

LAND USE

A. Background Issues

The identity of the region is a composite of its landscape, people, institutions, and history. All these factors contribute to its character. Over the past thirty years, the region has experienced a period of unprecedented economic growth and profound changes to its landscape. These trends will continue. This growth has generally benefited the region by providing new and expanded job opportunities and income growth. This growth has also resulted in increased social and cultural diversity. The results have not been universally pleasing when translated to the landscape of the region.

Indiscriminate commercial strips, residential sprawl characteristic of an urban setting, and the loss of open space have occurred in some areas of the region, particularly those closest to the interstate highways and heavily traveled state roads.

All municipalities in the region have planning programs, yet many are ill-equipped to deal with the complex challenges brought about by rising real estate and property taxes, and strained community services, particularly schools. Much of this unplanned growth jeopardizes town character, public services, natural resources, and the stock available for affordable housing.

The region supports the professional planning assistance program of the Regional Commission and the use of innovative land use planning techniques that allow for better growth management. Regional Commissioners and staff agree that area leaders in government and

private business need to work together more closely to develop and implement such a program.

It is the basic assumption of the Regional Commission that the region can continue to grow and develop economically, and with the involvement of its concerned



Long View of Randolph | Source: ©First Light Studios

citizens and solid local and regional planning the region can avoid substantial alteration of its special character, its landscape and quality of life.

B. Goals – The Future Pattern of Settlement

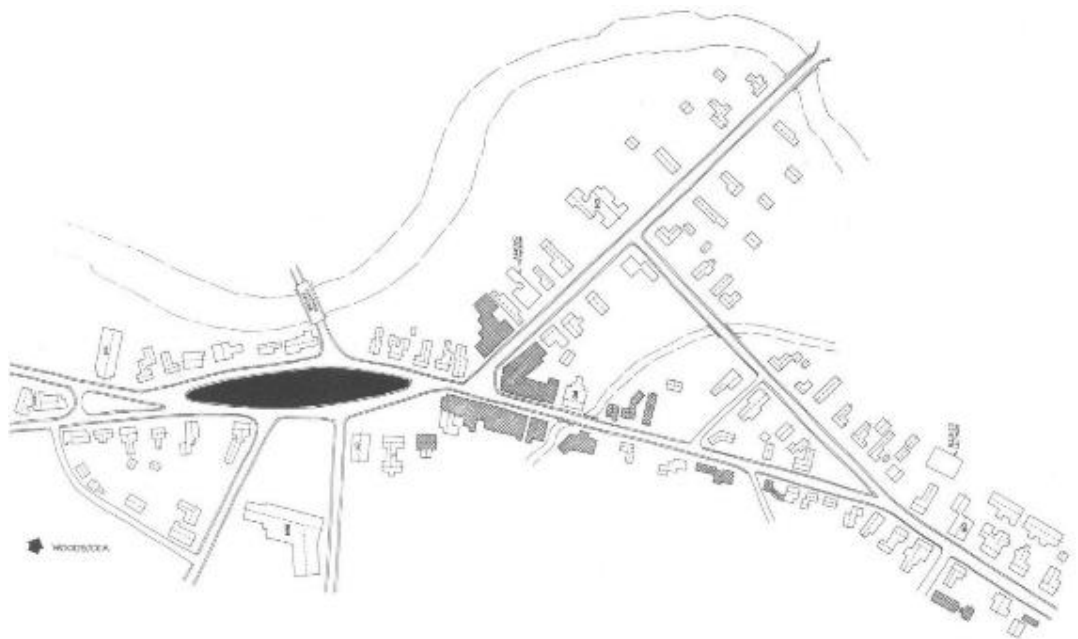
First in importance in formulation of the proposed land use pattern for the region is consideration of the existing settlement pattern. The region has already been settled into clusters of residences and other activities in the form of villages and hamlets surrounded by less dense settlement, rural in character, or large spaces in natural vegetation. This existing settlement pattern has demonstrated itself to be of a sociological, psychological, and aesthetic benefit to the region, while at the same time providing a system of

centers both efficient and economical for the conduct of business enterprise and for the provision of social and community facilities and services. This pattern must be protected and enhanced and is supported by state planning law. This is best accomplished by adopting as a policy, the use of this pattern for guiding future development of the region.

Regional Growth Areas

Due to severe physical site limitations and the relatively high costs incidental to land development in certain areas as compared to others, much of the region is neither readily available nor suited for intense development. Major growth or investments must be channeled into or adjacent to existing or planned settlement centers and to areas where adequate public facilities

Figure 4-1: Example of Regional Growth Area - Village of Woodstock



Source: Vermont Townscape © 1987

and services are available. Regional Growth Areas are the traditional developed areas in the region. They are differentiated into the following seven types: Regional Center, Town Centers, Village Settlements, Hamlet Areas, Designated Growth Centers, Designated Downtowns, and Designated Village Centers as well as expansion areas that are designated to accommodate future growth based on the capacity to provide infrastructure and suitable land without threatening critical resources or creating sprawl.

Traditionally, the growth areas in this region have consisted of a mix of land uses, or a solely residential community. New regional growth areas must also include plans for open space for parks, recreational areas, and similar uses. Land development adjacent to and surrounding such areas should be developed at low densities to provide diversity in the landscape and a range of choice in rural living environments. Concurrently, owners of lands not suitable for intense development should be encouraged, through public and private means, to maintain valuable resource lands in productivity or for conservation.

Designated Growth Centers

Signed into law in May of 2006, Act 183 – An Act Relating To Creation of Designated Growth Centers and Downtown Tax Credit Program created a definition of Designated Growth Centers that is focused on compact development that is located within Designated Downtowns, Designated Village Centers, new town center areas, or adjacent areas that are contiguous to,

or lying close to and not widely separated from, these designated areas provided that they exhibit strong land use, economic, and transportation relationships to the Designated Downtowns or Village Centers.

In addition to being either within or adjacent to a Designated Downtown, Designated Village Center, or new town center, a Designated Growth Center is defined as substantially containing eight different characteristics:

1. A mixture of uses;
2. Existing or planned public spaces;
3. Prominent community focal points such as civic buildings or common areas;
4. Densities of land development that are significantly greater than those allowed in areas outside the growth center;
5. Existing or planned investments in infrastructure including a circulation system that is conducive to pedestrian/non-vehicular traffic and supports the use of public transit;
6. It results in compact concentrated areas of land development that are served by existing or planned infrastructure and are separated by rural countryside or working landscape;
7. It is planned in accordance with the planning and development goals under 24 VSA Chapter 117 §4302 and conforms to smart growth principles; and
8. It is planned to reinforce the purposes of Act 250 (10 VSA Chapter 151).

Municipalities interested in pursuing Designated Growth Center status and benefits must submit an application to the Vermont Downtown Board after it has been presented at public hearings. In addition to the eight characteristics above, the proposed Designated Growth Center must be planned to conform to eight smart growth principles which emphasize historic and compact development patterns, the protection of important environmental, natural and historic features, the minimization of conflicts with agricultural and forest industries, a diversity of housing, and more. A complete list of the smart growth principles are given in Chapter 16 - Definitions of this Plan.

To award Growth Center Designation, the Downtown Board must find that the application demonstrates the following:

1. The proposal meets the definition of a Designated Growth Center;
2. Important natural resources and historic resources within the proposed Designated Growth Center have been identified and any anticipated impacts have been mitigated;
3. The applicant has a regionally confirmed planning process and municipal plan;
4. The applicant has adopted zoning and subdivision bylaws that implement their municipal plan;
5. The municipal plan and bylaws provide reasonable protection for important natural and historic resources located outside the proposed Designated Growth Center;
6. The applicant has adopted a capital

budget and program and has existing and planned infrastructure to implement the proposed Designated Growth Center;

7. The proposed Designated Growth Center is an appropriate size and reinforces any existing designated downtown, village center or new town center located in the municipality or adjacent municipality;
8. Growth cannot be achieved within any of the above (g) existing areas.
9. The municipal plan has incorporated guidelines from the Secretary of Agriculture in order to avoid the conversion of primary agricultural soils, wherever possible; and
10. The municipal plan and bylaws further the goal of retaining a more rural character in the areas surrounding the growth center to the extent that a more rural character exists.

The benefits received from designation include automatic fulfillment of the public purpose requirements for use of incremental tax revenues for public infrastructure and improvements (TIFs); VEDA incentives on a priority basis; state infrastructure and development assistance; stormwater revolving loan funds; technical and financial assistance for brownfield remediation; priority for Community Development Block Grants; state priority for investments (after Designated Downtowns and Designated Village Centers) and regulatory incentives. Designated Growth Center status lasts twenty years. The Downtown Board must review the designation every five years and

require corrective actions if it determines the Designated Growth Center no longer meets the standards.

Downtown Designation and Village Center Designation

The Regional Commission finds that economically strong downtowns and village centers are critical to the health and well-being of our municipalities. They are the natural location for small businesses and other uses that together constitute the diverse fabric and quality of small town living. Historically, Vermonters have sustained a commitment to make both private and public investments within these areas; the result includes an attractive environment for enhancing the vitality of these areas.

It is the intent of the Regional Commission to preserve and encourage development of the region's downtowns and village centers, to encourage investment in housing, historic preservation, transportation (including parking facilities), and to reflect traditional settlement patterns. Furthermore, the Regional Commission believes that dynamic planning programs focused on downtowns and villages will serve to minimize the ill effects of sprawl and unplanned development throughout the countryside.

In 1997, Vermont enacted the Historic Downtown Development Act (24 VSA Chapter 76A) to recognize local efforts to revitalize traditional villages and downtowns. Under the law, towns may apply to the Vermont Downtown Development Board for designation as a

downtown or village center. If designated, commercial property owners in downtowns and villages are eligible for state tax credits for rehabilitation of historic structures, facade improvements and building code improvements; if the tax credits cannot be used by the property owner, they may be sold to banks. In addition to tax credits, designated villages and downtowns receive priority consideration in Vermont's Municipal Planning Grant Program and the federal funding programs guided by the Vermont HUD (U.S. Department of Housing and Urban Development) Consolidated Plan, including the Vermont Community Development Program.

As of December 2006, the region has the following Designated Downtowns and Village Centers. Bradford, Randolph and White River Junction are Designated Downtowns. Bethel, Brookfield (Pond Village), Chelsea, East Randolph, Fairlee, Hartland Four Corners, Hartland Three Corners, North Hartland, North Tunbridge, Norwich, Pittsfield, Rochester, Royalton, Sharon, South Royalton, South Strafford, Tunbridge, Wells River, West Fairlee, and Woodstock are Designated Village Centers.

Land Use Goals

The land use goals outlined within this section are of primary importance to this Plan. They represent the foundation of the planning and development program for the region. These goals are intended to be applied uniformly throughout the region in conjunction with the implementation techniques included as part of this Plan. Only through a uniform

and consistent program of implementation can meaningful land use decisions be accomplished.

The goals outlined within this section recognize and accept the following as in the public interest:

1. Maintain and improve the accessibility and economic viability regional growth areas;
2. Encourage full use of regional growth areas;
3. Provide for intensive development only in regional growth areas where adequate public services and facilities are currently available or planned to be made available concurrently with such development;
4. Make local and state infrastructure investments in regional growth areas;
5. Protect the character of rural areas and their natural resources by avoiding sprawling development, and incompatible land uses;
6. Protect the natural environment by preservation and wise use of natural resources;
7. Maintain and enhance local comprehensive planning and regulation on issues of local concern;
8. Maintain investments in the transportation network by assuring that development will not degrade the level of service or functionality;
9. Reserve land at Interchange Areas for the development of services for the traveling public and transport of goods, not for the development of high traffic-generating commercial activities that are unrelated to

services for the traveling public or trucking industry, or institutional uses such as governmental offices or post offices. Interchange Area development should not be promoted to the detriment of regional growth areas or the public investments made therein.

C. Policies for Land Use Settlement

For the purposes of this Plan, seven types of land use areas have been established and identified. These areas have certain existing characteristics that identify them within the region. These areas are:

- Regional Center
- Town Centers
- Village Settlements
- Hamlet Areas
- Rural Areas
- Conservation and Resource Areas
- Interchange Areas

The region's land use areas are depicted on Map 4, the Future Land Use Areas map that is included in this Plan. The Regional Center, Town Centers, Village Settlements and Interchange Areas are identified by boundaries. Hamlet Areas are identified by center points; when making land use decisions using the policies in this Plan, Hamlet Areas must include the locally recognized extent of the hamlet as it is designated in the appropriate town plan. Conservation and Resource Areas are defined by a set of parameters, and Rural Areas are the remaining lands in the region.

Regional Center

Regional Centers are those areas where public sewer and water utilities exist, transportation infrastructure is capable of handling significant volumes of commuting and commercial traffic, a public transportation system provides options and there are intermodal opportunities present; some Designated Growth Centers and Designated Downtowns are included in this land use area. People use Regional Centers for the variety of employment and business opportunities, governmental and judicial functions, hospitals, schools, cultural and civic activities. White River Junction is the Regional Center.

Policies Relating to Regional Centers:

1. Regional Centers should support a mixture of single family, two family, and multiple family structures at the highest densities in the region.
2. Commercial uses, services, offices, wholesale business, industry, transport facilities, and community facilities and programs that serve regional needs and markets are encouraged to locate and to provide the broadest possible range of employment in these areas.
3. A balance of public and private capital investment determines the economic well-being of a town or region. In Regional Centers, intense growth is encouraged when a complete complement of public services such as water, sewer, and highways are available. Continued maintenance or expansion of such facilities must occur in relation to available tax revenues, at reasonable levels of public and private capital investment, and if additional development is to be accommodated.
4. Local capital planning programs and public investment strategies should encourage renovation of and in-filling within Regional Centers or expansion areas.
5. Investment in public and private housing for the elderly and low or moderate income families should be most directed to Regional Centers and away from unsettled rural areas.
6. Retail establishments providing goods and services to a regional clientele should be located in Regional Centers to minimize the blighting effects of sprawl and strip-development along major highways and to maintain rural character.
7. To avoid structural obsolescence and deterioration, conversion of larger older homes to newer more economical uses, particularly for homes with historic merit, is encouraged. See Historic Resources section for more information.
8. In areas containing structures and buildings of architectural or engineering significance, new development must be planned to be compatible with existing development and to not unduly impact the general and special character of the area.
9. Major developments like large governmental, medical, commercial, industrial buildings must be located in Regional Centers where utilities, facilities, and human capital are concentrated.

Town Centers

Town Centers are those areas where central public utilities for water and sewer are available, and where there exists a central location for commercial activities, schools, cultural and civic activities for the town and the surrounding communities; Designated Downtowns and some Designated Growth Centers are included in this land use area. Town Centers include the immediate area within and around the centers of Bethel, Bradford, Chelsea, Fairlee, Norwich, Randolph, Rochester, South Royalton, Wells River, Wilder and Woodstock.

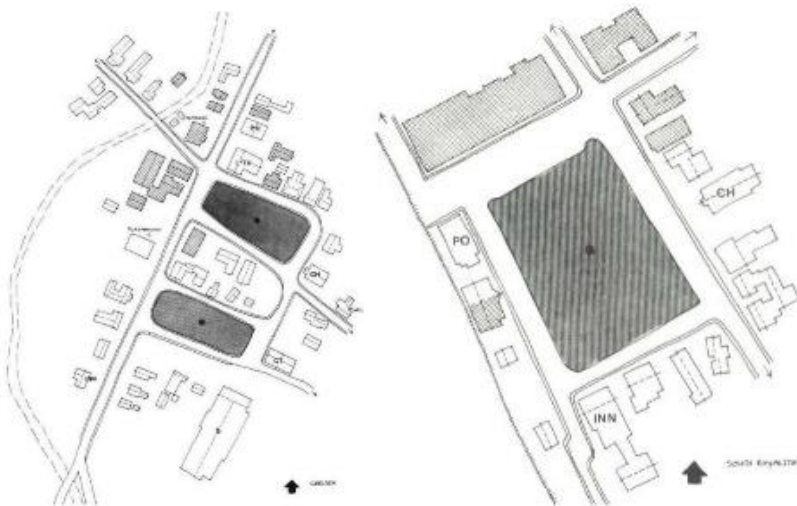
Policies Relating to Town Centers:

1. Town Centers must support a mixture of single family, two family, and multiple family structures at high densities.
2. Commercial uses, services, offices, wholesale business, industry,

transport facilities, and community facilities and services are encouraged to locate and to provide the broadest possible range of employment in these areas.

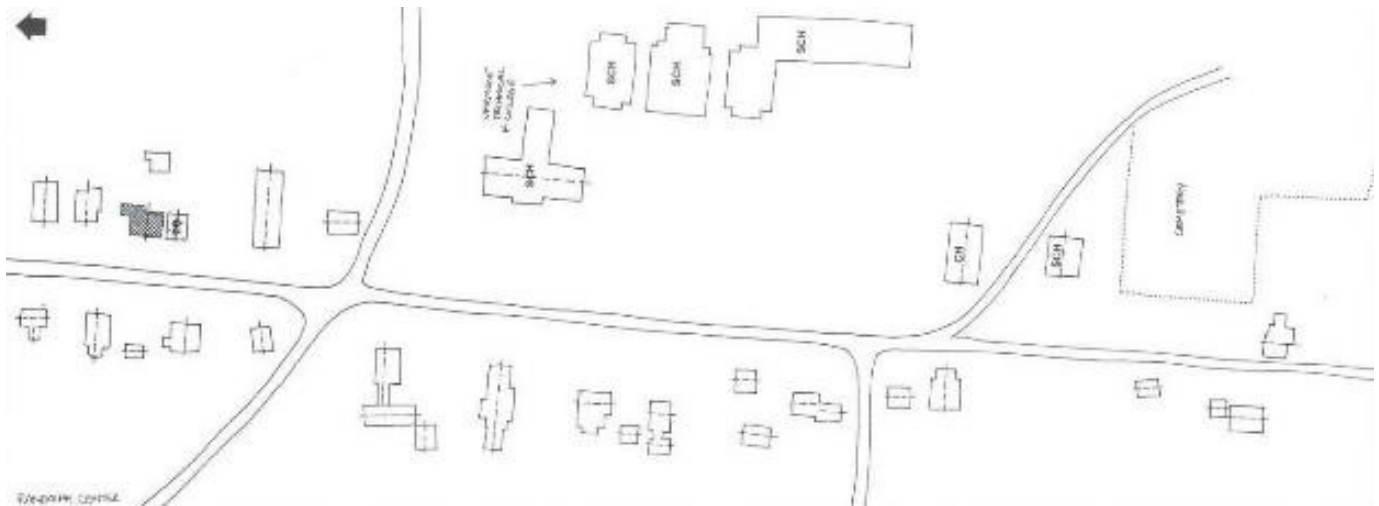
3. A balance of public and private capital investment determines the economic well-being of a town or region. In Town Centers, intense growth is encouraged when a reasonable complement of public services such as water, sewer, and highways are available. Continued maintenance or expansion of such facilities must occur in relation to available tax revenues, at reasonable levels of public and private capital investment, and if additional development is to be accommodated.
4. Local capital planning programs and public investment strategies should encourage renovation and in-filling within Town Centers or expansion areas.
5. Investment in public and private housing for the elderly and low or moderate income families must be directed to Town Centers and away from unsettled rural areas.
6. Principal retail establishments must be located in Town Centers, Designated Downtowns, or Designated Growth Centers to minimize the blighting effects of sprawl and strip-development along major highways and maintain rural character.
7. Conversion of larger older homes, particularly those with historic merit, is encouraged for new, more economical use to avoid structural

Figure 4-2: Two Examples of Town Centers – Chelsea and South Royalton



Source: Vermont Townscape © 1987

Figure 4-3: Example of a Village Settlement – Randolph Center



Source: Vermont Townscape © 1987

obsolescence and deterioration. See Historic Resources section for more information.

8. In areas containing structures and buildings of architectural or engineering significance, new development must be planned to be compatible with existing development and not unduly impact the general and special character of the area.

Postal facilities and similar governmental offices, should be located in Town Centers where other public services are available or planned. Development of governmental offices distant from and unrelated to community centers contributes to increased traffic, scattered development, and costly public services. Such a pattern of development is incompatible with the goals and policies of this Plan.

Village Settlements

Village Settlements are those areas that have developed into small community centers; Designated Village Centers and some Designated Growth Centers are included in this land use area. Village Settlements normally consist of mixed land uses at medium densities; some have public sewer or water systems, but others do not. Village Settlements generally have consolidated groups of structures located on a major regional highway. Village Settlements are not usually afforded direct access to the Interstate. Examples of Village Settlements include Barnard, Bridgewater, East Randolph, East Thetford, East Topsham, Granville, Hancock, Hartford Village, Hartland Four Corners, Hartland Three Corners, Newbury, North Hartland, Pittsfield, Plymouth Union (Plymouth), Pond Village (Brookfield), Post Mills (Thetford), Quechee, Randolph Center, Royalton Village, Sharon, South Woodstock,

Stockbridge, Taftsville, Thetford Center, Tunbridge, Tyson (Plymouth), West Fairlee, and West Woodstock.

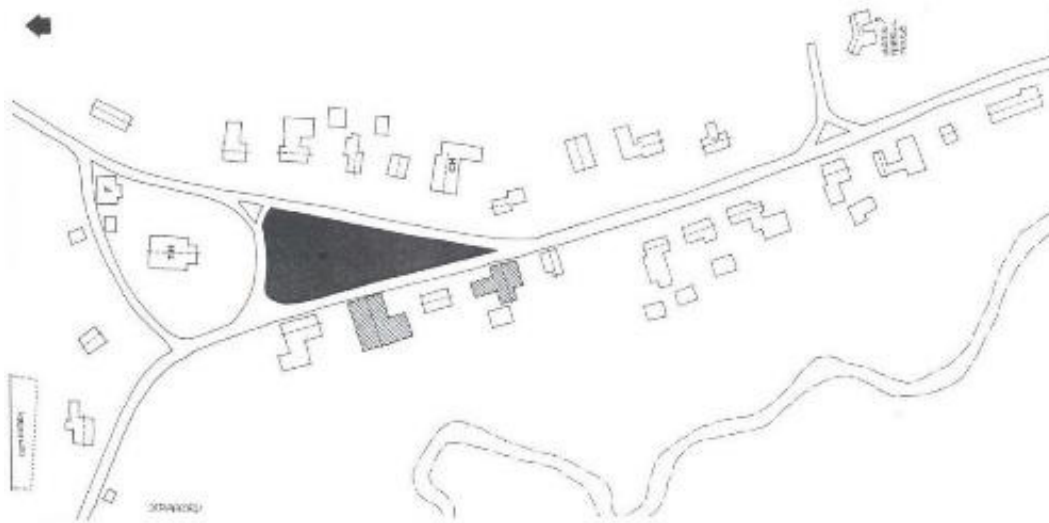
Policies Relating to Village Settlements:

1. Village Settlements should support housing types at a densities that are lower than Town Centers but higher than the areas surrounding the Village Settlement. Village Settlements that have neither public water nor sewer should plan for densities that can be supported by the soils present, in order to avoid ground and surface water contamination. A range of densities should be available within Village Settlements.
2. Conversion of larger older homes and particularly those with historic merit should be permitted for new, more economical use to avoid structural obsolescence and deterioration.
3. Shops and services, tourist businesses, lodging, public facilities and business and industrial enterprises at a small scale with appropriate design characteristics that fit the context of the area are encouraged.
4. New development in Village Settlements should be coordinated with, and in close proximity to, existing structures. New development must not place undue burdens on municipal or regional facilities, utilities and services, including transportation systems. To provide for a concentration of land uses and the maintenance of open space, larger or more intense development proposals should be encouraged to locate in areas that have central water and sewer systems.
5. In Village Settlements containing structures and buildings of architectural or engineering significance, new development should be planned so as to be reasonably compatible with existing development and so as not to unduly impact the general and special character of the area.
6. Detailed soil surveys and site analysis should be used to identify appropriate densities in villages without public water and sewer and for locating new Village Settlements.
7. Long-range planning for the provision of public services in these areas is encouraged. Services, planned and existing, should be coordinated so that the future expansion of services can be more accurately evaluated.
8. Existing postal facilities, and similar governmental offices, should be retained in Village Settlements and not be relocated into Rural Areas.

Hamlet Areas

Hamlet Areas consist of groupings of buildings, smaller in scale than Village Settlements. They historically have served as the location for single family homes, with few stores and businesses supported primarily by local residents. Hamlets are not regional market or trade centers. These areas generally do not contain a

Figure 4-4: Example of a Hamlet – Strafford



Source: Vermont Townscape © 1987

community water supply or sewer system. Minor community facilities and services sometimes are located in these areas. Examples of Hamlet Areas are Bridgewater Center, Bridgewater Corners, Corinth, East Barnard, East Bethel, East Braintree, East Brookfield, East Corinth, East Granville, Gaysville (Stockbridge), North Pomfret, North Thetford, North Tunbridge, South Pomfret, South Strafford, Strafford, Thetford Hill, Vershire, Vershire Center, Waits River (Topsham), West Braintree, West Bridgewater, West Brookfield, West Hartford, West Newbury, West Topsham, and areas immediately adjoining such areas.

Policies Relating to Hamlet Areas:

1. The density of development in Hamlet Areas reflects the existing settlement patterns, physical land capability, and the availability of utilities for expansion. Particular densities for development should be designated within the town plans of each of the respective communities within the region. A range of densities should be available within Hamlet Areas.
2. Hamlet Areas should support primarily single and two family homes in rural areas and mixed dwelling types in the more developed areas. Business enterprises that fit the context of the immediate area are encouraged.
3. Major traffic thoroughfares through Hamlet Areas should be planned or enhanced with traffic calming elements.
4. Buildings should be clustered to encourage open space in surrounding areas. Where unusual natural features, soil limitations, or special resources including high value agriculture land are identified, use of cluster development concepts is encouraged to protect

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- such resources from unnecessary development.
5. Where adjacent subdivisions are planned, they must provide for common open space systems to link active recreation areas such as playgrounds, playfields, and natural areas.
 6. Design features which contribute to the aesthetic value of residential and non-residential areas, including the provision of open spaces, trees and natural ground cover, and the conservation of stream valleys, historic landmarks and structures must be utilized in planning subdivisions.
 7. Existing postal facilities, and similar governmental offices, should be retained in Hamlet Areas and not be relocated into Rural Areas.

Rural Areas

Most land in the region lies outside of the regional growth areas. Remaining areas are generally rural in character. Rural Areas consist primarily of a mixed pattern of land uses, including residential, small-scale businesses, outdoor recreational, agricultural, forestry, and natural resource uses. Development within these areas has been largely dependent on site limitations, including soil composition, slope, and elevation, and ease of access to community services.

Land use policies should allow for the preservation and restoration of secondary buildings that are suitable for redevelopment while at the same time preventing the subdivision of large acreage parcels.

New growth in the region has and will continue to place excessive land development pressures on Rural Areas, particularly in those communities that are nearest to major highways and serve larger populations. Here, land use changes will occur at a relatively faster rate, despite local planning efforts and public investment strategies that give priority to new projects within defined growth areas (e.g. Interstate Interchange Areas and traditional Regional and Town Centers, Village Settlements, and Hamlet Areas). It is in the interest of the region that the present land use features within Rural Areas be maintained and remain dominant. These include significant amounts of open space, farmsteads, compatible building styles, low-density residential settlements, lightly traveled two lane roads, and numerous agricultural and forestry operations.

Not all land within Rural Areas is similar nor should be treated the same for development. Some land is steep, inaccessible, wet, subject to flooding, or lack basic utilities; this land should remain undeveloped. Other land, consisting of highly scenic landscapes, ecologically sensitive lands, or irreplaceable natural resources and should be conserved or be developed only in ways that retain these features. No land development should be endorsed where the effect of the proposed use unnecessarily impacts these areas. To do so would be incompatible with land use policies contained in this Plan.

The bulk of new development over the past thirty years in the region has occurred in outlying areas, including Rural Areas.

This is evidenced by the large number of new homes, schools, public facilities, rural highway improvements, power line upgrades, and land subdivisions being sited and developed away from the Designated Downtowns, Designated Village Centers, Designated Growth Centers, and other regional growth areas. Given the trend of people moving into rural areas, land is under pressure for non-residential development. Regional land use policy focuses most business uses within or close to the Regional Center or Town Centers or other more densely settled areas. Rural Areas, however, have been identified as possible sites for certain non-residential uses on the condition that such uses do not unduly compromise one of the principal objectives for the Rural Area - to retain rural character.

Home enterprises are appropriate land uses within Rural Areas. A home enterprise is intended to support the land use features noted above because these are attributes that are valuable to both the quality of life and the economic character of the region. Home enterprises are more dominant land uses than home occupations. A home enterprise may serve to provide alternative uses to older secondary buildings such as barns or similar outbuildings that sustain rural character yet allow alternative sites for small businesses. Land use policies should allow for the preservation and restoration of secondary buildings that are suitable for redevelopment while at the same time preventing the subdivision of large acreage parcels. Also of importance is the intent of providing opportunities for alternative entrepreneurial activities



Bridgewater Barn | Source: ©John Vose - Jericho Hills Photography

in outlying areas. Accommodating home enterprises can only be accomplished when rural character is protected. The impact of traffic on roads, use of sensitive site design principles, degree of visual impact from neighboring uses and public highways, extent of use of traditional building designs or styles, should all be major factors in evaluating proposed home enterprises. Business ventures that employ

relatively large number of employees or are operated by persons or owners not residing on the property are not considered home enterprises. Examples of home enterprises include but are not limited to consulting services, research laboratories, custom furniture and restoration shops, commercial gardening operations, and small-scale repair shops.

Policies Relating to Rural Areas:

1. Rural lands should be developed only in areas where potential for agriculture, forestry or mineral extraction is relatively low. In circumstances where lands are proposed for residential or non-residential uses, development should be planned to minimize or avoid adverse impacts on these resources. Where no reasonable alternative exists but to locate such development in areas exhibiting high resource potential, the project must be planned to minimize the reduction of such potential by providing for reasonable population densities, off-site mitigation, reasonable rates of growth, the use of cluster planning and community planning designed to economize on the cost of roads, utilities, and land usage.
2. Maintenance or enhancement of the rural environment or setting is a primary goal for Rural Areas; the development of large undeveloped tracts should occur at a density and design that meets this goal. Rural land proximate to regional growth areas should be considered locations for uses at higher densities, but only when sprawl and strip development are avoided. Areas further away from regional growth areas should accommodate residential uses at lower densities.
3. New land development and subdivision should be planned and sited to promote the continued use of agricultural and forestry land for their intended purposes. To minimize the potential conflicts between agricultural and non-agricultural uses, projects must be planned and sited to substantially satisfy the following:
 - a. Residential and other non-agricultural uses or structures should be sited on the least productive soils for agricultural and forestry uses;
 - b. If the tract or lot contains woodland, non-agricultural uses should be contained within the woodland, or be located along edges of open fields, to enable new construction to be visually absorbed or screened by natural landscape features;
 - c. Siting of proposed buildings or structures should be planned as to minimize any blocking or interruption of scenic vistas as viewed from a public highway;
 - d. Dwelling units and accessory buildings or structures, and proposed lots for development or sale, should be laid out or clustered so that they conserve the maximum feasible amount of farm, pasture land, or managed woodland; and
 - e. Roads, sewage disposal and

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- water supply systems, curb cuts, power lines and other land improvements necessary or desirable to accommodate development of such parcels must be planned so as to minimize conflicts with agricultural and forestry operations and necessary wildlife habitat.
4. Use of the planned unit development design scheme, is strongly encouraged as a means of providing an environment more amenable to a higher quality of life in the region.
 5. Planning and implementation of development or subdivisions must reflect the following principles:
 - a. Balancing of landowners' rights to use their land, with the corresponding rights of abutting and neighboring landowners to live without undue disturbances (e.g., noise, smoke, fumes, dust, odor, glare, stormwater runoff, etc.);
 - b. Convenience and safety of vehicular and pedestrian movement within the site, and in relation to adjacent areas or roads;
 - c. Adequacy of waste disposal methods and protection from pollution of surface or groundwater;
 - d. Protection of historic and natural environmental features on the site under review, and in adjacent areas;
 - e. Compact development that allows for use of shorter power lines and shorter, narrower, and interconnected roads that result in lower maintenance costs; and
 - f. When new roads are being constructed, consideration should be given to burying power and phone lines if cost effective.
 6. Non-residential uses, including small service businesses, small professional offices and inns are acceptable land uses for Rural Areas provided that such uses are planned as relatively small in size or scale, are not primary or dominant uses in an area, do not unduly conflict with existing or planned residential, forestry or agricultural uses, and do not unduly affect rural character.
 7. The Regional Commission recognizes the right of a resident to use a minor portion of a dwelling unit for an occupation which is customary in Rural Areas provided it does not create a nuisance or have an undue adverse effect on the values noted in this Plan as being important to sustaining the character of Rural Areas.
 8. Major retail enterprises or service centers which draw principally on regional market shares (including factory outlets, large grocery stores, fast food establishments, and shopping malls) are inappropriate in Rural Areas. Such uses are encouraged to locate within or in the expansion area(s) around the existing Regional Center, Town Centers, Designated Growth Centers, or Designated Downtowns. Major

retail enterprises and service centers must be of a scale and intensity that fits with the existing development that is present.

9. As has been stated in other sections of this Plan, new development has the potential to fragment working fields or forests, detract from the scenic nature of rural landscapes, lessen mobility of traffic on roads due to increased access points, drain economic viability from villages and downtowns, and impinge on natural habitat. It is in the interest of the Regional Commission to diligently evaluate all developments to determine if it results in these impacts and if they can be mitigated through good design. To meet this test, the development must:
 - a. Not materially decrease mobility or the functional use or safety of a highway;
 - b. Not impinge on wetlands, other natural resources, including habitat;
 - c. Be of a type or nature that is not appropriate for location within regional growth areas;
 - d. Not unnecessarily fragment large tracts of forest or agricultural lands;
 - e. Be of a design that is compatible with surrounding land uses; and
 - f. Avoid floodplains or other hazardous areas.

Conservation and Resource Areas

Conservation and Resource Areas are those natural areas in need of special protection because of their fragile nature,

irreplaceable value, and unique and important ecological functions. These areas consist of the following sub-groups:

1. Land in excess of 2,500 feet elevation;
2. Steep slopes - those in excess of twenty-five percent gradient;
3. Soils which are predominantly wet or shallow;
4. Wetlands classified by the State of Vermont or U.S. Army Corp of Engineers;
5. Floodplains and areas immediate to lakes, ponds or streams; and
6. Land identified as containing critical wildlife habitats and threatened or endangered species.

Sub-Groups: High Elevations, Steep Slopes, and Marginal Soils

Land in excess of 2,500 feet in elevation has been accepted by the State of Vermont as being in a fragile environment. The land is predominantly steep, soil depth to bedrock is usually extremely shallow, recovery rates to damaged vegetation are low and susceptibility to erosion is high. These areas are largely in forest land. These highland areas have served as sources of clean water for streams and rivers at lower elevations as well as ground water supplies for wells and springs situated in the valleys.

Policies Relating to High Elevations, Steep Slopes, and Marginal Soils Areas:

1. Land above 2,500 feet elevation should be maintained predominantly in a natural wilderness state, except in cases of wind power and/

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- or telecommunications projects endorsed by this Plan.
2. Green Mountain National Forest Service (GMNFS) acquisition of lands above 2,500 feet is encouraged between willing parties. Management plans prepared by the GMNFS must recognize the concept of preservation as well as forest utilization.
 3. Passive outdoor recreation and forestry uses are encouraged provided these uses do not unduly impact other significant resources of the site.
 4. Permanent uses such as dwellings and other similar uses are discouraged.
 5. Any use deemed appropriate to high elevations should be sensitive to slow vegetative recovery and severe soil limitations and should avoid erosion.
 6. Large scale or large tract land developments or subdivision are not supported in areas where steep slopes, wet, or shallow soils are predominant, unless it can be demonstrated that such developments or subdivisions will not be unduly detrimental to the environment. Where this can be adequately proven, density of settlement should be relatively low. Passive outdoor recreational, forestry, agricultural, and low density residential uses are examples of the preferred uses for critical areas, subject to overcoming site limitations.
 7. Development of snowmobile, hiking, and cross country ski trails and

similar recreational facilities are appropriate uses subject to meeting acceptable management practices and applicable state law.

8. Where permitted, land development or subdivision must be planned to minimize reduction of the resource value of such areas for forestry by providing reasonable population densities, use of cluster development, and new community planning designed to economize on the costs of roads, utilities, and land usage.

Sub-Groups: Wetlands and Floodplains

Wetlands and floodplains are fragile areas. How these lands are managed has a direct bearing on the quality and quantity of water resources. Wetlands are valuable for a number of purposes, including water retention during wet periods and water recharge during dry periods. They cleanse water, provide plant and wildlife habitat and diversity, and are often valuable for fish spawning. They also fulfill an important recreational and aesthetic role by providing opportunities for nature study and scenic enjoyment.

Floodplains are lowlands along rivers, streams, and lakes which periodically become inundated with water during times of high rainfall or spring runoff. They are important for retaining waters that might cause damage or destruction elsewhere. Floodplains are often the best agricultural lands because of their thick glacial deposits, minimum slope and proximity to surface water. Floodways are stream

channels and any adjacent floodplain areas that carry the bulk and force of the river's flow, and must be kept free of encroachment in order to prevent a 100-year flood from resulting in substantial increase in flood heights.

Policies Relating to Wetlands and Floodplains Areas:

1. Structural development or intensive land uses shall not occur in Class I and Class II wetlands unless there is an overriding public interest.
2. Developments, and their associated stormwater discharges, that are adjacent to wetlands should be planned so they do not cause undue disturbance to wetland areas. Maintenance of a naturally vegetated buffer strip between a wetland and the project site is required to prevent ground water pollution and direct discharges into a wetland.
3. The Agency of Natural Resources should improve wetland mapping incorporating better data from local efforts where available.
4. Structural development and placement of fill within the

limits of the 100-year floodplain is discouraged. Where careful planning at the local level accepts development within the floodplain, the development should be designed to achieve no, net loss of hydrologic or hydraulic capacity, and located so they do not impede the floodwaters and endanger the health, safety, and welfare of the public.

5. No structural development should be located within the limits of a floodway except projects involving health, safety, or transportation.
6. Natural areas, non-structural outdoor recreational and agricultural uses are the preferred land uses within floodplains. Commercial, industrial, and residential uses are strongly discouraged, except as noted above.
7. Development outside of existing or planned regional growth areas, should not be located immediately adjacent to watercourses, lakes, ponds or shorelines. Such areas should principally be maintained in a natural vegetative state for environmental and aesthetic purposes.



Hayfield serves as floodplain during spring runoff | Source: © K. Kanz, 2001

Sub-Groups: Wildlife Resources and Endangered Species

Maintenance of reasonably abundant populations of diverse wildlife species is a goal of this region. Improperly planned development or land subdivision can significantly detract from or counter this goal.

The loss of wildlife lessens public enjoyment of the outdoors. Loss of certain rural or remote landscapes to suburban landscapes adversely affects habitats for larger animals, including bear and moose, as these species are dependent on large wooded habitats. Fragmentation of forest lands into small discontinuous units can contribute to population decline and loss of certain habitats. Destruction or significant imperilment of necessary wildlife habitat or endangered species are not in the public interest unless such loss from the public is substantially outweighed by the benefits to the public from the development of lands containing such habitats or species. To ensure survival and perpetuation of significant habitats, the Regional Commission supports local, regional and state efforts to monitor and prevent unnecessary destruction or impairment of critical habitats.

Policies Relating to Wildlife Resources and Endangered Species Areas:

1. In areas defined as exhibiting significant wildlife habitats, planning for land development or subdivision should be sensitive to the economic, social, cultural, recreational, or other benefits to the public of the habitat. Where loss of the resource is imminent due to a development or subdivision, all feasible and reasonable means to prevent significant loss or imperilment of the resource should be employed. To minimize potential conflicts between wildlife resources and land development the following principles should be considered:

- a. Design in such a manner as to promote the most appropriate use of land for residential or non-residential uses by clustering or concentrating the density of land use within some sections of the parcel or involved lands in order to maintain or preserve significant habitats in large and undisturbed tracts;
 - b. Design projects in such a manner as to avoid fragmentation of large forest tracts to maintain natural habitats between two or more land developments or subdivision; and
 - c. Conservation of significant habitats by a grant of easement or covenant for protected areas.
2. Significant deer wintering areas (those identified and mapped by the State of Vermont) should be protected from residential development and other uses that threaten the ability of the habitat to support deer. Commercial, residential, and industrial developments are discouraged within deer wintering areas. Certain types of development may be permitted adjacent to deer wintering areas on finding by Vermont Department of Fish and Wildlife, or other wildlife experts, that the integrity of the area will not be unduly disturbed. Use of mitigation techniques is encouraged.
3. Protection of threatened or endangered species are matters of public interest. The Regional Commission supports efforts at

the local, state and federal levels to inventory and, where necessary, protect these resources for educational, recreational, and other purposes. Land development or subdivision which unduly impacts these resources are discouraged and are considered incompatible activities.

4. In areas identified and mapped by the Vermont Department of Fish and Wildlife as containing necessary wildlife habitat, land development and subdivision planning should utilize Department guidelines for protection of threatened or endangered species.

Interchange Areas

Background

The Regional Commission recognizes that areas in close proximity to its thirteen interchanges on Interstates I-89 and I-91 are prime areas for development due principally to their ease of public access and favorable site conditions. The Regional Commission acknowledges that these areas are important transfer points for traffic entering and exiting the region. The benefits of Interstate travel are well documented. However, in many areas in the Northeast, particularly in more developed areas, the lack of planning for development at interchanges has prompted various forms and types of undesirable development along roads immediate to the interchange. Therefore, the level of detail given to planning for interstate interchanges represents a response to the market's interest in these areas for development, not the Regional

Commission's desire to see development directed there.

In this region, the interchanges are located in the towns of Bradford, Fairlee, Hartford, Hartland, Newbury, Norwich, Sharon, Randolph, Royalton and Thetford. Interchanges in Fairlee, Sharon, and Hartford (White River Junction) are considered part of an existing Regional Center or Village Settlement and are therefore not identified as separate land use areas in this Plan. The interchanges in Bradford, Newbury, Norwich, Quechee, Randolph, Royalton, and Thetford are physically separate from a Regional Center, Town Center or Village Settlement, being in some cases two or three miles away. Because land use policy affirms regional growth areas as the principal areas for service, retail, civic, and institutional uses, it is in the interest of the region for these areas to continue to serve these vital functions. Conversely, Interchange Area development, with its different focus, should not be promoted to the detriment of regional growth areas or the public investments made therein.

Increased traffic congestion and safety issues resulting from interchange developments can decrease the level of service of roadways to points below acceptable levels. One example, the Quechee interchange (I-89, Exit 1), contains acres of developable land located within a mile of the intersection of two Interstate highways. This places this interchange at a high degree of vulnerability. Local development decisions made without adequate regard

to preserving mobility will degrade the functionality of the public investments. An illustration of this consequence is on Interstate 89 at Exit 20, a strip of commercial development in nearby West Lebanon, NH whose functionality has been degraded. Other typical problems associated with improper traffic management and development at interchanges include:

1. The creation of numerous curb cuts to access new development that are permitted incrementally on a case-by-case basis without due regard to an overall plan for the area;
2. The eventual existence of high traffic generators in the immediate vicinity which cause degradation of roadway intersections, the need for signalization, lower travel speeds, and extensive queuing of vehicles;
3. Inadequate planning for pedestrian accesses between developments and loss of significant farm land or access to such land;
4. Erosion of cultural, social, and economic values of the traditional town center or village settlement due to a dislocation or redistribution of key uses into the area; and
5. Fragmentation of land parcels in such a manner as to preclude future access or interior roads to properties more removed from the right-of-way; and unnecessary loss of scenic qualities resulting from insensitive land development.

The Regional Commission respects the right of municipalities to plan for growth in these areas. At the same time, the

Regional Commission believes that given the considerable public investment in the interstate highway system and regional growth areas, and the significant public exposure to such areas, these interchanges need to also be evaluated from a regional perspective. Land around interchanges and along highways leading to them are powerful magnets for non-residential uses, this often competes with and erodes regional growth areas; the proximity of large parking lots adjacent to high volume highways are attractive forces to consumers and businesses.

Interchange Policies - General:

1. Land use activities and public or quasi-public investments planned for Interchange Areas, that have the effect of eroding the socio-economic vitality of downtowns, are incompatible with this Plan. High priority should be given to public investments benefiting infrastructure, housing, and transportation facilities within Designated Downtowns, Designated Village Centers, Designated Growth Centers, and other regional growth areas.
2. Land uses planned for interchange areas should be of a type, scale, and design that complement rather than compete with uses that exist in Designated Downtowns, Designated Village Centers, Designated Growth Centers, and other regional growth areas. Appropriate uses include highway-oriented lodging and service facilities, trucking terminals, truck-dependent manufacturing,

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- and park-and-ride commuter lots. No use should impose a burden on the financial capacity of a town or the state to accommodate the growth caused by the project.
3. Any development planned for interchange development must be constructed to:
 - a. Complement the design principles and standards reflected in this Plan;
 - b. Promote the most appropriate land uses as determined through a locally sponsored planning process involving affected landowners, municipalities and the Regional Commission;
 - c. Maintain a high standard of scenic amenities for visually sensitive areas with due regard to impacts on neighboring land uses and highway users;
 - d. Discourage creation or establishment of uses deemed more appropriate to regional growth areas; and
 - e. Encourage planned unit developments.
 4. Support the development of Master Plans for each of the Interchange Areas. Such Plans should be conducted locally as part of each local Planning Commission's on-going planning program in cooperation with landowners, the Regional Commission, and other affected parties. Work should focus on creating an integrated site plan and design plan that serves as a means of addressing the potential conflicts or problems noted above.
- Elements that the Plan should include are:
- a. Access management controls;
 - b. Pedestrian amenities;
 - c. Parking;
 - d. Energy efficiency;
 - e. Utilities/public services;
 - f. Outdoor lighting standards;
 - g. Landscaping and screening;
 - h. Signage; and
 - i. Open space conservation.
5. The Master Plan should serve as the foundation for the identification of the highest and best use of these areas and should provide a framework for future development. Incremental and uncoordinated development inconsistent with Master Plans for each of the interchange areas is discouraged.
 6. Development concepts that should be utilized for interchange areas include:
 - a. A circulation system that is conducive to pedestrian, bicycle, and other non-vehicular travel modes;
 - b. A density or lot coverage area that is higher than surrounding rural settlement areas;
 - c. Use of planned unit development concepts such as compact development that is offset by open space;
 - d. A design that incorporates public spaces and promotes social interactions;
 - e. A mixture of uses including non-residential and community facilities, and possibly residential;
 - f. Central focal points or public

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- spaces serving the entire area;
 - g. A pattern and scale of development that complements traditional patterns and uses in regional growth areas; and
 - h. Provision for park-and-ride commuter parking lots and travel information services.
7. Any new development at or near interchange areas should promote a nodal development pattern where buildings are clustered, off-street parking screened in the rear of the parcel and inter-connected to adjoining parcels where practical.
 8. Municipalities with Interchange Areas are encouraged to promote creation and adoption of an Official Map, per 24 VSA §4421, to provide a legal means of creating an interconnected network of streets, walkways, and other public facilities or amenities on land designated as interchange development areas. Concepts employed in Master Plans and the Official Map should employ traditional streetscape patterns and designs deemed compatible with existing regional growth areas.

Interchange Policies - Specific:

The Regional Commission recognizes that the characteristics of each of the thirteen interchange areas designated in this Plan are not identical. While all of the interchange areas serve as transfer points between the Interstate (limited access roads) and state highways (connectors to villages and outlying countryside), the physical and economic landscape for these areas are different. Some areas are largely undeveloped open spaces without

public infrastructure, especially sewer or water. Other areas are situated at or near prominent vistas or scenic areas and are visually sensitive to certain types of development. Yet, other interchanges are experiencing new commercial or industrial development on what is or was farmland. Some interchanges are relatively flat and have greater potential to accommodate appropriate development compared to others that are steep or have other physical development constraints such as aquifers and wetlands. Lastly, local community planning desires and attitudes suggest that not all land use goals and policies should be universally applied. It is the finding of the Regional Commission that in order for this Plan to address each Interchange Area specifically, supplemental goals and policies have been developed for each of the interstate interchanges except for those in Fairlee, Hartford (Wilder), and Sharon because they are part of existing Village Settlements with few opportunities for significant development.

Bradford Interchange (I-91, Exit 16):

Exit 16 on Interstate 91 accesses Route 25. Route 25 runs in an east/west direction commencing in Topsham at the junction of Route 302 and extending to Bradford and the Connecticut River. Route 25 serves as a major connector road across east central Vermont to New Hampshire. This two-lane road supports mainly local and regional traffic in Washington and Orange Counties. Bradford serves as an economic hub for the area. The primary access points for services and shopping are via Routes 5 and 25.

The area adjacent to the interchange consists of a mixture of land uses.

Topography, soil conditions, and market forces have heavily influenced land uses. Low-lying areas adjacent to the Waits and Connecticut Rivers are subject to flooding. This has prevented structural development from occurring there. Much of the Area consists of primary agricultural soils and still is in agricultural use. The Appleton dairy farm continues to operate here, and the Carson farm was purchased by the Upper Valley Land Trust. A portion of land on the northwest quadrant adjacent to Route 25 near the interchange serves as a public water source for Bradford Village and immediate area. Hydro-geological studies commissioned by the Bradford Water Commission have identified source protection areas near the interchange. Three management zones have been mapped with recommended land uses suggested to secure protection of this water supply.

Following the construction of the interchange in the early 1970s, land uses have changed. Some agricultural and residential uses have been slowly transformed into commercial and industrial uses. This included development of the Pierson Industrial Park, the former Upper Valley Press building (now the Bradford Community Center), an auto parts retail store, a pharmacy, a super-market, a gas station/restaurant, and rental storage buildings. Land on the Lower Plain, east of Route 5 and south of the Village, was donated to the town by the Carson family for the Bradford Fire Station.

Presently public sewer is not available to the Lower Plain. For several years,

the Town, landowners, and Bradford Community Development Corporation have considered extending the sewer system to this area of town. Members of the community have argued that extending sewer services to the Lower Plain could provide an opportunity to intensely develop the area and to give Bradford needed space for community services and industry. Local discussions on extending sewer service continue.

The land located in the immediate area of the interchange should be left in an undeveloped state. Development should be directed to the east, in and around the intersection of Routes 5 and 25, taking opportunities to make use of the available land that is located between and behind the existing development, creating a compact core that allows other lands to remain open.

Hartland Interchange (I-91, Exit 9):

Exit 9 on Interstate 91 provides access to U.S. Route 5 and contains four quadrants of open land that is relatively free of natural constraints. There is no public sewer or water available at this interchange. Land conservation has taken place, or is planned, in three of the four quadrants. A Vermont Community Development Program grant was awarded to the Town of Hartland in November of 2000 to develop a master plan for the interchange following the denial of an Act 250 permit for a convenience store and gas station in the northeast quadrant. In 2001, the Upper Valley Land Trust purchased 29 acres of land in the southeast quadrant and sold it back to the town for a dollar. There is an official VTrans commuter parking

lot located along U.S. Route 5 in this quadrant and a wetland that begins east of it, running south toward the town line and meeting a brook halfway there as they drain into the Connecticut River. There is developable land located south of the conserved property, along the northbound lanes, that could be accessed by Route 5; the land is located in the towns of Hartland and Windsor.

The Upper Valley Land Trust has received funding to purchase the development and excavation rights of a seventy-six acre parcel of land in the southwest quadrant that borders on Route 5 and Rice Road. Further south in this quadrant, straddling the Hartland/Windsor town line, 285 acres of highly visible, forested hillside will be conserved with funding received from the National Scenic Byways Program. The grant was submitted to conserve this area along the Connecticut River National Scenic Byway. This parcel is significant because of its scenic attributes and the habitats that are present along the Bashan Brook and aided by the wildlife culvert that provides passage under the interstate.

The northwest quadrant contains open, developable land along Route 5. The rest of the quadrant contains a few areas of slope of twenty percent or greater, and the Lulls Brook converges with another brook and flows under Interstate 91, toward the Connecticut River.

The town of Hartland is not a regional economic center. Limitations include a lack of municipal utilities and the town's desire to maintain a rural character. In many ways, Hartland will continue to function

as a bedroom community to the Upper Valley. This Interchange Area has not been identified for large capital-intensive businesses. Such land use activities would be inconsistent with this Plan and the Hartland Town Plan. There are other areas that could provide space for small and moderate sized businesses including Hartland Four Corners, Hartland Three Corners, and North Hartland.

According to the Hartland Town Plan's Future Land Use map, the northeast quadrant has been designated for commercial development while the other three quadrants are classified as rural. As stated in the Town Plan: "Much of the land surrounding the interchange remains undeveloped pasture that serves as an important scenic resource, providing visual contrast to the highways. This variety is one important component of the rural business area character that sets it apart from, and makes it more visually interesting and pleasant, than the commercial strip development that exists at many other interchanges. The interchange is one mile from the existing Hartland Three Corners commercial district. In accordance with Vermont's so-called "Downtown Initiative", town officials should encourage businesses to locate in existing business or village centers. To accomplish this, strip-type development should be discouraged within and outside these areas." The Regional Commission concurs. Efforts to conserve land in the three quadrants designated as rural by the Hartland Town Plan should be continued. Commercial development in the northeast quadrant should be compact, sited and

designed to retain the scenic nature of the landscape. Retail development, gas stations, fast food restaurants, motels, and other full-scale highway-oriented services are inconsistent with the goals and policies of the Regional Plan for this Interchange Area due to the close proximity of the Hartland Three Corners village settlement area and its traveler-oriented services.

Norwich Interchange (I-91, Exit 13):

Exit 13 off Interstate 91 provides access to Main Street and U.S. Route 5 in Norwich and Route 10 in Hanover, New Hampshire. There is no municipal sewer available at this interchange, although the Hanover, New Hampshire sewer system is located across the river; municipal water is available at the interchange. Three zoning districts are present at the interchange: Village Residential, Rural Residential, and Commercial/Industrial.

The Connecticut River (state border), Ledyard Bridge, and the area known as Lewiston are located east of the interstate. The northeast quadrant contains residential development, slopes twenty percent or greater, an active rail line, and the historically industrial area of Lewiston. The southeast quadrant contains a wetland, surface water, an electrical substation, transmission lines, slopes of twenty percent or greater, rail, and The Montshire Museum, Vermont's Museum of Science.

The northwest quadrant contains conserved land, slopes of twenty percent or greater, and residential and public uses. Four smaller brooks drain into the Bragg Brook and head toward the Connecticut

River throughout the southwest quadrant. Land to the west of U.S. Route 5 has been conserved, but there are still areas of unconstrained land located west of Route 5, stretching east to the southbound lanes of the Interstate. A housing development of five units has been permitted for construction in this quadrant but possible conservation of the land is presently being considered.

Quechee (Hartford) Interchange (I-89, Exit 1):

Exit 1 of Interstate 89 accesses U.S. Route 4 and connects travelers and commerce west to Woodstock, Killington, Rutland and beyond, and east to White River Junction and Interstate 91. Route 4 is one of the few east/west highways spanning the narrower width of the state and therefore carries steady volumes of traffic. This interchange is located a mile-and-a-half from municipal sewer and water service; the residential wastewater system located to the west in Quechee is a shared leachfield system. The on- and off-ramps for the north and southbound lanes are located a half-mile apart. There are two different scenarios present at either end, with the northbound interchange leaving few opportunities for development due to the close proximity of thirty percent slopes and the Interstate.

The southbound interchange is a sprawling commercial area with access roads intersecting the on- and off-ramps. There is a proposal to develop a portion of the 135 acre parcel behind the commercial enterprises on the west side of Route 4. This land is zoned as Quechee Interstate Interchange (QII) and Rural Lands 5

(RL5) in the Town of Hartford's zoning regulation. Development around the southbound interchange must be planned based around access points that do not degrade the functionality of U.S. Route 4 or the I-89 on- and off-ramps. Stagecoach Road intersects the southbound ramps a tenth of a mile from the intersection with U.S. Route 4; it provides access to the open and undeveloped land west of the interstate. Intensive development that increases traffic volumes must not be permitted on the open lands accessed by Stagecoach Road; it would degrade the operation and safety of the Interstate and U.S. Route 4.

This interchange is not an appropriate location for a growth center. White River Junction, the Regional Center and a Vermont Designated Downtown, is located 3.5 miles to the east. Development at this interchange should be of a type that does not displace the development and investment that has occurred in the regional center. The types of land development appropriate for this interchange include residential, appropriately-scaled traveler-oriented uses, and other similar uses that are not intended to draw on regional populations.

Randolph Interchange (I-89, Exit 4):

The Exit 4 interchange on Interstate 89 is located in Randolph three miles from the revitalized, historic downtown and commercial district and one mile from historic Randolph Center, home of Vermont Technical College (VTC). Exit 4 accesses Route 66, a two-lane connector road that runs in an east/west direction between the Village of Randolph,

Randolph Center, East Randolph and Route 14. This area is predominately open land, including farmland and woodland. The interchange area is particularly well known for panoramic and distant scenic vistas, particularly the mountain views to the west. There are several structures at the interchange, including a gasoline/convenience store, fast food restaurant, professional offices, auto service repair garage, state highway facility, industrial/office complex, and several single family residences.

Presently there is no existing municipal water supply provided to the area, although there are water supply systems on the western edge of the area (Fish Hill) and eastern edge near VTC. An existing sewer line passes through the area and conveys wastewater from VTC down Route 66 to the municipal treatment facility. Annual average daily traffic (AADT) on Route 66 is estimated to increase with or without new development in the area.

In 1998, the Town of Randolph received a planning grant from the State of Vermont to explore opportunities for development at the Exit 4 Interchange. A final conceptual master plan entitled Exit 4 Engineering and Development Analysis was prepared by Dubois and King, Inc. and the Cavendish Partnership in January 1999. Future land use scenarios were developed for each quadrant of the interchange area. The details of this assessment are outlined in the report. Key components included the following:

1. Provide space for the development of business parks with design

Developable land around Vermont's 52 interstate interchanges is a finite resource that provides a unique set of opportunities and challenges for development, especially when viewed from a statewide perspective.

~Vermont
Interstate
Interchange
Design
Guidelines

-
- guidelines to protect scenic values;
 2. Provide open space for the conservation of wetlands, streams, steep slopes, other natural resources, and visual quality;
 3. Limit or deny new curb cuts to maintain the carrying capacity of Route 66;
 4. Provide space and opportunities for transitional/senior housing;
 5. Provide for an improved Park and Ride commuter lot/Welcome Center; and
 6. Consider land for an Agricultural/Cultural Museum perhaps to be affiliated with other uses.

Four years later, the Exit 4 Advisory Committee again studied development scenarios at the interchange, this time using 3-D visualization software, and the conclusions reinforced the 1999 findings concerning the important views at each of the four quadrants of the interchange.

Other key findings were included in the report. More comprehensive design review standards to be included under the Randolph Zoning Regulations were recommended. Prior to proceeding with any major development, the report recommended that design standards first be in place to evaluate development proposals. Selected or preferred development areas were noted during the planning process and mapped. Exclusion or avoidance areas were determined to be sensitive due to distinct area of environmental limitations or high visual resource values. Retail development was concluded as unsuitable for a combination of reasons including traffic impacts on

Route 66, visual sensitivity, and conflicts with downtown businesses. Moreover, stand-alone retail development at any scale or size was found to be incompatible with the community's values. However, there was one exception. Accessory uses of a retail nature for the business park, the agricultural museum, or similar planned uses were found acceptable.

In 2000 the Vermont Agency of Transportation (VTrans) commenced a planning study to develop long-term solutions to a park and ride facility at the interchange area. The need for a new or upgraded park and ride lot has been documented. Local meetings have been held in Randolph to gauge support. As a result of the meetings, an expansion and redesign of the existing site, in the northeast quadrant of the interchange, was preferred. The Vermont Agency of Transportation has obtained all permits and anticipates construction in 2007.

This Plan supports and endorses the efforts of the community to undertake further refinement of the planning concepts referenced in the Exit 4 planning reports. These include plans for a new park and ride facility, the possible creation of an adjunct agricultural museum, and office/industrial parks. Additionally, this Plan discourages large-scale retail development of the interchange - including shopping centers, malls, auto dealerships, and big box stores. Small-scale retail uses subordinate to primary uses and non-traditional to downtown Randolph or other designated areas may be acceptable uses subject to in-depth review and evaluation. The reuse of the former DuBois & King

offices by the Vermont Resources Center and Incubator illustrates the goals of this Plan.

Any project planned for the interchange should employ high design and construction standards and not unduly impair the scenic resources of the area. New development should be sited in areas that are not highly scenic, visible, or environmentally sensitive. The Randolph Planning Commission is currently preparing amendments to the town's zoning regulations, including design review standards and a density overlay, to protect scenic and natural resources. Future development at the interchange that requires improvements to Route 66, including traffic signals and turning lanes, needs to be carefully evaluated. These should only be authorized where it is determined such a public investment will not unreasonably endanger or interfere with the function, efficiency, safety, or use of this route. New development should coordinate with existing development on shared access or retrofit access point locations to improve safety.

Royalton Interchange (I-89, Exit 3):

Exit 3 on Interstate 89 in Royalton accesses Route 107, which runs in an east/west direction, connecting to Bethel and Stockbridge and Routes 100 and 14. Route 107 is classified as a minor arterial road. It is a heavily traveled road and forms part of a major transportation corridor between I-89 and Rutland and points west. Forecasts reveal that traffic volume will continue to grow over the next twenty years.

Following the completion of I-89 thirty-five years ago, several parcels of land near the interchange area have been developed. Primarily these changes in land use have been from rural residential and agricultural uses to industrial or commercial uses but still much of the area remains undeveloped, consisting of farm and forestland. Several areas contribute to highly scenic vistas, particularly from I-89 and Route 107. Due to its prominent location, pressures for new development at Exit 3 will continue. Solid transportation planning, coupled with sound land use planning principles, can minimize land use and traffic conflicts that have plagued many other interchange areas.

In 1999, The Town of Royalton was awarded a grant from the State of Vermont to develop a community vision and policy for the future growth of this area. The Royalton Planning Commission's goal was not to prohibit growth in the area, but to be more specific about how change should be directed. Informational meetings were held to update the public on the study and to get ideas on what the Regional Commission should focus on for future planning in this area. Following this, the Planning Commission found the following values to be important to the area:

1. Provide space for future business growth but only when it doesn't detract from Royalton's two villages;
2. Promote new development when plans are carefully laid out for safe access onto Routes 14 and 107;
3. Protect sensitive resource and scenic areas and encourage good design for new projects; and

-
4. Preserve the carrying capacity of Route 107 as a minor arterial road.

Given these values and an analysis of development suitability, nine future land use designations were recommended and depicted on a map. These included areas for industry, service and office type uses, residences, agriculture, and limited development. Goals and recommendations were listed to help guide the community on the highest and best uses for each sub-area. The Regional Commission accepts the findings and conclusions contained in the Exit 3 Planning and Development Study (September 2000) as the planning policies developed by the Town of Royalton for this area and development proposals should be compatible with this report. Additionally, the potential for sprawling strip development along Route 107 to the west of the interchange concerns the Regional Commission. Development to the west of the interchange should be designed to create small nodes, focused around existing development, that are surrounded by open space or natural areas.

Thetford Interchange (I-91, Exit 14):

Exit 14 on Interstate 91 accesses Route 113 which runs in an east/west direction connecting East Thetford (Route 5) to Thetford Hill, Thetford Center, Post Mills and beyond to West Fairlee, Vershire, and Chelsea. This interchange Area is prominently open with a few residential structures and no commercial or industrial uses. The nearest concentration of buildings is the hamlet of Thetford Hill. This historic settlement has remained largely unchanged since the opening of I-91 in the late 1960s. Thetford Hill has been identified as Village Residential Area

in the Thetford Town Plan. The purpose of the area is to encourage the development of residential centers and to serve as a nucleus for future growth of the Town. The Village Residential Area extends easterly from the village center to an undeveloped area near the interchange. A portion of Thetford Hill has been selected to be included in a Preservation Overlay District under the Town Zoning Regulations. All other land within the Interchange Area is classified as Rural Residential according to the Thetford Town Plan. The purpose of this Rural Residential Area is “to maintain a low density rural character primarily ... of farms, residences and woodlands.” This designation includes certain non-residential uses provided that the uses are relatively small and fit the nature of the terrain and character of the setting.

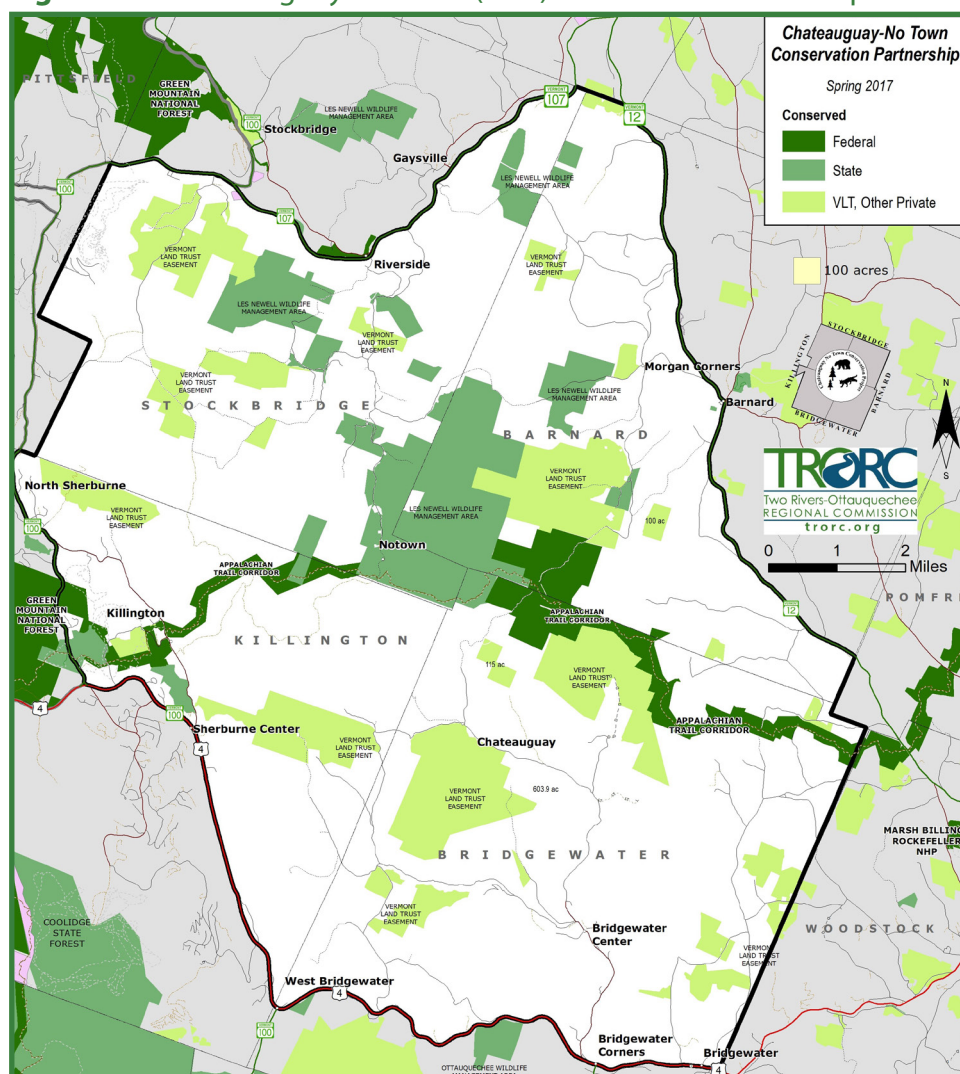
The Town of Thetford is not a major regional economic center. Limitations include a lack of municipal services, limited land suitable for industrial and commercial locations, and the town’s rural character. Even with increased industrial development, Thetford will continue to function primarily as a bedroom community to the Upper Valley. This interchange Area has not been identified for large capital-intensive businesses. Such land use activities would be inconsistent with this Plan and the Thetford Town Plan. There are other areas that could provide space for small and moderate sized businesses including East Thetford, Post Mills, and Thetford Center. Historically, the town’s residents have been against major development at the intersection of Interstate 91 and Vermont Route 113. Retail development, gas stations, fast food

restaurants, motels, and other full-scale highway-oriented services are inconsistent with the goals and policies of the Regional Plan for this Area. Small office parks and research facilities are permissible land use activities, subject to meeting appropriate design guidelines set forth in this Plan.

This Plan strongly recommends that the Town of Thetford develop a Master Plan for this interchange; land use decisions

need to make efficient use of public infrastructure investments, including roads, sewer, and water systems. This planning effort should be locally directed, and comprehensive enough to ensure that the goals and policies set forth in this section are thoroughly addressed. By doing this, evaluating the benefits and costs associated with major land developments would be more readily assured and predictable.

Figure 4-5: Chateaugay No Town (CNT) Conservation Area Map



Wells River (Newbury) Interchange (I-91, Exit 17):

Exit 17 (Boltonville) on Interstate 91 accesses Route 302 which runs in a east/west direction commencing in Barre and extending to Wells River and beyond into the White Mountain Region of New Hampshire and the Lakes Region of Maine. Route 302 is a state designated truck route; it is capable of handling larger trucks without state issued truck permits. The Exit 17 interchange is a well-recognized stop for truckers and tourists at the P & H Truck Stop which is open twenty-four hours a day. Current traffic volumes on Route 302 are generally low and free of traffic congestion. Projections undertaken by the Regional Commission in 1999 show that traffic levels are projected to increase over the next twenty years. However, traffic congestion and the service capacity of the road and intersections should still be within acceptable ranges. What is unknown at this point is the potential impact that large-scale commercial development in Woodsville, NH will have on traffic patterns.

The area around the interchange is predominantly undeveloped consisting of a mixture of open and forestland. There are a few commercial uses along Route 302 mainly extending easterly from the interchange toward Wells River, including a restaurant and other service uses. Northeasterly of the interchange is a fully developed industrial park. Uses at this site are at a relatively low density and are not highly visible from either Route 302 or I-91. Blue Mountain High Union School is

located near the interchange with a direct access onto Route 302.

Along the three mile length of the Route 302 corridor extending from Wells River Village, land suitable for intense development is very limited due to topography, proximity to water resources, presence of protected natural areas, access limitations, and poor soils. Opportunities for more concentrated development within the Route 302 corridor becomes more prevalent in the area of Wallace Hill Road and Leighton Hill Road where the land is relatively level with open topography and better soils.

There are several scenic vistas available to travelers on I-91 and Route 302 at or near the interchange area. Scenic resources include fields, farmsteads, forestland, historic buildings, and streams. It is the policy of this Plan that future land development at the interchange be carefully planned and designed to protect and enhance these valuable resources. Development that detracts from the valued landscape or creates unsafe road conditions conflicts with this Plan's land use goals.

All uses at the interchange are dependent on onsite sewer and water supply. There are no plans to provide public water or sewer services to the interchange area by the Village or Town; the costs reported in a 1990 financial study were deemed infeasible by the Village Trustees. Future development of the area will be limited by the capacity of the land to provide onsite wastewater disposal and water

systems. Uses that require large onsite disposal capacity will have difficulties obtaining wastewater disposal permits, this development is unlikely to be concentrated or dense.

Future land development should be designed and planned to fit the context, the site and the surrounding area. Projects that are incompatible with the surrounding area are discouraged and need to be redesigned so that they are not significant visual intrusions to travelers along I-91, Route 302, and town roads in the vicinity. To ensure that individual development proposals fit with the planning policies of this section, use of an expanded local site plan review process, including specific design criteria, is encouraged. State grant funds may be available to help the Town evaluate these options.

***White River Junction (Hartford):
Interchanges (I-91, Exits 10 and 11):***

Exit 10 is the intersection of two interstate highways, I-89 and I-91. Since Exit 10 is located immediately to the south of Exit 11, these two exits will be discussed in conjunction with one another. These interchanges are both served by public sewer and water, are located in the heart of the Regional Center, and possess the most intensive development around interstate exits in the region. There are proposals to develop two parcels of open land in the immediate interchange area. The land in southeast quadrant of Exit 10 is dominated by slopes that are twenty and thirty percent or steeper but there is open land along the northbound lane of I-91 that is bordered on the south by the Kilburn

Brook. This land could be accessed from the Connecticut River Road but slope and residential development separate the land from the access. Much of the land south of the Kilburn Brook is constrained by its designation as a Deer Wintering Area by the Vermont Agency of Natural Resources.

The undeveloped land in the southwest quadrant of Exit 10 is largely wooded with some twenty percent slopes present. North Hartland Road and Milisi Road could provide access to these wooded areas that are located along the southbound lane of I-91. The open land along the southbound lane of I-89 in this quadrant is constrained by surface water and wetlands located along the North Hartland Road but east of those natural constraints there is a proposal to build an aquatic fitness center. This parcel is zoned Industrial/Commercial (IC). South of Milisi Road there are four brooks that merge into one and drain under the interstate and into the Connecticut River.

The northern two quadrants of Exit 10 are also the southern two quadrants of Exit 11. Both quadrants are nearly fully developed with the exception of some wooded land in the eastern quadrant along I-89 and some open land that is also along I-89 on the east side of North Hartland Road.

The northern two quadrants of Exit 11 are either fully developed with the Veteran's Administration Hospital, residential development and commercial enterprises, or are constrained by slopes of twenty percent or more.

Chateauguay No Town Conservation Area (CNT):

The Chateauguay No Town Conservation (CNT) Area is a remote upland wilderness area covering parts of the Towns of Barnard, Bridgewater, Stockbridge, and Killington. The predominate land use is hardwood forest. The CNT Area has historically been very rural, except for a period during the mid-1800s when development flourished for a brief period due to gold mining speculation in Bridgewater. Today, human settlement in the Area is very sparse, year round public access is practically non-existent for most areas, and public services (electric or telephone) are very limited. For the few inhabitants living here, most are dependent on providing their own power and lighting, and maintaining and plowing their own roads. Roads are relatively narrow and steep and are not designed to sustain heavy vehicles or high volumes of traffic. For the public roads that lead into the Area, none are open or passable as through-roads, providing access to the abutting towns.

With limited exception, land parcels are very large, ranging upwards to several thousand acres in size. Much of this land is owned by timber companies or families interested in using the land for wood production. While there have been numerous land title transfers in recent years the number of land subdivisions has remained relatively low. Much of this land is enrolled in Vermont's Land Use Value Appraisal Program known as "Current Use"; see the Current Use Taxation section of this Plan for more information. Under this program, qualified landowners,

owning at least twenty-five contiguous acres, elect to keep their forestland in production and pay local property taxes based on its 'use' value rather than 'development' value. This program has had the effect of slowing down the development of these lands.

Multiple use recreational activities are highly prevalent in this Area. Numerous seasonal hunting camps exist and there are valuable wildlife habitats including black bear, moose, bobcat, and deer. Hikers seeking a rugged wilderness experience frequent the Area at all times of the year, using old town roads and trails, and the Appalachian Trail which passes through the central section of the Area. Access to the Trail is relatively easy and the number of Trail hikers continues to increase. Snowmobiling remains a very popular sport, attracting both locals and outsiders to the Area. The Vermont Association of Snow Travelers (VAST) retains an extensive system of snowmobile trails in the Area that serve as connector routes to other trails in Windsor and Rutland Counties. Local snowmobile groups have been active in maintaining these trails and working with landowners to ensure continued use of the trails.

The entire Area has been identified by the Vermont Department of Fish and Wildlife as a bear production habitat or an area supporting high densities of cub-producing females. These production areas are contiguous to or within remote road-less forestland. The CNT Area serves as a critical link between the bear production areas south and north of Route 4. The long-term stability of black bear depends on the retention of this Area

in a predominately undeveloped state. Except for busy Route 4 which acts as an unwanted barrier to bear crossings, this Area provides a critical link for bears to move freely between the north and the south habitat areas.

In late 1997, the Chateaugay No Town Conservation Project was launched by the four towns of Bridgewater, Barnard, Killington, and Stockbridge. A locally directed project, its goals are “to foster, through locally sponsored conservation activities, the long term commitment to stewardship of exceptional forest, wildlife, and recreational lands” in the upland areas where these four towns meet. Consisting of approximately 55,000 acres, conservation planning and implementation in the Area will take years to complete.

Since 1997, a locally appointed Committee, in cooperation with the Vermont Land Trust, The Conservation Fund, the Two Rivers – Ottauquechee Regional Commission, Appalachian Trail Conference, and the Vermont Agency of Natural Resources, has been evaluating ways to voluntarily conserve this Area, to protect critical habitats, to promote sustainable forestry, and to ensure recreational opportunities. To date, Project activities have included working with landowners on long-term planning and conservation of their property. Several landowners have agreed to work with the Vermont Land Trust, and other land trusts on specific plans to voluntarily conserve their land. In some cases, landowners have donated easements, relinquishing their right to develop their property and others have agreed to sell rights to the

Trust. The hope of this Project is that if enough people are inspired by the prospect of conserving the Area, land will be permanently protected from development. This will enable current uses of the Area to be permanently retained in the future. In December 2001, Meadowsend Timber Inc., headquartered in New London, New Hampshire, and a large landowner with a strong conservation ethic, sold development rights to its land to the Vermont Land Trust, permanently protecting approximately 2,100 acres of land in the CNT Area, most of this land is in Bridgewater. To assist the CNT partners in the implementation of the project, both a local and a regional conservation fund has been established to provide financial resources to assist landowners interested in conservation of their property.

The goals and policies set forth below are intended to supplement the Section C Policies – For Land Use Settlement set forth above. Land use activities involving or affecting land within the CNT Area need to be evaluated using all relevant sections of this Plan.

Goals, Policies and Recommendations: Land Use

Goals

1. To promote and endorse voluntary efforts between landowners and conservation trusts to conserve properties that have exceptional aesthetic, historic, recreational, and natural resource values.
2. To maintain or enhance use of land for forestry which provides wildlife habitat as well as recreational opportunities.
3. To support local, regional, and state efforts to foster voluntary conservation of the Area through planning, land acquisition, conservation easements, and tax incentives.
4. To limit public investments by the involved communities, the State of Vermont, and other governmental agencies when these investments unnecessarily or unreasonably endanger the long-term use of the Area for forestry, wildlife, and recreational purposes.
5. To discourage public or private development of major access roads or through roads connecting with public highways in neighboring towns.
6. To advocate against public utility upgrades or extensions unless the public is clearly benefited thereby and where it is determined not to compromise the land use goals and policies for this Area.
7. To ensure the protection and management of surface waters in upland watersheds comprising the Area, and to ensure that they remain in their pristine or natural state and are appropriately classified and typed.

Policies

1. Given the combination of factors that make conservation of this Area a high public priority, large development projects, including major residential subdivisions and tract development, in the Area are inconsistent with this Plan. Development of non-commercial seasonal camps serving hunters, snowmobilers, and other outdoor recreational users are appropriate uses and are encouraged. Construction of conventional homes intended for permanent or seasonal occupancy with all modern amenities is not the intended use for the Area. In situations where developments of this type are being proposed, they should only be at extremely low densities. Where a landowner is proposing to undertake such a development, permanent conservation of the remaining land is encouraged as a means to ensure that future residential development will be limited on this tract.
2. Timber production should be the primary or dominant use in this Area. Logging operations are encouraged provided that they are in accordance with best management practices. Woodlots should be managed and harvested in ways to keep soil erosion and sedimentation of streams to a minimum.
3. Insofar as is reasonable, all future development should be planned and sited to promote the continued use of forestland for its intended purposes. To minimize conflicts between forestry, wildlife habitats, and recreational uses, projects should be designed with the following principles in mind:

Goals, policies, and recommendations continued on next page

Goals, Policies and Recommendations: Land Use

Policies (Continued)

- a. Be relatively small in scale, not be the dominant land use on the parcel or in the immediate area;
 - b. Include or reserve a major portion of the land base for conservation or open space;
 - c. Avoid improvements or development in areas exhibiting highly scenic or sensitive landscapes and design structures to minimize disruption of the natural condition of the Area.
4. Ensuring continued public access into the Area for snowmobilers, hunters, hikers, and others is critical to the future use and enjoyment of this Area for sporting and recreational purposes. Town roads, legal trails, and some private roads open to the public serve as primary access routes into the Area. Loggers, sportsmen, hikers, and snowmobilers, benefit from this, as they are able access woodlots and trails readily. Public policy decisions or actions need to reflect these values.
5. Retention of snowmobile trails, many which go over private land and are part of the statewide VAST trail network, is a priority. Where private lands are involved, owners should be encouraged to keep their land open for these purposes. Local sports groups and snowmobile clubs should continue to have the support and cooperation of the Towns in these efforts. Conservation plans developed for landowners in this Area should reflect, where practicable, the desire to retain this network of trails and not close or cut-off important trail routes. Where appropriate, tax or financial incentives should be employed by the Town, State, and conservation organizations to ensure that this policy objective is attainable.
6. Town highways and legal trails are the primary means of public access to land in the Area. Principal users of these roads are local residents, seasonal camp owners, hikers, hunters, snowmobilers, and loggers. These roads accommodate relatively few vehicles ranging from light ATVs and snowmobiles to heavy logging trucks. Town Selectboards retain jurisdiction over these roads and trails, including their maintenance, upgrading, reclassification, and discontinuance. Present and future programs or actions involving roads or trails for this area should be compatible and complement the long-term land use goals and policies of this Plan. Decisions that have the potential effect of altering the stated land use goals of the Area are discouraged.
7. New developments that necessitate improvements to existing transportation facilities, particularly on heavily traveled arterial and collector roads, must be designed to avoid disruption or loss of major, identified wildlife corridor crossings. Transportation enhancements projects should be pursued to mitigate driver conflicts with wildlife, including education and awareness programs along road corridors that host significant numbers of crossings. In addition, initiatives should provide for improvements to the transportation infrastructure to reduce vehicle collisions and wildlife fatalities.

Goals, policies, and recommendations continued on next page

Goals, Policies and Recommendations: Land Use

Recommendations

1. Within five years of adoption, the Regional Commission will, in consultation with member municipalities, neighboring regional commissions, the State of Vermont, public interest groups and property owners, re-evaluate the Land Use section of this Plan. The Regional Commission should give consideration to existing land use settlement patterns, municipal plan goals and policies, agency plans, and projected trends and needs for the region's citizens and businesses. Following completion of the study, the Regional Commission should offer amendments to this section for adoption.
2. The Regional Commission should continue its efforts to provide professional planning services to its member municipalities and advise public officials on the various options available to manage growth and development at the local level.
3. The Regional Commission will work with member towns to determine appropriate location and size for growth centers within the region.