



town of hartford growth center application

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Reference Documents (on CD)

master plan and regulations

1. hartford master plan (2007)
2. hartford zoning regulations (2008)
3. hartford subdivision regulations (1987)
4. white river junction design guidelines (2001)

regional plans

5. two rivers - ottauquechee regional plan (2007)

neighborhood planning

6. white river junction village revitalization plan (2009)
7. route 5 south study (2001)
8. sykes mountain avenue study (2000)
9. downtown white river junction market analysis (1991)

transportation and infrastructure

10. hartford pedestrian and bicycle plan (2009)
11. pedestrian/bicycle trail feasibility study (2007)
12. downtown municipal parking lot conceptual re-design study (2005)
13. route 4 corridor management plan (2008)
14. sykes mountain avenue and u.s. route 5 corridor (2004)
15. capital improvement program (2009)
16. advance transit development plan (2008)
17. white river junction sewage plant study (2008)
18. hartford sewer ordinance (1990 with 2010 amendment)

build-out and projections

19. woods and poole methodology (2008)
20. build-out analysis report (2004)

letters of support

21. Two Rivers - Ottauquechee Regional Commission
22. Green Mountain Economic Development Corporation
23. Hartford Development Corporation

Smart Growth within the Proposed Growth Center

Community Vision and Master Plan

Hartford undertook a multi-phase update to its Master Plan beginning in 2002, which resulted in a significantly revised plan being adopted in two phases in 2003 and 2007. The plan update began with a Town of Hartford Planning Fair. A series of community meetings were then held in each of the villages. As the final component to the public participation process, focus group meetings were held in order to draft specific planning goals for the future of Hartford and the policies and strategies to achieve those goals. By the end of the five-year planning process, there had been 56 Master Plan Steering Committee meetings, eight focus group discussions, two Chamber of Commerce discussions, 17 community meetings, seven Planning Commission workshops and six public hearings. This outreach process resulted in a strong public consensus and the following vision for the town's future land use pattern:

1. Increase density in already developed areas with infrastructure (water and wastewater, close to community facilities and services, and served by public transit).
2. Manage density of future development.
3. Protect scenic areas, open space, and wildlife corridors.
4. Preserve Hartford's historic settlement pattern, defined by compact villages surrounded by rural countryside.
5. Maintain the character of Hartford's rural countryside and support agriculture, forestry, and recreational uses in these areas as well as carefully planned low-density residential uses.
6. Maintain and enhance Hartford's heritage of working farm and forest lands as part of a sustainable, environmentally sound, local resource-based economy.
7. Maintain and enhance open space and recreational "infrastructure" important for long-term health and quality of life of Hartford residents.

Development Patterns and Land Use Regulations

The Two Rivers-Ottawaquechee Regional Commission completed a build-out analysis for the town as part of the master planning process in 2004. The results of that analysis clearly indicated that Hartford's zoning would not help the town achieve the vision articulated by the community. To address the disconnect between the town's goals and its zoning, the Master Plan recommended a series of specific changes to the town's regulations. The town then began a major revision to its Zoning Regulations to implement the goals and recommendations of the new Master Plan.

As a result of the town's extensive public planning process culminating in successful adoption of revised regulations in October 2008, Hartford's zoning is compatible with the smart growth principles referenced in Vermont's growth center legislation. Zoning changes adopted included establishment of new zoning districts designed to promote higher-density development in Hartford's targeted growth area, while reducing development potential in outlying rural areas. The 2008 update also included: changes in zoning district designations for 34 areas in town; changes to densities and dimensional requirements; changes in permitted and conditional uses, and parking requirements; and establishment of setback waivers and overlay districts. The town is currently working on revisions to its Subdivision Regulations and Highway Ordinance in accordance with the recommendations of its Master Plan.

Planning for Smart Growth

Other recently completed studies and projects that support the smart growth principles referenced in Vermont's growth center legislation include:

- ⦿ **2009 White River Junction Revitalization Plan.** The 2009 Revitalization Plan updates the 1992 River City Revitalization Plan and includes: (1) an assessment of downtown infrastructure and utilities, parking and mobility, streetscape and urban design, wayfinding and branding; and (2) conceptual layout plans and a comprehensive capital improvement program.
- ⦿ **2009 Hartford Pedestrian & Bicycle Plan.** This plan resulted from the efforts of a citizens' group committed to expanding opportunities for and improving the safety of walking and bicycling in Hartford. The group was supported by town and regional planning staff. The plan includes a series of recommendations, many related to integrating bike and pedestrian infrastructure into new development, and a prioritized list of projects. Top priorities include improvements to Christian Street, North Hartland Road, Hartford Avenue, Maple Street and North Main Street - all projects within the proposed growth center. This plan was adopted by the Planning Commission and is pending approval by the Hartford Selectboard.
- ⦿ **2004 Sykes Mountain Avenue and US Route 5 Corridor Bicycle & Pedestrian Alignment Analysis.** This study was a follow-up to the 2000 Sykes Mountain Avenue Study, which identified a clear lack of pedestrian and bicycle accommodation in the project area. This conceptual alignment analysis examined the feasibility of creating a sidewalk and bicycle lane 1.5 miles along Sykes Mountain Avenue, extending south along Route 5 to the VA Cutoff Road. This study led to the town receiving a transportation enhancement grant to design and construct a sidewalk. This plan has also resulted in requirements for developers to include sidewalks in approved site plans.
- ⦿ **2001 Route 5 South Study.** The primary focus of this land use and transportation study was to ascertain the development feasibility of the corridor and make recommendations regarding land use, infrastructure, and zoning. The study concluded that since much of the area had significant natural resource constraints, it did not justify the high cost of providing infrastructure to the area. As a result, in the fall of 2008, much of the area was rezoned from Industrial Commercial to Rural Lands 10 with an Agricultural Overlay District. These rezonings also ensured the new and water and wastewater systems constructed in this corridor would not result in scattered and unplanned development.
- ⦿ **2000 Sykes Mountain Avenue Study.** The primary focus of this study was to evaluate the impacts of further development and/or redevelopment of the Sykes Mountain Avenue area, which is largely characterized by strip development with incremental and uncoordinated land use, transportation and utility systems. The study analyzed the impact of building-out the study area on the transportation network, neighboring land uses, natural resources and utility systems, and made recommendations to accommodate projected growth. The study took a comprehensive look at these issues and provided a planning framework for future land use decisions. This framework has guided development over the last nine years, resulting in a more coherent and coordinated land use pattern.

A. Growth Center Definition

Location

Hartford's proposed growth center includes the town's designated downtown, White River Junction, and contiguous lands as shown in Figure 1. The proposed growth center is within the area identified in Hartford's Master Plan as a planned growth area.^{1,2}

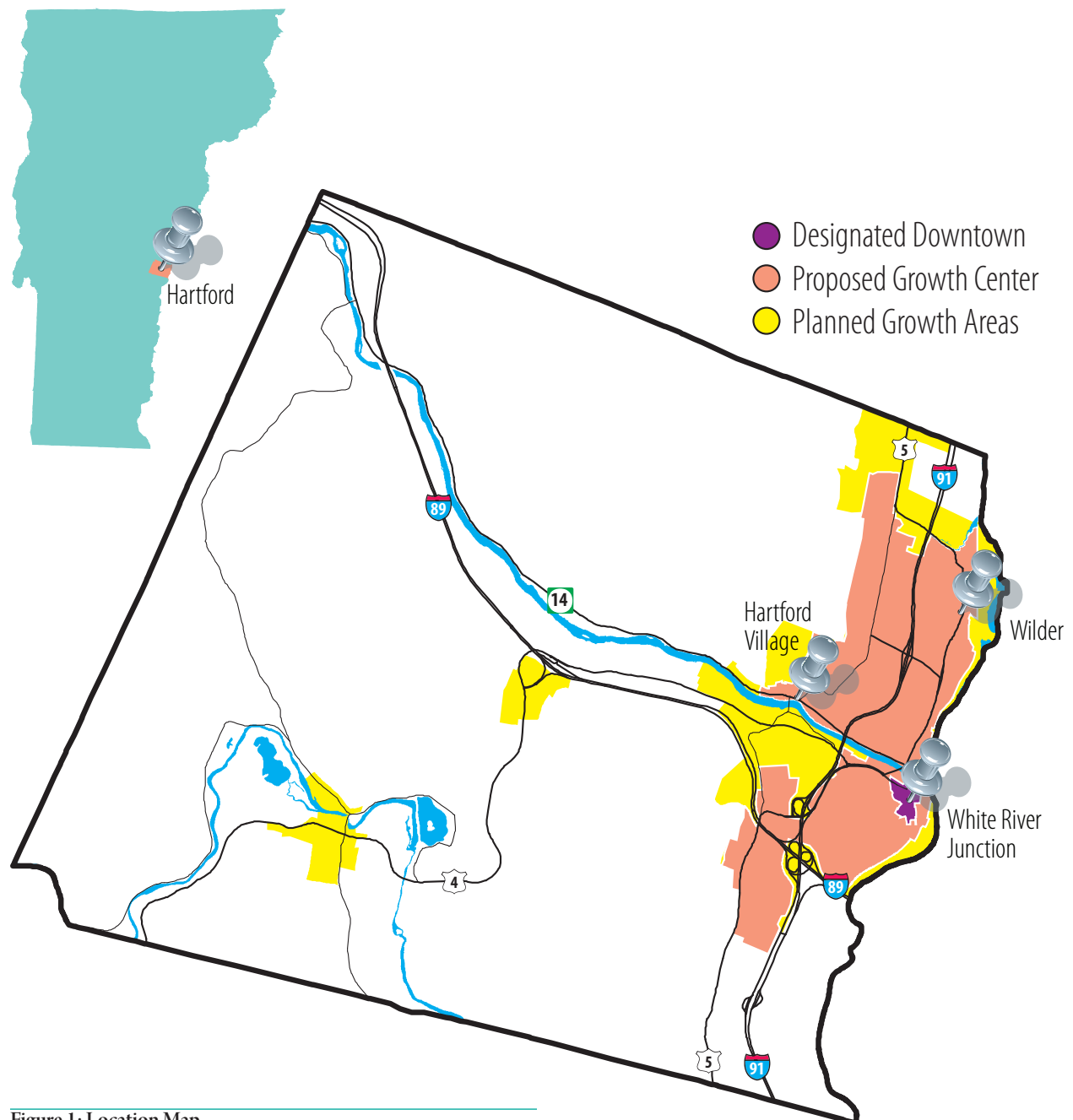


Figure 1: Location Map

Characteristics

Hartford's proposed growth center substantially contains the characteristics specified in 24 VSA § 791 (12) (B) as demonstrated below.

Mixed Use

Hartford's proposed growth center is planned to accommodate a mix of uses. It is the policy of the Hartford Master Plan to "Encourage mixed-use development in the village centers."¹

The following uses are allowed in one or more zoning districts within the proposed growth center: accessory use, agriculture, bakery, banking/financial institution, bar, B&B, cemetery, contractor's yard/shop, crematory, daycare facility, single/two/multi-unit dwelling, farmstand, food assembly/catering, funeral home, garden center, home business, home occupation, hospital/medical center, hotel/motel/inn, junkyard, kennel, light manufacturing/industry, light manufacturing/retail sales, lodging house, manufacturing/industry, medical clinic, mixed use building, motor vehicle car wash, motor vehicle fueling facility, motor vehicle repair, motor vehicle sales, museum, nursing care facility, office, open air market, parking facility, passenger terminal, place of worship, printing/publishing, public assembly facility, public facility, public information facility, PUD, recreational facility, research/testing lab, restaurant, retail, school, storage mini/self, transportation terminal, veterinary clinic, and warehouse.⁵

Hartford's proposed growth center is also being planned to accommodate housing that meets a diversity of social and income groups. The current housing stock within the proposed growth center is diverse, ranging from single-family homes in traditional village neighborhoods and in more rural settings, upper floor downtown apartments and condos, attached townhomes at various price points, apartments within converted historic homes and buildings, and mobile home parks. All these types of housing continue to be allowed within the proposed growth center. The recent zoning revisions creating the R-1M zoning district are intended to promote further development of multi-family units, which are more likely to be affordable, by allowing multi-family dwellings as a permitted use. The increase in density in most of the residential districts throughout the growth center are also intended to support development of accessory units and conversion of large single-family structures to multi-family dwellings.

Public Spaces

Hartford's public spaces and facilities are conveniently located and easily accessible to residents within the proposed growth center. Neighborhood schools, parks, libraries, post offices, places of worship, etc. promote social interaction among residents, and provide locations for a diverse range of groups and organizations to meet.



Railroad Museum and Welcome Center in White River Junction

Hartford’s proposed growth center includes the following public parks, lands and facilities as shown in Figure 2 and described in the town’s Master Plan:^{3,4}

Parks		State/Federal	
Veterans Memorial Park, WRJ	1.2 acres	Veterans’ Hospital	62.0 acres
Fred Briggs Park, WRJ	0.2 acres	Windsor County District Court	2.5 acres
Lyman Point Park, WRJ	0.9 acres	U.S. Postal Service	7.3 acres
Ratcliff Park, WRJ	8.4 acres	VTrans maintenance facility	7.6 acres
Frost Park, Wilder	2.0 acres	VTrans railyard, Amtrak station,	9.8 acres
Watson Mem. Park, Hartford Vil	8.6 acres	Welcome Center & Transporta-	
Town property on Christian St.	17.6 acres	tion Museum	
		New England Central Railroad	13.4 acres
Schools		Other Organizations	
Dothan Brook School	5.0 acres	Hartford Fire District 1	0.5 acres
White River School	1.7 acres	Hartford Historical Society	0.4 acres
Hartford High & Memorial Mid-	49.5 acres	Cemeteries	19.7 acres
dle Schools, and Hartford Area		Elks Club	1.4 acres
Career & Technology Center		American Legion	0.5 acres
Old Wilder Elementary School	1.6 acres	VFW Post 2571	0.2 acres
(now used by school district)		Bugbee Senior Center	0.5 acres
Town Government		HCRS Hartford Region Office	1.5 acres
Hartford Municipal Building	3.4 acres	Libraries	
Hartford Highway Department	2.3 acres	Hartford Library	0.1 acres
Hartford Water Department	2.8 acres	Wilder Club and Library	0.3 acres
Other municipal landholdings	13.6 acres		

Focal Points

Hartford's proposed growth center includes focal points and anchoring institutions of regional, town and neighborhood significance as shown in Figure 2. Facilities and institutions like the VA Hospital, Hartford High School, Windsor County District Court, Northern Stage, Center for Cartoon Studies, the new Upper Valley Aquatic Center, the Greyhound bus terminal, and the Amtrak train station and Welcome Center serve residents of or attract people from throughout the Upper Valley and beyond. At the town level, the Municipal Building and town recreation facilities are used by residents living within and outside the proposed growth center. Neighborhood elementary schools, libraries and parks are focal points for residents of White River Junction, Hartford village and Wilder.

Density of Development

The proposed growth center includes lands zoned for high density residential, mixed-use and commercial/industrial development. Within the proposed growth center, permitted residential densities range from more than 21 to more than 5 dwelling units per acre. Maximum permitted lot coverage in the mixed-use and commercial districts in the proposed growth center ranges from 65 to 90 percent.⁶

Further, Hartford's proposed growth center includes land in zoning districts that promote densities of development that are significantly greater than what is allowed within those districts not included within the proposed growth center. The Residential-3 zoning district, which is the lowest density residential district within the proposed growth center, allows for more than 5 dwelling units per acre. By comparison, the Rural Lands-1 district, which is the highest density residential district outside the town's planned growth areas, allows for only 1 dwelling unit per acre.⁶

Hartford's 2007 Master Plan recommended a number of zoning changes, which were implemented in 2008, to promote higher-density development within village areas and growth centers including reductions in minimum lot size requirements. Specifically, the following changes were made as detailed in Appendix D:

Mascoma Savings Bank on Sykes Mountain Avenue





Infill Development on Railroad Row in White River Junction

1. Central Business (CB) District - reductions in minimum lot size and lot width.
2. Industrial / Commercial (I/C) District - reductions in minimum lot size, width, depth, front setback, and side setback, and an increase in lot coverage.
3. Village Business (VB) District - reductions in minimum lot size and lot width.
4. Village Residential - Commercial (VR-C) District - reductions in minimum lot size, width, depth and front setback, and an increase in residential density.
5. Residential Commercial 2 (RC-2) District - reductions in minimum lot size, width, depth and front setback, and an increase in residential density.
6. Village Residential 1 (VR-1) District - reductions in minimum lot size, width, depth and front setback, and an increase in residential density.
7. Residential 1 (R-1) District - reductions in minimum lot width and depth, and an increase in residential density.
8. Residential 2 (R-2) District - reductions in minimum lot size, width, depth and front setback, and an increase in residential density.
9. Residential 3 (R-3) District - reductions in minimum lot width and depth, and an increase in residential density.

The 2008 Zoning Regulations establish zoning districts and densities, that at full build-out will generally maintain the current ratio of residential development, which is 25-30 percent in rural districts and 70-75 percent in village districts. This represents a substantial change from the previous zoning, which would have resulted in 45 percent of residential development occurring in rural districts and 55 percent in village districts at full build-out (See Appendix C).

Undeveloped “greenfield” properties comprise a small percentage of the land within Hartford’s proposed growth center. Much of the future growth is anticipated to involve infill and redevelopment

of properties that are now developed at substantially lower densities than allowed under the current zoning regulations. Over the 20-year planning period, Hartford envisions that portions of the proposed growth center currently characterized by lower-density land uses will become higher-density and more reflective of the state's smart growth principles. Examples of such projects include:

- ⦿ The recently constructed Mascoma Bank on Sykes Mountain Avenue, which is a 3-story, 30,000-square foot building. This site was formerly developed with an 1,850-square foot, single-story building.
- ⦿ The revitalization of Railroad Row, which replaced dilapidated warehouses with 3- and 4-story commercial and mixed-use buildings totaling 59,000 square feet of space on 0.65 acres (a FAR of 2.08).

Two areas in particular that are currently developed at lower densities within the proposed growth center include the lands along Route 5 south of the interchange and along Christian Street. During the town's multi-year planning and re-zoning process, considerable discussion and thought was given to these areas. Ultimately, the town determined that these lands were appropriate locations for future development, due to their proximity to existing infrastructure and development, and included them within its planned growth centers as designated in the 2007 Master Plan.

In deciding what land to include within its proposed growth center for state designation, Hartford found these areas necessary to meet the state requirement that the area accommodate a majority of future commercial and residential growth, and to maintain the desired ratio of growth area versus rural development. The town envisions these lands being developed over the 20-year planning period as follows:

- ⦿ On Route 5 South, Hartford expects that the new Aquatic Center will serve as a catalyst for additional growth, such as lodging or other visitor services in proximity to the interchange. Further south, the Kline Drive Industrial Park has available lots to accommodate small- to medium-sized businesses, and it includes a site being considered for an Upper Valley multi-modal center. As outlined in the Route 5 South Study, the town envisions that Kline Drive will become developed in a manner similar to the Billings Farms and Olcott parks on Route 5 north, which are largely built-out and occupied with a range of business uses from offices to light manufacturing and are served by town water and sewer, as well as transit service. The Route 5 South Study also recommended bicycle and pedestrian improvements along the corridor that have been incorporated into the town's bike-ped planning efforts as described below.¹²
- ⦿ On Christian Street, Hartford expects additional residential growth, primarily in the form of planned unit developments similar to those already built along Chandler Street and Bugbee Street, and planned for the Pippin property at the northern end of the proposed growth center. While included within the town's planned growth areas, Hartford recognized the need to protect the agricultural and scenic character of some parts of this corridor as these are key components that make Christian Street an attractive location for housing. The town's 2008 zoning balanced increased residential density with an overlay district that promotes clustered development in order to maintain open space and agricultural land, thus preserving much of the area's character while accommodating growth (See Section C, pages 24 to 27).

Infrastructure and Transportation

Water and Sewer. As shown in Figure 3, all of the land within Hartford's proposed growth center is in the town's water and sewer service area. Hartford voters passed bonds in February 2009 to upgrade the White River Junction wastewater treatment plant, which serves the proposed growth center. Final engineering is completed and final permitting is underway with construction expected to commence in 2010. This project will result in sufficient capacity to accommodate anticipated growth over the next 20 years as demonstrated in Appendix B.

The upgraded plant will have a permitted flow of 1.45 million gallons per day and an uncommitted reserve of 461,000 gallons per day, which has been allocated to serve development solely within its current service area (the town's planned growth area) as per the town's recently revised wastewater ordinance. Added to this is the existing 57,400 gallons per day of committed reserve that is already earmarked for properties within the proposed growth center, for a total wastewater capacity of 518,400 gallons per day. The 1,275 additional dwelling units and 1.5 million square feet of commercial space being planned for the proposed growth center are anticipated to demand approximately 385,000 gallons per day.

Water and sewer projects included in the town's capital budget and program include:

1. **Water Main Replacements (White River Junction System).** FY2011-15. Total cost: \$8.8 million to be funded through bonding and user fees.¹⁷
2. **WRJ Wastewater Treatment Plant Upgrade and Expansion and Pump Station Upgrade.** FY2010-13. Total cost: \$10.5 million to be funded through bonding.¹⁸

Upgrades to existing infrastructure would be required to provide service to limited areas within the proposed growth center as described below. The town has no plans to make these upgrades until such service is requested to support proposed development, and anticipates that associated costs would be largely borne by the developer.

- ⊙ To provide sewer to all areas along Route 5 south of the interchange within the proposed growth center would require a pump stations at Kline Drive and on the Wright property in addition to service lines.
- ⊙ To provide sewer service to the currently unconnected areas along Christian Street within the proposed growth center would require some redesign of existing service lines to avoid cross-country connections near Brookside and Woodhaven and to enable new gravity lines. Upgrades to the pump stations at either Depot or A Street may also be needed to accommodate expanded service.

Bike-Pedestrian Facilities. Hartford's proposed growth center features a multi-modal transportation system. There are sidewalks throughout White River Junction, Wilder and Hartford Village, as well as along the major travel corridors connecting these centers, as shown in Figure 4. Work was just completed on a multi-year effort to extend sidewalks along Route 5 between Wilder and White River Junction, and work is expected to commence in 2010 on the first phase of sidewalk construction on Sykes Mountain Avenue.¹⁵ Hartford recently completed a town-wide pedestrian and bicycle master plan, which includes a prioritized list of projects and action plan.^{13, 14}



New Sidewalks along Route 5

Hartford completed a feasibility study in 2004 for sidewalks from the VA Hospital along Route 5 to Sykes Mountain Avenue, and down Sykes Mountain Avenue to South Main Street in White River Junction.¹⁵ The town is currently engineering the portion of the project along Sykes Mountain Avenue and plans continued incremental implementation of this plan. Further, Hartford has sought funding through an Enhancement Grant for sidewalks along Route 5 from Ballardvale Drive to the Upper Valley Aquatic Center, which would implement a component of the sidewalk extension to Kline Drive recommended in both the Route 5 South Study and the Hartford Bicycle/Pedestrian Master plan. Connecting sidewalks across the interchange continues to be a challenge as VTrans has not accepted any of the alternatives proposed thus far. The town is committed to further study and coordination with VTrans to find a solution that will improve

pedestrian safety, as people are already walking along the road in this area.

New development within the proposed growth center will be required to install sidewalks as a condition of site plan approval if none currently exist.^{7, 8, 9} Since 2000, the Planning Commission has required provision of a sidewalk or paved shoulder as a condition of site plan approval for development at the following sites (some of which are awaiting construction as part of the state's Route 5 / Sykes Mountain Avenue sidewalk project):

1. Gateway Hyundai on Sykes Mountain Avenue
2. Gateway Car Wash on Sykes Mountain Avenue
3. Merchants Bank on Sykes Mountain Avenue
4. Mascoma Bank on Sykes Mountain Avenue
5. White River Toyota on Sykes Mountain Avenue
6. Upper Valley Aquatic Center on Arboretum Lane (off Route 5 South)
7. Orange/Windsor County Credit Union on Route 5 in White River Junction
8. Cornerstone Development on Butternut Road in White River Junction
9. River View Mews on A Street in Wilder
10. Hollow Drive Planned Development on Hollow Drive in Wilder

Hartford is currently budgeting around \$200,000 per year for sidewalk replacement based on a 40-year replacement cycle. In addition, the town's capital improvement plan and budget includes funding for future bike/ped projects as follows:¹⁶

1. **Sykes Avenue Sidewalk/Bike Lanes** (Roundabout to Butternut Road). FY2010. Total cost: \$556,000. Town funds: \$87,000.
2. **North Hartland Road Sidewalk/Bike Lanes** (Aquatic Center to Ballardvale Drive). FY2011. Total cost: \$309,000. Town funds: \$248,000.

3. **North Hartland Road Bike Lane Feasibility Study** (Sykes Mountain Avenue to Route 5 Bridge). FY2012. Total cost/Town funds: \$18,000.
4. **Christian Street Sidewalk/Bike Lane Feasibility Study** (Hartford Village to Norwich). FY2013. Total cost/Town funds: \$50,000.
5. **Christian Street Sidewalk/Bike Lane Final Engineering** (Hartford Village to Norwich). FY2015. Total cost/Town funds: \$100,000.

Transit Service. Advance Transit makes stops on weekdays at multiple locations within the proposed growth center along its Green and Orange routes, as shown in Figure 4. The Orange Route provides hourly service between White River Junction, West Lebanon and Hanover, while the Green Route provides hourly service between Hartford Village, Wilder, West Lebanon and Hanover. Advance Transit's system-wide free service has been made possible by special increased contributions from Upper Valley towns and major employers. Hartford's 2009 appropriation for Advance Transit service was \$40,590.

Overall ridership on Advance Transit buses increased 85 percent between 2003 and 2008, and 152 percent on the Green Route indicating the heavy use of this service within the proposed growth center. While Advance Transit has provided service in Hartford since 1984, the decision in 2000 to provide free service has resulted in ridership on the Green and Orange routes in Hartford more than doubling in recent years.

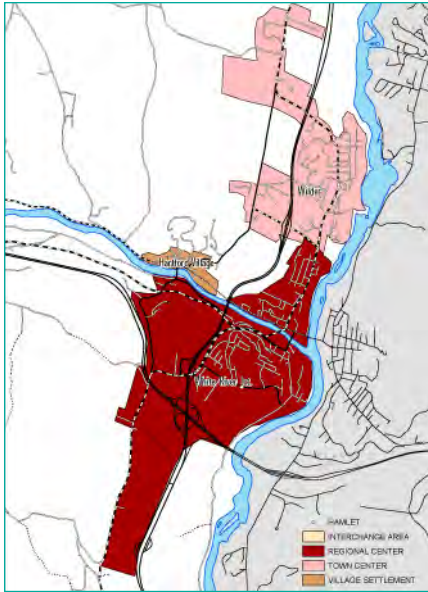
Advance Transit surveys riders and updates its Transit Development Plan every five years, making adjustments to its routes and schedules as necessary to meet passenger demand. The most recent plan, completed in 2008, outlines how the organization will respond to growing demand for transit and new development within its service territory, including within Hartford's proposed growth center. As development occurs within the proposed growth center, resulting in increased demand for transit service, it is anticipated that Advance Transit will expand its service to meet demand as it has been doing throughout its service territory.¹⁹⁻²³

Specific recent improvements to Advance Transit services and facilities in Hartford include:

1. Five new shelters currently being installed in Hartford.
2. 8,000-sf expansion of the Advance Transit facility located in Hartford.
3. Expansion of the Orange Route to serve the Upper Valley Aquatic Center is being considered.
4. Hartford is actively pursuing location of a regional multi-modal facility (potentially on Route 5 South), which would facilitate local transit service with inter-city transit.



Advance Transit Stop on Sykes Mountain Avenue

Regional Plan Land Use Areas**Compact Development Pattern**

Hartford's 2007 Master Plan identifies the villages of White River Junction, Quechee, Wilder and Hartford as planned growth areas. The plan further establishes a goal of maintaining a population balance in the town with 75 percent of residents living in the planned growth areas served by water and sewer, and only 25 percent living in the rural areas of town. The 2008 changes to the town's Zoning Regulations will realize this goal, as compared to the previous zoning that would have resulted in a 45 percent rural and 55 percent village settlement pattern. The areas targeted to accommodate future growth comprise approximately 15 percent of the town's land area.^{1,2} Hartford is seeking state growth center designation for 60 percent of this 4,400-acre area.

Hartford's proposed growth center is part of the Upper Valley's regional employment and service center. White River Junction, which includes downtown, Tafts Flats, Sykes Mountain Avenue and Route 5 south of the interchange, is recognized as a "Regional

Growth Area" and the "Regional Center" in the Two Rivers - Ottauquechee Regional Plan. The Regional Plan calls for major growth or investments to be channeled to the growth areas, which are existing or planned settlement centers and adjacent lands.^{10, 11} Thus, Hartford's growth center also serves to protect rural lands in neighboring municipalities, particularly those areas along the interstate and highway corridors.

Figure 5 illustrates the proximity of and connectivity between existing development nodes within the proposed growth center. Hartford believes that the 2,633 acres proposed for designation is appropriate in scale given the town's existing land use development patterns and role as a regional center, and that the proposed growth center is a compact area planned for concentrated development with rural countryside beyond its borders.

Conformance with State Law and Smart Growth Principles

The proposed growth center, and its implementing land use regulations, are built upon the foundation of Hartford's 2007 Master Plan. That plan was found to be in conformance with state planning goals and purposes when it was confirmed by the Two-Rivers Ottauquechee Regional Planning Commission on September 25, 2007. As demonstrated above, Hartford's proposed growth center substantially contains the characteristics specified in 24 VSA § 791(12)(B).

References:

	Attachment	Page	Description
1	1 Hartford Master Plan 2007	56-58	Chapter II: Land Use • Guiding Future Development • Village Areas and Growth Centers
2	1 Hartford Master Plan 2007	66	Chapter II: Land Use • Map 19: Proposed Growth Centers
3	1 Hartford Master Plan 2007	137-168	Chapter VI: Community Facilities and Services
4	1 Hartford Master Plan 2007	168-171	Chapter VI: Community Facilities and Services • Recommendations
5	2 Hartford Zoning Regulations 2008	11	Article 2 Districts and District Regulations • 9 District Objectives and Land Use Control • Summary of Permitted & Conditional Uses by Zoning District
6	2 Hartford Zoning Regulations 2008	12-33	Article 2 Districts and District Regulations • 9 District Objectives and Land Use Control
7	2 Hartford Zoning Regulations 2008	44	Article 3 General Provisions • 3-3 Access and Parking • 3-3.3.7. Safety, Access and Circulation • (F) Street and Sidewalk Improvements
8	2 Hartford Zoning Regulations 2008	79	Article 4 Special Provisions • 4-1 Site Development Plan Approval • 4-1.3. Review Standards • 4-1.3.1. Traffic Circulation
9	2 Hartford Zoning Regulations 2008	80	Article 4 Special Provisions • 4-1 Site Development Plan Approval • 4-1.3. Review Standards • 4-1.3.4. Bike/Ped Provisions
10	5 TRO Regional Plan 2007	26-30	III. Land Use • B. Goals - The Future Pattern of Settlement
11	5 TRO Regional Plan 2007	30-61	III. Land Use • C. Policies for Land Use Settlement
12	7 Route 5 South Study 2001	56-64	X. Recommendations
13	10 Hartford Ped. & Bicycle Plan 2009	27	4. Project Prioritization System • Figure 14 - Prioritization list
14	10 Hartford Ped. & Bicycle Plan 2009	31	5. Action Plan
15	14 Sykes Mt. Ave. & Rt. 5 Pedestrian & Bicycle Alignment Analysis	8-20	7. Description of Proposed Alignment Alternatives
16	15 Hartford CIP 2010-2015	6-7	Pedestrian/ Bicycle Improvements
17	15 Hartford CIP 2010-2015	11-13	Water Department
18	15 Hartford CIP 2010-2015	13-17	Wastewater Department
19	16 Transit Development Plan 2008	5-1 - 5-4	Chapter 5: Service Area Changes
20	16 Transit Development Plan 2008	7-3	Chapter 7: Longer Term Service Design Strategies - Core Service Area • Section 7.3. More Frequent Orange Route Service, Extended to Norwich
21	16 Transit Development Plan 2008	7-4	Chapter 7: Longer Term Service Design Strategies - Core Service Area • Section 7.4. More Frequent Green Route Service
22	16 Transit Development Plan 2008	7-5	Chapter 7: Longer Term Service Design Strategies - Core Service Area • Section 7.7. Saturday Service
23	16 Transit Development Plan 2008	9-3	Chapter 9: Bus Stops and Transfer Centers • Section 9.3. Bus Stop Planning in Vermont

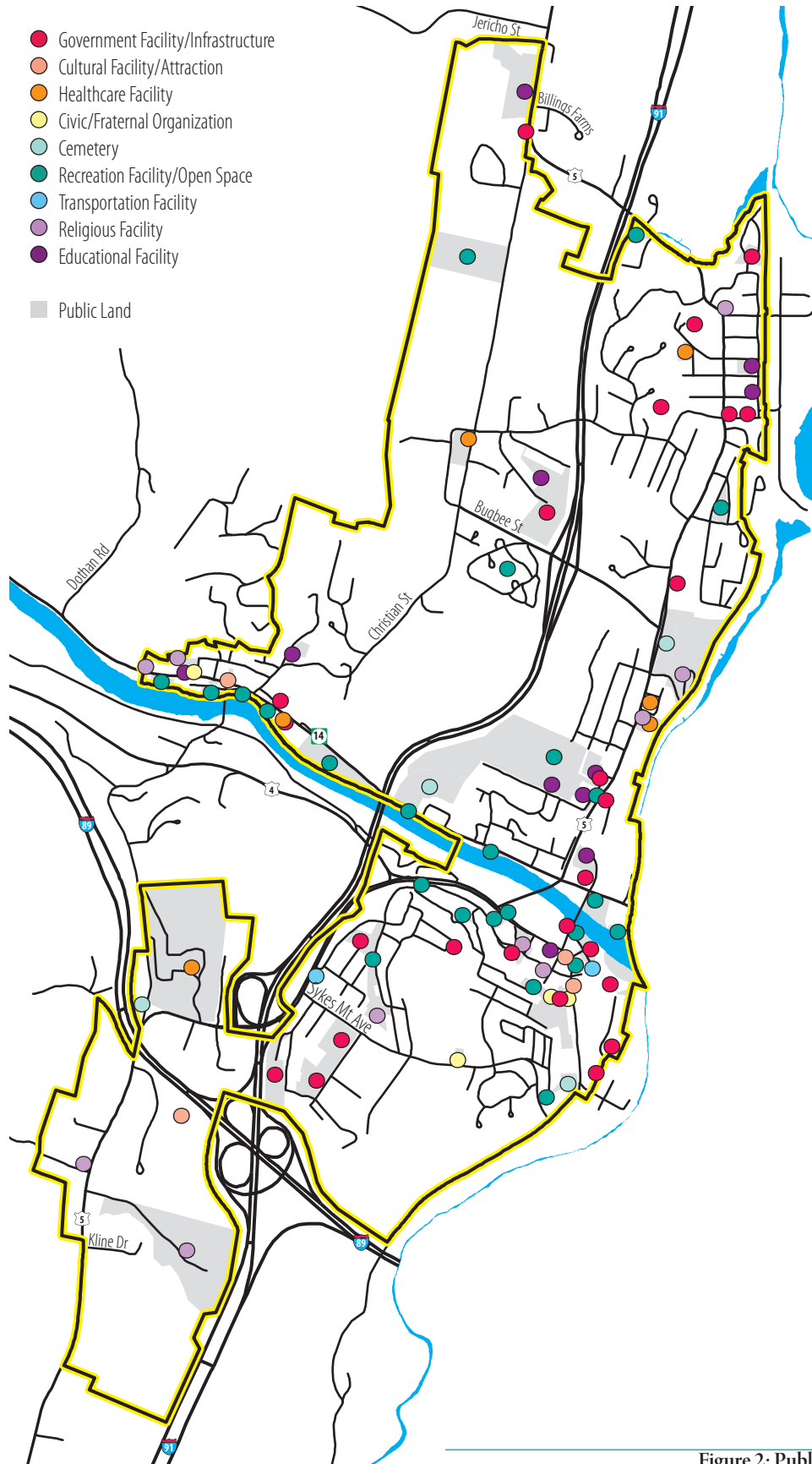


Figure 2: Public Spaces and Focal Points Map

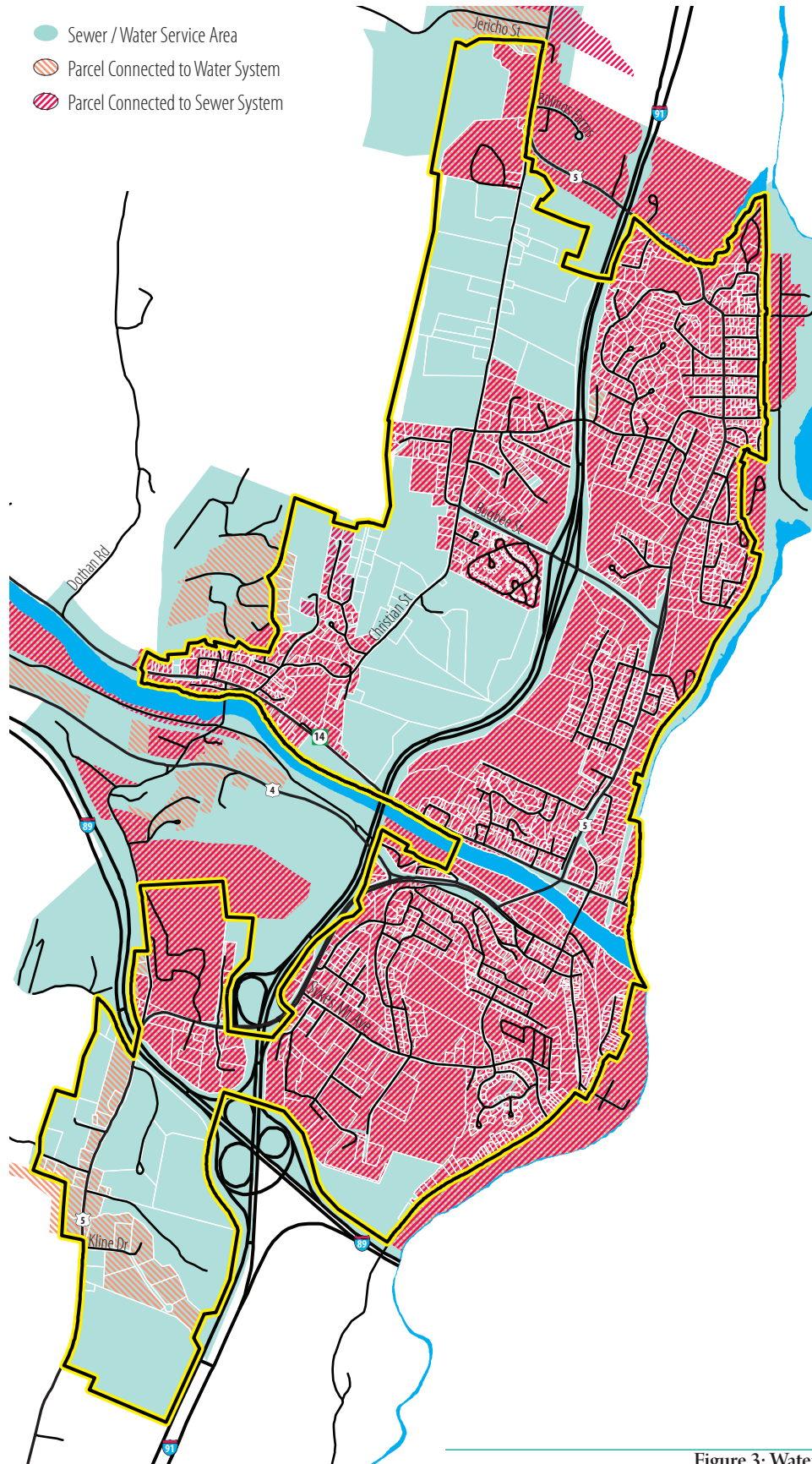


Figure 3: Water and Sewer Infrastructure Map

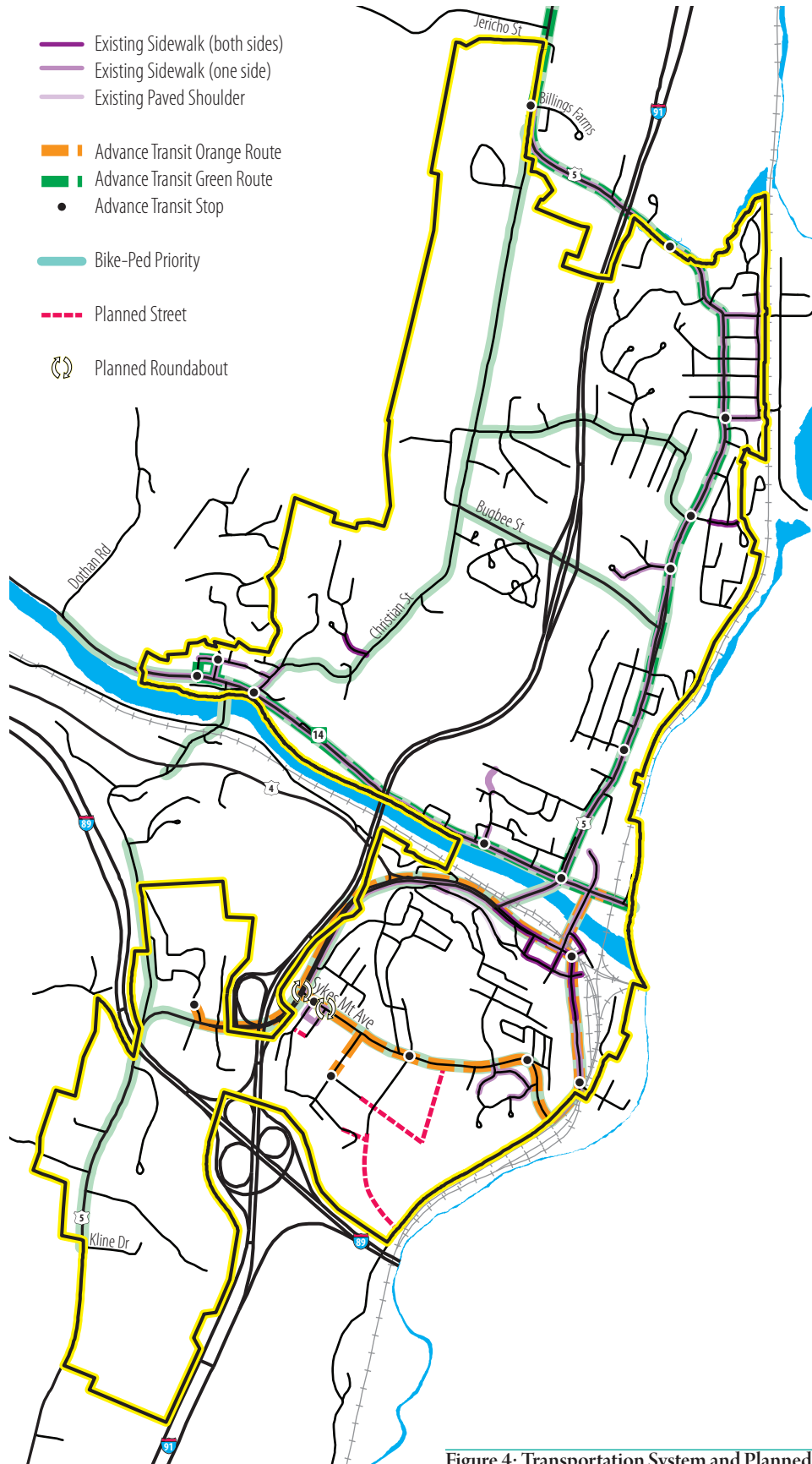
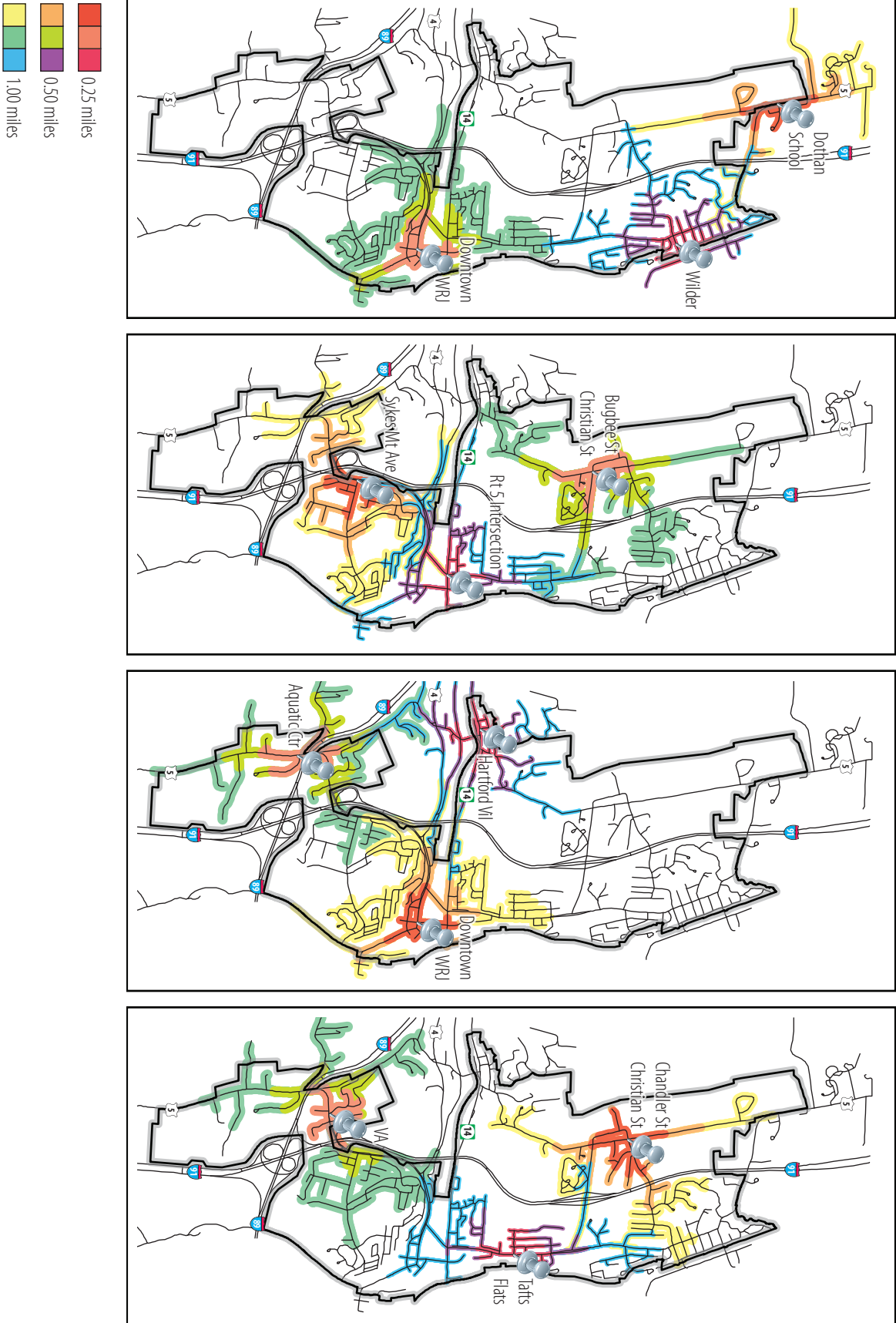


Figure 4: Transportation System and Planned Improvements Map

Figure 5: Neighborhood Proximity Map



B. Natural and Historic Resources

Hartford has identified important natural and historic resources within its proposed growth center and the anticipated impacts on those resources, and has proposed mitigation as demonstrated below.

Natural Resources

Hartford's proposed growth center has been drawn to largely exclude areas characterized by important natural resources. Floodplain areas along the Connecticut River and White River were not included (i.e., land between the railroad and the Connecticut River, and land along Old River Road). Upon recommendation of the Planning Coordination Group, the town redrew the north boundary of the proposed growth center to remove the portion of the Pippin property that contains a mapped deer wintering area, and the town-owned land behind the VA that was identified as core habitat by the Vermont Biodiversity study.

As shown in Figure 6, important natural resources remaining within the proposed growth center boundary include:

- 1. Floodplains**, primarily along the White River, which could not be excluded due to their location in the core of the proposed growth center. Hartford has adopted a Flood Hazard Prevention Bylaw, which regulates development within mapped flood hazard areas in accordance with state and federal requirements. Much of the floodplain along the White River is on lands owned by the railroad, VTrans, the town or school district. Other parcels are already developed, largely as residential properties, and little change of use is anticipated. There are a few privately-owned, undeveloped parcels, but the town does not expect substantial development being proposed due not only to the presence of the floodplain, but the narrow configuration and limited access to these lots, which are located between the railroad and the river.
- 2. Surface waters and wetlands**, including the White River, Dothan Brook and a number of smaller streams and tributaries, and 22 acres of wetlands. Hartford's Master Plan calls upon the town to "Develop and enforce shoreline protection regulations in order to protect riparian areas."⁶ That recommendation was implemented in 2007 through shoreline protection provisions in the town's zoning regulations, which require maintenance of a 100-foot riparian buffer along the Connecticut River, White River and Ottauquechee River, and a 30-foot riparian buffer from all other mapped streams or surface waters.⁹
- 3. Wildlife habitat**, areas identified as core habitat in the Vermont Biodiversity study. These areas are largely limited to those within the interior of the growth center, as the habitat and deer wintering areas along the periphery were excluded through changes to the proposed boundary. The habitat areas remaining within the proposed growth center are generally associated with steep slopes. The largest of these areas is serving as a wooded buffer between I-91 and the residential neighborhoods north of Hartford village. The 2007 Hartford Master Plan recommends "Maintain[ing] wooded buffer areas between the I-89/I-91 and surrounding properties."⁷ The town does not anticipate significant development on these lands, which are also constrained by steep slopes, and believes its current regulations provide adequate protection for these resources. Wildlife habitat must be shown on site and subdivisions plans, and the town's conditional use, subdivision and site plan review process consider impacts on wildlife habitat.^{8, 10, 12-14} The preliminary review of the Pippin project provides an example of how the Planning Commission has protected habitat during the development review process.

4. Two known locations of **rare/endangered species or natural communities**. One of these, an amphibian of special concern, is located off Hillcrest Terrace in the developed residential neighborhoods above downtown White River Junction. No significant changes to current land use in this area is anticipated that would result in new or increased adverse impacts to this species. The other known resource, a bird of special concern, is located off Sykes Mountain Avenue between Hickory Ridge and Lily Pond Road. There is some existing residential development in this area, but also the potential for more intensive development or redevelopment under the town's zoning regulations. As described above, the town believes its current conditional use, subdivision and site plan review processes are adequate to protect these resources.

Further, any loss of or impact to important natural resources within the proposed growth center must be considered in conjunction with the town's efforts to preserve and protect important natural resources in the outlying rural areas, as described in Section D of this application (pages 34 to 35).



Downtown White River Junction Historic District

Historic Resources

As shown in Figure 7, there are four National Register listed historic districts (Wilder, Downtown White River Junction, Hartford Village, and a small part of the Christian Street Rural district) and numerous historic structures (state and/or nationally listed) within Hartford's proposed growth center.³

Hartford's commitment to preserving historic resources is evidenced by its status as a Certified Local Government, as well as by the rehabilitation and adaptive use of historic structures throughout the town.^{2, 4} Hartford has both a Historic Preservation Commission and a local Historical Society, and the 2007 Master Plan calls upon the town to continue to work with these groups "to promote the preservation, recognition, enhancement, and appropriate use of the Town's historic and cultural resources."⁵ Hartford's Zoning Regulations include a design review district for downtown White River Junction, which requires approval from the Design Review Committee for most exterior modifications visible from public streets and places, and for demolition of historic structures.¹¹ The town anticipates that growth center designation will further strengthen its historic preservation and revitalization efforts, particularly within downtown White River Junction where Hartford plans to seek a TIF district as detailed in Section G (pages 43 to 45) of this application.

Given its location at the junction of the White and Connecticut rivers, Hartford is recognized as a place with a high potential for archaeological sites, both prehistoric and historic. Several archaeological sites have been documented in Hartford, but most of the town's archaeological resources remain undiscovered. The 2007 Hartford Master Plan calls upon to the town to "Develop a long-term plan to inventory, interpret, and preserve the Town's archaeological sites and to foster public awareness and appreciation of those sites."¹

Presently, Hartford is working with state and federal agencies to protect the archaeological resources found at the proposed expansion site of the White River Junction wastewater treatment plant. This effort is an example of how the town would respond to any future projects that result in the discovery of archaeological resources. Additionally, it should be recognized that a substantial amount of the development anticipated within the proposed growth center will be infill and redevelopment of previously disturbed sites, which limits the potential of disturbance to intact archaeological resources. Further, the town's stream setback and riparian buffer requirements serve to limit development in those areas with a higher probability of containing archaeological resources.⁹ Hartford also redrew its proposed growth center boundary, excluding some areas identified by the PCG as likely locations of archaeological resources.

References:

	Attachment	Page	Description
1	1 Hartford Master Plan 2007	4-5	Chapter I: Historic and Cultural Resources • Potential Archaeological Areas
2	1 Hartford Master Plan 2007	7-9	Chapter I: Historic and Cultural Resources • Preservation Action to Date
3	1 Hartford Master Plan 2007	9-24	Chapter I: Historic and Cultural Resources • Preservation Tools
4	1 Hartford Master Plan 2007	24-25	Chapter I: Historic and Cultural Resources • Downtown/Village Revitalization
5	1 Hartford Master Plan 2007	26-27	Chapter I: Historic and Cultural Resources • Recommendations
6	1 Hartford Master Plan 2007	250	Chapter IX: Natural Resources • Recommendations • Water Resources
7	1 Hartford Master Plan 2007	251	Chapter IX: Natural Resources • Recommendations • Biological Diversity
8	2 Hartford Zoning Regulations 2008	6-9	Article 2 Districts and District Regulations • 2-5 Conditional Uses
9	2 Hartford Zoning Regulations 2008	47-51	Article 3 General Provisions • 3-4 Protection of Surface Waters
10	2 Hartford Zoning Regulations 2008	78-81	Article 4 Special Provisions • 4-1 Site Development Plan Approval
11	2 Hartford Zoning Regulations 2008	81-86	Article 4 Special Provisions • 4-2 Design Review District
12	2 Hartford Zoning Regulations 2008	86-88	Article 4 Special Provisions • 4-3 Planned Development
13	3 Hartford Subdivision Regulations 1987	10-11	Article IV General Requirements and Design Standards • Section 4-1 Planning Standards
14	3 Hartford Subdivision Regulations 1987	16-17	Article IV General Requirements and Design Standards • Section 4-8 Site Preservation and Improvements

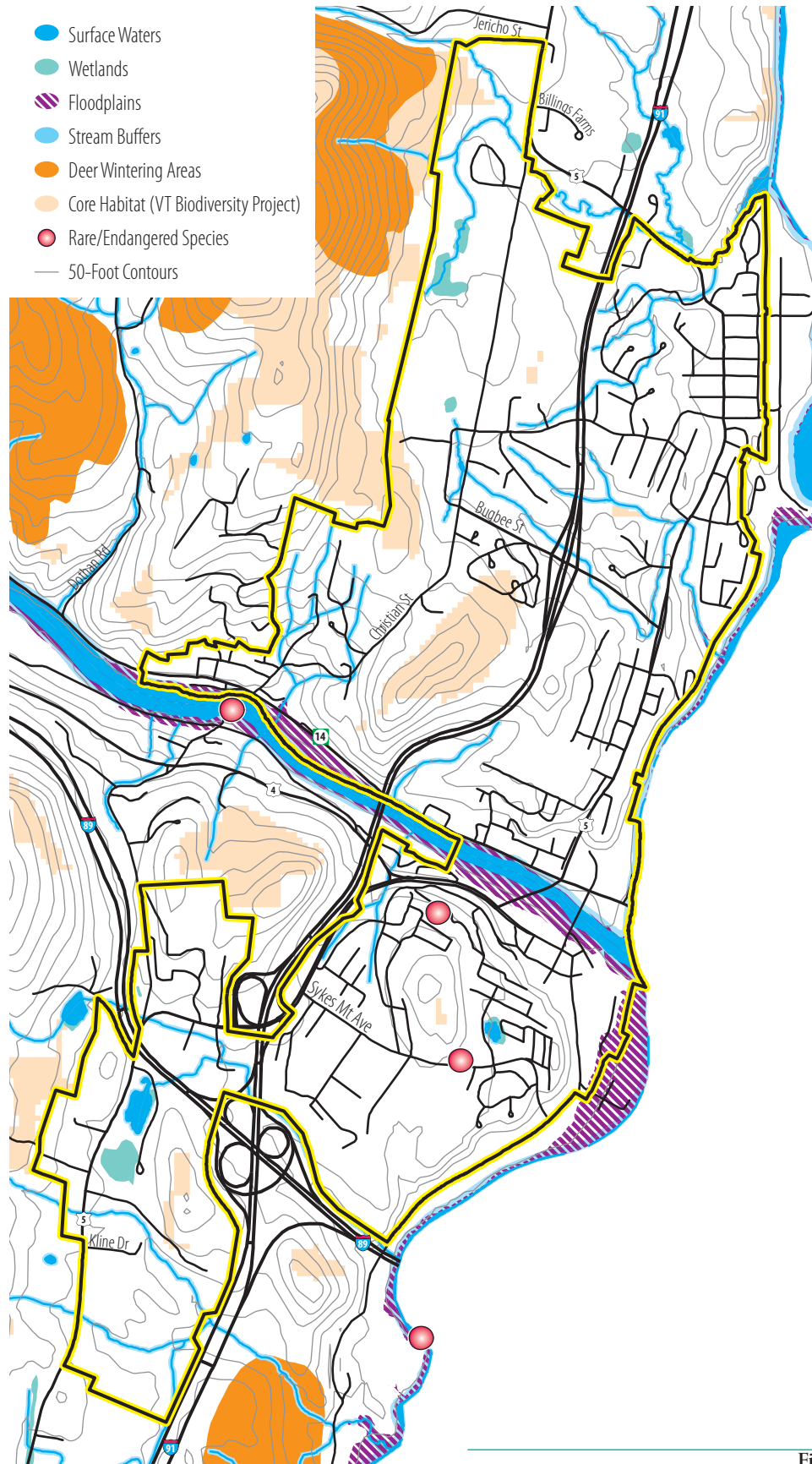


Figure 6: Natural Resources Map

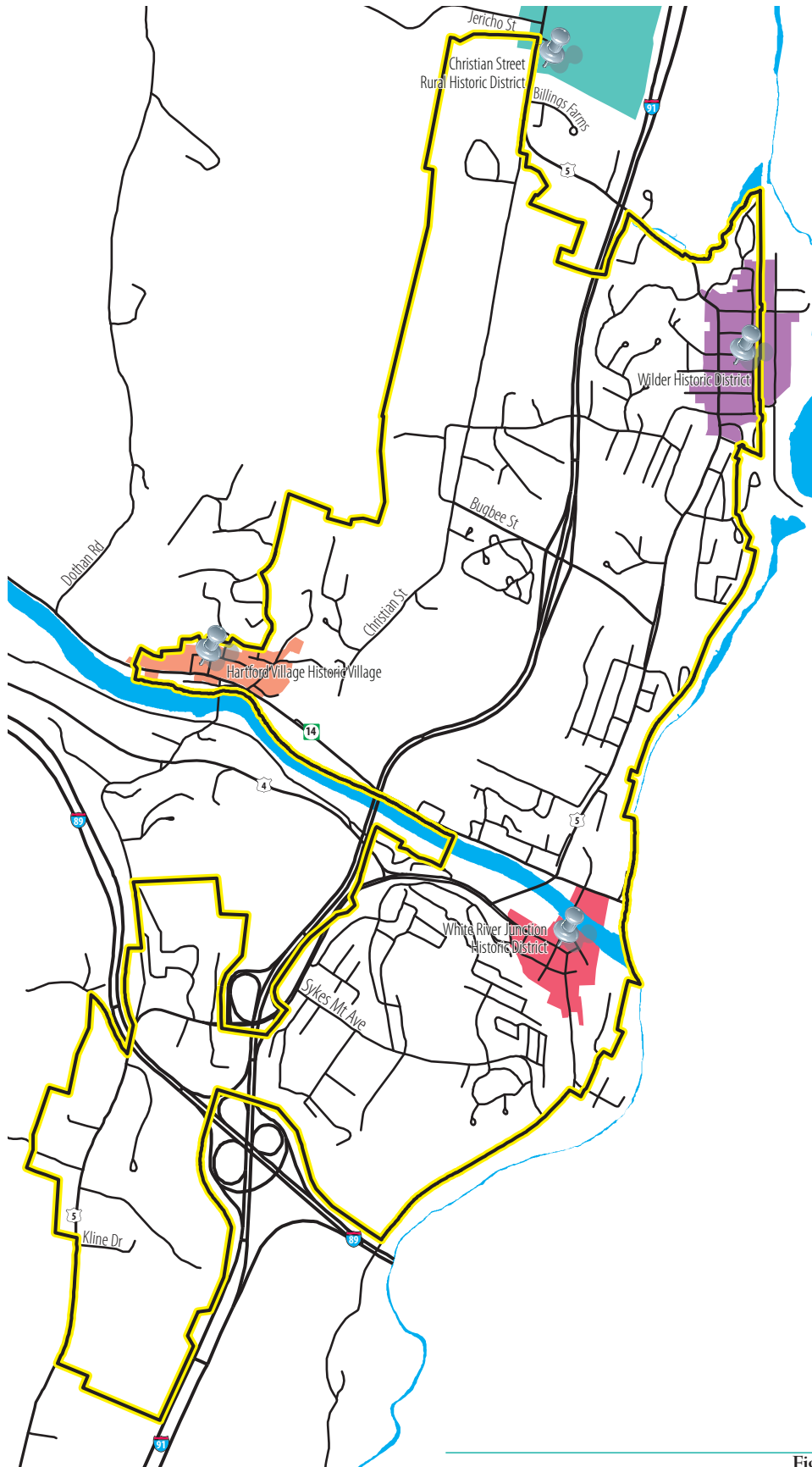


Figure 7: Historic Resources Map

C. Primary Agricultural Soils

Town and Regional Plans

The Two Rivers-Ottawaquechee Regional Plan and Hartford's Master Plan identify areas proposed for agriculture in accordance with state guidelines.^{3-5, 13, 14} Both plans include policies to guide development into designated growth areas in order to protect rural character and conserve resources, including agricultural soils and productive farmland, in outlying areas.^{1, 2, 12}

Conversion of Agricultural Soils

As shown in Figure 8, the proposed growth center includes 228 acres of land classified as prime agricultural soils and 462 acres classified as important agricultural soils. However, a substantial portion of these soils have already been developed including the larger concentrations in Wilder, the area on Christian Street between Chandler Road and Bugbee Street, the area north of Hartford Village around Campbell Street, around Hartford Point Cemetery, the VA Hospital and Ballardvale Drive area, south of Sykes Mountain Avenue between Holiday Drive and Bowling Lane, and the area around Remick Road, Melisi Road and Kline Drive.

Three areas with significant acreage of undeveloped agricultural soils remain within the proposed growth center boundary as shown in Figure 8:

1. 18 acres of statewide agricultural soils on the Valley Land Corp. property at the eastern end of Sykes Mountain Avenue. This 44-acre parcel is the largest remaining undeveloped property on Sykes Mountain Avenue and is zoned for industrial and commercial uses (I/C-2 District). The property is largely cleared and has few physical limitations for development. It has been zoned for industrial and commercial uses for decades, but had not been developed by a previous owner. This parcel was recently rezoned from the I/C District to the new I/C-2 District to promote a higher density and an urban form when the land is developed.⁶ The parcel's ownership has also recently changed and the town anticipates that this key parcel will be developed during the 20-year planning period thus completing the corridor of development along Sykes Mountain Avenue from Route 5 to South Main Street. Given this property's location, surrounding land uses and the availability of infrastructure, it is designated in both the Two Rivers-Ottawaquechee Regional Plan and Hartford Master Plan as a growth area.
2. 93 acres of prime and 60 acres of important agricultural soils around Christian Street. Most of these soils are on large residential properties, which are not actively farmed but are being less intensively used for horses and other similar "hobby" agricultural activities, or are kept open by contractual haying. Hartford's Master Plan recognizes the open land in this area primarily for its scenic value and the town does not envision that large-scale or intensive agriculture will return to Christian Street due to surrounding land uses, the value of the land for development and the availability of infrastructure.

To balance public input related to protecting Christian Street's rural character with the desire to provide areas for new growth in close proximity to existing settlement areas, the 2007 Master Plan recommended and the 2008 Zoning Regulations implemented an overlay district that includes those parcels with largely undeveloped agricultural soils while increasing the maximum permitted density of the Residential 3 zoning district. The Agriculture Overlay district requires subdivisions creating more than two new lots to meet major subdivision requirements, including mapping of

natural resources, and in some instances, to comply with planned development provisions including a minimum 50 percent open space requirement. The overlay also requires development envelopes to be located at the edge of fields, or if not feasible on the least productive soils, and encourages clustering to limit fragmentation of working lands.^{10,11} The land behind the R-3 district on the west side of Christian Street was rezoned to the RL-10 district, and are not part of the proposed growth center.⁸ Hartford deems the provisions of this overlay district to provide an appropriate level of protection for the 153 acres of agricultural soils in this area of Christian Street.

As shown in the build-out analysis (Appendix C), these lands along Christian Street represent most of the non-infill or -redevelopment potential for new housing within the proposed growth center. While it may be feasible under the zoning regulations, it is not realistic to assume that the 1,275 additional dwelling units needed to accommodate growth over the 20-year planning period will be provided solely through infill or redevelopment. After careful consideration and analysis, Hartford has determined that the 250 acres of land on Christian Street within the Agriculture Overlay District, with their potential for up to 933 dwellings, are necessary to meet growth targets. The town envisions that most residential development in this area would be compact settlements as part of planned unit developments, would be carefully located to minimize impacts to the corridor's rural character, and would result in permanently conserved open space. It is the town's position that any conversion of agricultural soils within its proposed growth center have been mitigated by the significant reduction in permitted residential densities on outlying lands and the strengthened provisions of the overlay districts related to thoughtful siting and clustering of development to limit impacts to natural resources and fragmentation of working lands.

3. 25 acres of prime agricultural soils and 1 acre of state agricultural soils on the Wright property at the southern end of the proposed growth center. This 71-acre parcel is on the eastern side Route 5 South across from the Wright Farm, which remains in operation, and is the location of their sawmill operation.

Before recent zoning changes, this parcel and the all the land east of Route 5 and west of I-91 from the interchange almost all the way to the town line was zoned for industrial and commercial uses (I/C). In 2001, a land use and transportation study of the Route 5 South corridor was completed, which recommended significant changes relative to future land use planning, zoning and infrastructure in this part of Hartford.¹⁵ As a result, the I/C zoning district on Route 5 South was eliminated and replaced by a much smaller Highway Commercial district, which terminates at the Wright parcel and allows for less intensive land uses than the former I/C district.⁷ Lands to the south and on the western side of Route 5 were down-zoned to the new Rural Lands 10 and Forest Conservation districts, including the main portion of the Wright farm, significantly reducing development potential in this part of Hartford.^{8,9}

While the Route 5 South Study recommended that all the land south of Kline Drive be designated for agricultural and forest uses, the town's decision to draw the line to include the eastern Wright parcel in its growth area was much discussed and carefully considered, and represents a necessary compromise that made the re-zoning of 9,500 acres in the RL-10 district and 3,100 acres in the FC district possible. It also reflected a change in the use of the property to a commercial lumber processing business. The Wright parcel is also covered by the Agriculture Overlay District. Hartford deems the provisions of the overlay district and the greater protection of the newly protected outlying lands to be adequate mitigation for the potential loss of the 26 acres of agricultural soils

on the Wright parcel. The Two Rivers - Ottauquechee Regional Planning Commission supported the town's decision when the RPC drafted its land use plan and designated the Route 5 South area to the Wright parcel as part of its "Regional Center." (See page 12).

References

	Attachment	Page	Description
1	1 Hartford Master Plan 2007	56-58	Chapter II: Land Use • Guiding Future Development • Village Areas and Growth Centers
2	1 Hartford Master Plan 2007	66	Chapter II: Land Use • Map 19: Proposed Growth Centers
3	1 Hartford Master Plan 2007	225	Chapter IX: Natural Resources • Map 27 Agricultural and Habitat Features
4	1 Hartford Master Plan 2007	235-236	Chapter IX: Natural Resources • Agricultural Resources
5	1 Hartford Master Plan 2007	251	Chapter IX: Natural Resources • Recommendations • Agricultural Resources
6	2 Hartford Zoning Regulations 2008	13	Article 2 Districts and District Regulations • 9 District Objectives and Land Use Control • "I/C-2" Industrial Commercial Two Zoning District
7	2 Hartford Zoning Regulations 2008	14	Article 2 Districts and District Regulations • 9 District Objectives and Land Use Control • "HC" Highway Commercial Zoning District
8	2 Hartford Zoning Regulations 2008	32	Article 2 Districts and District Regulations • 9 District Objectives and Land Use Control • "RL-10" Rural Lands 10 Zoning District
9	2 Hartford Zoning Regulations 2008	33	Article 2 Districts and District Regulations • 9 District Objectives and Land Use Control • "FC" Forestry/Conservation Zoning District
10	2 Hartford Zoning Regulations 2008	34-35	Article 2 Districts and District Regulations • 2-10 Overlay Districts • 2.10-2 General Provisions for Rural Lands, Agricultural Lands, and Wildlife Overlay Districts
11	2 Hartford Zoning Regulations 2008	78-81	Article 2 Districts and District Regulations • 2-10 Overlay Districts • 2.10-3 Agriculture Overlay District
12	5 TRO Regional Plan 2007	31-32	III. Land Use • C. Policies for Land Use Settlement • Regional Center
13	5 TRO Regional Plan 2007	37-40	III. Land Use • C. Policies for Land Use Settlement • Rural Areas
14	5 TRO Regional Plan 2007	98-110	V. Agriculture and Forestry
15	7 Route 5 South Study 2001	56-64	X. Recommendations

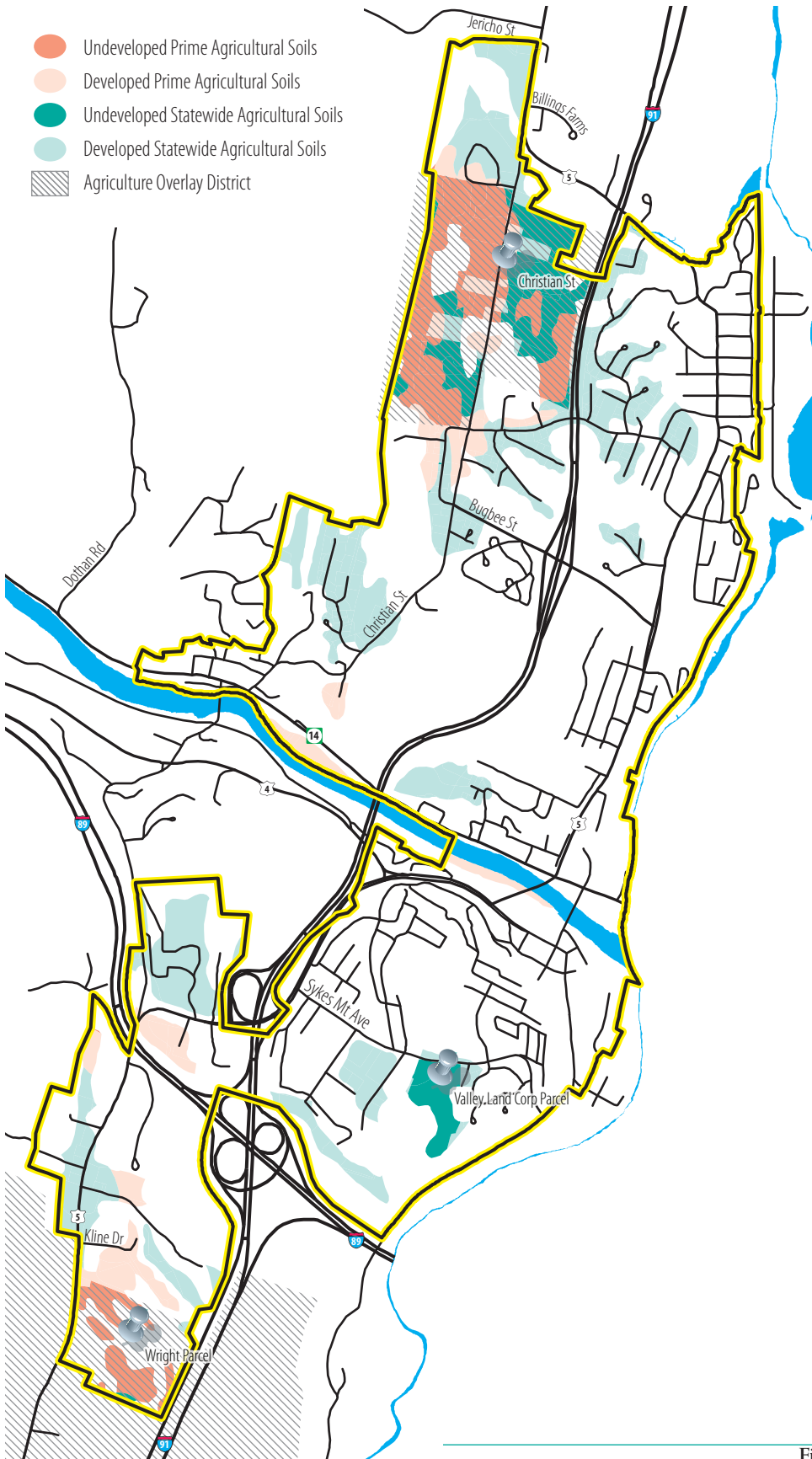


Figure 8: Agricultural Soils Map

D. Plans and Bylaws

Regional Confirmation

Hartford's 2007 Master Plan was regionally approved on 25 September 2007 as documented in the letter of support submitted by the Two-Rivers Ottauquechee Regional Planning Commission (Attachment 19).

Municipal Plan

As demonstrated throughout this application, Hartford's Master Plan contains provisions that are appropriate to implement the designated growth center proposal. These include, but are not limited to:

1. Page 30, Community Vision. 1. Increase density in already developed areas with infrastructure (water & wastewater, close to community facilities & services and served by public transit).
2. Page 30, Community Vision. 4. Preserve Hartford's historic settlement pattern, defined by compact villages surrounded by rural countryside.
3. Page 57, Guiding Future Development, Village Areas and Growth Centers, Strategies and Recommendations:
 - ⊙ 1. Designate the Villages of White River Junction, Quechee, Wilder, and Hartford and the Quechee Interstate Interchange zoning district as growth centers (see Proposed Growth Centers Map).
 - ⊙ 2. Revise zoning densities and dimensional requirements to encourage infill housing in the village areas, taking into consideration existing settlement patterns. [Implemented in 2008 Zoning Regulations]
 - ⊙ 3. Enhance pedestrian accessibility in village areas. [Completed town-wide Bicycle and Pedestrian Master Plan in 2009]
 - ⊙ 5. Continue to regularly evaluate the water and wastewater systems to ensure that improvements are planned and funded to accommodate anticipated growth for the foreseeable future. [Completed analysis and engineering in 2008 for WRJ plant with construction on plant upgrade to begin in 2010]
 - ⊙ 7. Encourage mixed-use development in the village centers. [Implemented in 2008 Zoning Regulations]
 - ⊙ 11. Ensure that higher density development does not detract from the historic character of Hartford's villages and the downtown.
 - ⊙ 14. Change zoning district designations to more accurately reflect the existing character of the neighborhood. [Implemented in 2008 Zoning Regulations]
 - ⊙ 16. Assure that zoning districts in the village centers retain adequate pedestrian orientation. Such areas should have clear sets of standards regulating traffic flow, preservation of greenspace and the development of sidewalks or walkways where appropriate. [Completed town-wide Bicycle and Pedestrian Master Plan in 2009]
4. Page 58-59, Guiding Future Development, Rural Areas:
 - ⊙ 19. Create a Rural Planned Unit Development (PUD) Overlay District for all Rural Land Zoning Districts: For all major subdivisions, require detailed mapping of natural resources with an emphasis on preserving rural character and sensitive features including prime agricultural soils, wetlands, steep slopes, important wildlife habitat, scenic views, and ridgelines and hillsides that

are easily visible from existing roadways and all overlay districts. [Implemented in 2008 Zoning Regulations]

- ⊙ 21. Create a Wildlife Habitat Overlay District: To maintain critical wildlife corridors and habitat that connect to unfragmented forested areas within Hartford and to adjacent Towns, development will be encouraged close to roads and/or developed areas to allow sufficient wildlife corridors through the area. [Implemented in 2008 Zoning Regulations]
- ⊙ 22. Create an Agricultural/Scenic Overlay District: Discourage development that impacts agricultural/scenic resources in: Jericho Area, Route 5 South/Connecticut River Road and Christian Street. All major subdivisions requires detailed mapping of natural resources. [Implemented in 2008 Zoning Regulations]
- ⊙ 23. Create a New Zoning District (RL-10): In less developed areas where unfragmented forests, large agricultural lands, undeveloped lands, and other natural resources exist, propose a change from RL-5 to RL-10. RL-5 will continue in areas closer to villages, roads, and areas where development has occurred closer to five-acre densities. [Implemented in 2008 Zoning Regulations]
- ⊙ 24. Create an Agricultural Forestry Zoning District in the Rural South Area: For the largest unfragmented forested area of Town that abuts the Town Forest and the Army Corps of Engineers lands where the density will be one lot per 28 acres, reduce the number of potential units in the most remote area of Town and allow for inclusion in the current use program. [Implemented in 2008 Zoning Regulations]
- ⊙ 25. Allow Smaller Lots without Reducing Density: In the RL-3, RL-5 and RL-10 zoning districts, reduce the minimum lot size to one acre while maintaining the overall density of each zoning district (one lot per three acres in RL-3, one lot per five acres in RL-5, and one lot per ten acres in RL-10). This will allow the opportunity for greater clustering of houses to protect larger amounts of open lands, agricultural land and forest land. [Implemented in 2008 Zoning Regulations]
- ⊙ 28. Cluster residential development on the most suitable sites that minimize impact on natural resources and fragile features: These include prime agricultural soils, wetlands, streams, steep slopes, scenic views, ridgelines, and important wildlife habitat. [Implemented in 2008 Zoning Regulations]
- ⊙ 30. Adopt standards to protect natural resources and fragile features: These areas include prime agricultural soils, wetlands, streams, steep slopes, scenic views, ridgelines and important wildlife habitat. [Implemented in 2008 Zoning Regulations]
- ⊙ 32. Encourage appropriate uses such as agriculture, forestry, wildlife habitat conservation, hunting and other recreational activities through incentive programs, land conservation as part of planned unit developments, purchase of development rights, and conservation easements and education.

5. Page 128, Economic Development Vision:

- ⊙ A revitalized, more attractive and vibrant downtown White River Junction
- ⊙ A more attractive and visually appealing Town, with fewer abandoned buildings, less blight, and appealing gateways to the Town
- ⊙ A stronger sense of community across the entire Town and within the five village centers and where the village centers are stronger focal points for community activities, services and small businesses
- ⊙ New development and investment focused in already developed areas that are served by existing infrastructure, especially the five village centers, and in denser and more pedestrian-oriented forms that minimize strip and sprawl-style development

6. Page 132, Economic Development Goals:
 - ⊙ Improve the image and physical appearance of White River Junction and attract new businesses and economic uses that establish White River Junction as a regional center for entertainment and cultural activities and professional services
 - ⊙ Create more attractive and vibrant village centers with new small businesses, upgraded buildings, and expanded community activities
7. Page 129, Economic Development Recommendations:
 - ⊙ 21. Implement the Sykes Mountain Avenue Study recommendations to create a more attractive and pedestrian-oriented mixed-use area, including zoning changes to allow higher density office development that can appeal to professional and high-tech firms.
 - ⊙ 22. Attract a developer to build a multi-tenant Technology Center office building in White River Junction and/or the Sykes Mountain Avenue area.
 - ⊙ 23. Determine the financial feasibility of extending water and wastewater service to the Kline Drive area, which is suitable for new development.
8. Page 183, Utilities, Recommendations:
 - ⊙ 4. Improve and expand water and wastewater system infrastructure within present service area before consideration of an expansion of the service area.
 - ⊙ 8. Expand water and wastewater systems in the Route 5 South area to service existing and potential commercial and industrial development between Route 5 and Interstate 91 as recommended in the Route 5 South Study.
9. Page 252, Natural Resources, Recommendations:
 - ⊙ 38. When development does occur, encourage cluster or planned developments. [Implemented in 2008 Zoning Regulations]
 - ⊙ 39. Continue to encourage urban infill in established settlement areas and discourage development in outlying areas. [Implemented in 2008 Zoning Regulations]
10. Page 264-265, Energy, Recommendations:
 - ⊙ 16. Promote the development and use of a system of trails, greenways, sidewalks, bicycle paths, and commuter parking lots as viable transportation components, with particular attention given to connecting schools, recreation facilities, shopping centers, places of employment, health centers, and transportation facilities. [Completed town-wide Bicycle and Pedestrian Master Plan in 2009]
 - ⊙ 19. Include sidewalks and bicycle paths as a component of the capital budgeting process and continue to pursue Federal and State funding for their construction. [Ongoing]
 - ⊙ 21. Consider transportation efficiency issues, bicycle use, and alternatives to the private automobile when reviewing proposed plans for a development. [Completed town-wide Bicycle and Pedestrian Master Plan in 2009]
 - ⊙ 24. Continue to encourage mixed-use growth centers (co-mingled residential development, employment areas, commercial districts, shopping areas, and rideshare lots), to discourage land use that would create or lead to energy inefficient sprawl and strip development. [Implemented in 2008 Zoning Regulations]

Bylaws

As demonstrated throughout this application, Hartford has adopted bylaws in conformance with the municipal plan that implement the provisions in the plan that pertain to the designated growth center proposal. These include, but are not limited to, the following provisions in the town's Zoning Regulations:

1. Page 9, 2-8 Classification of Lots, Source of Water and Sewage Service. [Defines 3 classes of lots: 1 = Off-lot water and sewage; 2 = Off-lot water or sewage; and 3 = On-lot water and sewage. Dimensional standards vary based on class within most districts.]
2. Page 12-39, Zoning Districts:
 - ⊙ I/C (Industrial Commercial) Zoning District. Objective: To reserve locations for commercial and light industrial operations, which require larger lots than are available in other commercial districts. The I-C Districts offer large, relatively level tracts of land with good highway access and sufficient distance to buffer existing residential neighborhoods.
 - ⊙ I/C-2 (Industrial Commercial Two) Zoning District. Objective: To reserve locations for commercial and light industrial operations which require larger lots than are available in other commercial districts. The I-C Districts offer large, relatively level tracts of land with good highway access and sufficient distance to buffer existing residential neighborhoods and to allow for taller structures. [Uses and standards the same as I/C, except that maximum building height increased from 40 to 60 feet.]
 - ⊙ HC (Highway Commercial) Zoning District. Objective: To provide for well-planned and coordinated development of commercial facilities and services that can be effectively integrated with the existing village and/or scenic character along major transportation corridors.
 - ⊙ CB (Central Business) Zoning District. Objective: To provide for intensive mixed use development in an area that has been served as Hartford's commercial center for more than a century. The area is particularly suited to compact development due to the availability of public parking, public water and sewer services, and public transportation. Approved uses should be consistent with the role of the district as a historic, pedestrian-friendly center for retail, business, and tourist activities, public services and high-density housing. Uses: Only commercial development shall be allowed on the first floor street front portion of a building within the boundary of the village center as specified in Section 2-1 and 2-2 of these Regulations.
 - ⊙ CB-2 (Central Business Two) Zoning District. Objective: To provide for intensive mixed use development and taller buildings in an area that has been served as Hartford's commercial center for more than a century. The area is particularly suited to compact development due to the availability of public parking, public water and sewer services, and public transportation. Approved uses should be consistent with the role of the district as a historic, pedestrian-friendly center for retail, business, and tourist activities, public services and high-density housing. [Uses and standards the same as CB, except that maximum building height increased from 40 to 60 feet.]
 - ⊙ RC-2 (Residential Commercial Two) Zoning District. Objective: To provide for mixed uses in areas which may have public water and sewer systems and generally are located on major highways. New development should be consistent with the predominantly residential character of these areas.
 - ⊙ VB (Village Business) Zoning District. Objective: To provide for a mixed-use neighborhood scale district with high residential densities and service businesses centrally located within a predominantly residential village.

- ⦿ VR-C (Village Residential-Commercial) Zoning District. Objective: To provide an area of mixed residential-commercial uses in or near village centers where commercial facilities generate little traffic and are compatible with a village residential environment.
 - ⦿ R-1 (Residential One) Zoning District. Objective: To encourage predominantly residential development at relatively high densities in established neighborhoods close to the village centers which have public water and sewer services, and are located within easy access to public transit.
 - ⦿ R-1M (Residential One, Multi-Family) Zoning District. Objective: To encourage predominantly multi-family residential development at relatively high densities in established neighborhoods close to the village centers which have public water and sewer services, and are located within easy access to public transit.
 - ⦿ R-2 (Residential Two) Zoning District. Objective: To encourage moderately-dense and predominantly residential development in established neighborhoods having good access to highways, public transit and public water and sewer services.
 - ⦿ R-3 (Residential Three) Zoning District. Objective: To encourage predominantly residential development at lower densities in established neighborhoods more distant from village centers. While not all parts of these districts are now served by public water and sewer, such services can be extended relatively efficiently as development continues.
 - ⦿ VR-1 (Village Residential One) Zoning District. Objective: To provide for a range of residential development in village areas served by public utilities.
 - ⦿ RL-5 (Rural Lands Five) Zoning District. Objective: To limit developmental density in areas which are now largely in agricultural or forestry uses, where development may be difficult and/or undesirable and public water and sewer services cannot be provided efficiently. Since the rural character of these lands depends on open space and natural areas, protection of these features should be considered when evaluating proposed conditional uses. [Density of 1 dwelling unit per 5 acres, but a minimum lot size of 1 acre.]
 - ⦿ RL-10 (Rural Lands Ten) Zoning District. Objective: To limit developmental density in areas which are now largely in agricultural or forestry uses, where development may be difficult and/or undesirable and public water and sewer services cannot be provided efficiently. Since the rural character of these lands depends on open space and natural areas, protection of these features should be considered when evaluating proposed conditional uses. [Density of 1 dwelling unit per 10 acres, but a minimum lot size of 1 acre.]
 - ⦿ FC (Forestry/Conservation) Zoning District. Objective: Provide for commercial forestry and the protection of timber, wildlife and other natural resources in the largest unfragmented forested area of Hartford. Much of the land is characterized by steep slopes, the absence of improved roads and remoteness from the Town's developed villages. Development applications must be carefully reviewed to ensure the protection of the area's rural character.
3. Page 34, 2-10.2 General Provisions for Rural Lands, Agricultural Lands, and Wildlife Connector Overlay Districts. Objective: To promote the preservation of the rural character, sensitive features and natural resources, including prime agricultural soils, wetlands, steep slopes, important wildlife habitat, scenic views, ridgelines and hillsides, in the Rural Lands, Agricultural, and Wildlife Connector Overlay Districts.
 4. Page 34-35, 2-10.2.4 Supplemental Development Standards. All development and subdivisions should be laid out so they integrate carefully into the natural resources while protecting and minimizing the fragmentation of land, and adverse visual and environmental impacts on these natural resources. [Supplemental standards include: (A) three-lot subdivision considered major and de-

tailed mapping of natural resources required; (B) development envelopes located downslope of ridgelines and prominent hills in areas visible from roadways; (C) encouraging development to be sited at field/forest edge; and (D) minimizing conflict with agriculture.

5. Page 35-36, 2.10.3 Agriculture Overlay District. Objective: To promote the continuation of agriculture, retain the maximum possible amount of agricultural lands, which often provide important scenic views, protect historically viable farmland and prime and statewide agricultural soils, and preserve Hartford's rural character, scenic characteristics, including open lands, views and working landscape qualities in accordance with Hartford's Master Plan. [Supplemental standards include: (A) Development to be located on edge of fields or least fertile soils; and (B) clustering encouraged.
6. Page 36, 2.10.4 Wildlife Connector Overlay District. Objective: To provide sufficient area for animals to move freely between conserved lands, undeveloped private lands, contiguous forest habitat, and other important habitat, land features, and natural communities within and beyond the boundaries of the Town in order to meet their necessary survival requirements. [Supplemental standards include: (A) Encouraging development to locate near roads or other development; (B) Establish buffers; and (C) Seek input of VT Department of Fish and Wildlife.
7. Page 42, 3-3.3 (C) Downtown White River Junction Parking District. This area (as delineated on Downtown White River Junction Parking District Map) is recognized has a high density residential, retail and service center in the Town, with a walkable scale and access to public transit, on-street parking and municipal parking lots. Development projects within this district may use off-site parking anywhere within the district, regardless of distance, providing it meets the requirements of Subsection 3-3.3.1.
8. Page 44, 3-3.3.8 (A) Parking in the Front Setback. [Single Family, Accessory Apartments and Two Family Units - parking may occupy up to 50% of the front lot line. For all other uses parking areas must be located behind the building frontline.]
9. Page 45, 3-3.3.9 (D) Excess Parking. Parking shall not be constructed for any building or use in excess of the number specified above [parking space table] without the approval of the Planning Commission.
10. Page 46, 3-3.3.9 (E) Modification of Parking Requirements. [PC can reduce parking requirements upon consideration of access to transit, on-street and public parking, shared parking between uses, employer incentives to reduce single-occupancy vehicles, etc.]
11. Page 47-51, 3-4 Protection of Surface Waters. Purpose: The purpose of this section is to protect water quality, reduce property loss, and preserve wildlife habitat by maintaining a riparian buffer (an undisturbed vegetated buffer) along surface waters. [Buffer width is 100 feet for the Connecticut, Ottauquechee and White Rivers and 30 feet for other mapped surface waters.]
12. Page 81-86, 4-2.1 Downtown White River Junction Design Review District. Purpose: The purpose of this District is to recognize that White River Junction's natural beauty and visual and historic character represent an important asset to the Town, and contribute substantially to White River Junction's economic base. In order to protect and enhance these attributes, the District is established to ensure that development considers the existing architecture, site layout, streetscape design, and sign placement and design. This design review is not intended to require property

owners to solely rehabilitate or replicate. Although reuse of existing buildings is encouraged whenever possible, new construction is appropriate when designed with sensitivity to the historic character and design features in the District. Specific recommendations are made in the White River Junction Design Plan (2001) and White River Junction Design Guidelines (2001) and which incorporated into the Zoning Regulations by reference.

13. Pages 86-88, 4-3 Planned Development. In accordance with section 4417 of the Act, the Planning Commission may vary certain regulations in order to encourage new communities, innovation in design and layout, more efficient use of land and to preserve the natural and scenic qualities of the open land in town. [A minimum of 50% of the development site must remain in open space.]

Rural Character

During the past several decades, Hartford has experienced a trend of increasing land subdivision and housing development in the rural parts of town, particularly on open land. The planning process that resulted in the 2007 Master Plan showed that rural lands and character are highly valued by Hartford residents. This sentiment is reflected in the plan's overall vision, as well as in the specific recommendations for Hartford's rural areas.^{1,2}

Consequently, the changes to the town's zoning regulations in 2008 included a number of provisions to better protect those resources including two new zoning districts with significantly lower permitted densities (Rural Lands 10 and Forest/Conservation) and three overlay districts (Rural Lands, Agriculture and Wildlife Connector) to protect rural resources.

1. 9,505 acres were zoned into the new RL-10 district (32% of town), which has a maximum residential density of one dwelling per 10 acres and a minimum lot size of one acre.³
2. 3,144 acres were zoned into the new Forest/Conservation district (11% of town), which has a minimum lot size of 28 acres.⁴
3. The Rural Lands overlay covers 24,197 acres of land (82% of town) and requires any subdivision creating two or more new lots to meet major subdivision requirements including detailed mapping of natural resources. The overlay also guides development in order to limit the fragmentation of agricultural and forest resources. The Planning Commission may require the proposed development to conform with the town's planned development provisions, which have a minimum 50 percent open space requirement.⁵
4. The Agriculture overlay covers 1,114 acres of land (4% of town) and requires development envelopes to be located at the edge of fields, or if not feasible on the least productive soils.⁶
5. The Wildlife Connector overlay covers 2,062 acres of land (7% of town). The district requires development to be located near existing roads or development to limit further resource fragmentation, and requires buffers between new development and wildlife habitat or travel corridors.⁷



Hartford's Rural Character



In addition to the new zoning districts, a significant amount of rural land that had been zoned for one dwelling per acre was down-zoned to the RL-3 or RL-5 districts with maximum densities of one home per 3 or 5 acres. The Rural Lands 3, 5 and 10 districts are density-based, which allows for subdivision of lots as small as one acre to limit fragmentation of rural lands.

References

	Attachment	Page	Description
1	1 Hartford Master Plan 2007	54	Chapter II: Land Use • Vision for the Future of Hartford
2	1 Hartford Master Plan 2007	58-59	Chapter II: Land Use • Guiding Future Development • Rural Areas
3	2 Hartford Zoning Regulations 2008	32	Article 2 Districts and District Regulations • 9 District Objectives and Land Use Control • "RL-10" Rural Lands 10 Zoning District
4	2 Hartford Zoning Regulations 2008	33	Article 2 Districts and District Regulations • 9 District Objectives and Land Use Control • "FC" Forestry/Conservation Zoning District
5	2 Hartford Zoning Regulations 2008	34-35	Article 2 Districts and District Regulations • 2-10 Overlay Districts • 2.10-2 General Provisions for Rural Lands, Agricultural Lands, and Wildlife Overlay Districts
6	2 Hartford Zoning Regulations 2008	35-36	Article 2 Districts and District Regulations • 2-10 Overlay Districts • 2.10-3 Agriculture Overlay District
7	2 Hartford Zoning Regulations 2008	36	Article 2 Districts and District Regulations • 2-10 Overlay Districts • 2.10-4 Wildlife Overlay District

E. Capital Budget and Program

CIP Adoption

Hartford engages in an annual capital budgeting and planning process involving all town departments, resulting in a six-year Capital Improvement Program (CIP). The 2010-2015 CIP was adopted in March 2009 in accordance with 24 VSA § 4430, and the 2011-2016 CIP is being drafted for adoption in March 2010. (See Attachment 15)

Infrastructure Capacity

Hartford's existing and planned infrastructure is adequate to implement the proposed growth center. The town carefully monitors the impact of growth on demand for services and plans to meet anticipated needs as demonstrated in the town's Master Plan and CIP.²

Planned Improvements

In addition to the transportation, water/wastewater, downtown revitalization and economic development projects discussed in Section A (pages 9 to 11) and Section G (pages 43 to 45) of this application, Hartford's Capital Improvement Program (Attachment 15) includes the following expenditures to maintain or build capacity in various town services/facilities:

1. **Ambulance Replacement.** \$28,500 allocated each year builds reserve to replace an ambulance every seven years.
2. **Fire Truck/Equipment Replacement.** \$100,000 allocated each year enables ongoing replacement of equipment.
3. **Police Cruiser Replacement.** \$50,000 allocated each year enables the replacement of two vehicles per year.
4. **Communication Facility Upgrade.** \$200,000 allocated to project already underway to support continued emergency communications and dispatch for Hartford and surrounding communities.
5. **Wilder Emergency Services Substation.** \$1.7 million (to be bonded) to improve response time for emergency services in Wilder in response to increased demand due to population and commercial growth.
6. **Annual Street Paving.** \$900,000 allocated annually for paving and reconstruction work.
7. **Public Works Facility.** \$80,000 budgeted for repaving and maintenance of the facility on a 10-year cycle.
8. **Construction Equipment Replacement.** \$549,000 budgeted for scheduled replacement of various pieces of equipment.
9. **Fairview Terrace Wall.** \$1.5 million (to be bonded) for the rehabilitation of a retaining wall that supports the roadway.
10. **WRJ Salt Shed.** \$7,200 allocated each year builds reserve to replace the shed's fabric roof cover on a 14-year cycle.
11. **Ratcliff Park.** \$20,000 budgeted for land acquisition to purchase property along the Connecticut River to provide improved public access.

12. **Kilowatt Park.** \$90,000 budgeted for ongoing implementation of the park's master plan.
13. **Maxfield Property Athletic Complex.** \$350,000 allocated to improvements.
14. Various ongoing maintenance and improvements paid for through the town's enterprise funds (user fees) for solid waste, water systems and wastewater systems.

Education Facilities

Hartford's school system has the capacity to accommodate anticipated growth. Presently, the town's school facilities have a capacity to serve approximately 2,500 students and a total enrollment of around 1,700 students. Given its excess capacity, Hartford's school district is currently accepting tuition students from the neighboring communities of Sharon, Hartland and Cornish.¹ According to the 2000 Census, Hartford and Windsor County as a whole had 0.5 school-age children per household. More recent Census estimates suggest that number has fallen to 0.4 school-age children per household. While the student generation rate is expected to decline further, even if it remained at current levels, Hartford's school district should be able to accommodate the potential enrollment increase estimated at 750 students over a 20-year period without the need for major expansion of its current facilities.

Water and Wastewater Infrastructure

The Hartford Water System has a treatment capacity of approximately 2.16 million gallons per day (gpd), with an average daily use of less than 800,000 gpd and peak day use of less than 1.2 million gpd. The town anticipates that the volume of water generated from the two wells, the treatment capacity of the plant, and the existing 2.5 million gallons of storage capacity will meet the needs of existing and future development within the proposed growth center.^{3,5}

As discussed in Section A (page 9) of this application, once the White River Junction wastewater treatment plant is upgraded, there will be approximately 461,000 gallons of uncommitted reserve capacity allocated to serve new development within the proposed growth center, in addition to the 57,400 gallons already earmarked for properties within the proposed growth center, which will be more than adequate to meet expected demand as shown in Appendix B.^{4,5} Hartford will monitor water and wastewater usage and begin planning to expand capacity when demand reaches 85 percent of available flow.

Transportation

Hartford has been actively planning for the transportation improvements needed to support the proposed growth center and coordinating its transportation planning with VTrans since several of the planned improvements involve state infrastructure or are within state rights-of-way.⁶⁻⁸ Chapter VIII of Hartford's Master Plan summarizes existing transportation conditions and capacities within the proposed growth center, which includes the town's most heavily traveled roadways (Interstates 89 and 91, U.S. Route 5, U.S. Route 4, Vt. Route 14, Christian Street, Main Street and Sykes Mountain Avenue).

The Sykes Mountain - Route 5 intersection has been identified as the most critical transportation project needed to accommodate future development within the proposed growth center. Recent upgrades have improved the town's other main intersection at Route 5 and Route 4. The intersection of Christian Street and Route 5 will be monitored as development proceeds to determine if further work will be needed, as the current configuration of the intersection and its sight distance remain less than ideal even after the most recent improvements. The town intends to implement the access management rec-



Existing Conditions on Sykes Mountain Avenue

ommendations of the Route 5 South study as development occurs along that corridor and the traffic calming projects identified in the White River Junction Revitalization Plan.

Generally, Hartford believes that the minor roads and neighborhood streets within the proposed growth center are adequate to support development during the 20-year planning period. The town will continue its practice of collecting and analyzing data related to the condition and capacity of local roads, and will plan for any transportation needs that arise through its development review and capital budgeting process.

Traffic on the main travel corridors in Hartford has been increasing at an average rate of one to two percent for many years. With implementation of smart growth principles, the town hopes to prevent further escalation of that rate and perhaps to even slow it. As demonstrated in Hartford's recently adopted Bicycle and Pedestrian Master Plan, the town is working to become a community where more people use transit, walk or bike for local trips, and where many people are able to live in close proximity to their jobs, schools and services.

In addition to the pedestrian/bicycle and transit improvements discussed in Section A and the downtown improvements discussed in Section G of this application, the following major transportation projects are being planned or have been recommended in transportation planning studies within the proposed growth center:

1. Sykes Mountain Avenue / Route 5 intersection improvements. A roundabout is planned for the Sykes Mountain Avenue / Route 5 intersection, and the design/right-of-way acquisition phase is currently underway. With completion of the reconstruction of Route 5 in Tafts Flats, this project is the town's top transportation priority.



Planned Bike-Ped Improvements on Sykes Mountain Avenue

2. Sykes Mountain Avenue corridor improvements. The Sykes Mountain Avenue Study (Attachment 8) included a number of recommendations to improve traffic circulation in this corridor including:⁹
 - ⊙ A-4. Create an urban grid street pattern for more efficient traffic flow by adding connector roads to link Beswick Drive to Ralph Lehman Drive, Holiday Drive to Ralph Lehman Drive, and Holiday Drive to Bowling Lane. This recommendation has been partially implemented and will be further carried out as development proceeds along Sykes Mountain Avenue.
 - ⊙ A-5. Encourage alternative transportation by providing added infrastructure improvements to include bus stops, sidewalks, bike lanes, bike rack areas, benches and better pedestrian linkages between commercial areas. This recommendation will be implemented through the upcoming sidewalk construction project and through individual development projects.
 - ⊙ A-6. Provide an external parking lot serviced by Advance Transit to encourage use of the public transit system and, thereby, reducing the projected traffic flows. The recently constructed park-and-ride lot on Route 5 North has been successfully implemented and the town will be looking for opportunities to undertake a similar project at the southern end of the proposed growth center.
 - ⊙ A-7. Eliminate left turns along Sykes Mountain Avenue (right turn only from all exit points) diverting all eastbound traffic in one direction past Bowling Lane to a roundabout. The roundabout would allow traffic to continue moving, reducing queuing, and to (1) either exit the roundabout to continue eastbound on Sykes Mountain Avenue or (2) to return westbound on Sykes Mountain Avenue. This recommendation has been incorporated into the planning for the roundabout currently in the final stages of engineering and right-of-way acquisition.
 - ⊙ B-2. Construct connector roads to linked the Sykes development corridor with U.S. Route 5 and South Main Street in order to provide added routine and emergency access and to disperse the increasing traffic flows. Establish a road to connect the southern terminus of Bowling Lane to South Main Street, just north of I-89 and another road to connect Beswick Drive to U.S. Route 5 (where the I-91 northbound exit ramp is located currently). Constructing these grid connector

roads should reduce the traffic volume on Sykes Mountain Avenue and may alleviate the need for signalizing one or more the intersections along Sykes Mountain Avenue. This is a long-term strategy to be considered if the state moves forward with a project to realign the interchange.

3. Realignment of the I-91 ramps on Route 5. This is another recommendation of the Sykes Mountain Avenue Study, but has not been actively pursued:
 - ⦿ B-1. Relocate the I-91 northbound exit and entrance ramp to create a four-way signalized intersection at Sykes Mountain Avenue and U.S. Route 5. The new location of the exit ramp would face eastbound at this intersection with Sykes Mountain Avenue, where a hotel parking lot currently stands. Vehicles entering I-91 northbound could enter at this same intersection. The relocation of these ramps would allow for a more efficient flow of traffic...This would also reduce the negative impact of lengthy queues at the northbound Route 5 intersection with Sykes Mountain Avenue, while solving many of the current configuration problems with the entrance and exit ramps on I-91.

References

	Attachment	Page	Description
1	1 Hartford Master Plan 2007	150-155	Chapter VI: Community Facilities and Services • Education
2	1 Hartford Master Plan 2007	168-171	Chapter VI: Community Facilities and Services • Recommendations
3	1 Hartford Master Plan 2007	173-178	Chapter VII: Utilities • Water Supply
4	1 Hartford Master Plan 2007	178-180	Chapter VII: Utilities • Wastewater Disposal
5	1 Hartford Master Plan 2007	183	Chapter VII: Utilities • Recommendations
6	1 Hartford Master Plan 2007	193	Chapter VIII: Public Roads and Transportation • Local Public Road Deficiencies
7	1 Hartford Master Plan 2007	195	Chapter VIII: Public Roads and Transportation • State-Controlled Road System
8	1 Hartford Master Plan 2007	212-217	Chapter VIII: Public Roads and Transportation • Recommendations
9	8 Sykes Mountain Avenue Study 2000	45-49	V. Future Plans and Recommendations • 3. Transportation Recommendations

F. Projections and Land Area

Projections

Based on projected population growth, household size and employment growth, Hartford anticipates 1,960 new dwelling units and 3,040 new jobs town-wide over the 20-year planning period. Hartford's proposed growth center is being planned to accommodate 1,275 of these additional dwelling units and 2,360 of these jobs, which will require the development of at least 1.5 million square feet of new commercial space, over the 20-year planning period as shown in Figure 9. Detailed projection data and methodology are presented in Appendix B.

Hartford feels that it is necessary for more than 50 percent of future residential and commercial development to occur within its proposed growth center. The 2007 Hartford Master Plans and the 2008 Zoning Regulation changes reinforce the current ratio between the number of residents living in areas served by infrastructure (75%) and those living in rural areas (25%). It is the town's goal to maintain this ratio, so more than half of the new development will need to be located within the proposed growth center. To determine what percentage of growth should be planned for the proposed growth center, Hartford reviewed the land available for residential development within its planned growth areas. Taking into consideration lands that the town has designated for growth but not included within the proposed growth center, the town concluded that the proposed growth center would need to accommodate 65 percent of new home construction over the 20-year planning period to maintain the Master Plan 75/25 ratio. Therefore, the town set its residential growth target at 1,275 dwellings.

Similarly, most of the land zoned for commercial or industrial uses in Hartford is within the proposed growth center. After a review of the regulations, employment projections and available land, Hartford determined that 78 percent of new jobs created over the 20-year planning period should be located within the proposed growth center. Thus, Hartford set a target of 2,360 jobs for its proposed growth center. Planning to accommodate more than 50 percent of future growth within planned growth areas also meets the town's Master Plan goal to conserve open space and working lands in outlying areas and protect the rural character valued by town residents.

Figure 9: Growth Center Targets

	Projection 2010	Projection 2030	Growth 2010-30	Growth Center Targets
Dwelling Units	5,440	7,400	1,960	1,275 dwellings (65% of growth)
Jobs	9,110	12,150	3,040	2,360 jobs (78% of growth)
Commercial Space				1,506,000 square feet

Land Area

Area Needed

The 2,633 acres of land proposed for growth center designated is necessary to accommodate anticipated growth over the 20-year planning period as demonstrated in the build-out analysis undertaken in support of this application (see Appendix C).

- ⊙ Residential Growth. The analysis showed that there is a potential for a maximum of nearly 4,100 dwelling units within the proposed growth center. However, infill or redevelopment

of small, developed lots accounts for 44 percent of those units. It is unlikely that the full infill potential of these lots will be realized during the 20-year planning period. Therefore as further discussed in Appendix C, Hartford believes the inclusion of the larger, less intensively developed parcels on Christian Street within the proposed growth center is necessary to ensure that the town can meet its target of 1,275 new homes by 2030.

- ④ **Commercial/Industrial Growth.** The amount of land needed to support the creation of 2,360 jobs within the proposed growth center is dependent on the space needs of businesses and the type of buildings are associated with those businesses. Given the employment projections, Hartford anticipates that 25 percent of the 1.5 million square feet of commercial space will be in 1-story structures, 47 percent will be in 2-story structures and 28 percent will be in buildings with three or more stories. As with the residential growth, a significant percentage of development potential is on already developed properties, which may not be fully realized during the planning period. Two currently undeveloped parcels (one in the I/C-2 and the other in the HC district) account for a substantial amount of commercial development potential.

Hartford believes it is necessary to include all of its I/C-2 and HC districts within the proposed growth center. Otherwise the commercial and industrial development that Hartford needs to accommodate as a regional employment center may be attracted to less suitable locations. Developments such as the new Mascoma Bank processing center, car dealerships, hotels and office parks critical to providing future jobs could not be placed in Wilder, Hartford Village or downtown White River Junction without demolishing existing buildings and destroying neighborhood character. Including the I/C-2 and HC districts along Sykes Mountain Avenue and Route 5 South within the proposed growth center are essential to protecting these historic village centers from incompatible development, as further discussed in Appendix C.

Infrastructure Extensions

The proposed growth center does not require the extension of infrastructure to service low-density development. The entire proposed growth center is within the town's sewer service area and the basic infrastructure is in place to provide service throughout this area. As detailed on page 9, some upgrades will be necessary to bring service to a limited number of properties within the proposed growth center that are currently not connected to the municipal water and sewer systems.

Pattern of Development

Hartford's current development pattern is characterized by nodes of development focused around its traditional village centers and transportation network. The town recognizes that the land included within the proposed growth center currently ranges from higher density (at the center of those nodes) to lower density (at the edges of the nodes). The town's zoning districts further reinforce this development pattern with their gradation of density and intensity of allowed uses (e.g., I/C-2 around Sykes Mountain Ave, buffered by I/C, HC and R1-M districts, or Wilder's commercial and mixed-use districts transitioning to R-1, then R-2 and finally R-3 as distance from the center increases). So at the conclusion of the 20-year planning period, the town anticipates that its multiple nodes will still be characterized by a higher density or intensity of use, but that more of the lands between them will be developed or used more intensively. Thus, the proposed growth center will not result in a scattered or low-density pattern of development.

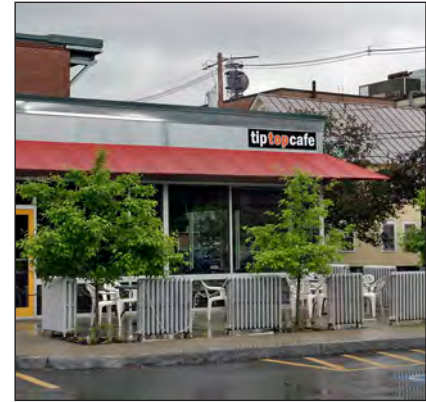
White River Junction.⁸⁻⁹ Hartford's Zoning Regulations include a design review district and the town has design guidelines (Attachment 4) in place for downtown White River Junction.^{7,10}

With the recent surge in private investment in downtown White River Junction, Hartford decided that it was time to take a fresh look at the downtown. In February 2009, the town, in partnership with the Hartford Development Corporation and the community at large, completed the White River Junction Revitalization Plan (Attachment 6). That plan includes an assessment of downtown infrastructure and utilities, parking and mobility, streetscape and urban design, and wayfinding, along with a conceptual layout plan and a detailed capital improvement plan and budget for the next 20 years. The town's intent to implement the plan, as it implemented the 1992 River City plan, is evidenced by the \$6.4 million (\$1.2 million in town funds and \$3.2 million in TIF bonding) included in Hartford's capital budget and program for improvements to sidewalks, roads, parking, lighting, landscaping, public areas, and water/wastewater upgrades in downtown White River Junction.¹¹

Health of the Downtown

White River Junction's downtown, with its classic buildings and street layout, continues to offer redevelopment and limited infill opportunities. Even in these difficult economic times, the designated downtown remains healthy as evidenced by a vacancy rate of 6.7 percent. Detailed use and vacancy data is included in Appendix C.

The revitalization effort begun nearly 20 years ago recognized that downtown White River Junction could not succeed by trying to compete with the regional retail center in adjoining (and sales tax free) West Lebanon. Instead, downtown White River Junction's niche has become arts institutions, professional offices and quality dining.



Downtown Restaurant

Similarly, the designated downtown is not in direct economic competition with Hartford's other commercial nodes as each meets a different market need. The area around the interchange (Sykes Mountain Avenue and Ballardvale Drive) are attractive locations for businesses that serve travelers (e.g., lodging, fast food, gasoline stations) and regional customers (e.g., auto sales), as well as light industry and other uses that are of a scale, character or intensity that would not be appropriate in downtown White River Junction. The commercial node along Route 5 north of downtown, and the small business districts of Wilder and Hartford village, provide locations for small, primarily community-serving businesses. Many of these small businesses could not afford space downtown or would not be appropriate due to their scale or character. To maintain a dynamic and diverse local economy, Hartford needs to provide suitable locations for many different types of businesses and so considers its commercial nodes to be working together to further the common goal of sustaining and enhancing the town's role as a regional employment and service center.

Accommodating Growth

The "designated downtown" portion of White River Junction includes 45 acres of land. There is currently around 650,000 square feet of building space in the designated downtown, of which less than 40,000 square feet is vacant. Within the designated downtown, around 22 acres are available for development

with 5 of those acres built out under the current zoning regulations. Infill development on the remaining 17 acres would result in less than 400,000 square feet of additional building space at maximum build-out under current zoning regulations, which is around 25 percent of the total amount of commercial space needed to accommodate job growth projections.

The build-out analysis calculates a maximum potential for new development, but Hartford believes that its designated downtown can realistically accommodate around 165,000 square feet of additional building space. One reason for this is that a number of the undeveloped or under-developed lots within the designated downtown provide parking for adjoining lots, which are intensively developed and cannot meet their parking needs onsite. Therefore, these lots while “undeveloped” are used and unlikely to become available for development unless the parking is no longer needed. Additionally, in order to achieve the maximum potential under the zoning regulations, it would be necessary to demolish existing historic structures on some lots and rebuild at a higher density. Such demolition is strongly discouraged by Hartford, as expressed in the policies of its Master Plan and implemented through the town’s zoning regulations.^{1-3, 10}

While a certain amount of redevelopment and infill is desirable and is being actively pursued as discussed further in Appendix C, Hartford’s 45-acre designated downtown cannot accommodate a majority of the town’s anticipated growth over the 20-year planning period without destroying its historic scale and character. A detailed downtown build-out analysis is also included in Appendix C.

References:

	Attachment	Page	Description
1	1 Hartford Master Plan 2007	24-25	Chapter 1: Historic and Cultural Resources • Downtown/Village Revitalization
2	1 Hartford Master Plan 2007	38-39	Chapter II: Land Use • Hartford’s Villages and Rural Areas • White River Junction
3	1 Hartford Master Plan 2007	56-58	Chapter II: Land Use • Guiding Future Development • Village Areas and Growth Centers
4	1 Hartford Master Plan 2007	128-139	Chapter V: Economic Development • Economic Development Vision and Goals
5	1 Hartford Master Plan 2007	129-134	Chapter V: Economic Development • Economic Development Implementation and Recommendations
6	1 Hartford Master Plan 2007	204-205	Chapter VIII: Public Roads and Transportation • Parking
7	2 Hartford Zoning Regulations 2008	5	Article 2 Districts and District Regulations • Section 2-1 Zoning Maps and Districts
8	2 Hartford Zoning Regulations 2008	15	Article 2 Districts and District Regulations • “CB” Central Business Zoning District
9	2 Hartford Zoning Regulations 2008	42	3-3 Access and Parking • 3-3.3 Off-Street Parking • 3-3.3.1 Location • (C) Downtown White River Parking District
10	2 Hartford Zoning Regulations 2008	81-86	Article 4 Special Provisions • 4-2 Design Review District
11	15 Hartford CIP 2010-2015	8	Economic Development

