's farm on the height of land.
31	Whitney/Shenk House - 1780	Located in Spencer Hollow, the house was built by Cyrus Whitney.
32	John Gill/Whitney/Whitcomb House	This large, two-story house was built about 1815 and was perhaps the town's first poor farm from 1832 to 1847. Also was a tavern at one time.
33	Gaylord Tavern/Spring	The marker for the Gaylord Spring, found near the Rufus Estey place, was used for the tavern operated in early Eureka history.
34	Hubbard/Burton/Richards House - 1815	Federal style. Erected by four master masons in four days. 1815-1820c. by Hubbard. Original site in 1790.
35	Hartness House	Built in 1904 for James Hartness. Shingle style. In the late 1950's, it became a restaurant and hotel.
36	Boutelle/Slack/Creaser House - 1802	Federal style. 1802 by Eliot Lyndes.
37	Smiley/Hartness/Flanders Manse - 1815	High Federal style. Built in 1815 by Smiley. Remodelled by Flanders, 1929. High quality architecture. Hartness bought house and property in the early 1900s.
38	Whitcomb/Taylor/Millikin House - 1798	This Cape Cod house with a central chimney was built by Jacob Whitcomb, a sea captain from Cohasset, Massachusetts.
39	Whitcomb House - 1798	The original owner of this house was Shubael Whitcomb. Six generations of Whitcombs lived in this house.
40	Town Farm (Stevens' Site - 1762)	This house is located on the site where one of the forefathers of Springfield, Simon Stevens, built his log cabin. It at one time served as the town farm. The house burned in early 1900s and was rebuilt.
41	Litchfield/Whitney House - 1798	The house was built by James Litchfield and is located near the site of his log cabin built in 1792.

42	Litchfield/Ellis/Houle House - 1803	Also built by James Litchfield, where Mary Ellis, a local historian, lived in her early years.
43	Jarvis/Robison/LaPoint House - 1840	"Snecked Ashlar" construction.
44	Airport	One of the oldest in Vermont and Eastern U.S. in use. Originally known as Springfield Landing Field, then as Hartness Municipal Airport. James Hartness - 1919-20. The Hanger -1920c. Springfield Manufacturer's Association -1925. Given to the Town in 1930.
45	Weeden/Trefry/Nobes House - 1840c.	1840c. by John Farnham and Leonard Parker. Greek Revival style. Distinguished exterior is the Sawtooth brick cornice (front and side elevations).
46	Field/Hannah House - c.1774	Located on Main Street in North Springfield, is reported to have been built before the Revolutionary War and was occupied for many years by the Field family.
47	Fuller/Watson-Jones/Easton House - 1813	This house was probably built around 1800,with the bricks placed over the wood in 1813. A place "where the Indians came to have dances," perhaps from French Meadows. The downstairs was used as a tavern with the dancing upstairs.
48	Lockwood Cemetery	Located on Fairgrounds Road, the cemetery has several graves, mostly of the Lockwood family.
49	Stellafane/Telescopes	Home of Springfield Telescope makers.
50	Springfield Art and Historical Society	Eclectic architecture. Built for Prentis Whitcomb in the 1860s as an Italianate Villa. Remodelled 1917, by Walter Slack. Left to the Town as an art center and historical society in 1955 by Edward Miller. Originally called the Miller Art Center.
51	Springfield Bog	Although there are more than eighty bogs listed in Vermont, this one is not large enough to be one of them. It has walks provided by the Audubon Society.
52	North Mowings (Brown House)	1790c. - David Fletcher. Georgian style. Built for two families.
53	Graystone Farm	"Snecked Ashlar" construction. Erected by Jeremiah Wood. Built in 1843.

54	Stoneholm Farm	Federal style farm house. 1809 - Thomas Dana. Has stone window lintels with keystones.
55	Barrett/Butterfield/Walsh House	Georgian style. Built in 1772 by John Barrett. 1777-delegated to Windsor State Convention. 1947 -fire destroyed the ell & damaged rear of second story. Oldest standing frame house in Springfield. Built on the original Blockhouse Farm.
56	Gilbert House	"Sneaked Ashlar" construction. Built in 1857.
57	Fellows House	1910c.- E. Fellows. Shingle style.
58	Slack House 1890c.	Slack, president of John Slack Corp. Renaissance Revival House.
59	Flinn Garage	A.J. Fullam built it pre 1900. Original was intended as Summer Hill Terminus for an aerial cable car. Garage was eventually owned by John Slack.
60	Hines Garage	Spanish Revival style.
61	Quigley House	Shingle style bungalow.
62	Armstrong House	Queen Anne style.
63	Bennett House	Shingle style with Queen Anne and Renaissance Revival features.
64	North Springfield Dam	Part of the system of dams along the Connecticut River valley used for flood control. It was completed in 1960.
65	Russian Orthodox Church	Built as a private home in the 1800's, purchased in early 1900s by the Church and converted. Bell tower - 1911.
66	Springfield Bakery	1930s Modern architecture.
67	Woolson Block	1886 by Amasa Woolson. One of the finest blocks in the Village.
68	Spafford Library	1895 - with a bequest of \$20,000 left to the Town in 1893 by Spafford. Renaissance Revival style, order used Corinthian. In 1927 a wing was added.
69	Congregational Church	1833-1836. Simple Greek Revival. 1869 - remodelled in High Victorian Gothic Style with bell tower. 1927 - remodelled in Georgian Revival Style.

70	Bank Block	1908 - Renaissance Revival.
71	The Commons	Location of the first meetinghouse in Springfield. At one time there were blacksmith shops, a shoe shop and powder house on The Commons. Nearby was a school and tavern. See marker for meetinghouse.
72	Sparrow Block	Original residence of Isaac Fisher. Also known as Tontine and later as Commonwealth Block - 1812. Remodelled by Sparrow - 1894.
73	McKinley Block	An addition to Lincoln Block. This helped define the corner of Main and Summer Hill St.
74	Lincoln Block	1880s - Jonathan Chase. 1895 - rebuilt by W. Walker. Renamed Lincoln Block - 1904.
75	Leland Block	1884 - rebuilt by Leland for dry goods and general merchandise store.
76	Methodist Church	1843-44, erected-Gothic Revival. Remodeled in 1866, 1882 and 1886. The two Bell Towers are Gothic Style. In 1961 the church was remodeled and expanded.
77	Methodist Church Houses	1834 - G. Washburn and D. Cushing. Early Nineteenth Century Style.
78	Cobb and Derby Mill	1882 - Cobb and Derby. Late Nineteenth Century mill architecture. Overlooks Falls of the Black River.
79	Springfield Community Center and Lovejoy Tool Company	Late Nineteenth Century industrial manufacturing complex. Erected by Jones & Lamson Machine Co. - 1888 and 1893. Brick building - 1915c. The Community Club was formed in 1919 using this building. Later part was used for the senior citizens.
80	Commemorative Marker	1909 - the marker commemorates the building of the Crown Point Road and Block House on Connecticut River.
81	Jones & Lamson	Completely landscaped industrial manufacturing complex.
82	Fellows Gear Shaper Housing Complex	1919 - fifty houses on the old Harlow Farm. One-family units except for a few duplexes. Example of an industry-sponsored community project.
83	North Baptist Church	1835 - Greek Revival style. Remodeled in High

		Victorian Gothic style from 1885-86.
84	Black River Corridor	One of the main routes (called the Indian Road) for Indian travel was along the Black River to the Connecticut River.
85	Connecticut River Corridor	The river was the primary route used by pioneers and settlers in this area when leaving towns in southern New England.
86	Parker Hill/Cemetery	Parker Hill became the second village in Springfield, reaching its peak in the late 1790 and early 1800s. The cemetery was in general use from 1794 until 1857.
87	Crown Point Road/Burying Ground	The cemetery was used while building the Crown Point Road in 1760 and is located near the road about one-half mile from US Rt. 5.
88	Indians Meadows/Dig	In 1990 an archaeological dig was made along the Connecticut River near where Indians made temporary homes on the meadows north of the Cheshire Toll Bridge.
89	Tory Cave	Located on the cliffs of Skitchewaug Mountain overlooking the Connecticut River. It was believed used by Indians and was a place of hiding for Tories during the Revolutionary War.
90	Walker Cemetery	Located on Putnam Road. It was used mostly for the Walker family in the mid 1800s.
91	Spencer Hollow	Named after the three Spencer brothers who settled there in the early 1760s.
92	Bettergneau Falls	Located on Sartwell Brook, now known as Spencer Brook, east of Eureka Road where the brook flows down into the valley (Spencer Hollow).
93	Eureka Street	The main street or road when Eureka was the center of activity in the 1770s and 1780s. This was the first village of Springfield with several businesses.
94	Old County Road - 1770	The connecting road between Rockingham Meeting House, Springfield, Weathersfield and Windsor. The second most important road in Springfield in the late eighteenth century.
95	Eureka Cemetery	Used by the inhabitants of Eureka village from 1768

to 1784. About forty people buried there.

96 Summer Hill Cemetery

This cemetery came into use about 1784. Located across from The Commons.

Sources:

1. "Historic Sites and Structures Survey" - Vermont Division of Historic Sites.
2. "Tour of Historic Places in Springfield" - Frederick W. Richardson, Springfield Historian, 1992

Appendix B — Recreation Resource Inventory

<u>Facility Name</u>	<u>Size</u> (Acres)	<u>Owner</u>	<u>Facilities/Activities</u>
Community Recreation Center 139 Main St.	N/A	Town	Recreation Department Offices, Senior Center Offices, all purpose rooms, game rooms, ceramic room, gym, bowling alley, kitchen
Westview Park	½	Town	Playground equipment and open space
Riverside Park	11	Town	1 Baseball, 1 Soccer, and 5 Softball/Youth Baseball Fields, Outdoor Basketball and 6 Tennis Courts, Skateboard Park, Outdoor Swimming Pool, Picnic Areas, and Playground Equipment
Freedom Park 7	Town	Skating Rink with	warming hut, Tennis Court, Open fields that see a lot of use from the neighborhood.
The Commons	2	Town	Skating Rink with warming hut, Peewee baseball and softball field, playground
North Springfield Park	2	School Board	Skating Rink with warming hut, and Youth Soccer field
North Springfield Ballfield	2	Ellsworth's Ice Cream	Adult Softball, and grade baseball
Toonerville Trail	3 miles	Town	Bike and Pedestrian Trail
Hartness Park	85	Town	Trails, Picnic Area, Timber Management
Meeting Waters (Bryant)	197	Town	Timber Management, Nature
Municipal Forest		Trails	
Weathersfield Reservoir, Municipal Forest	100	Town	Reserve Water Supply, Timber Management, Canoeing, Wildlife habitat
North Springfield Reservoir Property	1800	US Army Corps of Engineers	Flood Control Dam and Reservoir, Boat and Canoe launch, Fishing, Trails, Picnic Areas, Campgrounds
Hoyt's Landing	64	VT Fish & Game	Boat Launch, Fishing, Picnic Area
Skitchewaug Wildlife Management Area	216	VT Fish & Game	Wildlife and Timber Management
Gurney Field	3	School Board	Soccer and Track
Porter Field	2	School Board	Field Hockey
Brown Field	3	School Board	Football

Appendix C — Housing Tables

Table C1 - 1980 to 2000 Comparison: Springfield Vs. Regional Housing

Source: US Census Bureau, 1980-2000

TOWN	1980 Total Units	1990 Total Units	Numeric Change 1980-90	% Change 1980-90	2000 Total Units	Numeric Change 1990-2000	% Change 1990-2000
Andover	229	301	72	31.0%	347	46	15.3%
Baltimore	78	88	10	12.8%	105	17	19.3%
Cavendish	649	785	136	21.0%	860	75	9.6%
Chester	1,360	1,527	167	12.3%	1,611	84	5.5%
Ludlow	1,726	2,677	951	55.1%	3,001	324	12.1%
Reading	354	394	40	11.3%	407	13	3.3%
Springfield	4,076	4,256	180	4.4%	4,232	-24	-0.6%
Weathersfield	1,069	1,249	180	16.8%	1,315	66	5.3%
West Windsor	487	773	286	58.7%	716	-57	-7.4%
Windsor	1,584	1,647	63	4.0%	1,611	-36	-2.2%
SWCRPC Region*	11,612	13,697	2,085	18.0%	14,205	508	3.7%

*The Region served by the Southern Windsor County Regional Planning Commission

Table C2 - 2000 Comparison: Housing by Number of Units per Structure

Source: Census 2000 Summary File (SF 3) - Sample Data

Area Name	Total housing units	1-unit, detached	1-unit, attached	2 units	3 or 4 units	5 to 9 units	10 to 19 units	20+ units	mobile homes	boat, RV, van, etc.
Andover	350	306	16	12	5	0	0	0	11	0
Baltimore	113	91	0	10	0	0	0	0	12	0
Cavendish	852	620	10	52	28	35	0	2	100	5
Chester	1,611	1,221	21	75	57	48	35	30	116	8
Ludlow	3,001	1,498	184	190	279	603	21	82	144	0
Reading	404	340	6	4	8	0	0	0	36	10
Springfield	4,232	2,699	83	299	364	237	93	239	218	0
Weathersfield	1,315	957	14	25	4	0	5	0	310	0
West Windsor	716	571	16	9	11	27	70	0	12	0
Windsor	1,611	928	17	192	209	107	21	67	70	0
SWCRPC Region	14,205	9,231	367	868	965	1,057	245	420	1,029	23

Table C3 - Multi-family and mobile home units (i.e. all units except single family)

Area Name	Total housing units	Single Family # Units	SF %	Mobile Homes	MH %	Multi-Family Units*	MF %	Other	Other %
Andover	350	332	94.9%	11	3.1%	17	4.9%	0	0.0%
Baltimore	113	91	80.5%	12	10.6%	10	8.9%	0	0.0%
Cavendish	852	630	73.9%	100	11.7%	117	13.7%	5	0.6%
Chester	1,611	1,242	77.1%	116	7.2%	245	15.2%	8	0.5%
Ludlow	3,001	1,682	56.0%	144	4.8%	1,175	39.2%	0	0.0%
Reading	404	346	85.6%	36	8.9%	12	3.0%	10	2.5%
Springfield	4,232	2,782	65.7%	218	5.2%	1,232	29.1%	0	0.0%
Weathersfield	1,315	971	73.8%	310	23.6%	43	3.3%	0	0.0%
West Windsor	716	587	82.0%	12	1.7%	117	16.3%	0	0.0%
Windsor	1,611	945	58.7%	70	4.3%	596	37.0%	0	0.0%
SWCRPC Region*	14,205	9,608	67.6%	1,029	7.2%	3,564	25.1%	23	0.2%

*The Region Served by the Southern Windsor County Regional Planning Commission

**Structures with two or more units occupied by separate households.

Table C4 – Existing Assisted Housing in Springfield

Source: Vermont State Housing Authority

Name	Location	Owner	Total # of Units	Elderly Units	Handicapped Accessible Units
Bluegrass Hills	Seavers Brook	Emile Legere	44	0	0
Edwin L. Huber Building	80 Main Street	Springfield Housing Authority	60	60	3
Louis H. Whitcomb Building	1 Mineral Street	Springfield Housing Authority	72	72	7
The Maples Building	South Street	Springfield Housing Authority	28	28	4
Mountain View Apartments	Southridge Street	MVHLP (managed by SHA)	72	0	0
Southview Apartments*	South Street	RACLT	69	0	0
Westview Apartments*	Near Plaza	Realty Resources (managed by SHA)	58	11	4
154 Paddock Road	Paddock Road	RACLT	6	0	0
12 Valley Street	Valley Street	RACLT	2	0	0
54 South Street/Red Maple Mobile Home Park	South Street	RACLT	2 apartments 7 mobile homes	0	0
Housing Choice Vouchers	Scattered	Varies (Administered by SHA)	61	0	0
Total			479	171	18

*Assisted units in Westview and Southview are not fixed certificates but are Section 8 certificates assigned to individuals. These numbers fluctuate up and down regularly

SHA = Springfield Housing Authority

RACLT = Rockingham Area Community Land Trust

Table C5 – Proportion of Population and Housing by Town, Windsor County: 2000

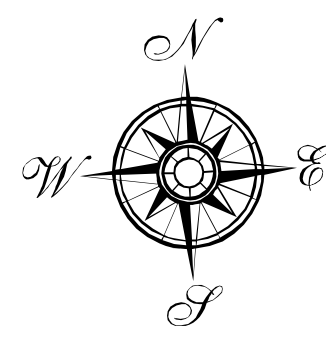
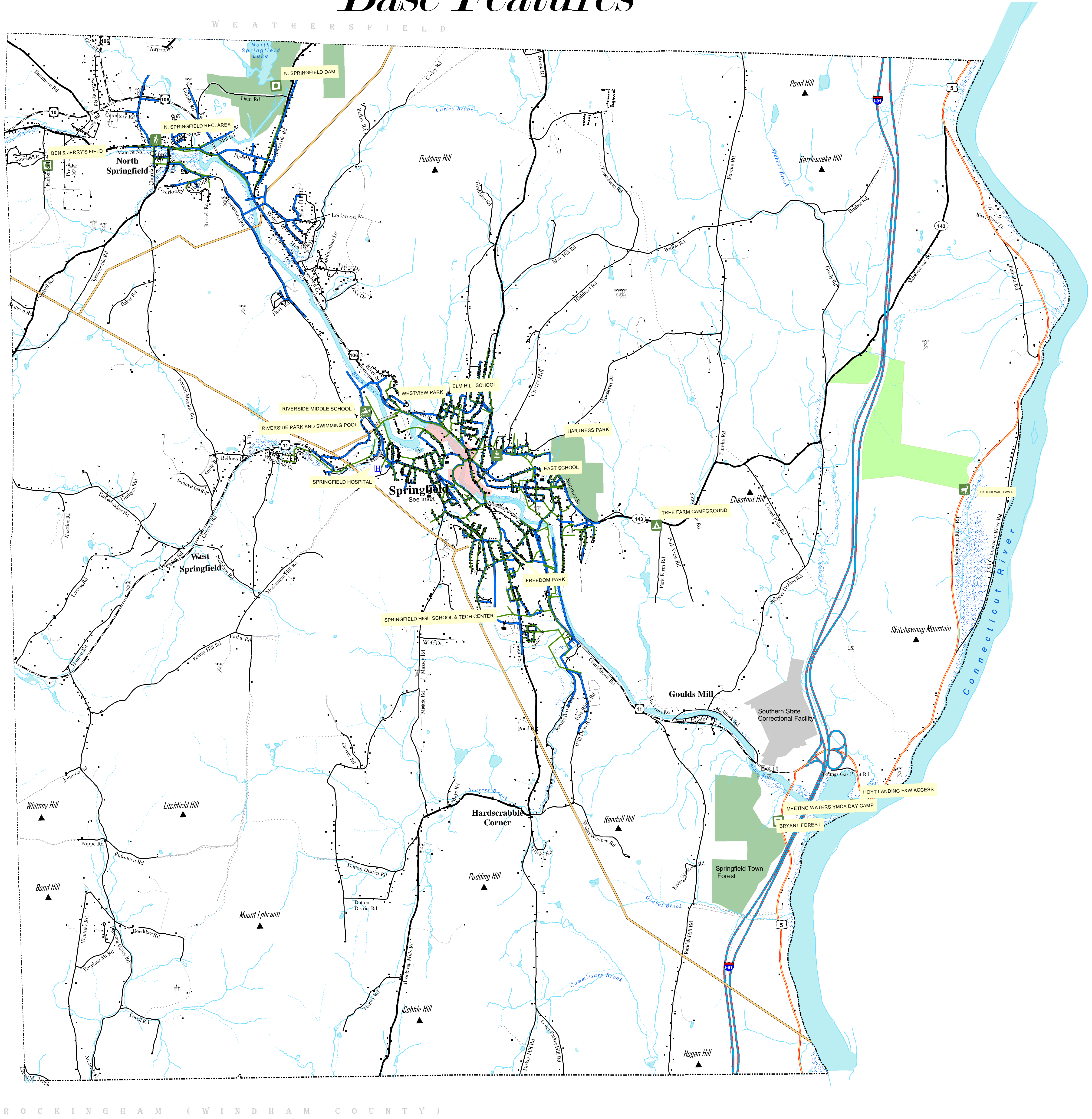
Source: Census 2000 Summary File (SF 1) 100-percent data and Vermont State Housing Authority

Area Name	Total Population	% of Windsor County Population	Total Housing Units	% of Windsor County Housing	Total Assisted Units**	% of Windsor County Assisted Units
Andover Town	496	0.9%	347	1.1%	0	0.0%
Baltimore Town	250	0.4%	105	0.3%	0	0.0%
Barnard Town	958	1.7%	629	2.0%	0	0.0%
Bethel Town	817	1.5%	956	3.0%	10	0.7%
Bridgewater Town	980	1.7%	582	1.8%	14	1.0%
Cavendish Town	1,470	2.6%	860	2.7%	6	0.4%
Chester Town	3,044	5.4%	1,611	5.1%	65	4.7%
Hartford Town	10,367	18.4%	5,493	17.4%	285	20.7%
Hartland Town	3,223	5.7%	1,382	4.4%	0	0.0%
Ludlow Town	2,449	4.4%	3,001	9.5%	59	4.3%
Norwich Town	3,544	6.3%	1,505	4.8%	24	1.7%
Plymouth Town	555	1.0%	773	2.4%	0	0.0%
Pomfret Town	997	1.8%	544	1.7%	0	0.0%
Reading Town	707	1.3%	407	1.3%	0	0.0%
Rochester Town	1,171	2.1%	768	2.4%	23	1.7%
Royalton Town	2,603	4.6%	1,281	4.1%	24	1.7%
Sharon Town	1,411	2.5%	663	2.1%	0	0.0%
Springfield Town	9,078	16.1%	4,232	13.4%	479	34.8%
Stockbridge Town	674	1.2%	528	1.7%	0	0.0%
Weathersfield Town	2,788	5.0%	1,315	4.2%	74	5.4%
Weston Town	630	1.1%	537	1.7%	0	0.0%
West Windsor Town	1,067	1.9%	716	2.3%	0	0.0%
Windsor Town	3,756	6.7%	1,611	5.1%	233	16.9%
Woodstock Town	3,232	5.7%	1,775	5.6%	66	4.8%
Windsor County	56,267	100%	31,621	100%	1,377	100%

**Includes housing that is subsidized and affordable to very low and low incomes

TOWN OF SPRINGFIELD

Base Features



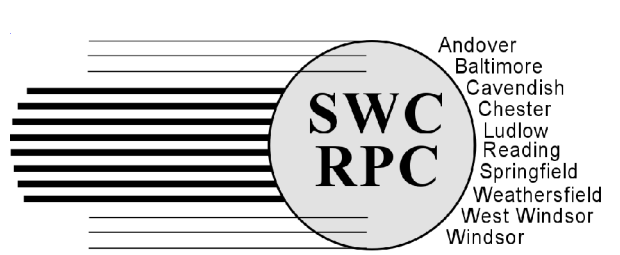
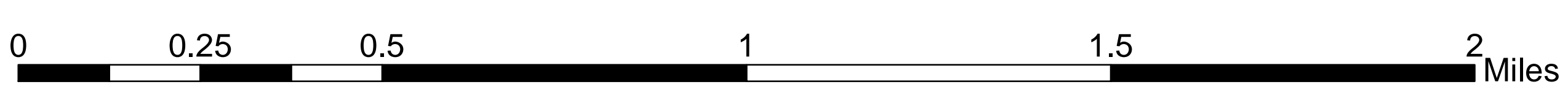
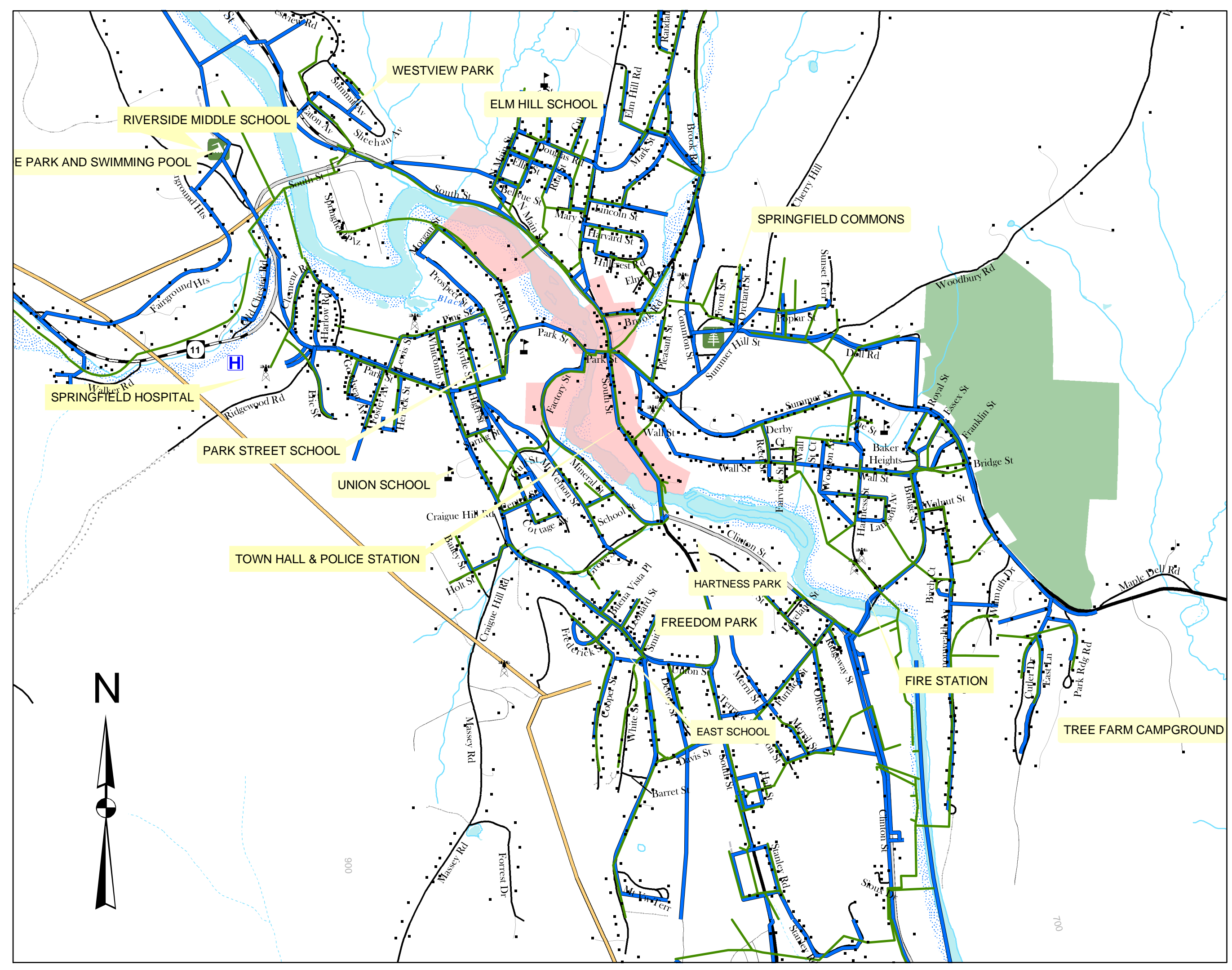
Legend

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|--|---|--|
| <p>Recreational Sites</p> <ul style="list-style-type: none"> Location Boat Launching Area Hiking Area Wildlife Management Area Camping Area Cemetery Trails Wireless Telecommunication Facility (including Towers and all other Facilities) Schools Buildings | <p>Public Lands</p> <ul style="list-style-type: none"> State Owned Municipally Owned Public Sewer Line Public Water Line Electric Transmission Line Historic District Surface Water Floodplain Streams | <p>Roads:</p> <ul style="list-style-type: none"> Town Boundary Class I TH Class II TH Class III TH Class IV TH State Forest Road Private Road Vermont State Highway US Highway US Highway Interstate Legal Trail Driveway (Private) |
|--|---|--|

Sources of Data:
 Vermont Center for Geographic Information (VCGI);
 Southern Windsor County Regional Planning Commission (SWCRPC);
 Natural Resource Conservation Service (NRCS);
 Micro Data, Incorporated (MicroData)

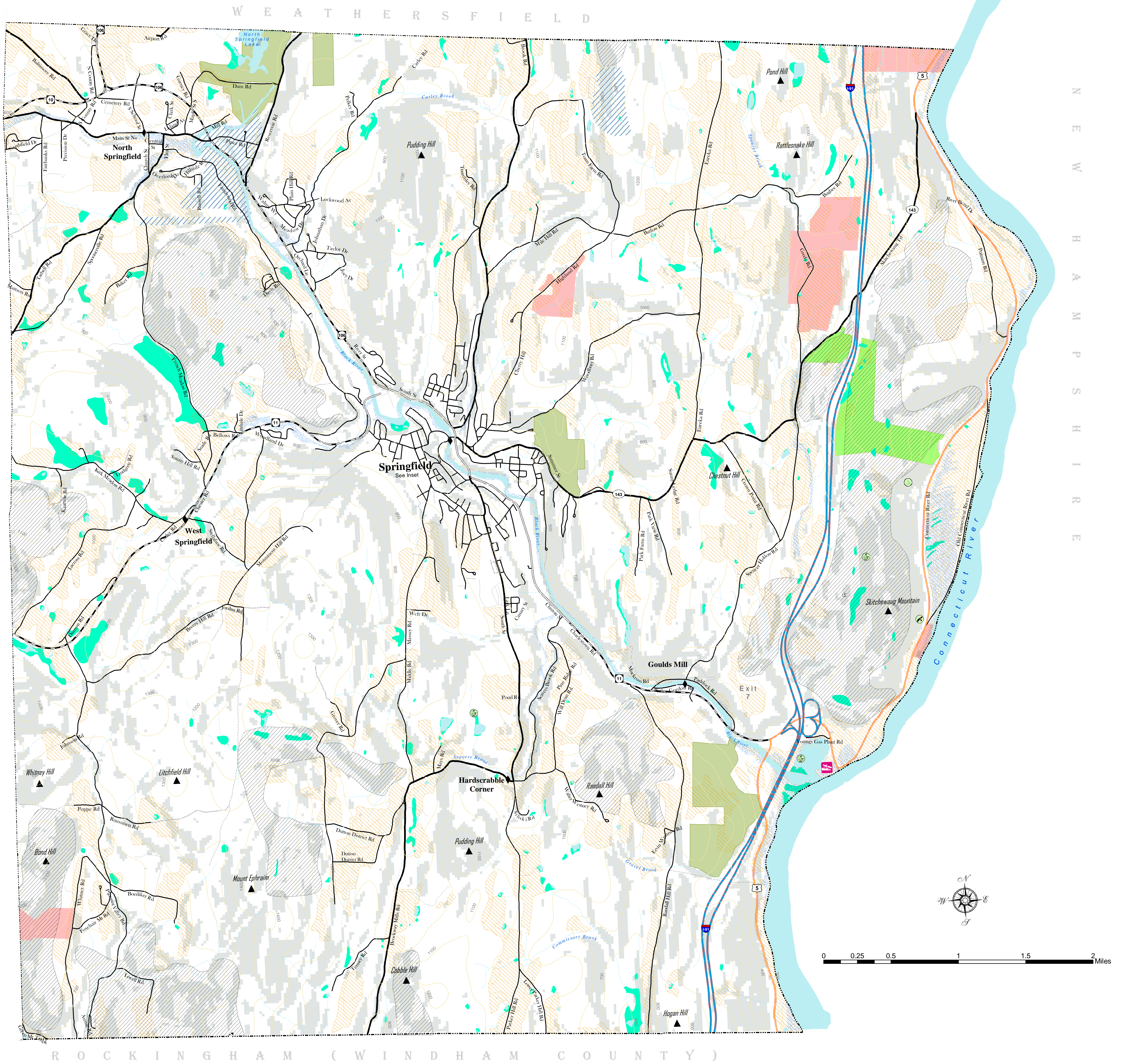
TOWN BOUNDARY: Converted from VCGI coverage "TBLASH" (SWCRPC)
ROADS: VCGI Road Centerlines from 1:5000 orthophotos and GPS correction (VCGI)
SURFACE WATERS: From 1:5000 orthophotos and field verification (NRCS)
RARE SPECIES: VT Fish and Wildlife Department - Non-game and natural heritage program (VCGI)
FLOODPLAINS: FEMA National Flood Insurance Mapping Program, digitized from hardcopy maps in 1996 (SWCRPC)
WETLANDS: Vermont Significant Wetlands Index (VCGI)
WELLHEAD PROTECTION AREAS: Agency of Natural Resources from best available source (VCGI)
SLOPES & CONTOURS: Derived from 1:24000 Digital Elevation Model (SWCRPC)
PRIME AGRICULTURAL: NRCS data are a pre-selected subset of SSURGO soil data depicting prime agricultural soils in Vermont, from Resource Conservation Service County Soil Surveys, April 2003

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 SWCRPC, NRCS and VCGI make no representation of any kind, including but not limited to the warranties of merchantability or fitness for a particular use, nor are any such warranties implied with respect to this data



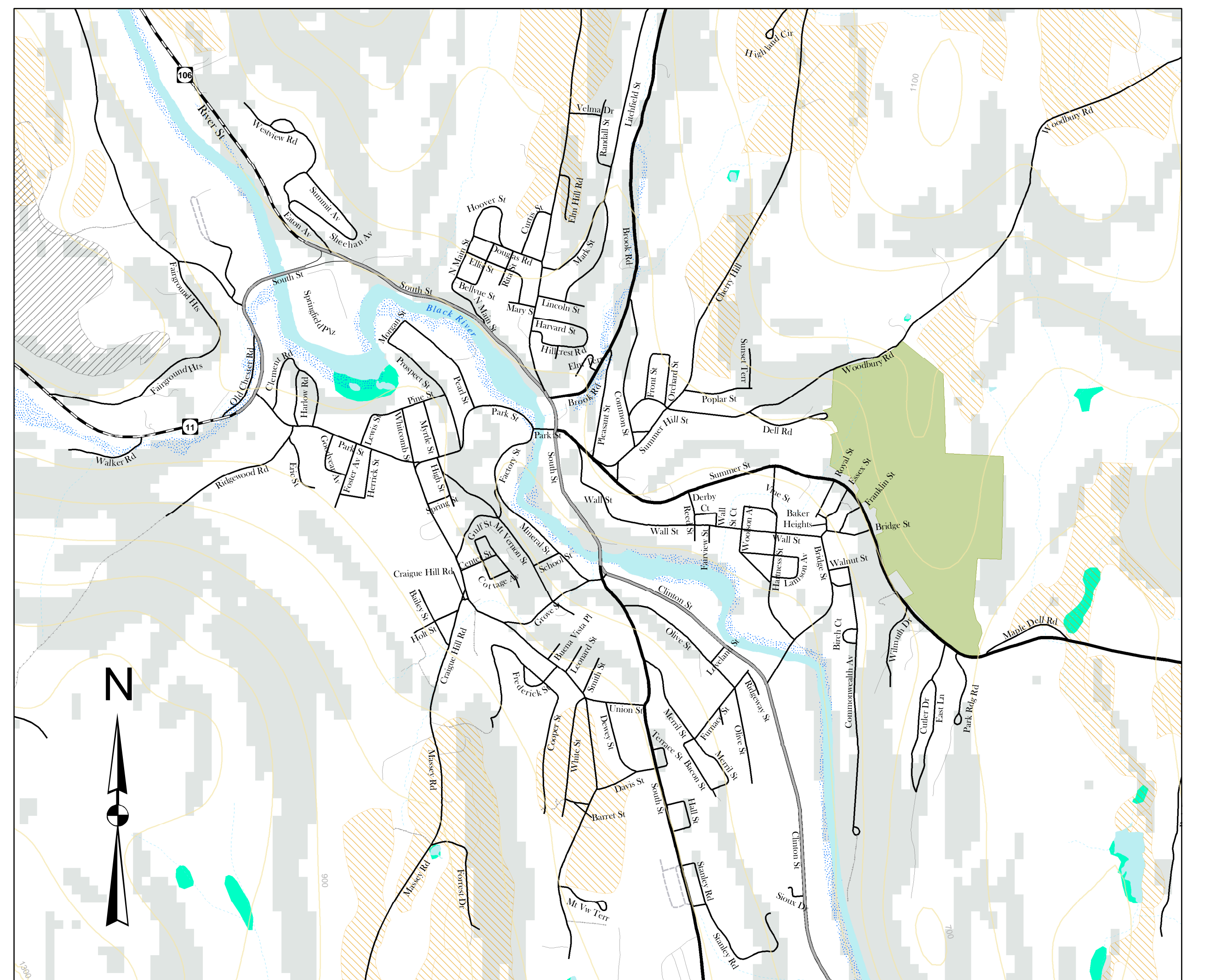
TOWN OF SPRINGFIELD

Natural Resources



Legend

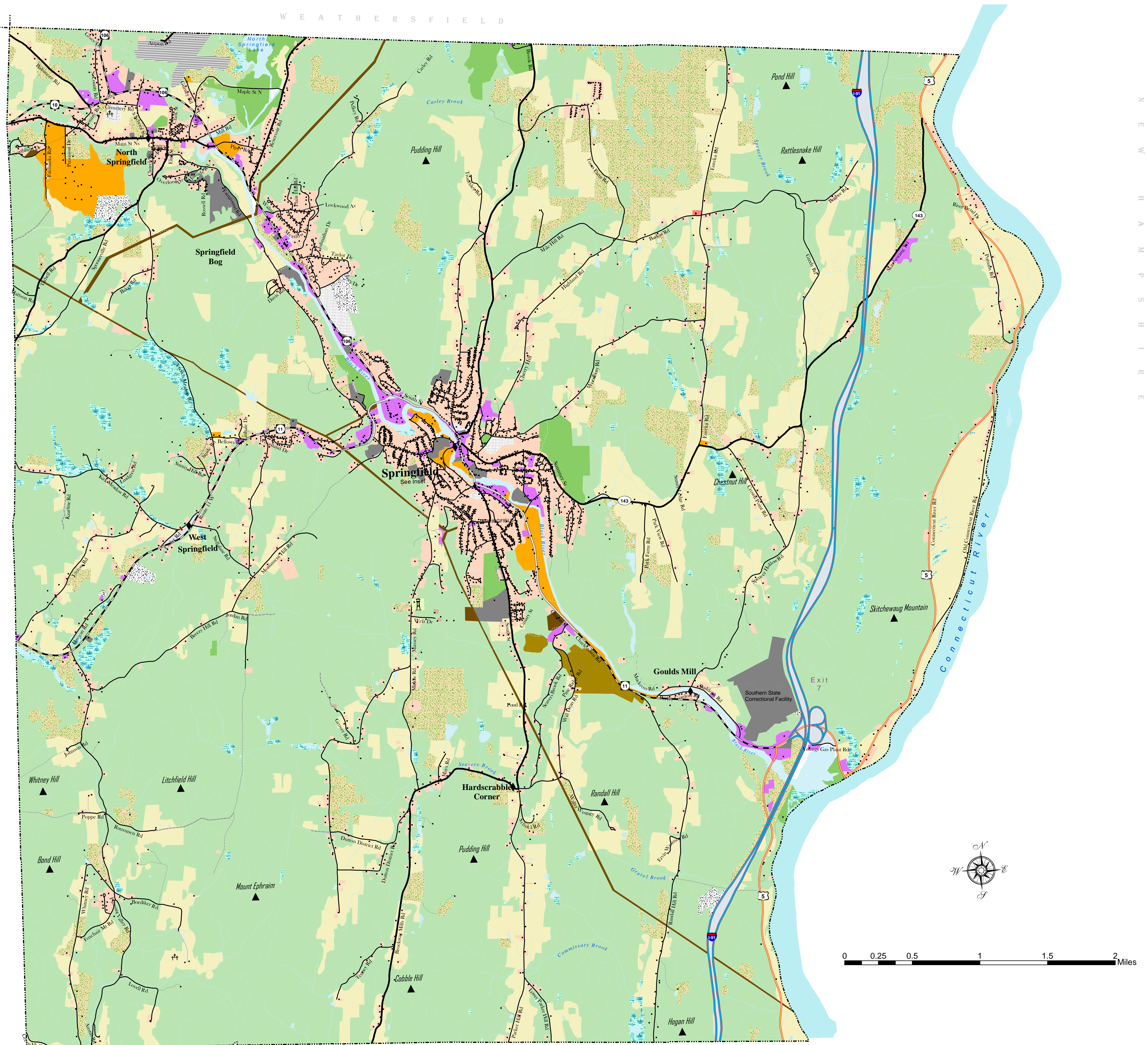
- | | | | | | |
|--|--------------------------|--|--|--|-----------------------------|
| | Town Boundary | | Rare Plant/Animal:
Bird | | Roads:
Class I TH |
| | Contour | | Plant | | Class II TH |
| | Deer Wintering Area | | Other Animal | | Class III TH |
| | Wellhead Protection Area | | Public Land:
State Owned | | Class IV TH |
| | Floodplain | | Municipally Owned | | State Forest Road |
| | Surface Water | | Conservation Easement | | Private Road |
| | Areas Above 25% Slope | | Prime Agricultural Lands
(SSURGO soil data from NRCS) | | Vermont State Highway |
| | Wetland | | | | US Highway |
| | Boat Launch Area | | | | US Highway |
| | | | | | Interstate |
| | | | | | Legal Trail |
| | | | | | Driveway (Private) |



Sources of Data:
 Vermont Center for Geographic Information (VCGI)
 Southern Windsor County Regional Planning Commission (SWCRPC)
 Natural Resource Conservation Service (NRCS)
 Micro Data, Incorporated (MicroData)
 TOWN BOUNDARY: Converted from VCGI coverage "TBHASH" (SWCRPC)
 ROADS: VCGI Road Centerlines from E:5000 orthophotos and GPS correction (VCGI)
 SURFACE WATERS: From E:5000 orthophotos and field verification (NRCS)
 RARE SPECIES: VT Fish and Wildlife Department - Non-game and natural heritage program (VCGI)
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TOWN OF SPRINGFIELD

Current Land Use/Land Cover



ROCKINGHAM (WINDHAM COUNTY)

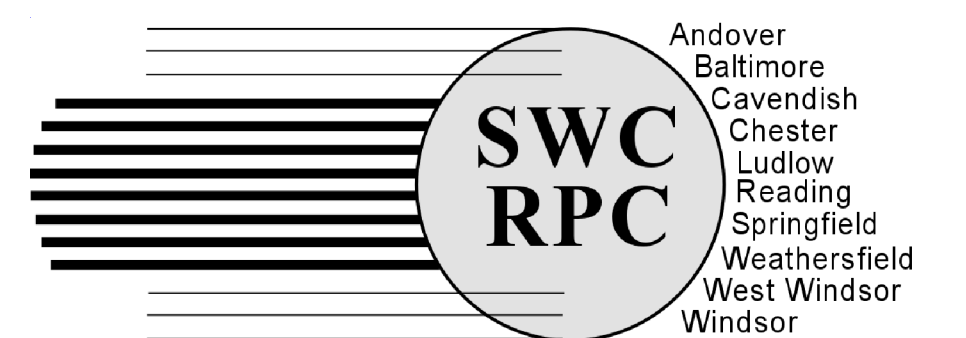
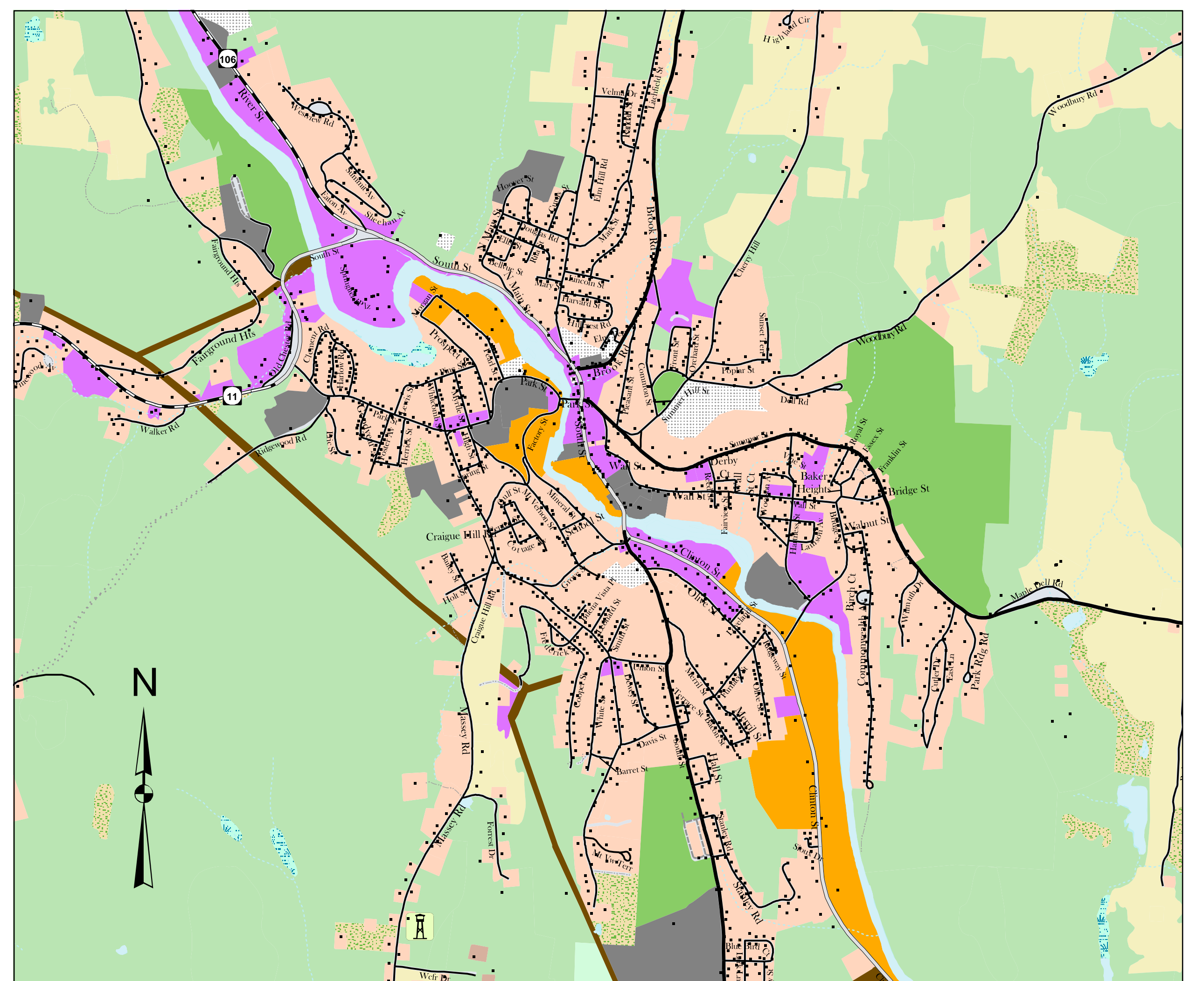
Legend

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| <ul style="list-style-type: none"> ----- Town Boundary ■ Building <p>Roads:</p> <ul style="list-style-type: none"> — Class I TH — Class II TH — Class III TH — Class IV TH — State Forest Road — Private Road — Vermont State Highway — US Highway — Interstate — Legal Trail — Driveway (Private) | <p>Current Land Use:</p> <ul style="list-style-type: none"> ■ Agricultural Land ■ Air Transportation ■ Commercial ■ Communication ■ Cemetery/Cultural/Public Assembly ■ Forest ■ Government/Institutional ■ Inactive Dump Sites ■ Industrial ■ Mixed ■ Mixed Herbaceous and Shrub/Brush ■ Outdoor Recreation/Assembly ■ Residential ■ Right of Way ■ Quarry or Gravel Pit ■ Utilities (elec., solid waste etc.) ■ Water ■ Wetland |
|--|--|

Sources of Data:
 Vermont Center for Geographic Information (VCGI);
 Southern Windsor County Regional Planning Commission (SWCRPC);
 Natural Resource Conservation Service (NRCS);
 Micro Data, Incorporated (MicroData)

TOWN BOUNDARY: Converted from VCGI coverage "TBLASH" (SWCRPC)
 BUILDING: Locations derived using orthophotography and GPS corrects by the Vermont E911 Program
 ROADS: VCGI Road Centerlines from 1:5000 orthophotos and GPS correction
 CURRENT LAND USE: Drafted on 1994 1:5000 orthophotos (MicroData)
 SURFACE WATERS: From 1:3000 orthophotos and field verification (NRCS)

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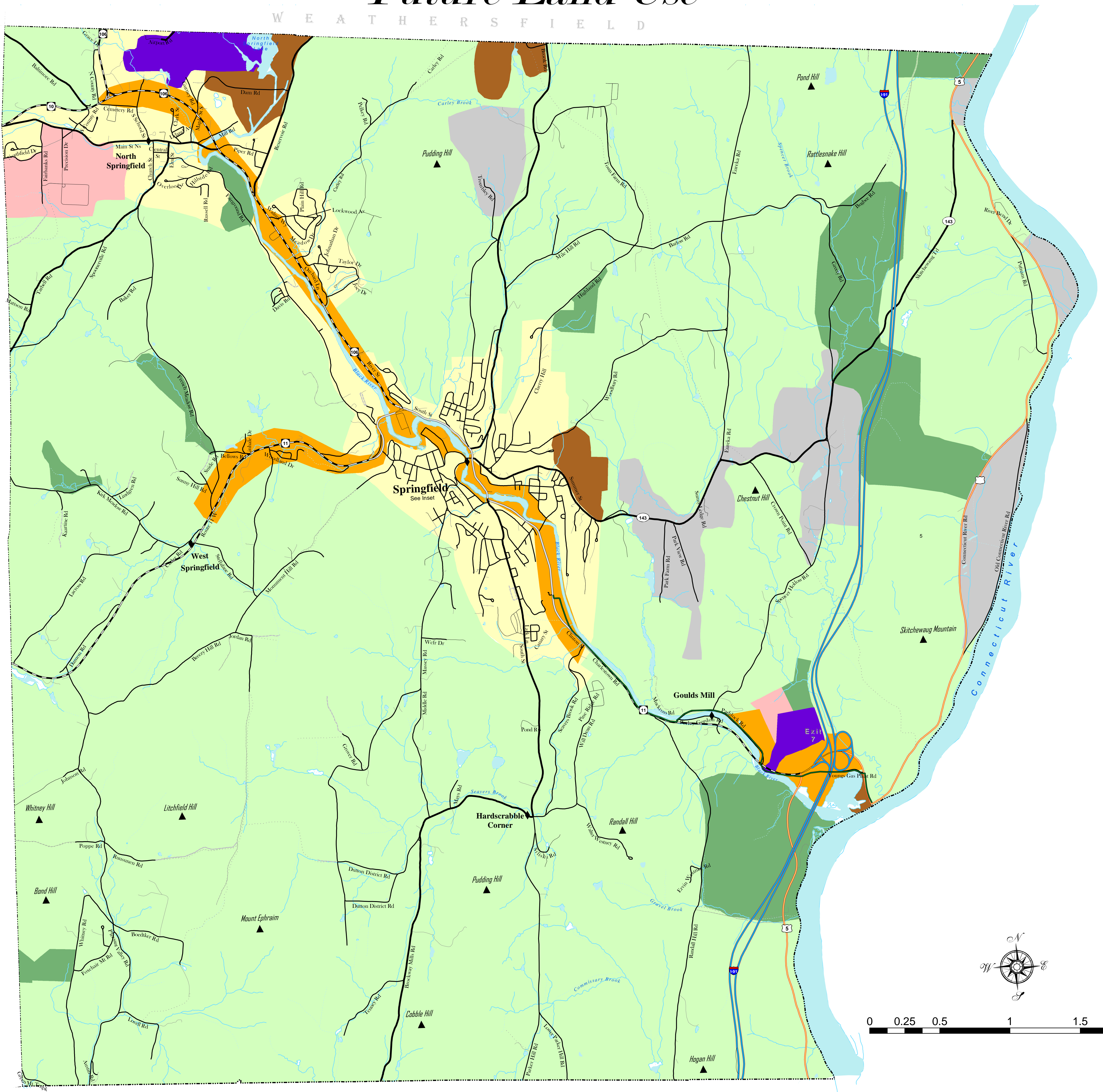
TOWN OF SPRINGFIELD

Future Land Use

W E A T H E R S F I E L D

C H E S T E R

N E W H A M P S H I R E



R O C K I N G H A M (W I N D H A M C O U N T Y)

Legend

- Town Boundary
- Blue line Rivers and lakes
- Blue line Surface Water
- Roads:**
- Class I TH
- Class II TH
- Class III TH
- Class IV TH
- State Forest Road
- Private Road
- Vermont State Highway
- US Highway
- Interstate
- Legal Trail
- Driveway (Private)
- Springfield Bike Path

Land Use Categories

- Grey square AGRICULTURE
- Dark green square CONSERVATION
- Light green square FOREST
- Pink square INDUSTRIAL
- Purple square INSTITUTIONAL
- Orange square MIXED USE
- Brown square RECREATION
- Yellow square RESIDENTIAL

Sources of Data:

- Vermont Center for Geographic Information (VGCI)
- Southern Windsor County Regional Planning Commission (SWCRPC)
- ROADS: VGCI Road Centerlines from 1:5000 orthophotos and GPS correction
- SURFACE WATERS: VGCI surface water from 1:5000 orthophotos
- FUTURE LAND USE: On file from town (SWCRPC)

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