ROUTE 44/BOLTON, CONNECTICUT Strategic Corridor Plan



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In association with TPA Design Group, Inc., URS Corp., and The Louis Berger Group

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Table of Contents

Preface.		i
1. IN7	RODUCTION	
2. GU	IDING VISION AND PRINCIPLES	4
3. CO	RRIDOR SETTING – OPPORTUNITIES AND ISSUES	6
3.1.	Environmental and Community Resources	6
3.2.	Land Use, Existing Plans, and Zoning	9
3.3.	Market Potential/Economic Development	
3.4.	Transportation System	
4. VIS	SION FOR THE FUTURE	
4.1.	Land Use	
4.2.	Transportation System	
5. RE	COMMENDED STRATEGIES	
5.1.	Land Use Management Recommendations	
5.2.	Economic Development Recommendations	
5.3.	Transportation System Recommendations	
6. IM	PLEMENTATION PLAN	
Resource	es and Photograph/Sketch Acknowledgements	51

List of Figures

Figure 1:	Route 44 Study Area	3
Figure 2:	Environmental Resources - Constraints to Development	7
Figure 3:	Land Use - Current	10
Figure 4:	State Plan of Conservation and Development	
	Land Use Classifications for Bolton	12
Figure 5:	Future Land Use Vision- Preservation Areas	27
Figure 6:	Future Land Use Vision – Development Clusters	28
Figure 7:	Post Office Square – Concept 1	30
Figure 8:	Post Office Square – Concept 2	31
Figure 9:	Nursery/Restaurant Site Concept	32
Figure 10	: Transportation Recommendations	35
Figure 11	: Future Land Use Vision - Consolidated Map	36

List of Tables

Cable 1: Daily Traffic Volumes	– Route 44	. 18	3
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Appendices

- Appendix A: Summary of Community Input/Comments
- Appendix B: Accident Data
- Appendix C: Sample Zoning Language for Mixed-Use Developments

Preface

The *Route 44/Bolton Strategic Corridor Plan* was prepared by Fitzgerald & Halliday, Inc. for the Town of Bolton under contract to the Capitol Region Council of Governments (CRCOG). Invaluable technical support was provided by Town of Bolton staff as well as staff from CRCOG. A Corridor Study Oversight Committee (SOC) provided oversight during the planning process. The Committee had nine members that included town officials, local business owners, and Bolton residents. Their contributions were extremely valuable both during meetings and while supporting other study activities. The SOC membership included:

Bruno Simonetti	First Selectman
Don Palmer	Selectman
Robert Neil	Selectman
James Loersch	Inland Wetlands Commission
Arlene Fiano	Planning & Zoning Commission
Ron Beaudoin	Conservation Commission
Cathy Teller	Economic Development Commission
Bob Morra	Water Pollution Control Authority
Beth Harney	Community At Large Member

<u>Staff</u>

Stuart Popper	Bolton Director of Community Development
Joyce Stille	Bolton Administrative Officer
Rebecca Augur	CRCOG

ACKNOWLEDGEMENT

At its May 6, 2008 meeting, the Bolton Board of Selectmen adopted this "Route 44/Bolton, Connecticut Strategic Corridor Plan" dated April 2008 and the accompanying "Bolton Corridor Market Study" dated July 2007 both prepared by Fitzgerald & Halliday, Inc. in association with TPA Design Group, Inc., URS Corp., and The Louis Berger Group. These reports are advisory only and references to priorities for open space represents work done by the Bolton Open Space Preservation, Acquisition and Conservation Committee and are not part of the Town's Plan of Conservation and Development.

1. INTRODUCTION



The face of Route 44 in Bolton, a main road through the town and a gateway to Hartford to the west and the University of Connecticut at Storrs to the east, may be changing. New sewer lines will be installed starting in 2008, presenting the Town with opportunities for new development and challenges as to how it will channel potential growth. Route 44 is an important arterial road serving both local and commuter traffic through Bolton. The area is also a primary commercial corridor for this mostly rural residential community. The new

sewer line will serve an area previously reliant on on-site septic systems. The combination of these factors may have a substantial impact on land development possibilities and trends in this area of Bolton. The Town has proactively seized the opportunity, before construction of the sewer line begins, to plan for the future of the area. This planning study developed a 'smart growth' land use plan for the corridor as well as strategies to address growing traffic congestion and safety concerns. The area covered within the study is shown in Figure 1 below.

This *Route 44/Bolton Strategic Corridor Plan* is the product of the Town's proactive planning initiative and provides a blueprint and implementation plan for the Town's desired land-use pattern and roadway improvements in the Route 44 corridor into the future. A grant provided through the Connecticut Office of Policy and Management (OPM) funded this study and the Capitol Region Council of Governments (CRCOG) assisted the Town in overseeing it.

It was an ideal time to prepare this plan so that Bolton could experience economic benefit while managing the growth that might occur when the sewer line project is complete. A key focus of the study was to examine how "smart growth" principles could be used to promote the kind of place Bolton wants Route 44 to be. Smart growth is an approach to planning and implementation of community development using these principles:

- Preserve valued community and natural resources while growing the economy
- Place development where there is or will be infrastructure (water, sewer, roads, and schools) and optimize infrastructure use before expanding
- Encourage and prioritize re-use of previously developed sites or new development in targeted growth areas
- Take steps to preserve and safeguard land identified for preservation
- Pursue a compact, mixed-use pattern of development for key areas that preserves or creates walkable neighborhoods and village character

- Provide a range of type and style of housing so that households from young adults to seniors can choose to live in town
- Promote a transportation system that encourages travel by a variety of modes (walking, bicycling, and transit in addition to the automobile)
- Work with the community to learn about these principles as well as how they are implemented and to then prepare a vision of where and how they want to grow



2. GUIDING VISION AND PRINCIPLES

In order to determine the most appropriate long-term strategies for guiding growth and change along Route 44, a vision was crafted that paints a picture of the ideal neighborhoods in the area in the future. The vision emanated from a consensus of views that included input from:

- The Study Oversight Committee
- The community as a whole through a community workshop
- Responses to a widely distributed questionnaire
- Interviews with selected corridor property owners, and
- Opportunities to comment on the study via a project website.

A summary of the comments and input received through the public outreach for this study is included in Appendix A. The following is the statement of vision for the Route 44 Corridor.

Vision Statement

Route 44 will continue to be the focus of growth and development for Bolton. Future development will, however, have a unique character defined by compact, pedestrian-friendly, mixed residential and business districts. These mixed-use districts will be contained so as not to disrupt scenic views of undeveloped open spaces, forests, parks, historic sites, and working farms which have been preserved as part of Bolton's heritage. They will provide services that enhance the quality of life for residents, and invite pass-through travelers to stop.

The mixed-use districts will serve as destinations that are easy to navigate by car, bicycle, and on foot. They will also be connected to one another and the village core to the south by a diversity of convenient means of travel including walking, bicycling, transit, and the automobile. Traffic on Route 44 will maintain reasonable speeds through the districts, allowing pedestrians to cross the street safely, at appropriate locations, as a result of speed-control measures. In addition, the Interstate 384 interchange will be modified to encourage slower speeds, to be safer to navigate, to allow connections among the mixed-use districts, and to create a pleasing visual gateway to the community.

Guiding Development Principles

In order to achieve the vision that Bolton has for the Route 44 roadway corridor, future development will be guided by the following 'Smart Growth' principles/policies:

- To preserve valued community and natural resources and safeguard land identified for preservation
- To encourage economic development consistent with the scale and character of activity described in the Route 44 Vision Statement
- To locate development where there is or will be infrastructure (water, sewer, and roads) and concentrate development there before using raw land
- 4 To place priority on re-use of previously developed sites in targeted growth areas
- **4** To place priority on locating new development in targeted growth areas
- To pursue a compact, mixed-use pattern of development for targeted growth areas that preserves or creates walkable neighborhoods and village character
- To foster a range of type and style of housing so that households from young adults to seniors can choose to live in town
- To promote a transportation system that encourages travel by a variety of means (walking, bicycling, and transit in addition to the automobile)
- ↓ To create a multi-faceted transportation system that conveniently links the targeted growth areas with one another and with the historic village center of Bolton

3. CORRIDOR SETTING - OPPORTUNITIES AND ISSUES

3.1. Environmental and Community Resources

Setting

The Route 44 Corridor is situated in an area with an abundance of open space in the form of undeveloped private lands and preserved open space such as land-trust properties, working farms, and state and town parks. There are approximately 720 acres in the corridor, of which about 225 acres or 31 percent falls in those categories. There is also an abundance of natural and community resources in the form of lakes, streams, wetlands, aquifers, as well as historic sites



and two greenways (off-road bicycle/pedestrian paths). The corridor is characterized by an often steeply rolling topography, limiting opportunities for development somewhat. Natural and community resources in the corridor are mapped on the following Figure 2. These resources can be categorized in two ways 1) those which will be considerations in future development (but may not prevent it) and 2) those that will constrain or inhibit development. They include:

Resource Considerations For Development	Resource Constraints To Development
Floodplains	Steep Slopes (>15%)
Aquifers/Public Drinking Water Supplies	Wetlands
Farmlands	Preserved Open Space – Parks/Land Trust
Community Priorities for Open Space	
Preservation	
Historic Sites and Properties	

In particular, it is notable that the western end of the corridor overlays a public drinking-water supply aquifer. An aquifer is an underground layer of water-bearing permeable rock or (gravel, sand, silt, or clay) from which groundwater can be usefully extracted. The presence of this aquifer means that individual wells from new development generally west of Bolton Notch Pond can expect to have a sound supply of drinkable water. It also means that future development in this area will need to be designed to minimize the potential for hazardous substances to filter down into the aquifer. In addition, stormwater runoff must be managed to sustain the recharge of the aquifer (replenishment by percolation of water downward from the surface).



Resources and Constraints

The natural resources in the corridor offer both constraints to future development as well as opportunities for habitat/environmental protection, preservation of rural character, and recreation. This study assumed that areas of wetlands, steep slopes (greater than 15%), and preserved open space (land formally set-aside for preservation) will not be developed in keeping with regulatory limitations, use restrictions, and engineering challenges. The Bolton Open Space and Acquisition Committee recently completed a property evaluation that identified priorities for open space preservation for both passive recreation such as hiking and for natural resource protection. Although few of these parcels fall within the corridor, it was also assumed that those that do would, generally, not be developed in the future. This assumption presumes that town land preservation efforts will find avenues to set those high priority lands aside. The exception, however, is the so-called 'Cider Mill' property west of Cider Mill Road which is currently the subject of a zone change application and a planned mixed-use development proposal. Figure 3 depicts the developable land within the corridor in relation to development constraints. The area of vacant (previously developed but now unused) or undeveloped land that presents real opportunities for ready development in the corridor in light of development constraints is relatively limited.

Although there is an ample supply of valued natural and cultural resources which enrich the lives of both residents and visitors in the corridor, generally the only way to get from one to another is by car. While there are two greenways or off-road trails for bicyclists and pedestrians in the corridor, they travel north/south and then westerly from Bolton Notch to Manchester. Currently, there are no trails, sidewalks, or bicycle lanes connecting the western Bolton Notch area and eastern ends of the corridor.

As noted above, the western end of the corridor is part of a designated Aquifer Protection Area, overlying an underground public drinking water supply. This water supply is protected through zoning from hazardous activities that could allow contaminants to infiltrate the groundwater. This means that some forms of development that call for the use of hazardous substances such as gasoline will be prohibited from locating in the area in the future. Existing developments that use hazardous substances will be registered with the Town and their handling of hazardous materials monitored. Any future expansion or alteration of those activities will be strictly limited. This Aquifer Protection Overlay Zone designation will constrain the form of development in the western end of the Route 44 corridor in the future, but will not prohibit it all together.

The understanding of constraints to development informed the identification of greatest development opportunities and potential pressures and served as a guide to developing the future land use pattern vision. The natural and cultural/historic resources of the corridor are part of the town's heritage and are assets crucial to residents' sense of Bolton as a place and the quality of life it offers. In summary, key natural and cultural resource issues include potential for:

- Loss of high priority open space to development
- Lack of connections among existing parks other than by car
- Impacts to water quality from increased development and impervious surfaces
- Impacts to access to Bolton Lake
- Loss of scenic vistas
- Loss of active farmland to development

3.2. Land Use, Existing Plans, and Zoning

Setting

Land use: Land use in the corridor can best be described as disparate. The area of Bolton Notch is an eclectic mix of auto-related activities including RV sales mixed with one restaurant/bar, some manufacturing, recreation in the form of a driving range, and a large veterinary practice. This area is separated from the remainder of the corridor by the imposing infrastructure of the Interstate 384 interchange and terminus. Just beyond the junction of I-384, Route 44 and Route 6 is another small



commercial cluster that spreads a little bit north of Route 44 along Quarry Road. Eastward is a scattering of offices, services, manufacturing, a farm stand and a nursery interspersed with Bolton Lake, homes and residential neighborhoods. However, overall, land in use in the corridor is predominantly residential at about 250 acres or 35 percent. Core community facilities and institutions are located away from and south of the corridor along Notch Road and in the historic town village center on Bolton Center Road. Existing land use (as of May, 2007) is shown in Figure 3.



Existing Plans: Existing land use plans which directly impact the corridor include the *Bolton Connecticut Plan of Conservation and Development* (Bolton Planning and Zoning Commission, 2005) and the *Conservation and Development Policies Plan for Connecticut, 2005-2010* (OPM, 2004) (The C&D Plan). The first plan is important as it sets the community policy and vision for the future of Bolton as a whole. The plan is intended to serve as the foundation for the town's land use regulations and to help inform decisions about community investment in infrastructure and management of its resources. Notable policies from the plan that are relevant to the corridor include:

- To regulate land use in the sewer service area to manage the extension of sewer connections and preserve the capacity of the line
- To maintain the low density of residential development but provide opportunities for affordable and senior housing
- To preserve 20 percent of the land as open space encourages cluster housing options
- To encourage appropriate commercial business in keeping with the scale of the community such as small retail and professional services encourages businesses to locate along Route 44
- To preserve the town's historic heritage
- To coordinate with the region and the state in developing a sound transportation system

The vision for the Route 44 corridor as developed through this study is consistent with these broader policies for the town.

The C&D Plan is intended to guide the decision-making process by the state government with regard to balancing economic growth with environmental protection and resource conservation. It has two component parts; plan text that describes desirable land use patterns/categories for the state and an associated map that designates each area of the state within the land use categories. This has implications for Bolton in terms of funding that may be available from the state to support local plans and projects. The Route 44 corridor is currently predominantly designated by the C&D Plan as a Conservation Area meaning lands that should be protected from further development to varying degrees (permanent protection to some limited new development or redevelopment). Any development that does occur should be compatible with the state's identified conservation values. There are two "Rural Community Centers" within the corridor as shown on Figure 4. These are considered suitable for mixed-use development within a village center setting.



<u>Zoning</u>: There are four zone designations within the corridor including two residential zones, one industrial zone and a general business zone. The frontage along Route 44 is predominantly GB or General Business. The industrial zone covers scattered parcels and is the least prevalent in the corridor. Activities allowed in each zone include the following.

Zone	Permitted Uses (with site plan review in non-residential zones) and Special Permit Uses
GB- General Business	Public utility building; public commuter parking lots; Bolton municipal facilities; open-lot sales; grocery; pharmacy; beauty salon/barber shop; offices; studios; retail; personal or business services; restaurants; taverns; banks; hotel/motel; bed and breakfast; theaters; printing; funeral homes; gas stations; auto sales and service; child care centers; wholesale sales; driving ranges/miniature golf and accessory uses to those listed above; adult-oriented businesses with limitations
R1– Residential	Single family detached dwelling; two- family dwelling with equal or nearly equal floor area; one accessory apartment; parks; farming; civic buildings such as libraries and fire stations; private churches, schools and libraries; home occupations (except auto repair); commercial horse stables; domestic keeping of livestock; bed and breakfasts; non-profit child care centers; group homes/continuing care facility; and cluster subdivision/Open Space Conservation (OSCD) developments including elderly housing cluster complexes
R2 – Residential	Same as the R1 zone; also multi-family complexes on 70,000 s.f. lot or greater
I - Industrial	Motor vehicle uses as in the GB zone (except no tire recapping or re- treading); manufacturing and processing of goods (except concrete and those with hazardous or explosive components); warehousing and freight terminal; construction businesses; outdoor storage; office buildings (medical or corporate); accessory uses related to the above

Other notable provisions of the regulations that may have a future impact on development in the Route 44 corridor by influencing or discouraging realization of opportunities to develop compact, pedestrian friendly activity nodes with a neighborhood sense of place include:

- Section 3A.10; For newly created lots (post June 21, 1989) there must be a minimum buildable area of ³/₄ of the area required by zoning that is an area undiminished by wetlands, buffers, setbacks and so forth. This results in larger lots sizes contradictory to the goal of compact development form.
- Section 3A.12; Driveways serving more than one lot are not generally allowed, except by special consideration of the Planning and Zoning Commission. If each parcel is required to have its own driveway, this can be disruptive to a sidewalk system, decreasing pedestrian safety. It is also a disincentive to designing walkable village

scale mixed-use developments which generally have fewer driveways and independent parking lots allowing more communal space. Additionally, this may contradict efforts to reduce the number of curb-cuts onto Route 44 for improved access safety and design – access management

- Section 3A.20; this section of the regulations has extensive controls over outdoor lighting and minimizes its impact to surrounding properties. This can facilitate effective mixing of uses in a village setting, allowing them to co-exist together comfortably.
- Section 3B.4; this section regarding restaurants discourages outdoor seating except with well-considered justification and considers pedestrian outdoor window service as an accessory use. Restaurant size is guided by seating requirements of no less than 30 indoor seats (exclusive of bar and counter seats) for a stand-alone restaurant and 10 seats when part of a unified shopping center. This may inhibit the location of new small scale restaurants such as cafes and coffee shops in a mixed-use village setting.
- Maximum building height is 2.5 stories in the residential zones, 3 stories for uses in the GB zone, and 4 stories in the I/industrial zone. This will prohibit tall office buildings, hotels, and shopping complexes
- Section 11J; this section sets standards for minimum frontage (200 feet) in the GB zone and establishes separation distances for driveways on the same or adjacent properties as a pre-requisite for requests for reduced frontage. While this is sound language for promoting access management, it also is a disincentive for a system of small lots with small frontage creating a strong sense of place within a walkable neighborhood.
- Section 11L; this section requires no less than 25% landscaped area in the GB zone. Minimum landscaping standards are essential to creating a sense of place in a development cluster.
- Section 15N; this section sets requirements for minimum number of parking spaces. No provision is included for shared parking or a reduction in required spaces under any circumstances. This may result in an oversupply of parking in the development clusters. In addition, strategically placed communal parking can be a key ingredient in a well designed village scale development. The expanses of pavement needed for parking can be tucked away from human activity centers, and foster a neighborhood sense of place.

Issues and Opportunities

The current land use pattern, C&D Plan and existing zoning each present some constraints to achieving the vision for the Route 44 corridor in Bolton. Key issues include:

- Dispersed nature of current varying land uses is not consistent with the desired community character and future land use vision
- Current zoning encourages only strip development along the length of Route 44
- The limited undeveloped land in the corridor suggests that change in land use and intensity of land use may come more so from redevelopment of land rather than use of never-developed properties
- Current zoning does not facilitate changes in use
- The interchange at I-384 as it currently exists is an insurmountable barrier to cohesiveness within the corridor
- The C&D Plan is not fully consistent with the future land use vision for the corridor and would not support new low-intensity development at the eastern gateway to Bolton
- Current zoning does not support realization of the corridor vision as it does not provide for a mix of residential and non-residential uses within the same zone or as part of a planned development and does not accommodate compact development form with smaller lot sizes, shared and reduction in parking, and minimal setbacks among buildings and between buildings and the street for a neighborhood sense of place.
- However, some limited zoning provisions such as those for landscaping, lighting, and driveway separation can support desired design and character along the corridor
- The zoning regulations do not include requirements for low-impact development (LID) which in essence would require state-of-the-art stormwater management features to minimize the impact of development on both surface and groundwater resources

3.3. Market Potential/Economic Development

Setting

The corridor today has, as noted above, a disparate collection of retail, services, recreation, industrial, and residential activity. The question becomes, what kind of business or new residential development may be attracted to locate in the corridor once there is sewer service available and considering that new sewer connections beyond properties fronting on Route 44 will be strictly limited. To answer this question, a market study was conducted to assess the development potential along the corridor and



the surrounding area. The assessment built upon the draft vision for the corridor with desired mix of land uses in the future with a detailed examination of the market conditions for commercial and residential development. Could that form and mix of development be attracted to the corridor?

In order to understand the potential markets within the corridor, the market analysis looked beyond the boundaries of Bolton in order to reflect the travel characteristics of residents, travelers/tourists and workers within or passing through the region and to account for the regional supply of and demand for commercial and residential development in the Hartford area. The analysis considered competing businesses located within two distinct driving distances of the corridor; a shorter distance for convenience goods frequently purchased such as a prescriptions (10 -15 minutes) and a longer distance (20 minutes or more) for larger less frequent purchases such as furniture or appliances. The full market study is contained and available in separate technical memorandum from this report.

In summary, the market study found that there is a saturation of large-scale retailers within easy driving distance of the corridor. Bolton as a business location cannot compete with this. Pass-through travelers can also stop conveniently in Manchester for services and goods such as banking or coffee. However, residents of Bolton must drive out of the community for these same retail options and services. Nonetheless, the market analysis suggests that the corridor could support development incorporating a variety of uses (residential, office, retail, and public space) that would serve the needs and desires of residents as well as capture some pass-through travelers and capitalize on the recreational assets within and adjacent to the corridor.

Issues and Opportunities

The Town of Bolton could, as described, capture demand for more clustered, mixed-use style development. By clustering small scale uses together a critical mass or synergy could be formed that would help the individual business thrive. The following summarizes the key issues and opportunities findings of the market analysis:

- Due to the saturation of neighboring large-scale retailers, the corridor cannot effectively compete with that market but could instead draw customers by offering a mix of uses providing numerous activities throughout the day (e.g., dining, passive recreation/public recreation, entertainment, residential, office).
- Bolton's strongest market opportunity relates to goods and services needed by its residents as well as potential linkages between business and civic (i.e. community center), institutional (i.e. schools/colleges), and recreational (i.e. Bolton Lake) activities.
- Retail that is thematically linked to and supportive of Bolton's outdoor recreation assets and the immediate region's heritage tourism sites appears to offer the greatest viability for new commercial development. Some examples of niches that could work for Bolton include outdoor recreation supporting (such as canoe and kayak rentals and tours), and heritage tourism oriented establishments (such as antique stores). Retail of this nature could be complemented, for example, by activities of interest to visitors such as an outdoor farmer's

market, which would offer a unique shopping experience reflective of Bolton's character and natural amenities.

- The market analysis also reveals a strong office market for small to medium scale operations. Satellite operations for large corporations or medical facilities such as a local office of a large insurance company or a medical walk-in clinic appear to be most viable for Bolton. Furthermore, this scale of office development may offer bridge or transitional opportunities for Bolton's many home-based businesses looking to expand operations.
- The population and employment projections for Bolton and the surrounding market areas indicate growth that would support additional residential development. The demographic projections suggest a need for more diverse housing stock in Bolton (i.e., town homes, condos) to accommodate a range of ages, growing population of those 50 and older, and associated lifestyles.
- Overall, the market analysis suggests that Bolton's strongest opportunities for commercial and residential development are for targeted, smaller scale mixed and clustered assemblies of niche retail, professional and financial service sector offices, and housing that complements and enhances the viability of these commercial endeavors.

3.4. Transportation System

Setting

The transportation system in the corridor is detailed in Figure 1 of the study area. Its component parts are described in brief below.

<u>Roads</u>: Within the study area, Route 44 is classified as a two-lane minor arterial roadway. To the west, Route 44 provides access to downtown Manchester, East Hartford and Hartford. To the east, Route 44 provides access to Coventry as well as Mansfield where it connects to Route 195 in the vicinity of the UCONN campus.



I-384 is an interstate limited access highway which runs from its terminus in the Route 44 corridor westward to Manchester where it connects to I-84. About 1,500 feet east of the merge of I-384 and Route 44, Route 6 diverges from Route 44. Route 6 is a two-lane principal arterial and runs southeast to Willimantic. A number of local roads intersect Route 44 along the length of the corridor. These serve both as residential streets and as connector routes to the village center as well as to Route 6 to the south and Vernon to the north. Most notably, Notch Road intersects Route 44 within the complex knot of roads that is the I-384 interchange area and is the key route from Route 44 to Bolton's schools, senior center, fire station, and town hall at the village center.

<u>Pedestrian, Bicycle and Transit Facilities:</u> According to the *Connecticut Bicycle Map* (ConnDOT, 2002), Bolton Center Road (Route 85) and Mill Road are designated as recommended bike routes. While this does not necessarily mean that these roadways feature bike lanes, these routes were selected by ConnDOT based on available shoulder width as well as low to moderate daily traffic volumes. Route 44 west of Bolton Center Road is designated as a recommended bike route as well. In addition, a multi-use greenway runs north-south through the study area; the greenway runs south along Railroad Brook to the southwestern end of Bolton Notch State Park near the Bolton Notch Pond boat launch. The greenway then runs along the southern border of Bolton Notch State Park and across Route 44 near the Route 6 split, continuing southeast towards Hop River State Park. An additional greenway is planned; this trail will intersect the existing greenway near the Bolton Pond boat launch and run southwest along I-384 toward Manchester. Most roadways in the study area do not feature sidewalks or bike paths.

There is no public transit service along the corridor. However, CT Transit provides local bus transit service to a location on Route 6 in Manchester about 3 miles west of the study area. The Burnside Avenue line provides service to downtown Hartford with buses departing every 30 minutes on weekdays from 4:00 AM to 6:30 PM and on Saturdays from 7:30 AM to 6:30 PM.

<u>Traffic Characteristics:</u> Recent and historic daily traffic volumes were obtained from the Connecticut Department of Transportation (ConnDOT) for locations along Route 44 in the study area. Table 1 provides a summary.

				2002-2005
		2002 Average	2005 Average	Annual %
Location on Route 44	Direction	Daily Volume	Daily Volume	Change
East of Tolland Road	Both	15,500	15,500	0.0%
NE of Quarry Road	Both	17,000	16,900	-0.2%
West of Tolland Road	Both	16,500	17,800	2.6%
SW of Quarry Road	Both	18,500	19,400	1.6%

Table 1: Daily Traffic Volumes – Route 44

Source: Fitzgerald & Halliday, Inc

Based on these volumes and conversations with ConnDOT forecasting personnel, an annual traffic growth rate of about one percent can be expected into the future. While no dramatic change in traffic volumes is anticipated, a slow growth will continue to exacerbate the existing issues regarding speeds, incompatibility of commuter and local traffic as well as safety concerns.

<u>Safety Evaluation</u>: Crash data in the study area were obtained from ConnDOT for Routes 6 & 44 and I-384 over a three-year period (2004-6). A total of 132 crashes were recorded along these roadways over the three-year period, including 29 which resulted in injuries and 3 fatalities. A review of the crash data indicates that the highest number of accidents (14) occurred on I-384 within ½-mile of Route 44. Twelve of the accidents along this length of roadway were fixed object collisions (such as collisions with trees, guardrails or ledges), indicating drivers driving too fast for conditions. Overall, 35 percent of the accidents reported were fixed object collisions.

The next most prevalent type of accident was rear-end collision, equaling 32 percent of the total, typically caused by following vehicles too closely. The rear-end collisions were fairly evenly distributed throughout the study area. No other patterns of significance were noted. A summary of the accident data is provided in Appendix B.

Issues and Opportunities

Route 44 is a busy arterial roadway characterized by high volumes of peak hour through-traffic, especially commuter traffic traveling between Manchester and Hartford to the west and the University of Connecticut to the east. The study area features a complex set of merges and diverges associated with the termination of I-384. This interchange zone, stretching from just west of Morancey Road to Quarry Road, also includes the split of Route 44 and Route 6. Roadways in this zone are designed to allow for higher speed travel. The interchange zone requires quick decision making on the part of motorists as they weave, merge and diverge to access the appropriate lanes heading to their destination. This leads to confusion, especially for first-time visitors to the area. Safety issues also result from this situation since high-speed through traffic utilizing a ramp system is incompatible with slower speed local traffic at stop-controlled intersections (i.e. signal at Quarry Road).

As an example, the proximity of the northern end of Notch Road to the Route 44/Route 6 diverge point forces motorists entering from northbound Notch Road to merge with high-speed traffic from a complete stop, in fact crossing one lane if they wish to access Route 44. The sight line from this location to the approaching traffic is not adequate for the speeds of oncoming vehicles, and this situation is exacerbated by darkness or adverse weather conditions. Another example is the access from westbound Route 44 to the driveway to Bolton Notch State Park. This driveway is not signed and, since it is a sharp turn, it requires an abrupt deceleration on Route 44 for access. Egress from the driveway calls for a driver to immediately accelerate in order to successfully merge with high-speed oncoming traffic. As such, this interchange zone results in a change in character of Route 44 which interrupts its continuity in the study area. The roadway characteristics that facilitate the movement of through-traffic serve to complicate traffic flow on the local road network and at driveways along Route 44. In addition, the area features steep grades on either side of Route 44 which limit roadway width and impact sight distance.

Key concerns noted through the public involvement activities for this study include:

- Route 44 is not safe for bicyclists or pedestrians there are no safe pedestrian crossings
- There is a need to change the configuration of the I-384 interchange, particularly the intersection with Notch Road
- There are excessive speeds along Route 44
- There is a need for bicycle and pedestrian linkages between Bolton Notch and the rest of the corridor
- There is a need for better linkages for cars as well as bicyclist and pedestrians between Route 44 and the village center including schools and the library

This study included a preliminary investigation of options to reconfigure the I-384 interchange to improve the transition from the highway and related travel patterns and speeds to Route 44 as a community street. In general, the analysis found that viable, feasible options for modifying the configuration of I-384 do exist. More detailed engineering study would be required to determine which alternative would work best. The findings of this investigation are available in a separate technical memorandum. Separate from this project, the Town of Bolton, with assistance from CRCOG, is preparing for study of Route 6 through Bolton including options to improve safety at the Route 6 and Notch Road intersection. Alternatives are expected to build on the preliminary concepts explored for this Route 44 study.

4. VISION FOR THE FUTURE

As an outgrowth of the analysis of existing conditions in the corridor, the identification of key issues and opportunities, and identification of a written vision for the future, a future land use scheme was developed. This scheme is comprised of two component parts; 1) a realistic pattern of desirable future land use that reflects smart growth principles and 2) a package of conceptual improvements to the transportation system to support the land use vision and achieve community goals for travel in the corridor.

4.1. Land Use

The overall proposed land use pattern for the corridor is one that concentrates development in three 'nodes' and separates these with preservation areas. The development nodes would vary in character based on location, functions they are expected to serve, and market potential for the future. In general, land uses that would be more traffic-intensive or of higher level activity and more intense use of land would be located abutting Route 44 with less intense land uses transitioning to the surrounding preservation area. The preservation areas would also vary in character relative to the form and degree of preservation they are expected to afford. This is consistent with the smart growth principles of:

- Preserving valued community and natural resources while growing the economy
- Placing development where there is or will be infrastructure and optimizing use of infrastructure use before expanding
- Encouraging re-use of previously developed sites and placing new development in targeted growth areas
- Taking steps to preserve and safeguard land identified for preservation

The future land use vision is depicted in Figures 5 and 6. Definitions for each of the future land use categories would be as follows:

Preservation Areas: Includes those areas where the existing land use pattern contributes to community character and should be sustained and/or where valued open space should be preserved.

Preservation would occur in three forms as follows:

<u>Open Space Preservation</u>: includes scenic vistas, farmland/ agribusiness retention, and highpriority parcels for future preservation as open space. These occur generally at gateways into Bolton and access to them could be enhanced to highlight Bolton's rural character and amenities. This category also recognizes opportunities for resource linkages with trails or greenways between parcels. Examples of the kinds of land use include in this category include:





<u>Neighborhood/Residential Preservation</u>: includes existing cohesive residential neighborhoods with associated small retail activity and historic/heritage/cultural resources such as churches and cemeteries. Some change in land use in the form of new development or redevelopment may occur, but it should be consistent with and complementary to the existing pattern. Examples include:







Existing Preserved Open Space/Parks: includes both state and town parks as well as land trust lands.





Development Clusters: Those areas where existing business should be retained and new development or redevelopment should be focused. These development areas should emphasize infill and be clustered together to form loose nodes of concentrated land use.

Development in the clusters would occur at three levels of intensity as follows:

<u>Low Intensity Cluster</u>; should be areas of lower density non-commercial, mixed-uses (such as multifamily complexes, senior housing and civic uses/facilities) with broad areas of open space surrounding and/or incorporated into site design. Examples include:





Harwinton, Connecticut Senior Housing and Town Hall/Library complex surrounded by open space but adjacent to the elementary school and a shopping plaza (not visible)

<u>Medium Intensity Cluster</u>; should be areas of medium density mixed-use activities with small parks used to create open/public spaces. Scale should be one to three-story structures; areas could be used for single and multi-family residential, active recreation and related retail/services activities; could include a village configuration.



Bridgewater Center, Connecticut





<u>High Intensity Cluster</u>: should be areas of higher density mixed-use residential and commercial activities with pocket parks and plazas used to create public spaces. Scale should be one to threestory structures with some medium-box buildings such as a local grocery store; could include a village configuration; emphasis should be on retaining and enhancing existing businesses while also accommodating new uses/infill. Examples include:



Downtown Mystic, photo courtesy of the Eastern CT Tourism District



What does a village center or configuration look like?

A village or neighborhood center can take many forms, depending on location and whether there is existing development nearby. Generally, a village configuration consists of a cluster of development with:

- narrow streets
- buildings at one to three stories high
- a variety of land uses
- buildings with similar architecture located at the street line
- parking tucked away in the rear
- sidewalks, on-street parking, and
- public gathering spaces such as a neighborhood green or pocket sized parks

Bridgewater, Connecticut is one example of this configuration shown previously on page 24. Two other examples, one schematic and one an aerial view are offered below.



- Collinsville, CT
- •Canoe sales/rentals
- •Retail shops
- •Restaurants
- •Housing

Hudson, Alabama – schematic of village amidst farmland







In order to further demonstrate the feasibility of the envisioned future land use pattern and distinguish among the development nodes for the corridor, preliminary conceptual designs for two specific locations in the corridor were developed. The parcels for the sample designs were selected in consideration of location, existing conditions, redevelopment potential, and input from the SOC. Although the western node is the largest, alternate sites were chosen at the junction of Route 44 and Quarry Road and at the eastern edge of the corridor. This is primarily because of ongoing redevelopment activity already occurring on major parcels within the western node and the advanced stage of design associated with those projects. This study is anticipated to be completed in time, however, to help inform decision-making regarding those projects. The following Figures 7 through 9 show the concept possibilities for the two sample parcels.

These conceptual layouts represent mixed-uses on a single site in the proposed medium intensity clusters. The first is the current site of the Post Office. Two alternative layouts are presented. This site could become more of a destination for travelers under these concepts, allowing them to make multiple stops in one location, parking the car just once. The Post Office concept plans include small pockets of green space where visitors could rest or gather outdoors and some parking moved to the rear of the property to allow for more landscaping and sidewalks.

The second site is the location of the nursery at the eastern end of the corridor. This site concept builds on the current use which is an example of the recommended niche retail emphasizing the areas agricultural assets. The conceptual layout shows a mix of uses with linkage to the parcel next door for a mix of retail and services (restaurant) with green space also set aside for outdoor dining, walking, enjoying the views, or picnicking.











RESTAURANT SITE

Remove Existing Restaurant Buildings Retain Existing House 2000 SF Restaurant 1300 SF Art/Antique Retail Space Seasonal Farmers Market Area Pedestrian Connection to Nursery Site

NURSERY SITE

Remove one Greenhouse Construct 1000 sf Retail Addition Construct Material Storage Bins Construct three New Greenhouses Organize Parking & Circulation

NOTE: CONCEPT PLAN IS BASED UPON USGS TOPOGRAPHY AND FIELD OBSERVATIONS AND IS FOR GENERAL PLANNING PURPOSES ONLY.

Route 44 Planning Study Bolton, Conn.
4.2. Transportation System

There is a key opportunity to restore the balance between through-traffic, local traffic, and alternative modes of transportation in this corridor. To accomplish this, through-traffic must be tamed while simultaneously improving local access and strengthening the bicycle and pedestrian networks. Figure 10 summarizes the recommended locations of improvements to the transportation system within the corridor.

<u>Route 44:</u> Physical features can be installed to create a greater awareness on the part of the motorists traveling through the area and alert them to the community nature of the roadway, including:

- Gateway signage (such as banners and aesthetic roadside signs)
- Bike lanes
- On-street parking
- Street trees and furniture
- Sidewalks and trails
- Road edge landscaping
- Shorter setbacks bringing buildings closer to the road and placing parking behind buildings fronting on Route 44

These physical characteristics provide visual cues that Route 44 is not a limited-access highway but does serve local traffic. By altering the nature of the roadway, drivers will be more aware of the potential for bicyclists, pedestrians, and vehicles from local streets and driveways. This will serve to make the area safer as well.

<u>I-384 Interchange</u>: The terminus of I-384 as it merges with Route 44 is abrupt. Motorists on I-384 eastbound have an expectation of traveling on a high-speed limited access highway. However, east of the Exit 5 ramps, motorists should be given more cues that they are approaching a local arterial with vastly different characteristics. As ConnDOT has indicated that I-384 is not a candidate for extension beyond its connection to Route 44, it would be appropriate to scale down the design of the roadway from the Exit 5 ramps to Route 44. An alternative highway terminus design is feasible that could be more compatible with the local roadway system in the vicinity. This design could include a boulevard configuration with four lanes separated by a landscaped median. Substituting conventional stop-sign and signal controlled intersections for the existing highway and ramp system would create a consistency of character along the entire length of Route 44 in the study area that would be more compatible with local traffic and alternative modes of transportation. <u>Bicycle and Pedestrian Access</u>: Multi-mode trails can run along streets as well as be separate from them. Enhancing the pedestrian and bicycle network in the corridor calls for both types of facilities with connectivity throughout. In particular, a connecting system of bicycle and pedestrian facilities should be designed between Bolton Notch and the small shopping plaza at the Post Office continuing past the Bolton Lake boat launch area to Indian Notch Park.

At the community workshop participants emphasized how desirable it would be to have a multimodal connection between Route 44 and the town center. Notch Road is the most direct route. However, the existing configuration of the intersection of Route 44 and Notch Road precludes bicycle and pedestrian circulation in that area. Until the issues at that intersection are addressed, multimodal pathways in that area will need to remain separate from Route 44.

An alternative connection between Route 44 and the town center may be possible via the existing greenway running southeast from Route 44 between Route 6 and Notch Road. This greenway runs just to the northeast of Toomey Road. If the appropriate property easement and topography issues can be addressed, a connection might be made to Notch Road in the vicinity of the town center via Toomey Road. Then, a bicycle lane and/or sidewalks may be feasible along Notch Road for safer travel by pedestrians and bicyclist to the town center. Further study would be necessary to determine if this connection and facilities are feasible.





5. RECOMMENDED STRATEGIES

5.1. Land Use Management Recommendations

In addition to the generalized land use categories shown on the Future Land Use Plan, there are a number of specific recommendations for land use management that are also essential components of achieving the future land use vision. In particular, since existing zoning does not serve the future land use vision for the corridor, the entire area should be rezoned to modify allowable land uses, mix of uses and allowable densities, as well as establish design guidelines to promote the character of development that is desirable. Examples of zoning language used in other communities to achieve the smart growth objectives for mixed-use compact development form are included in Appendix C. Specific recommendations to accomplish this include:

Regulatory Tools

Land uses by zone: Four distinctive new zones could accomplish the rezoning objectives. The zoning regulations should incorporate a statement of purpose for each zone that includes a reference to this strategic plan as the overall guide to development applicants as to what is preferred. The zones that could serve the corridor could include:

- A mixed-use neighborhood design zone that allows a mix of residential and nonresidential uses including second-story apartments over first-floor retail in the same structure (correlates to high intensity cluster)
- A civic mixed-use zone that allows a mix of residential, heritage/tourism, and civic/institutional uses (such as ballparks, satellite community center, or town sponsored affordable senior housing) (correlates to medium intensity cluster)
- A neighborhood residential zone intended to preserve the existing cohesive neighborhoods. It could permit a mix of residential densities, including accessory apartments and allow some small-scale and/or neighborhood-oriented retail and/or services. (correlates to neighborhood/residential preservation area)
- An open space conservation zone that permits very low density residential (perhaps net density of 1 unit per 5 acres or greater), traditional farming/agribusiness, and passive recreational uses such as campgrounds. This zone might also require cluster subdivisions in lieu of the traditional single family home on one large lot to support the creation of linked open spaces and habitat corridors. (correlates to open space preservation area)

These new zones can be adopted in several different ways. The existing zoning designations could be removed and replaced with the four recommended zones. The advantage of this approach is that it clearly sets aside specific geographic areas for mixed-use of a specific density. Design guidelines within these new zoning districts could take the form of either guides or alternately, standards required to be met. The disadvantage is that the intensity of the mixed-use

in these areas would have to conform to specific requirements, leaving less room for flexibility of design. An alternative approach would be to adopt the new zones as 'floating' zones. The new zones would only exist within the text of the zoning regulations and not placed on the Bolton Zoning Map until approval of an application to create a particular mixed-use zone and to affix that mixed-use zone to a specific property. Consequently, the creation of a mixed-use zone would only be accomplished by approval of a zoning map change and a concurrent and related project master plan. The advantage of this approach is that it creates maximum flexibility for the location and size of the mixed-use developments in Bolton. The disadvantage is that the existing zoning which is oriented for strip development in the Route 44 corridor would remain unless a private developer takes the initiative to request a zone change for mixed-use and offers a project master plan to do so. A third approach would be a combination of the foregoing with some specific rezoned areas as well as the option to rezone for mixed-use with a floating zone written into the regulations.

<u>Design guidelines</u>: Due to the eclectic variety of development currently in the corridor, there is a need for well articulated design criteria in the zoning regulations for the development clusters regarding what is considered consistent and complementary to the community setting. This can be accomplished in three ways:

- a. Written design criteria
- b. A separate design manual referenced by zoning regulations
- c. Pictures

Written design criteria can specify architectural styles, landscaping, and building facades which are acceptable. While these cannot be mandated under current Connecticut statutes regarding zoning (except in limited instances) they can serve as powerful guides to development design. Most development applicants appreciate clear guidance on preferred design that they can then work to fit into their site development plans. These design guidelines can be incorporated directly into the zoning regulations. The current regulations do provide general guidance regarding this.

An alternate approach would be to create a separate design manual for the development nodes that is incorporated by reference into the zoning regulations. Design issues that be should addressed include:

- Proportions and massing of buildings
- Public views of properties and maintenance of vistas
- Lighting and fencing
- Preservation of existing mature trees, stone walls, and distinctive rock outcroppings
- Natural buffers among the clusters and between the clusters and preservation zones
- Landscaping standards
- Open space and public/community spaces standards

- Low-impact design standards (LID)for stormwater management (such as requirements for vegetated drainage swales) and minimizing paved/impervious surfaces
- Location and design of parking, loading, and trash receptacles
- Design and placement of new access roads and requiring connectivity among streets and among parcels
- Preferred roof lines, pitch and treatments
- Preferred façade design and materials
- Common exterior signage design themes
- Requirements for pedestrian friendly streets, sidewalks, bicycle paths, and pedestrian amenities such as benches and shade/shelter ; bicycle parking
- Encouragement for well-defined public spaces with seating, shade/shelter, water fountains, and outdoor art

In order to address the issue of diverse architecture that now defines the Route 44 corridor, it is recommended that the regulations and/or manual include photographs of existing buildings which represent architectural styles and treatments that are desirable for the development clusters. These can be collected as a community effort as an extension of the visioning exercises conducted for this study.

<u>Other regulatory tools</u>: Other regulatory approaches that should be considered include:

- A comprehensive set of access design criteria for placement and design of driveways accessing Route 44
- Transfer of development rights program for transfer of development rights from the preservation areas to the development nodes
- A comprehensive set of open space set-aside requirements for all types of developments in addition to that required as part of an OSCD; from pedestrian refuges in large parking lots to pocket parks in a planned "lifestyle centers" to community parks in a mixed-density residential development to conservation easements for bicycle and pedestrian trails
- Reduced setbacks for the newly created zones encompassing the development nodes to bring buildings closer to the street and place parking behind buildings to foster a pedestrian-friendly environment that also de-emphasizes the needs of the automobile.
- Allow small lot sizes in the development nodes with specific standards for consolidation of parcels to accommodate a larger planned development scheme

<u>Development Incentives</u>: Many communities use a diversity of both regulatory and nonregulatory incentives to attract the types of businesses they wish to see in a targeted district or node. Regulatory incentives contained in the zoning ordinance can include allowances for greater intensity/density of structures on a lot, more flexibility in parking, open space, public space, and/or signage requirements, and reductions or waivers of fees associated with development applications. In addition, some communities offer a streamlined development approval process for desirable forms of development. For example, in Tolland, the zoning administrator can approve some developments that are allowed by right and meet all site plan requirements, bypassing the formal Planning and Zoning application and decision making process. In order to encourage the construction of affordable housing for seniors, the regulations can also offer a streamlined or expedited application process for developments that incorporate affordable agetargeted housing in the development nodes.

Non-regulatory Tools

<u>Incentives</u>: Non-regulatory tools or incentives to encourage desirable development by a municipality are generally financial and can include:

- Consider the western low-intensity development cluster as a future location for one or more community institutions such a ball park, public beach access and facilities, or a satellite community center as an attractor to desired complementary development
- Offering matching funds to pay for off-site improvements that may be required to mitigate a project's impacts such as impacts to roadways or stormwater management systems
- Offering matching funds for site amenities such as landscaping and pedestrian facilities
- Offering tax credits, tax-increment financing, and tax breaks or deferrals for desirable projects. These tax benefits can be varied in form as well such as straight property tax relief, tax relief tied to affordable housing unit, or job-creation tax credits
- Creation of a development financing authority and/or a housing trust fund.
- Offering to partner with a business to offer parking options

<u>Public-Private Partnerships</u>: The Town of Bolton should explore opportunities for public-private partnerships to promote desirable land use through a variety of venues including shared responsibility for:

- Parking facilities
- Public access to open space; public open space within private development
- Sidewalk and bicycle path connections from private to public facilities
- Brownfields redevelopment
- Shared driveways and access roads from public roads to private development
- Affordable housing ventures

Policy Strategies

In addition to the above, it is recommended that Bolton take some additional steps to reinforce the vision of the development clusters as commercial neighborhoods. Tools that can be used to accomplish this include:

- Adopt this plan by reference as an amendment or supplement to the Plan of Conservation and Development. This will strengthen its significance as a statement of community policy
- Petition the Office of Policy and Management to reclassify the land along the corridor in keeping with the future land use vision – specifically to add a Rural Community Center to the eastern end of the corridor and reconfigure the size and extent of the two existing Rural Community Center areas along Route 44

5.2. Economic Development Recommendations

The market analysis suggests that the corridor could support development incorporating a variety of uses, particularly those that build on the natural and recreational assets of the corridor. The Town of Bolton could capture market demand in these sectors with the following tools:

Public-Private Partnerships

- Develop detailed written business partnership strategy
- Create an organization that is a public-private partnership collaborative to conduct marketing and promotions specifically within the corridor. This organization could come in the form of a merchants association, a local development corporation or a business improvement district focused specifically on the corridor.
- Seek assistance with compatible economic development from the Rural Development Council.

Branding & Promotion

- Seek out a collaborative relationship with a nearby Chamber of Commerce or communitybased organization to assist with general promotions and business attraction campaign.
- Contact the appropriate state tourism district to discuss options for utilizing available promotional programs, websites and related links; promote agribusinesses and tourism services (bed & breakfasts, etc.)
- Develop a brochure to promote Bolton's recreational destinations and build upon its agricultural assets to tie in "Connecticut Grown" promotion
- Focus promotion efforts on agribusiness and tourism services; develop a publicly supported regularly scheduled outdoor farmer's market.

Business Retention

- Develop and maintain a matrix of existing businesses, key contacts and number of employees
- Create a regular schedule for contact existing businesses to gauge issues, concerns and ideas.

• Convene and economic summit at least once a year to discuss trends and identify issues to be addressed

Business Attraction

- Monitor potential development in the corridor and support those businesses that represent compatible development and support of the local economy
- Create a link on the town's website to promote available sites and communicate desired development
- Develop an attraction strategy for specific markets: banks, walk-in/emergency health clinic, professional offices and neighborhood commercial services
- Develop a niche strategy for outdoor recreation and heritage tourism. The strategy would identify specific business types that would be the focus of economic development efforts. The niche strategy could offer a theme for multiple economic development activities along the corridor.

5.3. Transportation System Recommendations

The transportation system needs to address a variety of needs in the corridor but should complement the land uses and environment in the corridor, not define it. The generalized location and nature of the recommended transportation system improvements were shown in Figure 10. A comprehensive listing of more detailed recommended actions to improve the system is as follows:

Vehicular Circulation/Access Strategies

- Pursue a comprehensive study of alternatives for the reconfiguration of the I-384 interchange through CRCOG and ConnDOT including the following components:
 - Reduce the design speed and scale down I-384 east of Exit 5 ramps to create a transition zone
 - Increase visual cues to warn motorists approaching Route 44 of highway terminus and congested conditions
 - Reconfigure the intersection of Notch Road and Route 44
- Reconfigure the intersection of Route 44 and the entrance to Bolton Notch State Park
- Consolidate commercial driveways at the Post Office Plaza and align with Quarry Road
- Align the access to Bolton Lake Boat Launch with South Road at its intersection with Route 44
- Limit side street and driveway access on Route 44 between Morancey Road and Quarry Road
- Consider restricting right-turns-on-red onto Route 44 from the Bolton Lake Boat Launch access driveway to prevent vehicles trailing boats from turning in front of through-traffic

Signage/Gateways Strategies

- Install aesthetic gateway signage to alert motorists to the potential for slow, turning vehicles and/or pedestrian activity at the following locations:
- Eastbound Route 44 at Cider Mill Road
- Eastbound Route 44 at Quarry Road
- Westbound Route 44 at Tolland Road
- Install aesthetic and highly visible signage to direct motorists to natural resources and pathway access points
- Enhance/improve road edge landscaping, lighting, and pedestrian amenities (such as benches) to visually narrow the roadway perception for drivers and inform them of the community character of Route 44 through Bolton

Pedestrian/Bicycle Circulation Strategies

- Strengthen off-street network
 - Provide multimodal connections between existing pathways and natural resources (Freja Park, Bolton Notch State Park/Bolton Notch Pond, Lower Bolton Lake/Boat Launch, Indian Notch Park)
 - Create a bicycle and pedestrian network on the north side of Route 44 from Bolton Notch State Park to Cider Mill Road
 - Create multimodal link between Indian Notch Park and the Lower Bolton Lake Boat Launch
- Increase continuity of multimodal network along streets
 - Create a continuous network of sidewalks along Route 44 in the vicinity of the Bolton Lake Boat Launch, from Keeney Drive to North Road
 - Establish a pedestrian crossing of Route 44 at South Road
 - Add a bike lane along Route 44 from Quarry Road to Tolland Road
- Explore feasibility of a link between the Valley Falls greenway and Notch Road for multimodal connection to the Bolton town center
- Use land use/zoning strategies for public-private partnerships in providing sidewalks, bicycle access, and trail linkages within new developments

6. IMPLEMENTATION PLAN

The Town of Bolton will have primary responsibility for implementing the recommendations contained in this *Route 44/Bolton Strategic Corridor Plan*. Where appropriate, however, the town should actively seek the cooperation, support (financial and otherwise), and involvement of other interested parties such as CRCOG, the Connecticut Department of Transportation, the Department of Economic and Community Development, the Department of Environmental Protection, the local business community, and local residents. As a first collaborative step for the transportation system, the town should coordinate with CRCOG to identify priority projects for inclusion in the Regional Transportation Plan and the Statewide Transportation Improvement Program. Ongoing coordination with ConnDOT will also be especially important for those recommendations that involve traffic improvements related to Route 44, Route 6 and I-384. In addition, effective implementation of the plan's recommendations would benefit from periodic review of their status by the Bolton Planning and Zoning Commission or other designated body.

The following matrix summarizes the recommendations and identifies a lead agency.

Land Use Recommendations	Actions	Lead Agency	Priority
Regulatory Strategies			
Rezone the corridor with 4 new mixed-use zones as follows: 1) open space/conservation	Draft zoning language for each new zone - allowed uses, special permit uses, densities, dimensional requirements	PZC	High
2) neighborhood residential Both correlated to the	Allow flexible/small lot sizes in the development clusters	PZC	High
preservation nodes	Develop site design guidelines for new zones	PZC	High
3) civic/mixed-use4) neighborhood designBoth correlated to the development clusters	Reduce setbacks and amend parking requirements for buildings/uses in the zones within the development clusters	PZC	High
	Amend open space set-aside requirements in zoning to include criteria for each new zone	PZC	High
	Determine proposed zone boundaries	PZC	High
	Adopt new zones and related zoning language	PZC	High

Bolton/Route 44 Corridor Study Draft Summary Recommendations Matrix

Land Use Recommendations				
Employ access management along Route 44	Develop and adopt access design criteria in the zoning regulations for driveways and/or side streets onto Bolton's arterial roads	PZC	High	
Explore Transfer of Development Rights program	Investigate TDR zones and procedures that have been implemented in other CT towns	PZC	Medium	
	Develop process for TDR, establish responsible municipal agency, and amend zoning to accommodate	PZC	Low	
Adopt regulatory incentives in zoning	Amend zoning to include incentive language such as flexibility of some requirements for complementary development proposals	PZC	High	
Non- Regulatory Strategies				
Employ non-regulatory incentives to attract and facilitate desirable development	Consider locating one or more new community institutions such as senior housing, ball fields, or beach access in the western development node to support/attract desirable development pattern there	BoS	Medium	
	Create a development financing authority or housing trust fund	BoS	Medium	
	Create a package of development and/or financial incentives for desirable projects in the development nodes	BoS/EDC	Medium	
Pursue public-private partnerships for desirable development in the corridor	nerships for desirable and process for creating public-		Medium	
	Offer matching funds or shared responsibility for improvements as part of desirable development such as parking and LID features	BoS/EDC	Medium	
Policy Strategies				
Adopt this plan as an amendment to the POCD	Conduct public hearing process through the planning and zoning commission for plan adoption	PZC	High	
Petition the OPM to alter State POCD designations within the corridor	Draft petition letter for endorsement by each of Bolton's Boards and Commissions as well as CRCOG and submit to OPM to start the process	BoS	Low	
<u>Lead Agency Acronym</u> PZC BoS EDC	Bolton Planning and Zoning Bolton Selectman Economic Development			

- Commission
- CC Conservation Commission

Economic Development/Market Recommendations	evelopment/Market Actions			
	Develop detailed written business partnership strategy	EDC	High	
Cultivate Public-Private Partnerships	Create an public-private collaborative organization focused on marketing and promotions in the corridor	EDC	High	
	Seek assistance and support from the Rural Development Council	EDC	High, ongoing	
	Contact the appropriate state tourism district to discuss options for utilizing available promotional programs, websites, etcetera	EDC	High	
Proactively undertake promotion and 'Branding'	Focus promotion efforts on agribusinesses and tourism services; Develop regular, publicly supported Farmer's Market	EDC	Medium	
	Develop a brochure to promote Bolton's recreational destinations and build upon its agricultural assets to tie in "Connecticut Grown"	d build upon its CC/EDC		
	Seek out a collaborative relationship with a nearby Chamber of Commerce or community- based organization to assist with general promotions and business attraction campaign	CC/EDC	Medium, ongoing	
	Develop and maintain a matrix of existing businesses, key contacts and number of employees	EDC	Medium, ongoing	
Proactively support business retention	Create a regular schedule for contacting existing businesses to gauge issues, concerns and ideas.	EDC	Low, ongoing	
	Convene and economic summit at annually to discuss trends and identify issues	EDC	Medium	
	Develop an attraction strategy for specific complementary markets: banks, professional offices and neighborhood commercial services	EDC	High	
Proactively pursue complementary business attraction	Create a link on the town's website to promote available sites and communicate desired development	EDC	High	
	Develop a niche strategy for outdoor recreation and heritage tourism.	EDC	High	
	Monitor potential development projects and support those that represent compatible development and support of the local economy	EDC	Medium, ongoing	
Lead Agency Acronym PZC BoS	Bolton Planning and Zoning Bolton Selectman			

BoSBolton SelectmanEDCEconomic Development Commission

CC Conservation Commission

Transportation System Recommendations	Actions	Lead Agency	Priority	
Vehicular Circulation/Access Strategies				
Pursue a comprehensive study of alternatives for the reconfiguration of the I-384 interchange through CRCOG	Reduce the design speed and scale down the footprint of I-384 east of Exit 5 to create a transition zone; increase visual cues to warn motorists of change to a boulevard	BoS	High	
and ConnDOT	Reconfigure the intersection of Notch Road and Route 44	BoS	High	
	Reconfigure the intersection of Route 44 and the entrance to Bolton Notch State Park	BoS	High	
Improve access patterns from driveways and side roads onto Route 44 where feasible	Align the access to Bolton Lake Boat Launch with South Road at its intersection with Route 44	BoS	Medium	
	Limit side street and driveway access on Route 44 between Morancey Road and Howard Road	BoS	Low	
	Consider restricting right-turns-on-red onto Route 44 from the Bolton Lake Boat Launch access driveway to prevent vehicles trailing boats from turning in front of through-traffic	BoS	Medium	
Signage/Gateway Strategies				
Create visual gateways into Bolton to alert motorists to the entry into a community and	Install aesthetic gateway signage in the vicinity of Bolton Center Road, Quarry Road, and also at Tolland Road	EDC	High	
potential for slow, turning vehicles and/or pedestrian activity	Provide signage strategically along Route 44 to direct motorists to parks, tourism, and recreation sites	EDC	Medium	
	Enhance/improve road edge landscaping, lighting, and pedestrian amenities to visually narrow the roadway perception for drivers	BoS/EDC	High	

Pedestrian/Bicyclist Circulation Strategies		BoS	
Bridge the gaps in the off-road trail system for complete connectivity from east to west along the corridor	EDC/CC/BoS	High	
	Prioritize sections along Route 44 for funding and construction of multimodal paths	BoS/PZC	High, ongoing
	Create bicycle/pedestrian network between Indian Notch Park and Bolton Notch State Park	EDC/CC/BoS	Medium
Provide bicycle and pedestrian	Create a bicycle and pedestrian network on the north side of Route 44 from Bolton State Park to Cider Mill Road	EDC/CC/BoS	Medium
linkages along Route 44 and within any future developments in the development nodes	Establish a pedestrian crossing of Route 44 at South Road	BoS	Medium
	Add a bike lane (on-road) along Route 44 from Quarry Road to Tolland Road	BoS	Medium
	Explore feasibility of a link between the Valley Falls greenway and Notch Road for multimodal connection to the Bolton town center	BoS	Medium
	Use land use/zoning strategies for public-private partnerships in providing sidewalks, bicycle access, and trail linkages within new developments	PZC/BoS	High

Lead Agency Acronym PZC

- PZC Bolton Planning and Zoning
- BoS Bolton Selectman
- EDC Economic Development
 - Commission
- CC Conservation Commission

Resources and Photograph/Sketch Acknowledgements

- American Planning Association Zoning Practice varied publications
- Town of Bolton Bolton Plan of Conservation and Development, November, 2005
- Town of Bolton Inland Wetlands and Watercourses Regulations, Revised to January, 2007
- Town of Bolton Open Space and Acquisition Committee, parcel mapping
- Town of Bolton Zoning Regulations, revised to May, 2005
- Capitol region Council of Governments Best Practices Manual for Traditional Neighborhood Design
- Connecticut Department of Environmental Protection Environmental Impact Evaluation, Sanitary Sewer Extension, Towns of Bolton, Vernon, and Manchester, January, 2007
- Connecticut Main Street Center
- Google Earth
- Lincoln Land Institute
- Local Assistance Planning Center State of Minnesota
- Local Initiatives Support Corporation
- Office of Policy and Management Connecticut Conservation and Development Policies Plan 2005-2010
- Urban Land Institute

APPENDIX A SUMMARY OF COMMUNITY INPUT/COMMENTS



Bolton/Route 44 Planning Study

COMMUNITY WORKSHOP 10-22-2007 FINDINGS SUMMARY

Voting on Issues – Top Ten priority Issues

In the visioning exercises at the Bolton Community Workshop, held on October 22, 2007, participants were asked to verbalize their comments/concerns about the study and the corridor. These comments/concerns were written on chart paper and posted to a wall in the meeting room. Participants were then given seven sticky dots and asked to vote for their seven priority concerns (only placing one dot per comment/concern –no double dotting!). 33 comments/concerns were stated, although some were variations of the same issue. Votes tended to congregate on issues indicating the formation of consensus. The top ten issues are listed below:

	Comment/Concern	Number of Votes
1	Protect Bolton Lake and other natural resources.	23
2	Do not create "Berlin Turnpike" effect on Route 44.	18
3	Route 44 is not safe for bicycles or pedestrians.	17
4	Preserve views / purchase open space to retain town character, theme.	16
5	Link natural resources by pedestrian/bicycle pathways.	15
6	Parks and natural resources should be incorporated into a market niche	14
	of "outdoors retail".	
7	Explore public/civic venture to develop senior housing.	14
8	Fix Notch Road, considered "suicide turn" access both onto and off of	13
	Route 44.	
9	Consider altering I-384 terminus location (shorten) and add deceleration	13
	signage and/or cross section/visual clues.	
10	Senior housing is needed that is affordable.	12

Recommendations

Land Use/Development

- Would like to see small grocery store, farmer's market, food co-op at Bolton Lake or the western end of the corridor commercial node
- Development along Route 44 west of Bolton Notch Pond is a good location for economic growth
- Avoid infill and strip development along Route 44 in the vicinity of Howard Road to lessen impacts of traffic congestion and safety/hazards of travel on 44
- Keep residential character of neighborhood at Bolton lake
- Add green space and linkages from DEP boat launch ton Indian Notch Park

- Implement some farm preservation tools to help keep agriculture in corridor
- Get rid of billboards need signage controls

<u>I-384</u>

- End 384 as highway at Exit 5/Route 85 interchange
- Reconfigure Route 384 Interchange/ realign intersection with Notch Road
- Downgrade roadway to improve stopping distance

Route 44

- Reconfigure the intersection of Route 44 and Route 6 /Hop River Road with bypass behind Post-office plaza
- Have an overpass of Route 6 over Route 44 and tie Notch Road into Route 44 at the underpass portion
- Do not allow right turn on red at signal or intersections
- Concern with fatal accident at Bolton Center Road
- Post more speed limit signs
- Traffic calming in section long Bolton Lake
- Add bypass/frontage road at eastern end of the corridor for access to residences
- Add U-turn option at Route 6 and 44
- Add ITS Intelligent Transportation Systems video-actuated signage and radar speed detector
- Place signal at the "top of the hill" at Bolton Lake
- Align side street with DEP Boat launch access road

Other Access

- Improve access to allow more use of Bolton Notch Pond and surrounding open space
- Need direct access to Indian Notch Park from Route 44
- Need bicycle/pedestrian link along Route 384/44 at Bolton Notch Pond
- Add bike lane and/or off-road path along the length of the north side of Route 44 from Greenway at the east side of Bolton Notch Pond to Indian Notch State Park
- Provide pedestrian crossing of Route 44 to get to Bolton Lake
- Need a pedestrian/bicycle connection from the rail trail to the school/library (outside the study area)

Wishes and Concerns

At the Community Workshop held at the Bolton Center School on October 22, 2007 over 60 participants participated in an activity to envision the future of Route 44 corridor in Bolton. Participants were given five post-it notes and a pen. They were asked to write several words or phrases to describe what they like/dislike about the Route 44 and what they would like to see happen in the future. Responses have been grouped into similar categories:

Wishes/Likes

Community Vision

- I would like to preserve the charm of the area
- Open space
- Would like to see village charm
- Like community, neighborhoods, people
- Quiet, slow development with open space
- Like the rural feel
- Like that it still presents as a largely rural vista
- Like lake views (need more) and rural character
- Love the lake
- Need a little more of a village
- Like it to become: village character connecting with pedestrian/bicyclist corridors connecting to Hop River Bike Trail, Freja Park, then onward to Bolton town and Manchester; mix of houses, businesses, recreation area; no big box businesses
- Wants pedestrian and bicycle friendly
- I want it to be reminiscent of an old New England village
- Rural farmland
- Like New England charm and scenic beauty
- What I like about Route 44 is the rural setting, English-like still
- What I would like is a classy, rural-like, setting for offices, shops, etc.
- Country road
- Rural look
- Recreation potential
- We live very near Rte 44 and travel on it every day. I value a stress-less lifestyle and also convenience, beauty and balance.
- I hope for graceful development that doesn't destroy the Bolton that I love.

Traffic

- Would like a new highway design for traffic
- Changing the character of 44 may not slow the traffic. The speed on Bolton Center Road and Hebron Road averages 50-60 mph. Traffic comes to a complete stop off of 384 and turns. Drivers still think they are on an extension of 384. Perhaps stop signs or more traffic lights would help.
- We want Route 44 to be less traveled. The traffic absolutely flies. SLOW the traffic down.
- Like direct route east to UConn and beyond
- Is a connector to other communities
- Needs traffic calming and more retail like a small breakfast/lunch place

Land Use and Development

- Sensible planning, achievable goals, common sense expectations
- We need to pay attention to permitted types of businesses and standards of governing appearance.
- I like the development possibilities
- We need a large scale grocery store so we don't have to travel to Manchester or Coventry.
- Do not want to have empty buildings
- Become a downtown/village
- Miniature golf
- Right type of commercial development
- Would like it to be well-planned
- NO fast food drive-ins!
- Business plazas with smart growth
- Want architecturally interesting buildings and parking areas
- Want senior housing
- Want a bank
- Want something that would highlight and take advantage of the lake
- Hope to see development which incorporates natural resources (parks)
- Don't just focus on retail and/or industrial. Development should attract people for things other than shopping.
- What I would like to see is conservation and local small business (agriculture)
- Small village style shopping nodes with pedestrian access and through traffic bypass
- We need some industry in Bolton that will keep our taxes from skyrocketing; taxes are too high in Bolton
- NO Berlin Turnpike
- Would like to conserve open space where possible.
- Good restaurants and shops
- Well designed buildings
- Well landscaped parking
- Great opportunity for commercial expansion and residential expansion
- Vision for future low density development i.e. bookstore, dance or yoga studio, extension of bike path from Manchester
- Needs to be a business hub
- Economic potential
- Tax relief
- Senior housing potential
- Connects important places

Natural Resources

- Route 44 has beautiful natural resources which are too difficult to access now.
- Country lane
- Indian Notch
- Like its open land
- Like its rural feel with quaint produce stands
- Like Freja Park
- The view of Bolton Lake
- Like lake area

Bicycle Pedestrian Resources

- Access to boat launch
- Path and walkways
- Pedestrian-friendly development
- Better safer access for pedestrians and cyclists
- Increased pedestrian access to community businesses
- Park and walking trails
- Need to develop pedestrian access along the corridor including through "The Notch" to the East Coast Greenway
- Hope to see bike/foot traffic access
- Want bike/hike accessibility
- Become slow-paced bike, bus, walkway to shops and homes
- Need sidewalks

Issues/Concerns

Traffic

- Do not like current roadway design
- Too much traffic
- Fast traffic
- A lot of traffic already travels it so do not want heavier traffic
- Intersection with Notch Road
- Too many cars going too fast
- Is difficult to access from areas south of Route 44
- Too much fast traffic without easy on and off
- 384/6/44 interchange is not good.
- Narrow road
- Side roads typically have stop signs no stop lights seem to invite accidents
- No left turn lane causes back-ups
- Don't like intersection of 384 exit, Route 44, and Route 6.
- Hate the traffic
- Do not like the high speed

Land Use Development

- Commercial buildings are ill planned and unattractive
- Current corridor development already off on the wrong foot
- Some unattractive buildings
- Enough gas stations
- Traffic, ugly buildings, absence of trees
- Billboards, random signs, sheet metal buildings, ugly properties
- What I don't like about Route 44 not enough development
- Don't like ugly development (sheet rock buildings, billboards)
- Traffic flow is the thing that worries me most. Second would be failed businesses.

Bicycle Pedestrian Issues

- No sidewalks, disconnected
- No safe way for pedestrians and bicyclists to safely travel along it

WHAT BOLTON WANTS......Market Questionnaire Findings

Which Category Best Fits Your Preference for Route 44 Development:

- _15_ We could use smaller scale development offering the services and goods we need on a weekly basis.
- _6_ We should focus on non-retail economic development along the corridor to expand the tax base.
- * About 6 respondents said both of the above.

If you had a choice, what are three top goods or services you would patronize along Route 44?

- _15__ Bank/Credit Union
- _5_ Coffee, Ice Cream, light fare
- _12_ Family style, locally owned restaurant
- _ 1_ Other restaurant (not fast food)
- _2_ Medical/Dental Office
- _3_ Walk-in Emergency Care
- _4_ Discount Department Store
- _1_ Equipment/Laundromat/Garden/Feed
- _0_ Foreign Car Repair
- _1_ National Retail Car/Muffler
- _10_ Small Scale Grocer
- _2_ Large scale grocer
- _5_ Canoe/Bait Shop Sporting Goods
- _0__ Computer Sales/Repair
- _3_ Non-drive through Pharmacy
- _1__ Subway
- _2_ Other small scale retail destination shops, unusual gifts, food, books

Where do you primarily shop?

19 - Manchester

2 - Glastonbury

Other: Vernon (2); Coventry; Willimantic; West Hartford Center (3)

When do you shop?

- 10 Weekends/ Days Off
- 14 To or From Work
- 3 Weekdays/ Tuesdays for Senior Discount at Shop-Rite



COMMUNITY WORKSHOP

DRAFT ROUTE 44 STRATEGIC PLAN PRESENTATION

Agenda

March 13, 2008 6:30 p.m. to 8:30 p.m. Bolton Elementary School

- 1. Greetings and introductions (10 minutes)
- 2. Presentation Draft Route 44 Strategic Vision Plan (35 minutes)
 - a. Land use Vision
 - b. Economic/Market Recommendations
 - c. Transportation System Recommendations
 - d. Plan Actions Implementation
- 3. Discussion your comments (60 minutes)
- 4. Wrapping up and next steps (10 minutes)

Bolton/Route 44 Public Meeting 3-13-2008 Summary of Feedback

- In general, the proposed land use plan and associated transportation system recommendations were well received.
- There was a request to more strongly address the potential for bicycle and pedestrian connections from Route 44 to the village center and municipal facilities on Notch Rd
- It was noted that the Town of Bolton is the largest employer in the town, but it is not indicated as such in the market data
- The chairman of the Conservation Commission indicated that the Cider Mill property is a high priority conservation site largely due to the drinking water aquifer that underlies it. He questioned the designation as a development cluster site. There was some discussion of appropriate land uses and development design that would have no adverse impact to an aquifer.

Questions from the attendees and discussion responses:

- Is there a study indicating the impacts of commercial development on the town's tax base?
 - Response: There is no such study however, given the relatively small acreage available for commercial uses in Bolton versus the predominant residential land form, increases in commercial activity and intensity are unlikely to have a significant effect on the town tax base, or reduce the property tax burden for residents.
- What are the impacts on water quality of the proposed development forms?
 - Response: Well designed development with minimal impervious surfaces and sound stormwater management facilities should have minimal impacts to water quality. The presence of the sewer line will also reduce potential for any new development to have an adverse effect. Water supply varies tremendously throughout Connecticut and the availability of supply within the study corridor is unknown. However, the availability of a drinking-water aquifer underneath the Cider Mill Road area suggests that that there would be sufficient supply to support more business there and the identification of this area for higher density development is consistent with the anticipated water supply.
- What does village style mixed use look like? Can we indicate a built site or provide photos?
 - Response: Graphics representing this will be added to the study report
- Can we make minutes from the SOC meetings available?
 - Response: The meeting minutes will be posted on the project website

APPENDIX B ACCIDENT DATA

Crash Data Summary (2004-06) - Routes 44, 6 & I-384

Bolton, Conn.

Roadway	Intersection/Segment Hillcrest Road Route 85/Route 533	Accidents 2 10	Injuries	Fatalities	Type of Collision	Accidents
			0	0	Turning - Same Dir.	2
			4	0	Angle	- 1
		10	·	0	Intersecting Turn	1
					Rear End	4
					Sideswipe - Same Dir.	1
					Turning - Opposing Paths	1
					Turning - Same Dir.	2
	Comm. Driveway -Mobil	3	0	0	Rear End	2
	Collini. Driveway -Mobil	5	0	0	Turning - Same Dir.	1
	Comm. Dr. to Williams Road	3	0	0	Fixed Object	1
	Comm. Dr. to wimains Road	5	0	0	Rear End	2
	Williams Road to WB I-384	15	5	0	Backing	1
	williams Road to wB 1-384	15	5	0	-	5
					Fixed Object	
					Intersecting Turn Rear End	3
Route 6						2
Koute 6					Sideswipe - Opp. Dir.	1
	NID 1 204		0	0	Turning - Opposing Paths	3
	WB 1-384	1	0	0	Fixed Object	1
	WB 1-384 to EB I-384	4	1	1	Fixed Object	3
					Pedestrian	1
	EB I-384	2	1	0	Fixed Object	1
					Rear End	1
	EB I-384 to Notch Road	12	4	0	Angle	1
					Fixed Object	6
					Rear End	4
					Sideswipe - Same Dir.	1
	Notch Road	3	0	0	Fixed Object	1
					Intersecting Turn	1
					Turning - Same Dir.	1
	Route 44	8	1	0	Fixed Object	6
					Sideswipe - Same Dir.	2
	Route 6 to Quarry Road	1	0	0	Rear End	1
	Quarry Road	9	1	0	Angle	1
					Fixed Object	1
					Rear End	4
					Sideswipe - Same Dir.	1
					Turning - Opposing Paths	1
					Turning - Same Dir.	1
	Quarry Road to Howard Road	6	1	0	Fixed Object	2
					Rear End	1
					Sideswipe - Same Dir.	2
					Turning - Same Dir.	1
	Howard Road	1	1	0	Rear End	1
	Howard Road to Vernon Road	2	0	0	Fixed Object	1
Route 44			-	-	Sideswipe - Same Dir.	1
	Vernon Road	1	1	0	Intersecting Turn	1
	Vernon Road to South Road	7	2	0	Fixed Object	1
	- mon read to bouil Roud	,	-	v	Rear End	5
					Sideswipe - Opp. Dir.	1
	South Road	7	1	0	Fixed Object	1
	South Road	/	1	0	Intersecting Turn	1
					Rear End	4
						-
	South Dond to Tollard Deed	o	1	0	Sideswipe - Opp. Dir.	1
	South Road to Tolland Road	8	1	0	Intersecting Turn	1
					Rear End Turning - Same Dir.	5 2

Crash Data Summary (2004-06) - Routes 44, 6 & I-384 Bolton, Conn.

Roadway	Intersection/Segment	Total Number of Accidents	Number of Accidents Resulting in Injuries	Number of Accidents Resulting in Fatalities	Type of Collision	Number of Accidents
	Tolland Road	3	0	0	Fixed Object	1
					Rear End	2
	Tolland Road to Old Coventry Roa	2	1	0	Rear End	1
Route 44					Sideswipe - Same Dir.	1
	Old Coventry Road	1	0	0	Rear End	1
	Old Coventry Road to Coventry Te	3	0	1	Fixed Object	1
					Rear End	2
	Within 1/2-mi. of Route 44/Route	14	4	1	Fixed Object	12
					Overturn	1
1 204					Sideswipe - Same Dir.	1
I-384	Route 44/Route 6	4	0	0	Fixed Object	2
					Intersecting Turn	1
					Sideswipe - Same Dir.	1
	Total	132	29	3		

Source: Connecticut Department of Transportation

APPENDIX C SAMPLE ZONING LANGUAGE

Recommended Examples

Due to the length and breadth of most zoning regulations which could provide examples of provisions intended to result in compact neighborhood design as well as open space conservation design, one excerpt of a model ordinance and other sources rather than examples are offered in this appendix.

Connecticut Examples

Reading of the following Connecticut municipal regulations with applicable provisions is recommended:

- Burlington, Connecticut Central Business District Overlay Zone
- Chaplin Rural Agricultural Zones
- East Windsor agricultural/open space zone
- Groton Mixed-use floating zone
- Simsbury Design Guidelines
- Suffield village district overlay, purchase of development rights program, also agricultural/open space zone
- Torrington Open Space/ minimum buildable area provisions
- Washington special business districts for each development cluster
- West Haven open space zoning

Other resources:

- Cape Cod Village Design Guidelines www.capecodcommission.org/bylaws
- Massachusetts Smart Growth Toolkit www.mass.gov/envir/smart_growth_toolkit/bylaws
- Georgia Model TND zoning regulations; <u>http://www.dca.state.ga.us/intra_nonpub/Toolkit/ModelOrdinances/</u>
- Wisconsin Model Traditional Neighborhood Design Ordinance www.co.dane.wi.us/plandev/Community/

EXCERPT: MODEL MIXED-USE DISTRICT ORDINANCE

Section 4.1 – Model Smart Land Development Regulations – Interim Planning Advisory Services Report – American Planning Association, March 2006

4.1 MODEL MIXED-USE ZONING DISTRICT ORDINANCE

The following model zoning district provisions represent a commercial zoning classification that permits, rather than mandates, a vertical mix of commercial and residential uses within the same building. The district is intended to accommodate a physical pattern of development often found along village main streets and in neighborhood commercial areas of older cities.

Primary Smart Growth Principle Addressed: Mix land uses Secondary Smart Growth Principle Addressed: Compact building design

CX1, Neighborhood Commercial, Mixed-Use District

101. Purpose

The purposes of the CX1, Neighborhood Commercial, Mixed-Use District are to:

(1) Accommodate mixed-use buildings with neighborhood-serving retail, service, and other uses on the ground floor and residential units above the nonresidential space;

(2) Encourage development that exhibits the physical design characteristics of pedestrianoriented, storefront-style shopping streets; and

(3) Promote the health and well-being of residents by encouraging physical activity, alternative transportation, and greater social interaction.

102. Definitions

As used in this ordinance, the following words and terms shall have the meanings specified herein:

"Floor Area Ratio" means the ratio of a building's gross floor area to the area of the lot on which the building is located.

"Gross Floor Area" is the sum of the gross horizontal areas of all floors of a building measured from the exterior faces of the exterior walls or from the centerline of walls separating two buildings. Gross floor area does not include basements when at least one-half the floor-to-ceiling height is below grade, accessory parking (i.e., parking that is available on or off-site that is not part of the use's minimum parking standard), attic space having a floor-to-ceiling height less than seven feet, exterior balconies, uncovered steps, or inner courts.

"Mixed-use Building" means a building that contains at least one floor devoted to allowed nonresidential uses and at least one devoted to allowed residential uses.

103. Allowed Uses

Uses are allowed in "CX1" zoning districts in accordance with the use table of this section.

USE GROUP		Zoning District
Use Category		CXI
Specific Use Type		CAI
P= permitted by-right	C = conditional use	N = Not allowed

Comment: This use table should be refined to reflect local characteristics and planning objectives. The range of uses allowed should be kept as broad as possible in order to ensure that the district is economically viable. Note that this model allows, as a conditional use, drive-through facilities. Drive-through facilities may be appropriate in such areas in connection with banks and pharmacies. Whether to allow them is a policy choice, no different than other policy choices in selecting permitted uses. Also keep in mind that in buildings with residential units, commercial use issues will be largely self-policing because owner associations and builder/developers will ensure that commercial uses in mixed-use buildings will be compatible with upper-story residential uses.

104. Commercial Establishment Size Limits

The gross floor area of commercial establishments in the CX1 district shall not exceed [15,000] square feet.

Comment: Floor area limits are proposed in the model ordinance to help ensure that allowed commercial uses would be geared toward a neighborhood market area. Some local ordinances impose much more restrictive floor area limits in neighborhood-oriented districts. The limit proposed in this model ordinance would accommodate a modern drug store. If floor area limits are employed, the standards should not be so restrictive as to hamper the economic viability of the district.

105. Indoor/Outdoor Operations

All permitted uses in the CX1 district must be conducted within completely enclosed buildings unless otherwise expressly authorized. This requirement does not apply to off-street parking or loading areas, automated teller machines, or outdoor seating areas.

106. Floor-to-Floor Heights and Floor Area of Ground-floor Space

(1) All commercial floor space provided on the ground floor of a mixed-use building must have a minimum floor-to-ceiling height of [11] feet.

(2) All commercial floor space provided on the ground floor of a mixed-use building must contain the following minimum floor area:

(a) At least [800] square feet or [25] percent of the lot area (whichever is greater) on lots with street frontage of less than [50] feet; or

(b) at least 20 percent of the lot area on lots with [50] feet of street frontage or more.

Comment: In areas with strong residential real estate markets, ground-floor space is sometimes viewed as an afterthought, particularly when developed by those with a poor understanding of mixed-use development. These types of provisions can help ensure that ground-floor space will meet the needs of future retailers and not sit vacant for years after upper-floor residential units have been leased or sold.

107. Lot Area per Unit (Density)

The minimum lot area per dwelling unit shall be [1,000] square feet for mixed-use buildings and [1,500] square feet for all other buildings.

Comment: If mixed-use buildings are desired, such buildings should be rewarded with more flexible development standards. The model ordinance allows higher residential densities in mixed-use buildings than it does in single-use buildings.

108. Floor Area Ratio

The maximum FAR shall be [2.0] for mixed-use buildings and [1.25] for all other buildings.

Comment: To encourage mixed-use buildings, the model ordinance allows higher FARs for mixed-use projects.

109. Setbacks

The entire building façade must abut front and street side property lines or be located within
 feet of such property lines.

Comment: Rather than mandating a zero-foot "build-to" line for all properties in CX1 zoning districts, this model offers flexibility to accommodate shallow building setbacks that are sometimes necessary to accommodate features such as outdoor seating/display areas, stoops and sidewalk widening. Alternately, it is possible for the ordinance to establish a formula to determine setbacks based on the average setback of buildings in a block face. For an example of this, see Section 108 of the Model Town Center Ordinance (below).

(2) The minimum rear setback is [0-30] percent of the lot depth.

Comment: The appropriate minimum building setback will depend on lot and development patterns in the area. When alleys abut the rear of CX1 lots, no rear setback may be necessary, except perhaps for upper floors. On the other hand, when CX1-zoned lots will abut the rear property line of residential lots, buildings in the CX1 district should be set back from rear property lines in order to protect the privacy and open feeling expected within residential rear yards.

(3) No interior side setbacks are required in the CX1 district, except when CX1-zoned property abuts R-zoned property, in which case the minimum side setback required in the CX1 district shall be the same as required for a residential use on the abutting R-zoned lot.

Comment: Most pedestrian-oriented shopping streets are lined with buildings that span the entire width of the lot. The standard proposed here will help reinforce that pattern, while also ensuring that if a CX1 district abuts a residential zoning district, a "typical" residential side yard will be provided.

110. Building Height

The maximum building height shall be [38–50] feet for mixed-use buildings and [35–47] feet for all other buildings.

Comment: Some communities will want to regulate height by stories rather than feet above grade, since stories will allow for greater flexibility in building design. The standards proposed allow greater height for mixed-use buildings than for single-use buildings because mixed-use buildings are required to have taller floor-to-ceiling heights on the ground floor. The proposed standards will accommodate three- or four-story buildings.

111. Off-Street Parking

(1) [Insert off-street parking standards]

(2) No off-street parking is required for nonresidential uses in CX1 districts unless such uses exceed [3,000] square feet of gross floor area, in which case off-street parking must be provided for the floor area in excess of [3,000] square feet.

Comment: Paragraph (2) may be incorporated into paragraph (1). Exempting small retail businesses from compliance with off-street parking requirements will help promote pedestrianoriented character and encourage use/reuse of storefront retail space. Communities should also examine off-street parking ratios with an eye toward reducing the amount of off-street parking required overall and encouraging shared and off-site parking arrangements.

(3) Off-street parking spaces must be located to the rear of the principal building or otherwise screened so as to not be visible from public right-of-way or residential zoning districts.

112. Transparency

(1) A minimum of [60–75] percent of the street-facing building façade between two feet and eight feet in height must be comprised of clear windows that allow views of indoor space or product display areas.

(2) The bottom of any window or product display window used to satisfy the transparency standard of paragraph (1) above may not be more than [3-4.5] feet above the adjacent sidewalk.

(3) Product display windows used to satisfy these requirements must have a minimum height of [4] feet and be internally lighted.

113. Doors and Entrances

(1) Buildings must have a primary entrance door facing a public sidewalk. Entrances at building corners may be used to satisfy this requirement.

(2) Building entrances may include doors to individual shops or businesses, lobby entrances, entrances to pedestrian-oriented plazas, or courtyard entrances to a cluster of shops or businesses.

Comment: Requiring ground-floor windows and sidewalk-facing entrances help make for a more pleasing pedestrian environment.

114. Vehicle and Driveway Access

No curb cuts are allowed for lots that abut alleys.

Comment: Driveways that cross sidewalks disrupt pedestrian movements and pose safety threats. They should be the rare exception in neighborhood-oriented mixed-use districts.