



INFRASTRUCTURE

Overview

This booklet is for discussion purposes only. It is intended to outline issues and possible strategies for discussion with the Commission.

This booklet examines community facilities, transportation and utilities. These are the underlying elements of a town's infrastructure.

Community facilities include town buildings and facilities needed to provide services to residents, businesses, and property owners, ranging from emergency services to schools to town administration. Transportation includes not only roadways, but also public transit and facilities for bicyclists and pedestrians. Utilities include piped utilities (public water, public sewer, storm water and natural gas), wired utilities (electric and cable), and wireless utilities (cellular communications).

Infrastructure should support desired development patterns.

When reviewing this booklet think about:

- What issues or topics should be covered that are not?
- Where do we need to elaborate on our vision?
- Are the strategies, recommendations appropriate for Vernon?
- What issues do we need to expand upon further?



Planning & Zoning’s Role in Capital Improvements

The Town Council annually adopts a Capital Improvement Program (CIP), which programs capital projects over the next six fiscal years based upon the needs of the community and departments and available fiscal resources.

In some communities, the Planning and Zoning Commission provides input into the CIP or reviews the CIP as it is developed to allow potential land-use related issues to be addressed early in the process.

In all communities, the Planning and Zoning Commission is required to review certain capital improvements pursuant to Connecticut General Statutes 8-24. Generally those items directly related to land use such as roads, utilities, and public buildings and public land must be referred to the Planning and Zoning Commission for approval.

Community Facilities

Overview

Community facilities include those that provide: services to residents (town governance, social services, education, DPW), public safety (fire, police, EMS) and amenities (recreation, library). Vernon’s community facilities are listed below and shown on the Community Facilities Plan map.

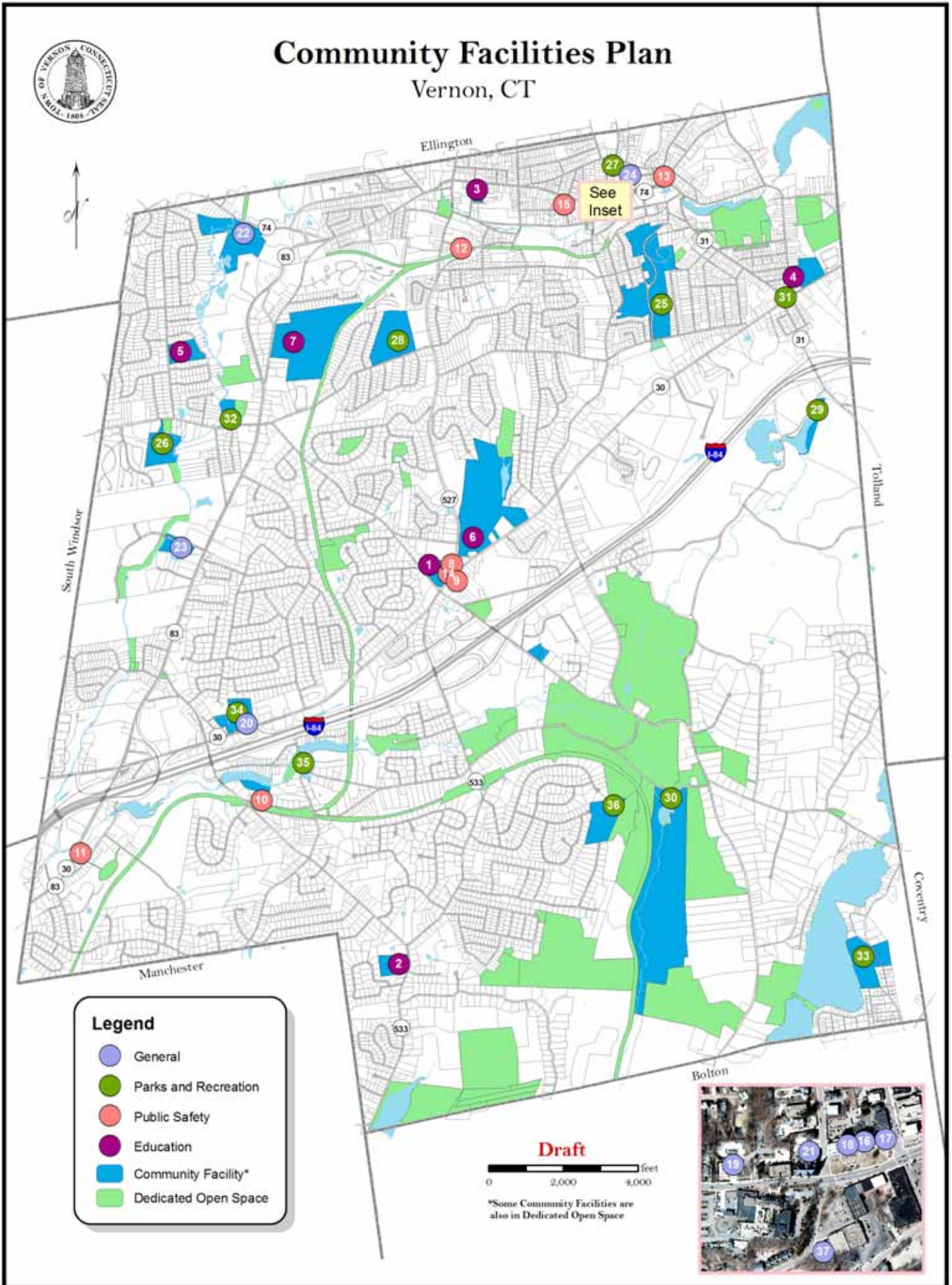
Generally, a POCD looks at the locational aspects of community facilities: is additional land needed for new or expanded community facilities and, if so, which locations might be appropriate? A POCD sometimes also discusses how demographic or other trends might impact the demand for various types of community facilities.

# on Map	Name	# on Map	Name
1	Center Road School	20	Public Works Dept; Social Services
2	Lake Street School	21	Youth Services
3	Maple Street School	22	Sewer Treatment Plant
4	Northeast School	23	Recycling Center
5	Skinner Road School	24	Board of Education
6	Vernon Center Middle School	25	Henry Park
7	Rockville High School	26	Dart Hill Park
8	Emergency Services Station #641	27	Talcott Park
9	Fire Station #1	28	Legion Field
10	Dobsonville Fire Station #2	29	Walker's Reservoir
11	Fire Station #3	30	Valley Falls Park
12	John Ashe Fire Station #4	31	Lafayette Park
13	Fitton Fire House #5	32	Dart Hill North Trails
14	Vernon Police	33	Newhoca Park & Camp Newhoca
15	Police Sub-Station	34	Center 375
16	Town Hall	35	Tankerhoosen & Phoenix Mill Park
17	Town Hall Annex	36	Boulder Ridge
18	Senior Center	37	Building Department
19	Public Library		



Community Facilities Plan

Vernon, CT



Summary of Community Facility Issues

The following table summarizes identified needs and discusses some considerations that might be addressed in the POCD. Additional discussion on key considerations follows. The information in the table is derived from interviews with a number of local officials, research and an assessment of issues.

The table highlights what we heard and found. It does not take into consideration the costs or fiscal resources to undertake these projects. While the summary uses the word “need” it does not distinguish between those items which are necessary for a department to fulfill its function versus those items which are desirable for quality of life or other purposes.

	Findings	Considerations
Administration / Services		
Town Hall	<ul style="list-style-type: none"> No immediate needs - internal updates have been completed; additional planned Longer-term: <ul style="list-style-type: none"> a desire was expressed to have all land use departments in one facility lack of meeting spaces in Rockville – dependent upon availability of Senior Center space 	<ul style="list-style-type: none"> Importance of keeping Town Hall and most administrative services in Rockville to draw people to Rockville and demonstrate Town’s commitment to Rockville Use of space in Citizens Block or if Senior Center moved to a central location? Longer term, electronic storage could reduce some spatial needs
Schools	<ul style="list-style-type: none"> Space in schools is adequate – recent bonding for upgrades Declining school enrollment – will there be surplus school space in the future? Need storage space – but not pressing 	<ul style="list-style-type: none"> School enrollments tend to be cyclical. If a school is closed due to declining enrollments, the Town should consider retaining the building and possibly leasing out space. If enrollment increases again, it is very difficult to find land for a new school.
Public Works	<ul style="list-style-type: none"> Space is generally adequate Need more covered storage 	<ul style="list-style-type: none"> Prefer to have coverage storage on-site; DPW has developed a plan for this
Waste Disposal	<ul style="list-style-type: none"> Have enough space at transfer station to meet needs – only 3 out of 7 acres currently used 	<ul style="list-style-type: none"> n/a – additional space needs not identified
Social Services	<ul style="list-style-type: none"> Need better office and program space (privacy issues with current configuration) Central location works well because clients are from throughout town 	<ul style="list-style-type: none"> Assume space reconfigurations could be achieved in existing town-owned facilities
Youth Services	<ul style="list-style-type: none"> Space (which is rented) adequate for current needs (20 children in a program) 	<ul style="list-style-type: none"> If increase in children in programs, would need more space Longer term would like to see a community center, possibly located in Rockville

	Findings	Considerations
Public Safety		
Police	<ul style="list-style-type: none"> • Current building is 30 years old and Department feels it does not meet needs current • State mandates might drive future need for more space • Need to conduct a needs analysis for space (money had been allocated previously) 	<ul style="list-style-type: none"> • If expanded – where? Current location is central, but is there room? • Recent State efforts to regionalize dispatch. If this and other regionalization efforts occur, will that increase or decrease space needs for Police and Fire in Vernon?
Fire	<ul style="list-style-type: none"> • Feels that Station 541 on Prospect not adequate; site too small for expansion of station • Would like to have a large meeting space 	<ul style="list-style-type: none"> • Is town-owned land available for a new station? How many stations are needed for a Town the size of Vernon (land area and population)? • If there is ever a change to a paid force, would existing buildings be adequate? • What other trends might influence fire stations and their locations?
Ambulance	<ul style="list-style-type: none"> • 2 ambulances kept at Public Safety Building • No space needs indicated 	<ul style="list-style-type: none"> • n/a – additional space needs not identified
Emergency Shelters	<ul style="list-style-type: none"> • There are 7 emergency shelters in Vernon and agreements with Tolland and Ellington to share if needed 	<ul style="list-style-type: none"> • n/a – no additional shelters needed

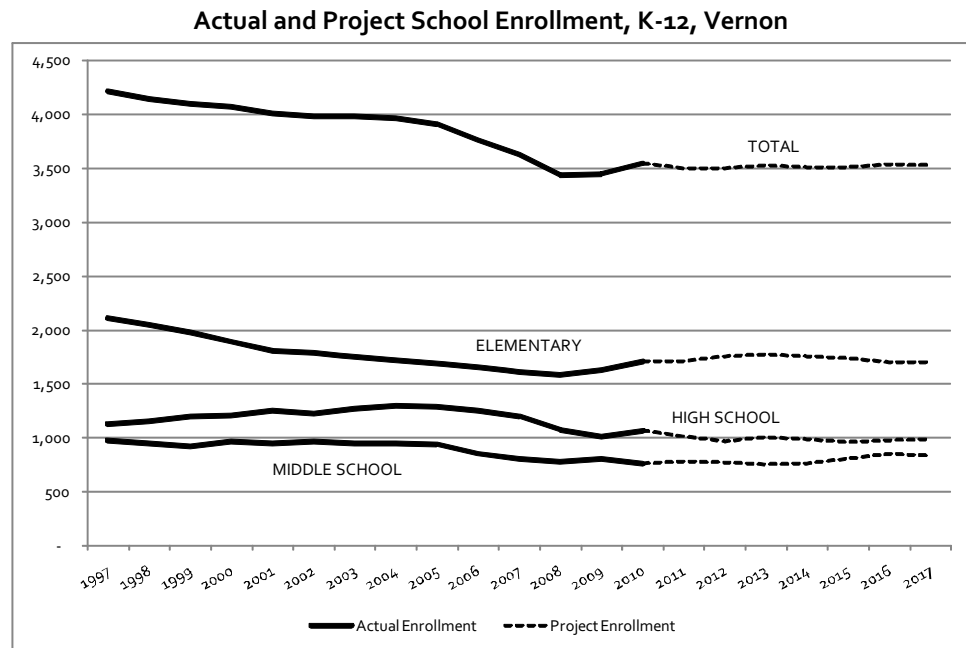
	Findings	Considerations
Other Services and Amenities		
Parks and Recreation	<ul style="list-style-type: none"> • Maintenance is priority • Increased demand for sports fields • Some upgrades desired for existing facilities • Need indoor storage at Henry Park • Long term – desire for a gym in Rockville, possibly combined with a community center 	<ul style="list-style-type: none"> • Should additional volunteer groups be encouraged to help with maintenance? • Approach for meeting sport field demands?
Senior Center	<ul style="list-style-type: none"> • No pressing needs, but longer term could use more office space • If they ever moved, a central location would better meet seniors’ needs 	<ul style="list-style-type: none"> • If, over the long term, Senior Center moved to the center of town, how could this building be used to meet other needs - municipal or economic development?
Library	<ul style="list-style-type: none"> • The library is not technically a “municipal” facility since it is privately operated; however it is included because it is an important community facility • Expansion planned on current site – 4,000 square feet • Currently lease some parking to hospital, but may need parking for library use in future due to expansion 	<ul style="list-style-type: none"> • Longer term – may need to address parking • Library plays important role in attracting residents to Rockville. Important long term that they remain in Rockville (as they are planning).

Additional Information and Discussion

This section provides some additional information on the following items outlined in the previous tables: Schools, possible space needs of the Police Station, Fire Protection considerations, and Parks and Recreation.

Schools

Enrollment in Vernon's public schools has decreased overall from 4,214 students in 1997/98 school year to 3,542 students in the 2009/2010 school year. A 2007 study projected that through 2017, school enrollment would stay at around 3,500. Actual enrollment and projections are shown in the following table.



Source: *Vernon Enrollment Projected to 2017*, by Peter M. Prowda, PhD, 2007.

School enrollment is often cyclical and enrollment could peak again over the long term. It is not the intention of this plan to make a recommendation of whether a school should be closed if enrollment continues to decline nor has the closing of a school been proposed by the Town. However, should any school not be needed over the next 10 years, it is recommended that the Town retains the land and building since it is very difficult to find land for new school should enrollment climb again. Careful analysis of projections can keep the Town apprised of potential enrollment increases.

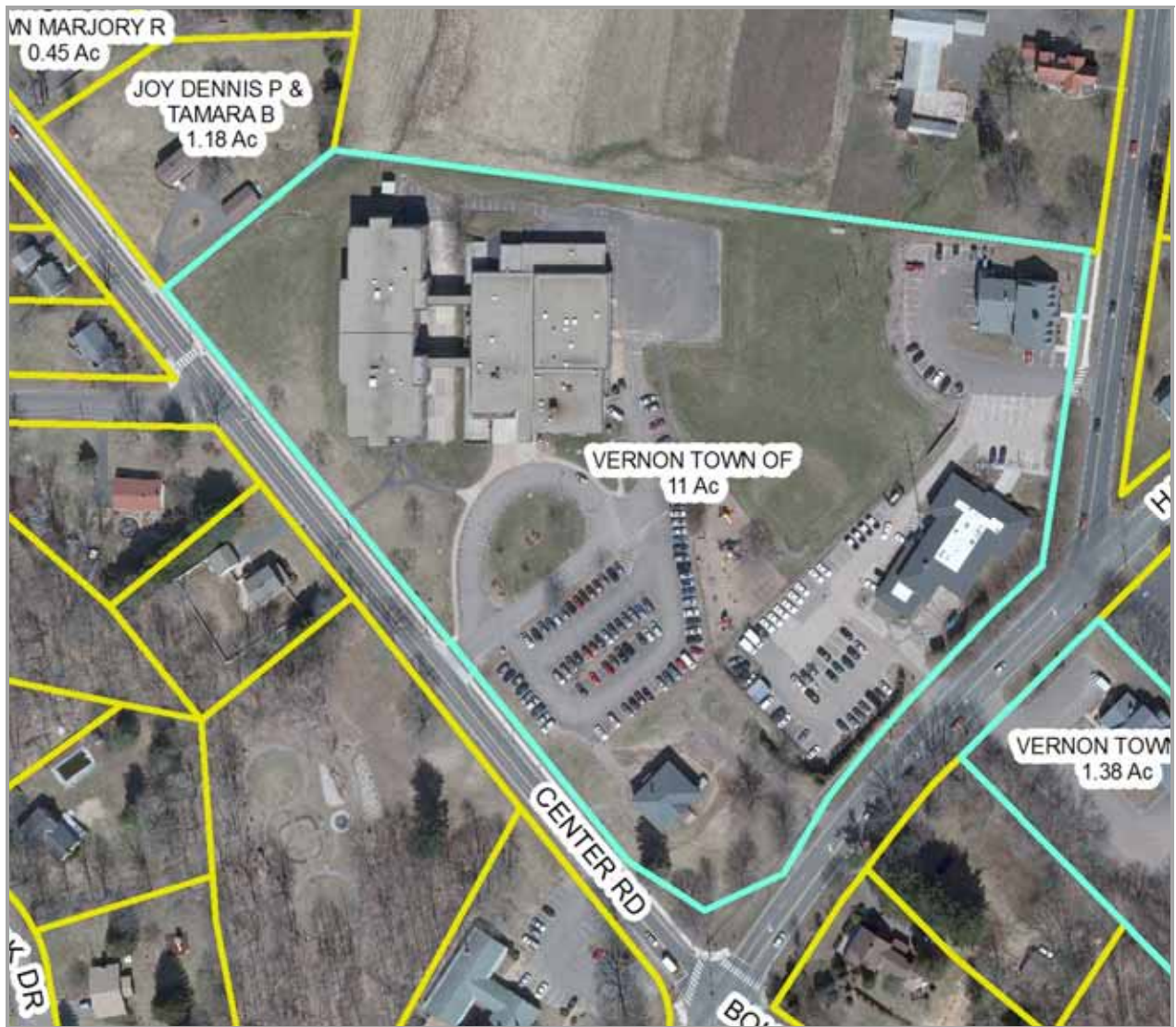
Finally, school quality is one of the key determining factors when families decide where to live. As discussed in previous booklets, there is a desire to have a well-balanced mixture of age groups. Thus, it is important to maintain a quality school system.

Police Station

Police officials have indicated that additional space is needed to meet current and potential needs, including to comply with various state requirements and standards. The current central location serves the Police Department well and contributes to the municipal campus-type feel of this part of Vernon Center. On-site expansion would require a creative approach and cooperation among the other uses located here. While this parcel is large, it is fully occupied with buildings, parking and outdoor uses.

The Town should also continue to maintain a police substation in Rockville. The substation helps to address real and perceived safety concerns.

Vernon Center



Fire Protection

it has not been determined if additional fire stations are needed in Vernon. Previously there was a recommendation to locate a station near Bolton Lakes but officials felt that the number of likely calls might not warrant a station. Fire officials have pointed out that Station 541 is old, small and the site is too constrained to allow an expansion. If it is determined that a replacement station is necessary, new land would need to be identified.

However, there are other factors that might ultimately influence how many stations are needed and the most suitable locations:

- Long term sustainability of a volunteer fire department. With just over 200 volunteers, Vernon has one of the largest volunteer fire departments in the State. The Department is still able to successfully recruit new volunteers, though it has become more difficult for a number of reasons including rigorous national training standards. If demographics continue to shift toward an older population, it could become much more difficult to recruit. While it is uncertain at what point, if any, the Town might need a paid force, it is important to determine if the size and locations of fire stations might be different under such a scenario.
- Updates to international codes. Proposed updates to International Codes would require sprinklers in all new construction. If this change is adopted and Connecticut decides to also adopt the code, there could be implications on the number of fire stations needed. Since sprinklers provide more leeway in response time, it could reduce the impact that new growth can have on fire departments

Numerous building and zoning requirements and standards are intended to ensure public safety such as the accommodation of fire equipment in case of emergency. The Planning and Zoning Commission should continue to confer with fire officials when updating regulations and reviewing site plans and subdivisions.

There are instances where safety provisions might affect the desired character of a development or decrease the amount of space available for a building. Fire officials note that providing sprinklers gives them more flexibility to waive or reduce certain requirements (e.g., driveway widths, etc.). If the state does not adopt a sprinkler requirement, the Planning and Zoning Commission might determine if providing a requirement in the zoning regulations might advance land use goals. Some communities have taken this approach.

Issues related to the availability of water for firefighting is discussed under "Utilities."

Parks and Recreation

As discussed in Booklet 4, Conservation, a number of parks and recreational opportunities including 2 beaches, 36 miles of trails and a 9.1 mile rail trail are located in Vernon. In addition the State and private land trusts also own recreation areas in Vernon. The Town has recently improved a number of its outdoor recreation areas and parks, including Central Park and Talcott Park.

The Parks and Recreation Department identified maintenance of existing facilities as its priority over the coming years. In addition to the Parks and Recreation Department, volunteer "Friends of" groups maintain a number of parks. Such groups keep public parks in usable condition, provide cost-savings to the Town, and build community spirit.

Rising demand for sports fields is a pressing issue in many communities. It can be very difficult to find vacant land for new sports fields. The Parks and Recreation Department (with coordination with the School Department) carefully manages the use of fields to meet demand as best as possible, but they think there may be a future need for additional football and lacrosse fields. Options to manage demand might include:

- Finding land and building new fields (vacant, Town-owned land is not abundant or is already committed to other purposes).
- Letting (or encouraging) the private market or non-profits address demand by building commercial or user-funded fields.
- Expanding the use of existing fields (e.g., installing artificial turf, lights, etc.).
- Restricting the use of fields (e.g., restricting use of fields by out-of-season sports) to allow more sports, but reduced use by each sport.

The first two options have land use implications since it would require that additional land is dedicated for recreational use.

Finally, it is important to ensure that recreation facilities are "Good Neighbors" since they can have impacts on neighboring uses. If new facilities are built, they should be in locations where the types of activities and impacts (e.g. traffic, noise, lighting) have a minimal effect on nearby residences.

Conversely, when new development is proposed adjacent to existing recreational facilities, these developments should be carefully planned to minimize impacts to buildings when the facilities are being used. This can help ensure that existing facilities remain viable over the long term.

Vision for Community Facilities

Vernon will provide adequate community facilities to meet the needs of residents, businesses and property owners and to protect the health, safety, and welfare of the public. The Town will continue to provide and support an array of recreational opportunities and other community amenities which contribute to the Town's quality of life. The Town will continue to find cost-effective solutions to meeting community needs.

Possible Strategies

When planning for new or expanded community facilities, maintain Vernon's community structure:

1. Maintain Rockville as the focal point for town governance and the library.
2. Maintain a "campus" style setting for public safety and other municipal services in Vernon Center.
3. For other parts of town, continue to locate community facilities in areas that are appropriate for the type of use and best meet the needs of residents / users.
4. Minimize impacts between new and existing neighborhoods and those facilities that might have impacts on neighborhoods.

Address current community facility and service needs:

5. Continue to update and maintain public buildings and schools, including the provision of energy conservation measures.
6. Continue to update and maintain parks and recreation facilities.
7. Continue to re-use and reconfigure existing space, share facilities, and employ technology innovations to meet needs and minimize the need for new land or buildings.

Anticipate and plan for future needs:

8. Monitor how demographic changes might affect the needs and demands on Town services and facilities.
9. Retain school buildings / sites to meet long-term education needs.
10. Investigate options for expanding the police station.
11. Examine space needs and locational considerations for fire stations.
12. Determine approaches for meeting recreation demands.
13. Continue to seek innovative ways to provide quality-of-life amenities, such as through grants, public-private partnerships, etc.

Transportation

This section addresses Vernon’s transportation system – roads, public transportation, and pedestrian and bicycling facilities. Overall, a community’s transportation system should support existing and desired land use patterns and provide for the mobility of its residents, workers, and visitors. Viable alternative transportation options (including public transit and walking) expand mobility options for residents or workers who do not have a car or are unable to drive. This is particularly important in communities that have a large or growing senior populations.

Many components of Vernon’s transportation infrastructure are under the jurisdiction of state and regional entities. While Vernon does not have direct control over these other entities, continued collaboration can ensure that Vernon’s transportation system meets local needs.

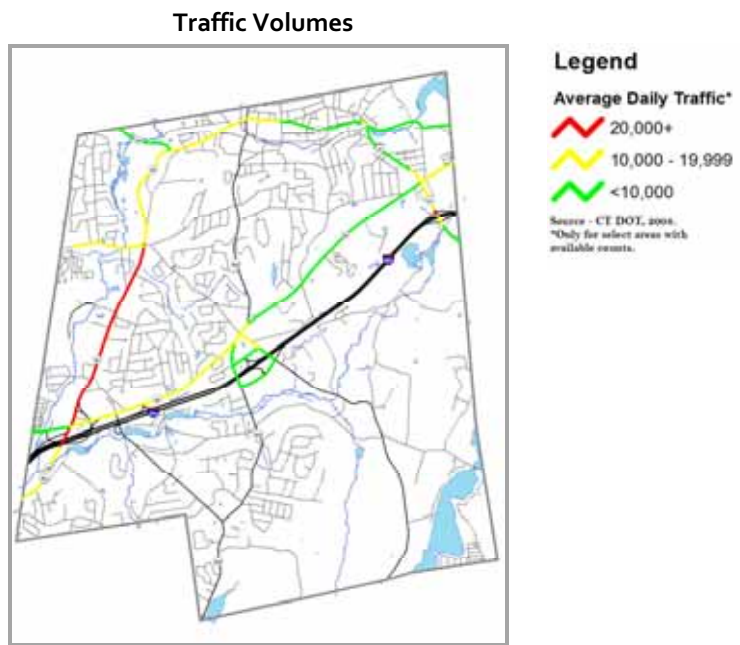
Roads

Overall Circulation and Road Classification

Vernon’s road network is well-developed and provides convenient access to jobs and other destinations in the Town and the region. Many residents at public workshops highlighted this convenience as a contributor to a high quality of life in Vernon. Regional commuters depend upon Vernon’s roads to reach I-84. While regional commuters add traffic, they also present business development opportunities for providing services to these commuters.

The Connecticut Department of Transportation (ConnDOT) has classified roads in Vernon (see sidebar on p. 12 and Transportation Plan on p. 13). The classification seems reasonable, with one exception: Route 83 between Windsorville Road and West Road might be better classified as a Minor Arterial rather than Major based upon lower traffic volumes and the character of the area.

To evaluate and manage potential traffic impacts, the Planning and Zoning Commission often requires the submittal of Traffic Impact Statements when development is proposed. Another approach used by communities is to tie allowable land uses to road classification. High traffic generators are generally not considered appropriate on local roads and, often, collector roads. Therefore certain uses are only allowed on arterials. This can be particu-



Road Classification

The following classification is partially based on guidelines by the Federal Highway Administration and the town's subdivision regulations.

Interstate – Road with controlled access intended to move larger volumes of traffic.

Major Arterial – Intended to carry regional traffic and serve major activity centers. In theory, serving abutting land is subordinate to moving traffic.

Minor Arterial – Interconnects and augments major arterials, provides for trips of moderate length, might serve minor traffic generators.

Collector – Collects traffic from local roads and neighborhoods and connects with minor and major arterials.

Local Road – All other streets, primarily providing direct access to abutting land. Generally not appropriate for high traffic generators.

larly helpful when siting non-residential uses (schools, nursing homes, religious facilities) in residential zones.

As discussed below, improvements to Route 83 in Vernon Circle are expected to address traffic flow in this area. Other areas of town tend to experience some congestion during morning and evening rush hours (generally roads that provide access to I-84). For example, the Route 30/31 intersection connects residents of Vernon, Tolland and Ellington to the highway and there are a number of businesses that also attract and generate traffic. Ultimately, possible improvements to this intersection and the intersections with the I-84 ramps might be necessary. As additional development occurs here, there might be opportunities for improvements to circulation patterns.

Future roads will likely include those built as part of subdivisions, to serve a specific development, or to relieve congestion points.

Access Management

"Access Management" is an overarching strategy to optimize access to land while ensuring for the safe and efficient flow of traffic. Curb cut (driveway) management is a key component of access management. Multiple curb cuts in close proximity to one another impact traffic flow, increase the potential for accidents, and increases the number of conflict points between pedestrians and vehicles.

The Planning and Zoning Commission has worked to reduce / combine curb cuts when development occurs. Additional steps could include adding access management provisions to its zoning regulations and preparing an access management plan. An access management plan provides specific recommendations for access to properties along a corridor. Zoning regulations can then require compliance with the plan when properties are developed or redeveloped.

The State has ultimate control over the location and number of curb cuts for properties along state roads. The recent improvements to Route 83 in Vernon Circle have helped address issues there; the island limits the ability to make left-hand turns. The Town should continue to work with the State to ensure its decisions are consistent with town policies for access management. This is especially important for Routes 83 and 30 and will be important as development occurs along Route 31 near exit 67.

Road Maintenance and Other Improvements

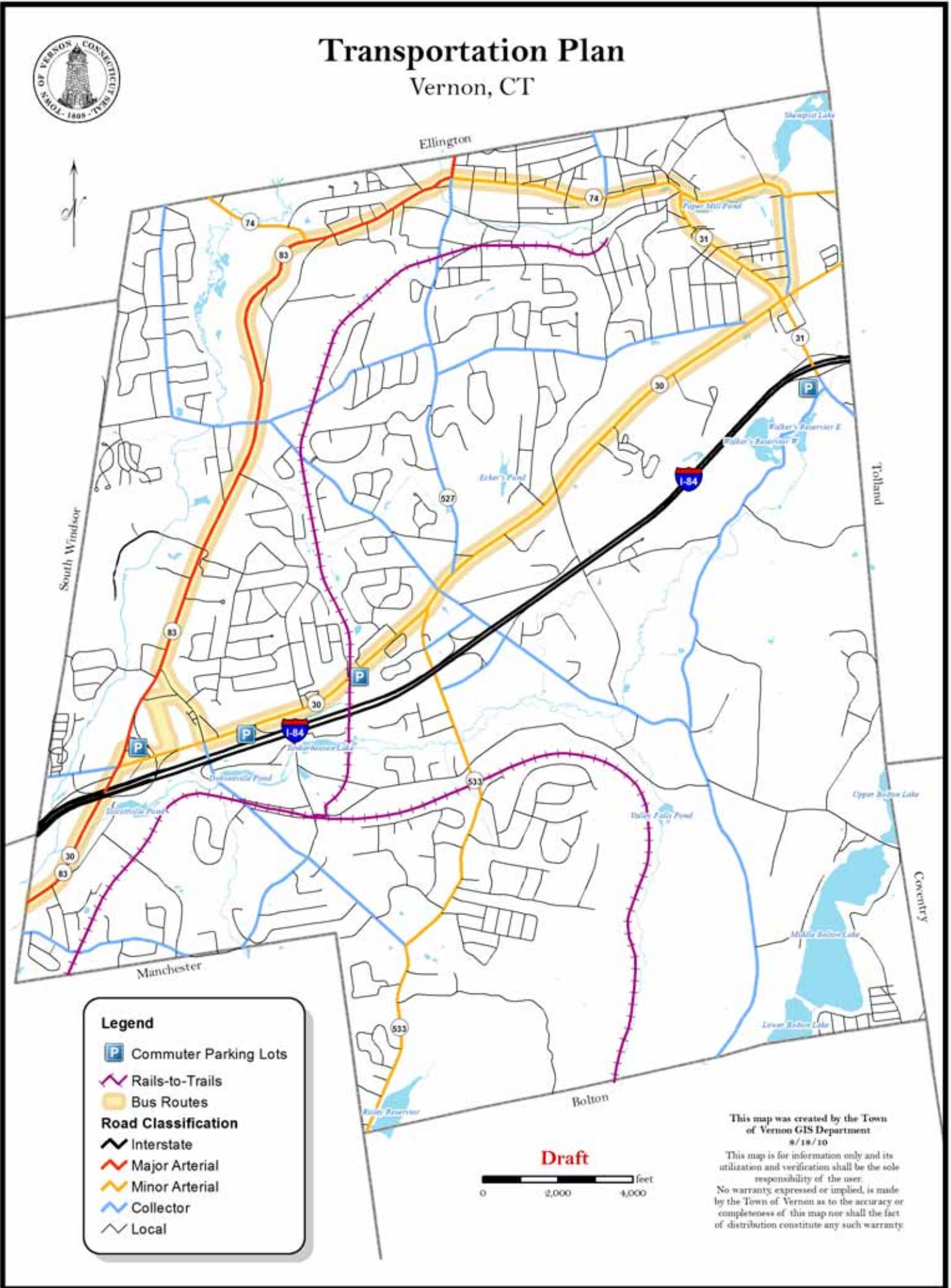
The Town should continue to program funds for maintaining and improving its roads. Maintaining existing road infrastructure is an important priority for safety, convenience, and from a cost efficiency perspective; regular maintenance can extend the useful life of a road and thereby delay the need for reconstruction. The Town has also undertaken aesthetic improvements when upgrading roads since roads can greatly influence the character of a neighborhood.

Lastly, bridge improvements and reconstruction are a community priority. A number of bridge projects are underway or planned.



Transportation Plan

Vernon, CT



Legend

- Commuter Parking Lots
- Rails-to-Trails
- Bus Routes

Road Classification

- Interstate
- Major Arterial
- Minor Arterial
- Collector
- Local

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Sidewalk Plan

The Sidewalk Plan suggests which areas of Vernon could be highest priority for sidewalk construction and maintenance. It can also help the Planning and Zoning Commission determine when a private development should include sidewalks.

Highest priority areas are those areas where there is more likely to be a demand for sidewalks or there is a desire to increase pedestrian activity. Areas were rated as follows:

1 point if area is within:

- ¼ mile of most commercial zones (SED, PC, C, RC, RDBR, HD-RC)
- ¼ mile of existing high density residential areas (see "Residential 5+" on land use map in Booklet 3)
- ¼ mile from a bus route
- ¼ mile of a commuter parking lot
- ¼ mile from an existing sidewalk
- A node (see Booklet 5)
- ¼ mile of any public school

¼ point if area is within:

- ½ mile from a school
- 1 mile from a school
- 1.5 miles from a middle or high school
- 2 miles from the high school

Ratings

Highest Priority: 5 – 7 points

Medium Priority: 3 – 4.9 points

Lower Priority: 0.25 to 2.0 points

Lowest Priority: 0 points

Walking and Bicycling

An increase the number of trips made by foot or on bicycle can reduce traffic and have environmental and health benefits. While a community cannot change people's behavior, it can increase opportunities and reduce barriers to walking and biking. There are two means for creating opportunities and reducing barriers for pedestrian and bicyclists –public investment or through improvements made by the private sector.

In terms of public investment, the Town has a track record of providing and promoting pedestrian and bicycle infrastructure. The Town has maintained the historic walkable environment in areas such as Rockville and has invested in sidewalks in other areas where walking is a suitable means of transportation. The Skinner Road School participates in the Safe Routes To School movement which encourages children to walk to school. Finally, Vernon's Rail Trail provides a central bicycle corridor, allowing pedestrian and bicyclists to easily get around town and to Bolton and Manchester.

These public-lead efforts should continue. It is recognized that sidewalk maintenance and construction requires funding and difficult choices have to be made annually about where limited dollars can best be used to enhance the sidewalk network. The Town has taken cost-efficient approaches by obtaining grants and incorporating sidewalk improvements as road work is done. This latter approach of including sidewalk upgrades when roads are repaired is akin to a "Complete Streets" approach. Complete streets take all users –pedestrians, bicyclists and drivers – into account when improving roads. .

In terms of the private sector, the Planning and Zoning Commission recognizes the benefits pedestrian access and sidewalks in new development or redevelopment. Zoning regulations require "sidewalks shall be installed for all new development in all areas" and further calls for granite curbs in "sidewalk policy areas." Subdivision regulations require sidewalks on at least one side of the street, unless waived by the Commission.

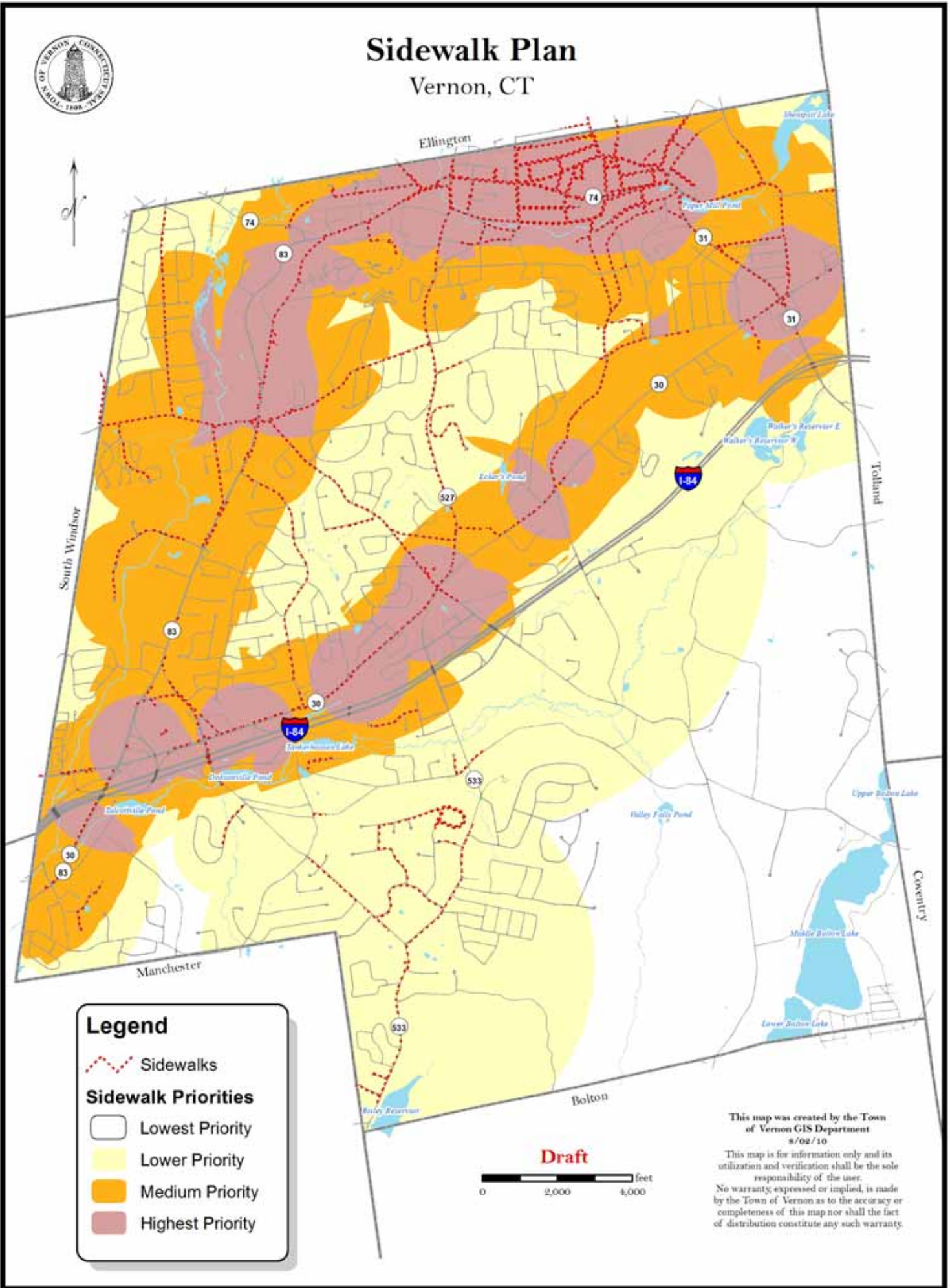
But determining when to waive sidewalks proves challenging. The private-sector approach to expanding the sidewalk network is piecemeal since it is based upon when and where development occurs. As a result, landowners may feel frustrated that they are required to provide sidewalks when there are no sidewalks on adjacent properties. Having a clear plan that identifies priority areas for future sidewalks could help clarify how individual sidewalk additions fit into the larger picture. Conversely, there are areas of Vernon where sidewalks might not be necessary. A Sidewalk Plan can aid in the determination of when to require sidewalks.

Other pedestrian and bicycle amenities (pathways connecting adjacent properties, bicycle racks, benches, etc.) can be provided as new development or redevelopment occurs. In addition to the off-road Rail Trail, on-road bike accommodations are important components of a bicycle transportation system. A "Complete Streets" approach can identify ways to accommodate bicyclists when improving roads.



Sidewalk Plan

Vernon, CT



Legend

- Sidewalks
- Sidewalk Priorities**
- Lowest Priority
- Lower Priority
- Medium Priority
- Highest Priority



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Public Transportation

Vernon is one of 16 communities that belongs to the Greater Hartford Transit District. The District plans, develops, operates, maintains, and provides transportation and related services such as transportation centers and parking facilities. CT Transit operates local and commuter bus service. Buses connect Rockville and the Route 83 corridor to Manchester and downtown Hartford. The Vernon Express provides direct service between commuter parking lots and Hartford.

Workshop attendees would like to see more user-friendly bus service. The Town could encourage CT Transit to better identify and maintain bus stops, make route maps more accessible, and increase service as needed. The Town can also identify areas not currently served that could benefit from bus service.

Paratransit (door to door service) is also provided by the Hockanum Valley Community Council. The Senior Center also provides some bus transportation, mainly to bring seniors to the center and for special trips and events. The private sector and the Housing Authority also meet demand for door-to-door transportation – many senior and elderly housing developments provide transportation to their residents.

The Town received funding for the creation of a multi-modal transportation center. While the location and details are still in the planning stages, such a facility could help make it easier for residents and others in the region to use public transit in Vernon.



Parking

This section address parking in Rockville, town-wide parking standards, and commuter lots.

Parking Requirements

Ensuring an adequate amount of and convenient location of parking in downtown areas can be a great challenge. Downtowns, including Rockville, are appealing in large part for pedestrian-friendliness. Yet most visitors and workers mainly arrive by car and need a place to park. Parking strategies in a downtown should balance convenience for drivers, providing a walkable and attractive streetscape, and not inadvertently freezing redevelopment through unachievable parking requirements.

There are a number of parking spaces throughout Rockville; however, many of the parking lots are privately owned. At certain times, visitors to the Town Hall or Senior Center have trouble finding on-street parking or a space in the municipal lot while private lots sit near-empty. The Town should continue to investigate options for structured parking to increase capacity at its municipal lot and work with private landowners to allow public parking on their sites.

Town-wide, providing more parking than is necessary can have environmental and economic impacts. The environmental impacts are straightforward – increases in impervious surfaces impact water quality.

However, the economic impacts of parking requirements are rarely discussed or considered by communities. Parking lots can be expensive to install and maintain and may not result in the highest economic return (or value) for the property owner, or the Town. Each lot has a limited buildable area – the more that is used for parking means that less can be used for buildings. For property owners, having more leasable square footage can increase profits and the value of the property. For the Town, increased property values will strengthen the Grand List and produce more property tax revenue. As mentioned above, high parking requirements can freeze redevelopment; often the older, vacant buildings that a community desires to see redeveloped cannot meet parking requirements. Yet, not providing sufficient parking can cause congestion and safety concerns.

The Town provides some flexibility in meeting parking requirements. Additional measures might be beneficial. The following table outlines alternative approaches to parking requirements and indicates which approaches might be appropriate in Rockville or the remainder of the Town (other than Rockville).

Possible Regulatory Approaches to Parking

Parking Approaches	Appropriate for:	
	Rockville	Remainder of Town
RECALIBRATE		
Continue to require a minimum number of spaces, but recalibrate space requirements to better match demand.	✓	✓
"5/8ths" Rule – reduce parking requirements by 5/8ths in areas where public parking or on-street parking are available [Mystic uses this approach downtown].	✓	
Set a minimum and <u>maximum</u> number of spaces.	✓	✓
REDUCE*		
Allow reduction in spaces if applicant can demonstrate the spaces are not needed (no fee-in-lieu required).	✓	✓
Allow reduction if other <u>private</u> parking spaces are available nearby and owner has a legal agreement with owner of other spaces to share (no fee-in-lieu required).	✓	✓
Allow reduction if other <u>public</u> parking spaces are available nearby (on-street or public lot) – in this case, the fee-in-lieu of parking payment should be required because a cost is borne by the Town.	✓	
*Vernon's zoning regulations allow payment in lieu of parking for up to 20% of the required spaces.		
DEFER		
Can build lesser number of spaces but must reserve an area for future parking spaces in case demand warrants a need for them.		✓
ELIMINATE		
Eliminate minimum parking requirements for some or all uses.	✓	✓





Commuter Parking

There are four commuter parking lots in Vernon. Three are owned by the State and one is leased from a religious institution. One lot (the Route 30 west lot) is currently being studied as a future multi-modal transportation center.

In terms of use, 2009 data from ConnDOT indicates low usage of some of the lots (the data should be used with caution in that it is based on one count and that count was taken during the current economic downturn). The count might indicate that Vernon has a more land dedicated to commuter parking than is needed.

To serve their purpose, commuter lots must be located near the highway. The land also tends to be prime land for economic development. Long term, it is important to maintain adequate commuter lot capacity to encourage increased car-pooling and bus use. However, opportunities for meeting commuter needs and additional business development could be explored. The Town could discuss options with ConnDOT for allowing the development of underused lots so long as current and future commuter needs could be met by expanding other lots or through other creative approaches (e.g., continuing to lease private lots such as additional religious facilities).

Commuter Lot Use, 2009

Location	Capacity	% Filled	Image
Routes 83/30 at Green Circle Road	163	3%	
Route 30 (west)	183	80%	
Route 30 (Sacred Heart Church)	170	38%	
Route 31 (Exit 67)	245	54%	

Photos from MicroSoft, 2010.

Vision for Transportation

Vernon's transportation system will provide for the safe and efficient movement of people and goods through and within the Town. Sidewalks and pathways, bicycling facilities, and public transit will continue to be viable transportation options in the Town. Transportation facilities, including roads and parking, will balance the needs and safety of users and the character of the Town.

Possible Strategies

Maintain overall circulation patterns and minimize congestion:

1. Consider incorporating road classification into zoning regulations to manage potential traffic impacts.
2. Continue to require Traffic Impact Statements for developments which might generate high levels of traffic.
3. Continue to work with the State on options to manage congestion near I-84 access points.

Continue to require and encourage access management:

4. Continue to work with land use applicants and the State Traffic Commission to reduce / minimize curb cuts.
5. Consider incorporating access management provisions into the Zoning Regulations.
6. Consider creating an access management plan for Route 83.

Continue road maintenance:

7. Continue to program funding for regular maintenance.

Improve and expand public transit service

8. Continue to work with the region and public transit providers to improve bus service as needed.
9. Support the creation of a multi-modal transportation center in Vernon.

Enhance pedestrian and bicycle travel:

10. Consider adopting a Sidewalk Plan to help prioritize spending for construction and maintenance of sidewalks and to help determine when to require the installation of sidewalks.
11. Continue to incorporate sidewalk improvements into road projects, where feasible.
12. Encourage new development to provide pedestrian and bicycle infrastructure.

Address parking:

13. Consider building structured parking in the municipal lot in Rockville.
14. Encourage landowners to share parking in Rockville.
15. Rethink parking requirements to reduce the environmental and economic impacts of providing too much parking.
16. Explore options for alternative uses of commuter lots with low usage.

Utilities

This section addresses sewers, and other utilities including public water systems, drainage, and energy. Sewer service will likely be the most prominent utility issue to address over the next 10 years.

Sewers and Septic Systems

Houses and businesses in Vernon are either served by on-site septic systems or public sewers. Vernon's Water Pollution Control Authority (WPCA) manages most of the public sewer system in town which consists of approximately 112 miles of sewerage pipes and the Wastewater Treatment Plant (some of Vernon's sewers discharge to Manchester). A total of five communities, including Vernon, discharge sewerage to the Vernon treatment plant. The most recent Sewer Facilities Plan was prepared in 1991 and partial updates were recently made when planning for treatment plant upgrades. While the plant has a capacity of 7.1 million gallons per day (mgd), actual discharge is between 3.5 to 4 mgd. Each community is allocated a portion of the full plant capacity (see sidebar).

Vernon Wastewater Treatment Plant Allocations

	% of Allocation
Vernon	77.1%
Tolland	5.63
Ellington	14.37
Manchester	1.28
S. Windsor	1.62

There are also some "private" sewage pipes that connect various developments to the public system. The new sewer system that will serve the Bolton Lakes area will be managed by the Bolton Lakes Regional WPCA, of which Vernon is a member. That sewer system will also discharge to Manchester.

Current and future needs related to existing sewer facilities include:

- Updating the Wastewater Facilities Plan. With additional plant upgrades required (see last bullet) the Wastewater Facilities Plan may need to be updated. The Plan would provide current and projected sewage flow from each community and could determine if there might be opportunities to sell extra capacity.
- Continued Maintenance. The Town upgrades pipes on an as-needed basis, but with some sewer pipes that are 120 years old, replacement could be necessary. Fortunately, according to local officials, the older pipes are in good condition.
- Additional upgrades to the Wastewater Treatment Plan. While recent upgrades helped to improve water quality, further upgrades will be needed to meet additional state environmental requirements.

In terms of sewer service areas, much of the land north of I-84 and in the southwest of town are served by public sewers. Meanwhile, most of the less developed southeast part of town relies upon on-site septic systems. The area around Middle and Lower Bolton Lakes is scheduled to be served by sewers in order to minimize potential public health issues and environmental impacts to the lakes.

The availability of public sewers impacts the amount of and type of development that a parcel of land can accommodate. Ultimately, the Vernon WPCA and Bolton Lakes Regional WPCA decide when and where sewers are to be extended. The Planning and Zoning Commission should work closely with both WPCAs to help meet land use goals. Such coordination will have added importance in that the State now requires that sewer expansions are consistent with the State's *Plan of Conservation and Development*. The State generally will not fund the expansion of sewers into conservation or preservation areas, as identified in the State Plan.

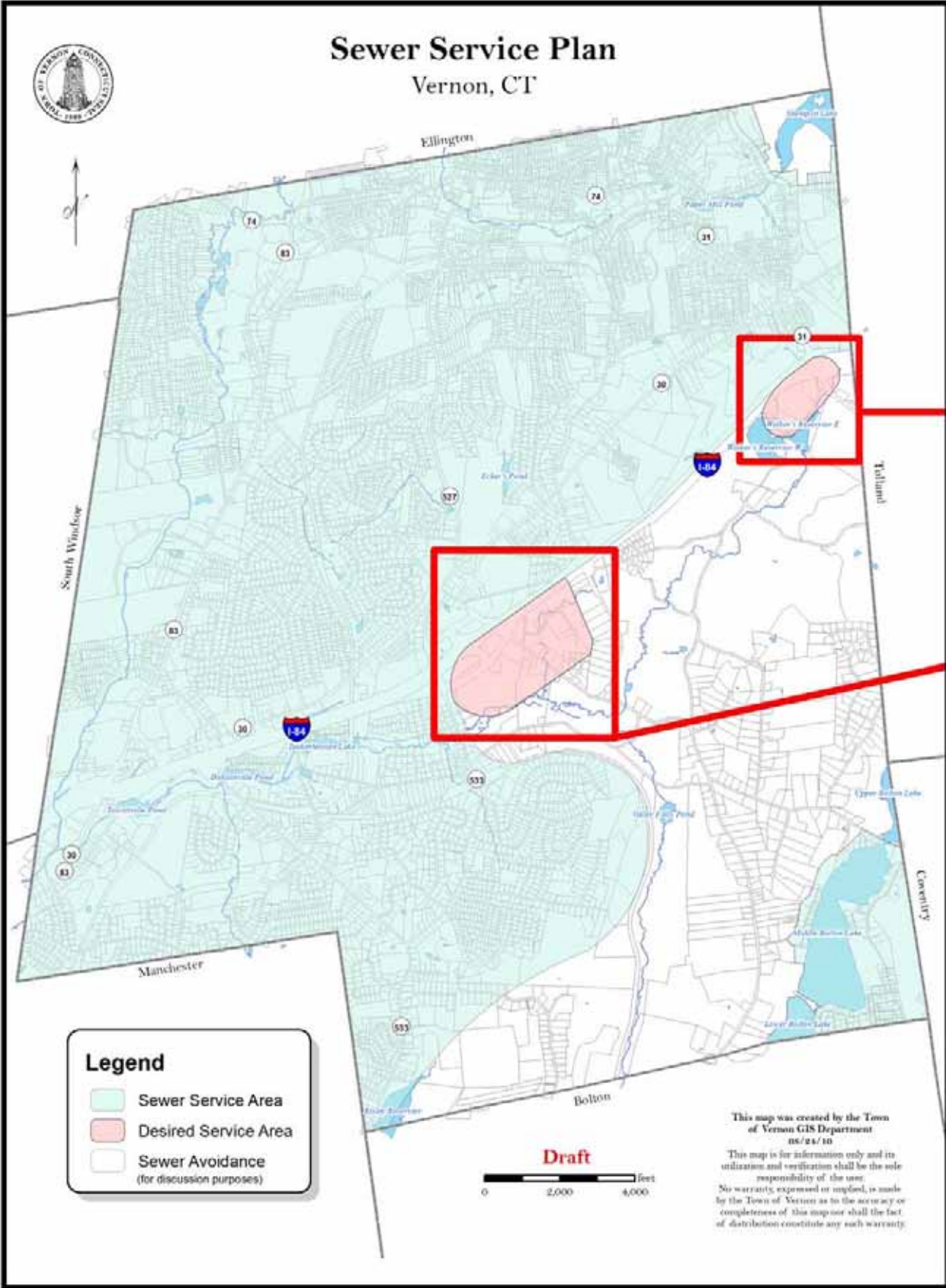
There are two business development areas in Vernon that are not served by sewers. Both areas are primarily zoned for businesses uses, and, in the case of the Exit 66 area, is home to an industrial park. Providing sewer service in these areas can facilitate business development goals. As indicated on the Sewer Service Plan map, the Exit 66 area is labeled as "conservation" and "preservation" on the State Plan map (see green areas on Sewer Service Plan map on facing page). This is likely due to the presence of the Tankerhoosen River and the A-level aquifer (see Conservation Booklet). The State is currently updating its plan; the Town should work with the State to address this inconsistency and develop options that will provide for the protection of these water resources while allowing compatible business development.

The remaining areas of Vernon would be considered "Sewer Avoidance" areas where the intent is to continue to rely upon on-site septic systems unless public health issues warrant sewer extensions.



Sewer Service Plan

Vernon, CT



State Plan



State Plan



Legend

- Sewer Service Area
- Desired Service Area
- Sewer Avoidance (for discussion purposes)

Draft



This map was created by the Town of Vernon GIS Department 06/24/10

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Other Utilities

Water

Vernon's residents and businesses obtain their water either from a water system or from on-site wells. The Water Service Plan indicates approximate areas served by water systems.

A regional water provider, the Connecticut Water Company, is the predominant water provider to those properties on a public system. While projections for future service connections and demand are not available for individual towns, the CT Water Company did provide projections for the regional system. They project service connections to reach just over 34,600 by 2020 (there were 29,837 connections in 2005) and demand to reach 6.8 million gallons per day by 2020 (demand was 5.9mgd in 2005). Overall they anticipate they can meet water needs of the region over the next 10 years.

There also are a number of smaller systems that generally provide water to a specific development or parcel. Issues or long term needs related to these systems were not identified.

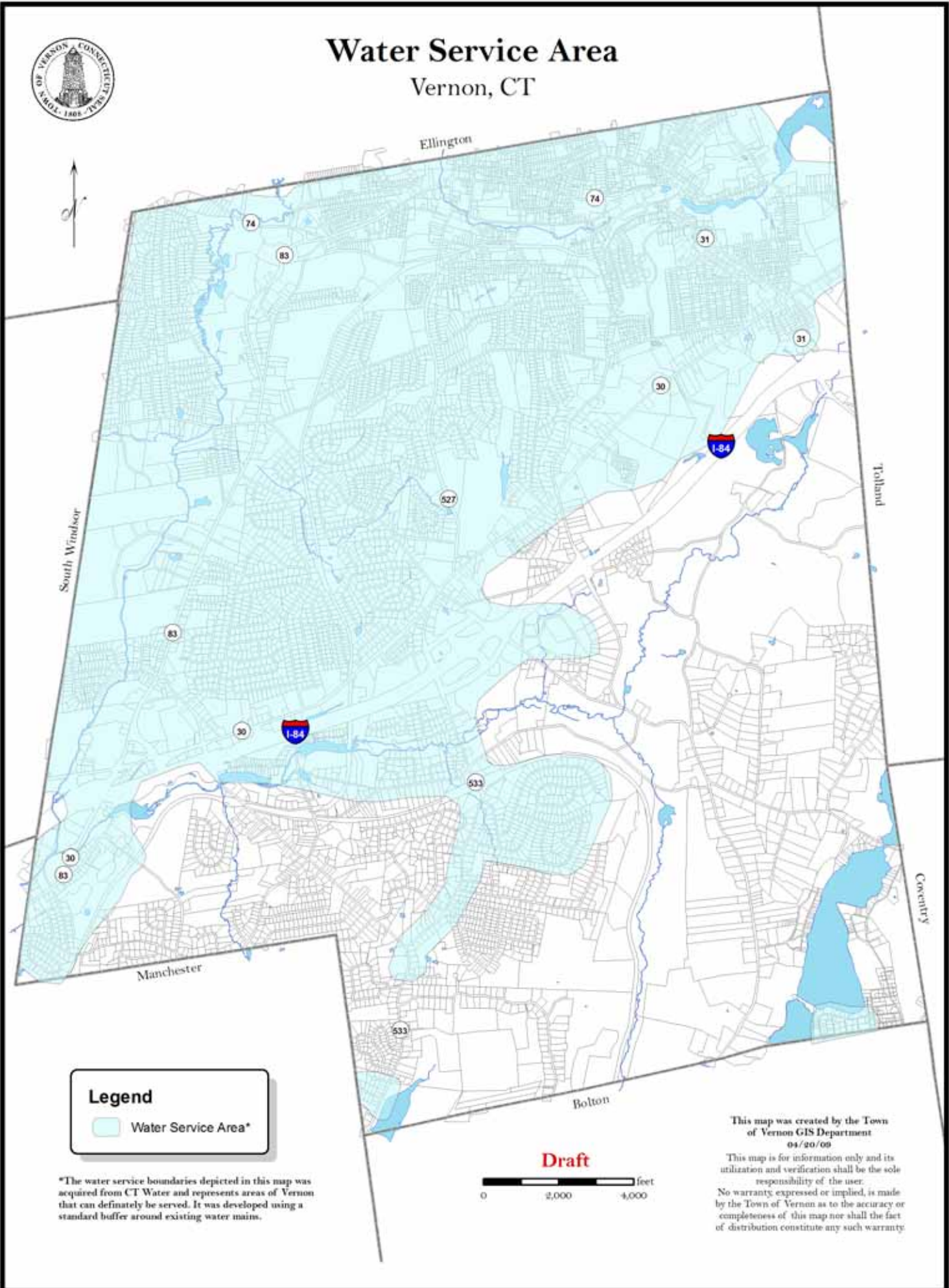
There is one emerging issue that the Town should monitor over time. A number of properties south of I-84 that use on-site wells are hooked up to sewer systems. This will also be the situation around Bolton Lakes, once the new sewer system is built. As discussed in Booklet 4, Conservation, when a property has an on-site well and septic system, the water cycles up from the well and discharges back into the ground after treatment in the septic system. With sewers, that water is instead transferred off-site, and in many cases in Vernon, to a different watershed. This causes an imbalance in the water budget; over time it could impact the amount of ground water available for wells. This situation should be carefully monitored to ensure that well water levels are not affected. Efforts to increase stormwater infiltration on site can also help mitigate this water loss (LID).

Finally, areas without public water need a source of water for fighting fires. The Fire Marshal and Fire Chief recommend that cisterns are installed at key locations in areas that lack public water service.



Water Service Area

Vernon, CT



Legend

 Water Service Area*

*The water service boundaries depicted in this map was acquired from CT Water and represents areas of Vernon that can definitely be served. It was developed using a standard buffer around existing water mains.



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Drainage

The Town has begun mapping its drainage infrastructure so that there will be a complete inventory of the location and size of pipes and other structures. According to the Department of Public Works, continued inspections and maintenance of the existing drainage system is the priority.

As discussed in Booklet 4, Conservation, the Town should pursue low impact development techniques, which promote on-site infiltration. Reducing the amount of storm water that runs off of properties (and into drainage pipes) relieves burdens on the Town's drainage infrastructure and can reduce the need for constructing and maintaining additional drainage structures.

Communications

Outside of upgrades to public safety communication systems, issues related to telephone, cable, cellular and other communications have not been identified.

Energy

Connecticut Light and Power (CL&P) provides electrical service in Vernon. Recent upgrades to the Rockville substation and the addition of new substations in surrounding towns have improved electrical service. CL&P anticipates having adequate capacity to serve Vernon over the next 10 years.

Yankee Gas provides natural gas service to parts of Vernon. To accommodate growth in natural gas use, upgrades to Vernon's gate station are planned. The process for the upgrade has begun and eventually will require approval by the Connecticut Department of Public Utility Control. Yankee Gas aims to have the new gate station on-line by 2012.

Workshop attendees expressed a desire to see the promotion of alternative energy options. The Planning and Zoning Commission may wish to review zoning regulations and amend as needed to accommodate appropriate alternative energy. The Town established an Energy Committee and has undertaken efforts to reduce energy consumption at town facilities such as Board of Education buildings and the Wastewater Treatment Plant.

The Town Council recently created an Energy Improvement District to facilitate the "sharing" of excess energy generated by smaller scale energy producers. Such a district can benefit businesses by reducing energy costs and by providing greater reliability.

Vision for Utilities:

Vernon will provide for adequate utilities to meet community needs and to support desired land use patterns. The Town will be on the forefront of innovative approaches to providing for the energy needs of businesses and residents.

Potential Strategies:**Coordinate land use goals with the provision of sewer service:**

1. Work with the State and the WPCA to determine appropriate sewer extensions for business development purposes.

Ensure that utilities meet current and future needs:

2. Continue to maintain the sewer system and plan for upgrades as needed.
3. Longer term, monitor water levels in areas with on-site wells and public sewer service to determine if ground water levels are impacted.
4. Continue to inventory and maintain current drainage infrastructure.
5. Implement low impact development (LID) measures to reduce stormwater flow into the Town's drainage system.
6. Keep private utility providers apprised of future development potential to ensure adequate availability of utilities.

Meet energy needs:

7. Continue to seek alternative energy approaches to reduce energy consumption and energy prices for businesses and residents.
8. Review zoning regulations and update as needed to allow appropriate alternative energy structures.

