

Town of Richmond
Planning Commission Meeting
AGENDA

Wednesday October 21st, 2020, 7:00 PM

Due to restrictions in place for COVID-19, and in accordance Bill H.681 **this meeting will be held by login online and conference call only**. You do not need a computer to attend this meeting. You may use the "Join By Phone" number to call from a cell phone or landline. When prompted, enter the meeting ID provided below to join by phone. For additional information and accommodations to improve the accessibility of this meeting, please contact Ravi Venkataraman at 802-434-2430 or at rvenkataraman@richmondvt.gov

Join Zoom Meeting: <https://us02web.zoom.us/j/83865973702>

Join by phone: (929) 205-6099

Meeting ID: 833 7940 8426

1. Welcome and troubleshooting
2. Adjustments to the Agenda
3. Public Comment for non-agenda items
4. Approval of Minutes
 - October 7th, 2020
5. Discussion on outreach schedule
 - Review discussion points for East Main St. discussions
6. Discussion on Town Plan goals regarding Richmond Village
7. Discussion on "Zoning for Great Neighborhoods"
8. Other Business, Correspondence, and Adjournment
 - Notice from Town of Hinesburg on Town Plan update
 - Notice from Town of Williston on amendments to the Unified Development Bylaw
 - Update on recent legislative changes

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2 Richmond Planning Commission
3 REGULAR MEETING MINUTES FOR October 7, 2020
4

Members Present: Chris Cole, Scott Nickerson, Virginia Clarke, Chris Granda, Alison Anand,
Mark Fausel, Brian Tellstone (joined at 7:30 pm)
Members Absent: Joy Reap, Jake Kornfeld,
Others Present: Ravi Venkataraman (Town Planner/Staff), Mark Hall, Marshall Paulsen,
5 Don Morin

6 **1. Welcome and troubleshooting**
7

8 Chris Cole called the meeting to order at 7:02 pm
9

10 **2. Adjustments to the Agenda**
11

12 Scott Nickerson said he would like to address his resignation from the Planning Commission. Cole
13 thanked him for his service, and the perspective and knowledge he brought to the Planning
14 Commission. Nickerson expressed his gratitude to Planning Commission members and wished the
15 members all the best.
16

17 **3. Public Comment for non-agenda items**
18

19 Don Morin said he owned three or four properties in Richmond, including his house. Morin said that he
20 approached the DRB in 2014 to propose a four-unit building to replace the single-family dwelling at 112
21 E. Main Street, and was rejected by the DRB at the time. Morin said that he sold the property last
22 month. Morin expressed the need to increase density allowances in zoning to the commission. He said
23 the subject lot is 0.47 acres, and the neighboring property is 0.35 acres and has four units, and other
24 properties along Main Street are similar to his, concluding that the number of units under present
25 conditions do not coincide with the zoning regulations. Morin said that he is in favor of allowing more
26 density in the village. Cole said that the Town Plan calls for higher density and the commission is
27 looking into adding density along major corridors in a manner that is compatible with the existing built
28 environment. Fausel said that he recognizes that the speed in which the Planning Commission works is
29 not responsive enough and has affected the community, apologizes for it, and hopes to improve going
30 forward. Morin acknowledged the needed role of the Planning Commission and its pace of work, and
31 added that increased density allowances would lead to better buildings. Cole said that the commission
32 will have discussions later in the meeting on density allowances and bringing the community into the
33 discussion. Nickerson asked for clarification on whether the property was 112 E. Main Street or 102 E.
34 Main Street, and said that the footprints of the buildings fits well within the village.
35

36 **4. Approval of Minutes**
37

38 Motion by Mark Fausel, seconded by Chris Granda, to approve the September 16, 2020 Planning
39 Commission meeting minutes. Voting: unanimous. Motion carried.
40

41 **5. Review of Housing Committee applicants**
42

43 Cole asked Mark Hall for brief introduction. Hall said he recently moved to Richmond, works for
44 Dealer.com, holds an MBA, is certified in project management, and manages properties in Williston.

45 He said he came to Richmond to grow family, with the intent of becoming longtime residents. Hall said
46 that with his background in business, and as a landlord, he can be an asset to the housing committee.
47 Cole asked Virginia Clarke and Fausel about the process. Clarke said that the commission
48 would recommend the applicant, and that there is only one vacancy on the Housing Committee
49 currently. Granda asked if there were other applicants. Ravi Venkataraman said there weren't,
50 that he had kept the application period open for three weeks for letters of interest, and that
51 therefore applicants had adequate time to file a letter of interest.

52

53 Motion by Granda, seconded by Clarke, to recommend to the Selectboard the appointment of Mark Hall
54 to the Housing Committee. Voting: unanimous. Motion carried.

55

56 **6. Review of statement of policy goals guiding our zoning work**

57

58 Clarke provided an overview of the posting on Front Porch Forum of the Planning Commission goals
59 document, and said that this would be provided in all future outreach. Clarke said that the Planning
60 Commission should reflect on the Town Plan goals and that the commission should reach out to other
61 stakeholders listed in the Town Plan to check their progress on goals. Cole concurred, and asked
62 Venkataraman if he had the list of goals the commission needed to address. Venkataraman said he did.
63 Venkataraman said that he has received positive feedback on the Front Porch Forum posting from the
64 public, that it may be good for the commission to provide regular updates like this in the future, that
65 other town boards and committees should be invited to Planning Commission meetings for input and
66 feedback. Alison Anand said that the energy section of the Town Plan evoked concern among the
67 public. Clarke asked for suggestions to disseminate the post. Fausel suggested reposting on Front
68 Porch Forum. Granda concurred, adding that it could be posted in the Times Ink. Nickerson suggested
69 posting it on the Planning Commission web page. Venkataraman asked for clarification if this was to be
70 reposted on its own or with the outreach schedule, and recommended reposting with the outreach
71 schedule so that the public would be able to act upon the Planning Commission's post. Clarke
72 concurred.

73

74 **7. Invitation for residents to participate in the conversation**

75

76 Clarke overviewed a draft outreach schedule she wrote. Venkataraman suggested grouping the
77 outreach groups by geography instead of existing groups. Fausel suggested language that suggests
78 that anyone interested in the conversations about the areas identified should attend. Cole said that the
79 schedule should include the opportunity for people who attended to attend again and provide comments
80 on any draft language the Planning Commission formulates. Cole recommended that the public should
81 be informed of the full process, from the input stage to implementation. Cole said that the schedule as
82 presented may be too aggressive. Anand suggested gaps in the schedule to resolve ongoing
83 discussions, and to allow people multiple opportunities to attend. Anand suggested advertising the
84 outreach schedule in various media. Fausel recommended providing a brief statement on Front Porch
85 Forum and a link to the website for the full posting. Fausel said he liked Clarke's schedule, and
86 recommended having public input at the forefront. Granda disagreed with Fausel, suggesting a proposal
87 for the public to review to stimulate discussion. Venkataraman suggested meetings in between public-
88 input focused meetings to debrief and to create discussion questions to guide the conversations. Cole
89 suggested providing images to give a concrete sense of implementation and referred to the "Zoning For
90 Great Neighborhoods" initiative. Clarke asked about the frequency of the outreach meetings. Anand
91 recommended every other meeting. Fausel concurred, and said that an introductory framework should
92 be provided. Granda had concerns about the lack of time in the schedule to process and debrief. Cole
93 said that the commission should rely upon the Town Plan for guidance and use that during the outreach
94 meetings. Venkataraman recommended connecting the Town Plan goals with concrete examples so
95 that the public understands how implementation would occur. Granda concurred. Nickerson cited Don
96 Morin's property as an example of density in the community. Cole said that the commission should
97 provide references to the public on examples of various densities and forms within Richmond.

98 Venkataraman showed the commission a draft table listing the multifamily dwellings in the village, and
99 will be sending this out to the commission in the coming days. Cole said that he, Clarke and
100 Venkataraman will work on a schedule for the commission outside the meeting. Fausel suggested
101 providing maps easily accessible. Venkataraman said he could provide maps and modify the webpage
102 accordingly. Anand suggested reviewing traffic impacts with expansions in density allowances.
103

104 **8. Developing a model for mixed use in the village by looking at the specifics of the current**
105 **Residential/Commercial District**
106

107 Clarke overviewed the document she prepared for the Planning Commission meeting, and areas
108 adjacent to the Residential/Commercial District worth consideration for rezoning. Clarke recommended
109 classifying uses to trigger an administrative site plan review requirement, and had concerns about
110 providing guidelines for the zoning administrator because the zoning administrator may not like it so.
111 Venkataraman said that the commission should think about the impact of the use and then state that the
112 use requires an administrative approval or a DRB approval, because in many cases, the difference is
113 the time the permitting takes and not necessarily the rigor of review. Cole said that the "Zoning for Great
114 Neighborhoods" document is salient and should be applied in this context. Venkataraman added that
115 the commission should not take into consideration whether the zoning administrator or he likes the
116 regulations, and instead the commission should create thorough regulations that provide the zoning
117 administrator support in their decisions and hold in court on appeal.
118

119 **10 Adjournment**
120

121 Motion by Nickerson, seconded by Granda to adjourn the meeting. Voting: unanimous. Motion
122 carried. The meeting adjourned at 8:55 pm.
123

124 Respectfully submitted by Ravi Venkataraman, Town Planner

The 2018 Richmond Town Plan lists a number of goals related to zoning that the **Planning Commission** is asked to address. These can be found in the Implementation Section starting on page 41. This memo is a summary of the goals that can be used as supporting material for changes that the PC is proposing for the village area in the Richmond Zoning Regulations.

Community Development:

- 1,2 (goal, action) – “explore ways to allow for non-traditional housing types (and) ways to encourage the creation of new business enterprises”
- 1,3 – “allow for the presence and development of healthcare and critical facilities”
- 1,6 – “support new and/or unique employment opportunities ... such as expanded allowance of cottage industries and home occupations”
- 4,4 – “ensure that zoning regulations allow for sustainable recreational uses of public and private lands including, but not limited to, the potential development of community centers, outdoor seating or gathering, performance spaces”

Economic Development:

- 1,2 – “streamline the business permitting process and reduce permitting costs for small businesses or entrepreneurs”
- 1,3 – “...support pop-up and experimental businesses such as special events, temporary markets, food trucks and pop-up stores”
- 2,1 – “...allow for approved forest and farm based commercial activities”
- 3,1 – “ study the potential for expanding Richmond’s village center, and renew the Village Center designation”
- 3,3 – “...ensure that concentrated growth occur in designated growth centers, thus bringing residents and businesses in close proximity”
- 4,4 – “support economic development of local character areas”

Future Land Use:

- 1,2 – “create policies that encourage affordable housing development”
- 1,5 – “create form-based zoning regulations that include architectural and design requirements ... especially in mixed-use districts’
- 1,6 – “explore density-based zoning”

Housing:

- 1,1 – “...identify opportunities for development of a variety of housing types, for example allowing mixed residential and commercial use, higher unit density, or unique accessory housing ...”

- 1,3 – “create a town housing committee that can identify needs and partner with organizations to ...identify opportunities for construction or adaptation of housing stock, as well as aid in creation of affordable housing policies...”
- 1,4 – “encourage concentrated residential development in areas identified for growth”

Natural Resources:

- 2,2 – “...allow for value-added or accessory enterprises ... on farm ...properties as a means of maintaining large parcels”
- 3,4 – “ ...include Smart Growth principles such as concentrated downtown development ...to maintain Richmond’s historic settlement pattern and village character”

Transportation:

- 3,3 ---- “encourage Smart Growth development in the village center/downtown, or near transit options, to reduce car travel distances”

Technical Plan	Goal, Action	Action Language	Party	Time Frame	Status	Point Person
Community Development (CD)	5,3	Support public health programs and resources in and outside of Richmond by ensuring town policies allow for their presence and the development of critical facilities	Planning Commission	Ongoing		
Community Development (CD)	1,2	When updating zoning regulations, explore ways to allow for non-traditional housing types, ways to encourage the creation of new business enterprises	Planning Commission	Short Term		
Community Development (CD)	1,6	Support new and/or unique employment opportunities for Richmond residents through policy and regulation, such as continued or expanded allowance of cottage industry and home occupations	Planning Commission	Short Term		
Community Development (CD)	4,4	Support public and private recreational businesses or endeavors by ensuring that zoning regulations allow for sustainable recreational uses of public and private lands including, but not limited to, the potential development of community centers, outdoor seating or gathering, performance spaces, etc.	Planning Commission	Short Term		
Community Development (CD)	1,3	Support public health programs and resources in and outside of Richmond by ensuring that town policies and regulations allow for their presence, the development of healthcare and critical facilities, and by supporting and allowing access for all individuals to facilities and programs	Planning Commission, Selectboard	Ongoing		
Economic Development (ED)	3,2	Develop a Downtown Master Plan that will direct growth to the village area and address streetscape improvements identified in existing plans. Pursue strategies to attract and focus commercial activity in Jonesville	Planning Commission	Long Term		
Economic Development (ED)	4,1	Collaborate with the Trails Committee and Conservation Commission to conduct an assessment of current and needed trails and trail networking in Richmond	Planning Commission	Long Term		
Economic Development (ED)	1,1	Create clear guidelines and information resources for permit applicants, clarifying requirements and steps for permitting and approval.	Planning Commission	Short Term		
Economic Development (ED)	1,2	Streamline the business permitting process and reduce permitting costs for small businesses or entrepreneurs	Planning Commission	Short Term		
Economic Development (ED)	2,1	Update Richmond's land use regulations to protect these industries by incorporating strategies to reduce forest and farm fragmentation and allow for approved forest and farm based commercial activities	Planning Commission	Short Term		

Economic Development (ED)	2,5	Explore regulatory means of supporting the viability of farm and forest based land uses	Planning Commission	Short Term		
Economic Development (ED)	3,1	Study the potential for expanding Richmond’s village center, the benefits of the Designated Downtown program, and renew the Village Center Designation	Planning Commission	Short Term		
Economic Development (ED)	3,3	Maintain and upgrade zoning regulations and development review policies to ensure that concentrated growth occurs in designated growth centers, thus bringing residents and businesses in close proximity	Planning Commission	Short Term		
Economic Development (ED)	4,4	Support economic development of local character areas through zoning regulations	Planning Commission	Short Term		
Economic Development (ED)	6,1	Update land use regulations to include permitting steps, development parameters and mitigation requirements specific to renewable energy projects	Planning Commission	Short Term		
Economic Development (ED)	1,3	Create a permit to support pop-up and experimental businesses such as special events, temporary markets, food trucks and pop-up stores	Planning Commission	Short Term		
Emergency Resilience (ER)	1,10	Continue to strictly regulate development in the Special Flood Hazard Area	Planning Commission	Short Term		
Energy (E)	1,1	Adopt and maintain a zoning ordinance based on “smart growth” principles, with most development concentrated in the village, neighborhoods, downtown, gateway mixed use areas to reduce vehicle miles travelled from housing to shopping and to public transit options.	Planning Commission	Short Term		
Energy (E)	1,10	Consider requiring EV charging stations for new commercial development.	Planning Commission	Short Term		
Energy (E)	1,11	Update zoning regulations to include language to clarify permitting requirements for new electric vehicle charging installations and support the ongoing development of this infrastructure.	Planning Commission	Short Term		
Energy (E)	2,7	Consider adopting all or parts of the State’s Energy Stretch Code in the town’s zoning regulations for new construction, renovations, and/or additions.	Planning Commission	Short Term		
Energy (E)	3,1	Develop potential standards for renewable energy generation facilities, including mitigation of aesthetic and natural resources impacts	Planning Commission	Short Term		
Energy (E)	3,2	Designate specific locations as preferred sites for the siting of net-metered solar generation projects.	Planning Commission	Short Term		

Energy (E)	4,1	Develop an energy action plan for the Town to implement the energy goals and actions in this plan and assist with evaluating investments in energy efficiency and renewable energy opportunities that benefit the town.	Planning Commission, Energy Coordinator	Short Term		
Future Land Use (FLU)	1,2	Create policies that encourage affordable housing development	Planning Commission	Short Term		
Future Land Use (FLU)	1,4	Create zoning regulations that support the above mentioned uses and prohibitions	Planning Commission	Short Term		
Future Land Use (FLU)	1,5	Create form-based zoning regulations that include architectural and design requirements to be met in certain districts, especially mixed-use areas	Planning Commission	Short Term		
Future Land Use (FLU)	1,6	Explore density-based zoning when updating the land use regulations	Planning Commission	Short Term		
Future Land Use (FLU)	2,1	Continue to prohibit damaging or dangerous types of development in sensitive or conserved areas such as floodplain or steep slopes	Planning Commission	Short Term		
Future Land Use (FLU)	2,2	Restrict certain types of development in sensitive or high priority natural areas	Planning Commission	Short Term		
Future Land Use (FLU)	2,3	Encourage development that protects natural resources and preserves scenic and/or historic character of Richmond	Planning Commission	Short Term		
Historic Resources (HR)	1,5	Reapply for the State of Vermont Agency of Commerce and Community Development's Village Center Designation	Planning Commission	Short Term		
Historic Resources (HR)	1,7	Ensure that town regulations allow for historic interpretive signage and historic markers.	Planning Commission	Short Term		
Housing (H)	1,5	Consider participation in the FEMA Community Rating System which can lower overall home insurance costs for homeowners in the Special Flood Hazard Area	Planning Commission	Long Term		
Housing (H)	1,2	Continue to support the existence of the mobile home park, and support additional affordable housing development in the park	Planning Commission	Ongoing		
Housing (H)	1,1	When updating zoning regulations, identify opportunities for development of a variety of housing types, for example allowing mixed residential and commercial use, higher unit density, or unique accessory housing in certain identified districts	Planning Commission	Short Term		

Housing (H)	1,3	Create a town housing committee that can identify needs and partner with organizations to help secure funding and identify opportunities for construction or adaptation of housing stock, as well as aid in the creation of affordable housing policies that are welcomed by both developers and residents	Planning Commission	Short Term		
Housing (H)	1,4	Encourage concentrated residential development in areas identified for growth	Planning Commission	Short Term		
Housing (H)	1,9	Support programs and funding sources for preserving and renovating historic or older homes that can help owners maintain historic character and livability	Planning Commission, Historical Society	Ongoing		
Natural Resources (NR)	1,14	Protect river corridors to ensure that streams and rivers have the room they need to move and change over time by utilizing Vermont's River Corridor maps and establishing setbacks for small streams during development review (small stream: less than 2 square miles of drainage area)	Planning Commission	Long Term		
Natural Resources (NR)	1,15	Safeguard water quality, stream channel stability, habitats, and habitat connectivity by protecting riparian areas	Planning Commission	Long Term		
Natural Resources (NR)	3,2	Encourage creative development that minimizes both visual and environmental impacts on the landscape	Planning Commission	Ongoing		
Natural Resources (NR)	4,2	Manage trail development and usage on Town lands to protect neighboring property owner rights and possible sensitive natural areas or conservation priorities such as those listed previously	Planning Commission	Ongoing		
Natural Resources (NR)	1,3	Utilize the best available science to inform the creation of supplemental land use regulations and maps that would further conserve or protect sensitive natural areas	Planning Commission	Short Term		
Natural Resources (NR)	1,6	Minimize the fragmentation and intrusion into sensitive wildlife habitats and forests, including Contiguous Habitat Units and Wildlife Travel Corridors, through land use regulation that promotes Vermont's Smart Growth principles such as clustering development, siting development in a manner to preserve contiguous habitat areas, and through coordinating with neighboring towns on border areas.	Planning Commission	Short Term		

Natural Resources (NR)	1,7	Restrict development on steep slopes between 20% and 35%, cliffs, and ridgelines over 900ft in elevation, and prohibit all structural development (including renewable energy generation facilities and distribution/transmission infrastructure) on slopes greater than 35% , in order to maintain habitat connectors and mitigate erosion	Planning Commission	Short Term		
Natural Resources (NR)	1,13	Continue to prohibit the construction of new principal structures in the Special Flood Hazard Areas of the Winooski and Huntington Rivers	Planning Commission	Short Term		
Natural Resources (NR)	1,20	Integrate applicable Low Impact Development (LID) standards into land use regulations	Planning Commission	Short Term		
Natural Resources (NR)	1,21	Review land use regulations to ensure compliance with all Vermont and federal regulations that provide surface water protection	Planning Commission	Short Term		
Natural Resources (NR)	2,2	Explore amending zoning regulations to allow for value-added or accessory enterprises, that are not currently exempt through state law, on farm or forest properties as a means of financially maintaining large parcels	Planning Commission	Short Term		
Natural Resources (NR)	2,3	Avoid the creation of landlocked parcels during subdivision of farm or forestry lands by encouraging the maintenance of rights of way and accesses	Planning Commission	Short Term		
Natural Resources (NR)	3,1	Update the previously performed (2002) Scenic Viewshed Assessment to identify and map public priorities for landscape conservation, and restrict development that would compromise those identified viewsheds	Planning Commission	Short Term		
Natural Resources (NR)	3,3	Adopt zoning regulations that mitigate noise pollution and light pollution	Planning Commission	Short Term		
Natural Resources (NR)	3,4	Adopt zoning regulations that include Vermont's Smart Growth principles such as concentrated downtown development in order to maintain Richmond's historic settlement pattern and village character.	Planning Commission	Short Term		
Natural Resources (NR)	1,4	Continue to support the efforts of the public and private organizations such as the Richmond Conservation Commission, Richmond Trails Committee, and Richmond Land Trust to protect sensitive natural areas	Planning Commission, Town-Wide	Ongoing		
Transportation (T)	3,3	Encourage "smart growth" development in the village center or downtown, or near transit options, to reduce car travel distances.	Planning Commission	Short Term, Ongoing		

TO: Planning Commission

FROM: Ravi Venkataraman, Town Planner

DATE: October 16, 2020

SUBJECT: Form-based code elements

In addition to the “Enabling Better Places: A Zoning Guide for Vermont Neighborhoods”, below are built environment forms worth consideration for implementation, including:

- Accessory Dwelling Units (ADU) to single-family dwellings
- “Cottage Court” developments
- Townhouses (multifamily dwelling uses with separate street entrances per unit)
- Buildings with multiple residential units (multifamily dwelling uses with one street entrance for all the units)
- Commercially oriented mixed-use building

These examples are from:

- City of Burlington Community Economic Development Office (CEDO)
- South Burlington’s Land Development Regulations
- Shelburne’s Form-Based Code
- “Enabling Better Places: A Zoning Guide for Vermont Neighborhoods”
- Brattleboro’s Land Development Regulations
- Newport’s Land Development Regulations
- Aerial images of example properties in Richmond

To note: While these examples may imply a streetscape standard, building elements and building dimensions are only aspects of a streetscape standard. Streetscape standards also include travel lane width, street parking standards, roadway elements (i.e. planters, bump-outs, chicanes), bicycle facilities, sidewalk standards, landscaping, lighting, signage, and ADA standards (i.e. curb cuts, tactile elements, ramp widths and grades for ramps parallel to steps).

Accessory Dwelling Units

As background, the Richmond Zoning Regulations define an accessory dwelling as:

One accessory dwelling per lot includes efficiency, one-bedroom, or two-bedroom apartment that is located within or appurtenant to, and is clearly subordinate to, a single-family dwelling; is on the same lot as the single-family dwelling; has the facilities and provisions necessary for independent living, including sleeping, food preparation, and sanitation; and that also meets the requirements of these Zoning Regulations (see Section 5.9), in accordance with the Act (§4412)

Section 5.9 adds additional detail on the definition of accessory dwellings, including that:

Either the single-family dwelling or the accessory dwelling must be occupied by the owner or by the owner’s spouse, civil union partner, parents or legal children.

The Richmond Zoning Regulations allow for more than what is required for ADUs under [24 V.S.A. 4412](#).

As shown in Figure 1 below, an ADU on a lot can be detached, attached, and within the existing single-family dwelling.

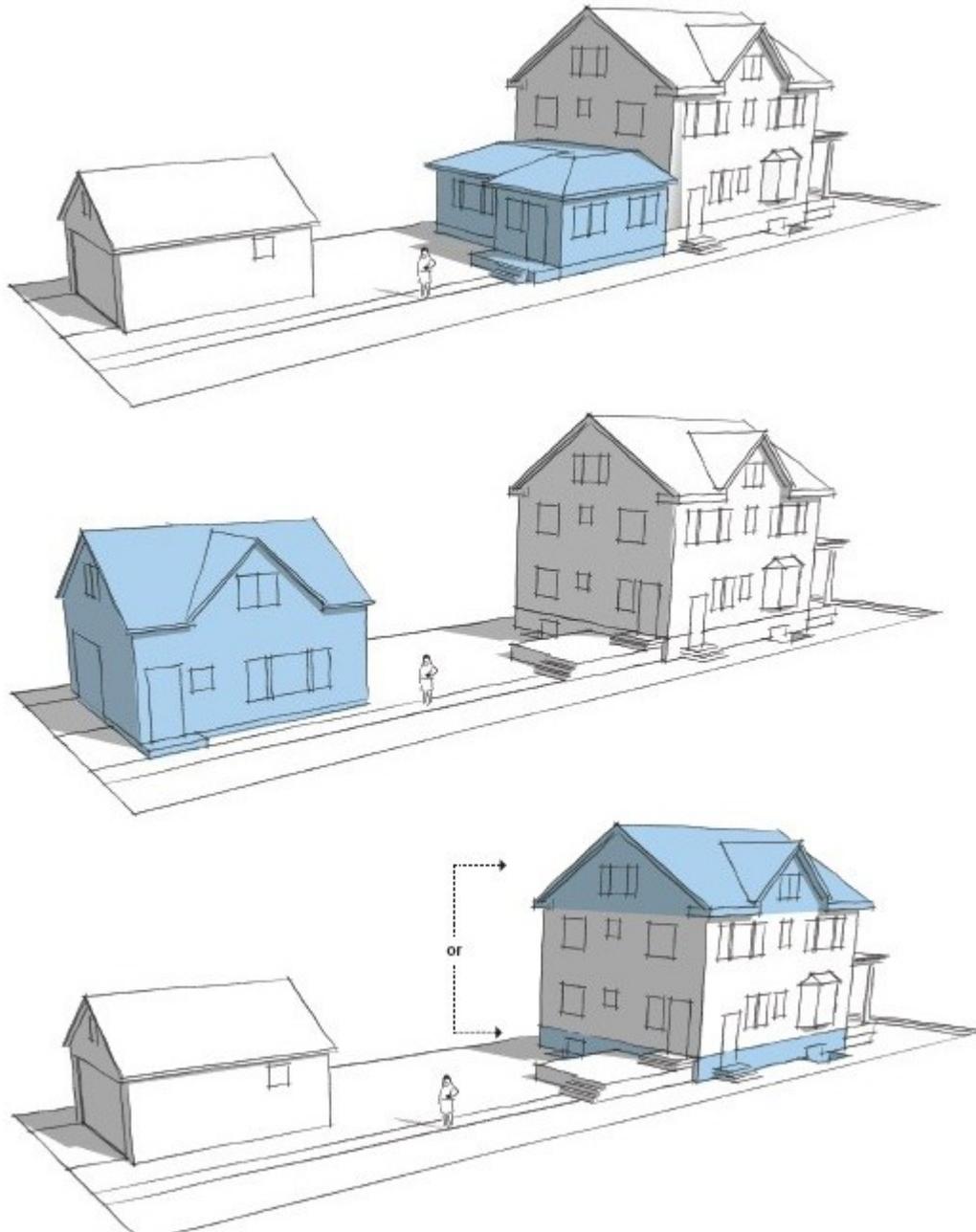


Figure 1: From City of Burlington CEDO, taken from City of Minneapolis, on methods to incorporate accessory dwellings to properties with single-family dwellings

Currently, I do not have the exact amount on the number of ADUs in Richmond. However, one example of a single-family dwelling use with an accessory dwelling in Richmond looks like this:

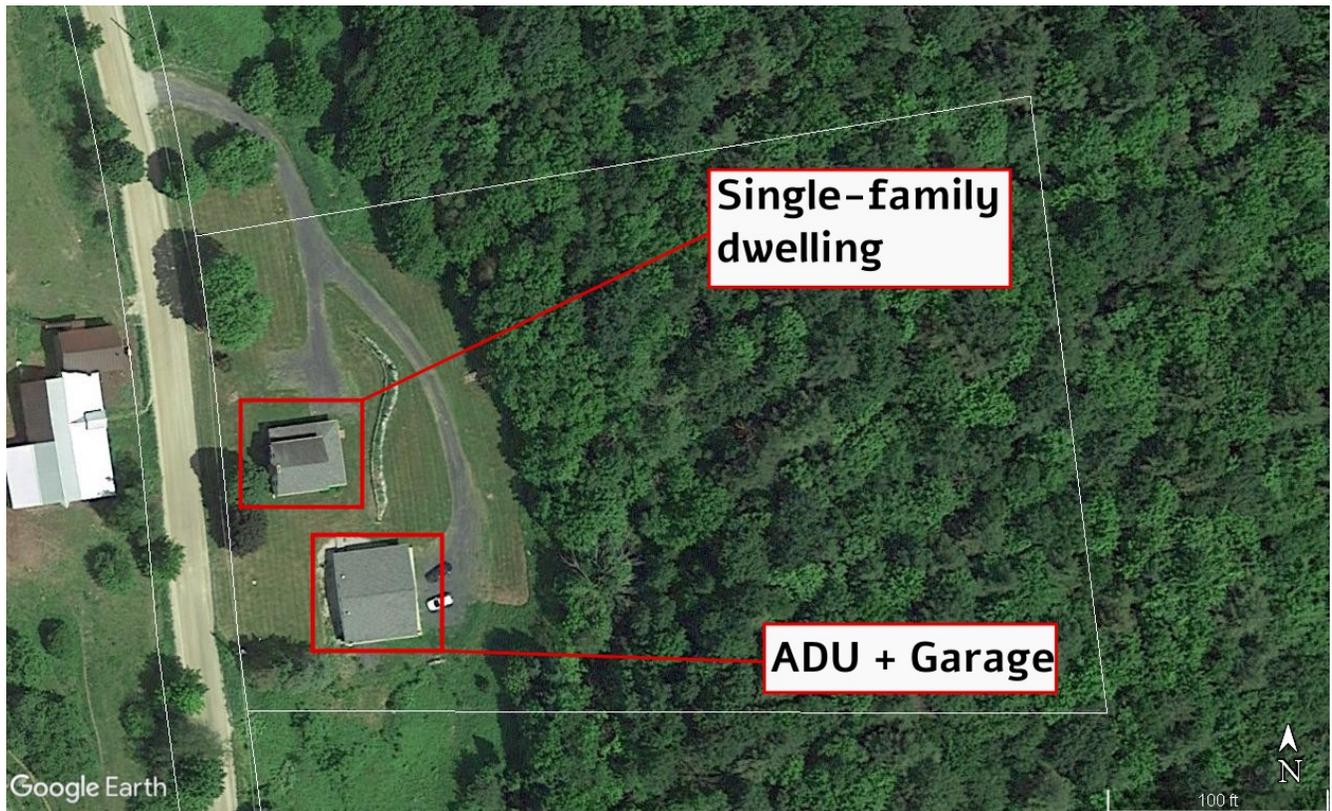


Figure 2: Example property in Richmond with a single-family dwelling and an accessory dwelling unit

Accessory Dwellings versus additional units on a property in detached dwellings

Having faced the question:

Well, if a single-family dwelling can have an accessory dwelling, couldn't a duplex have an accessory dwelling?

I think it's important to clarify the terms of an accessory dwelling. Accessory dwellings are listed as a use in the Richmond Zoning Regulations, and accessory uses are defined as (emphasis added):

A use or structure on the same lot with and of a nature which is customarily incidental and subordinate to the principal use or structure.

Usage of the terms “incidental” and “subordinate” are standard in most zoning regulations in regards to accessory structures and uses. Generally, these terms imply that:

- The accessory structure and/or use would not occur on its own without the primary use on the lot,
- The accessory structure and/or use is directly related to the uses on the property and therefore understood to be an extension of the primary use (like a garage for a single-family dwelling, or a home occupation), and

- The accessory structure and/or use would be clearly smaller in size and scale from the primary structure and use

Thus, with accessory dwellings, it is considered accessory per the zoning regulations and statute because:

- The property owner or members of the property owner’s family reside on the property,
- The statutory allowance is for only one accessory dwelling, and
- The zoning regulations state that the accessory dwelling must be smaller than 75 percent of the total habitable floor area of the single-family dwelling (with some caveats to meet statutory requirements)

For a form as shown in the middle example below from Town of Brattleboro’s Land Development Ordinance, it raises the question of whether the dwelling unit (DU) is accessory.

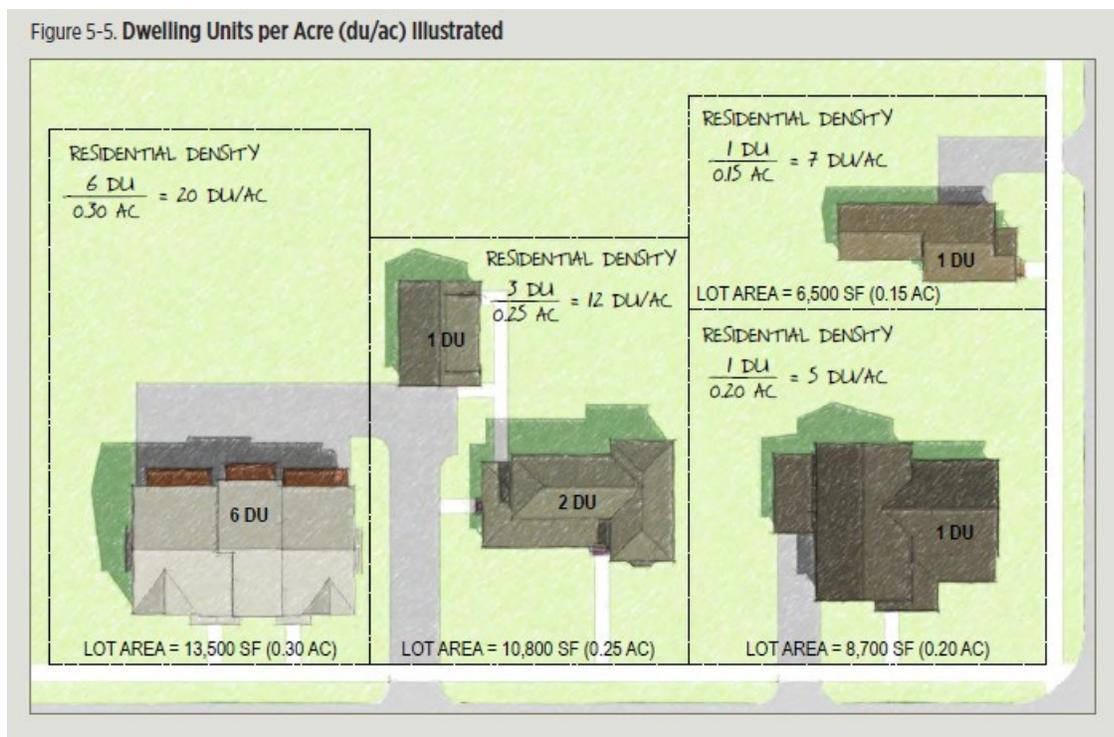


Figure 3: From Town of Brattleboro's Land Use Regulations, on calculating residential density

Currently, in Richmond, we would consider that form to be a PUD with multiple primary structures, because no allowances are provided for accessory dwellings for any use other than single-family dwellings.

Conceptually, although the dwelling unit is clearly subordinate in size and scale to the two-family dwelling (the primary use of the property), it raises the questions of if and how its existence is dependent upon the existence of the primary use—both residential units within the two-family dwelling—on the property.

Cottage Court

Provided below are examples of the form of Cottage Courts.

T-3 "Cottage Court" Building Envelope Standards

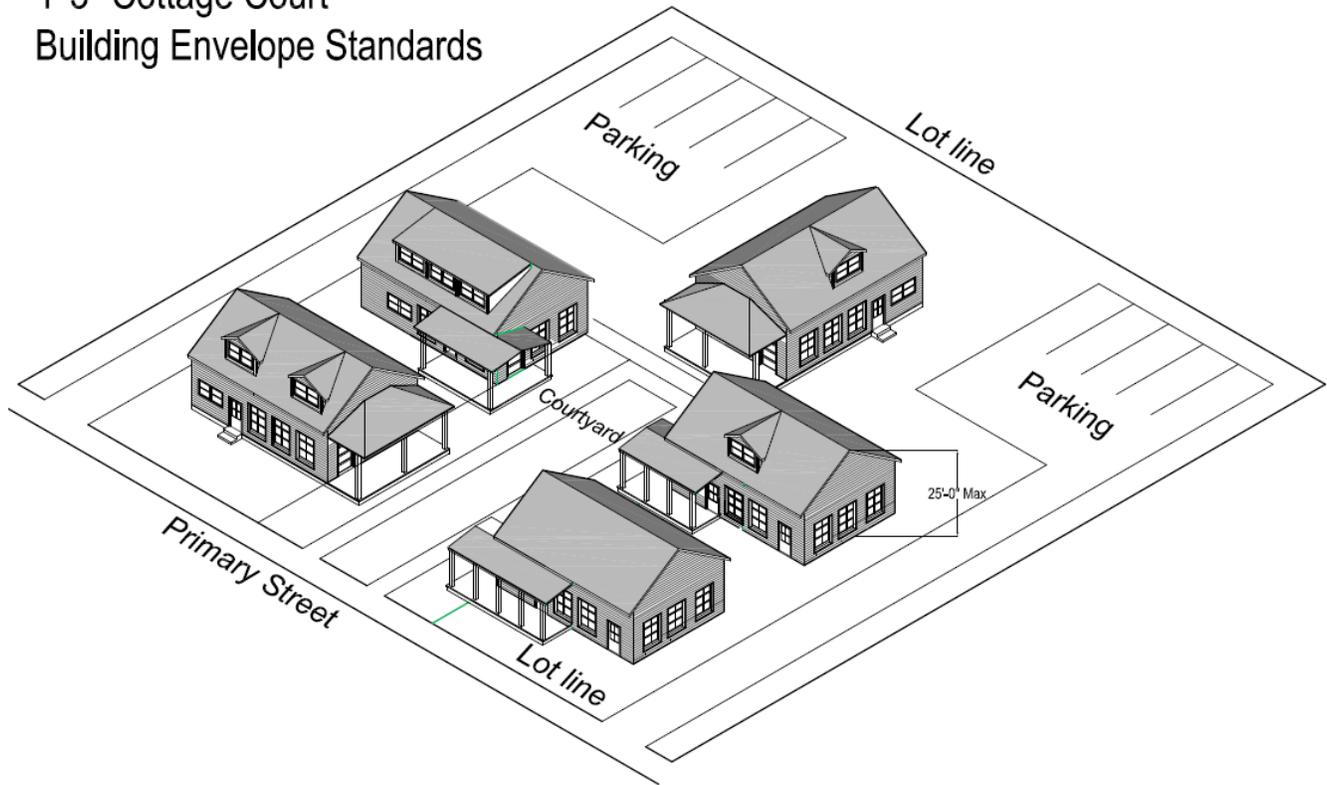


Figure 4: From City of South Burlington's Land Development Regulations

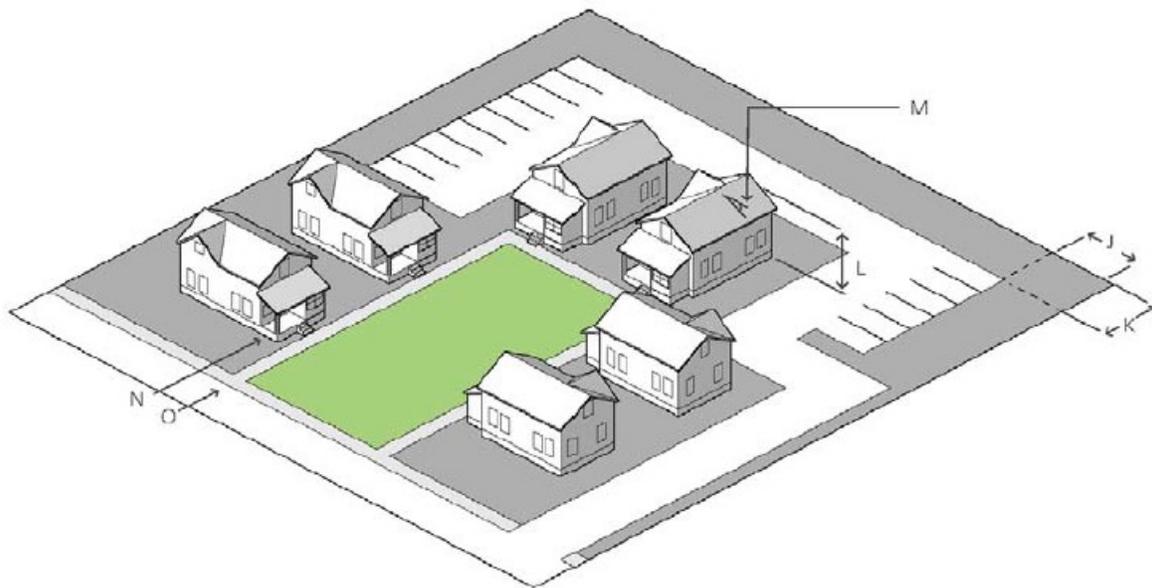


Figure 5: From Town of Shelburne's Form-Based Zoning Overlay District Regulations



Figure 6: From “Enabling Better Places: A Zoning Guide for Vermont Neighborhoods”

Implementation of the “cottage court” would trigger PUD requirements, even in form-based code, because of the unique configuration of buildings, and, possibly, lots.

Townhouses

Below are examples of townhouses—or multifamily dwelling uses with separate entrances per unit.



Figure 7: From Town of Shelburne's Form-Based Zoning Overlay District Regulations



Figure 8: From “Enabling Better Places: A Zoning Guide for Vermont Neighborhoods”

Townhouses would be approved as either multifamily dwelling uses, or as PUDs, depending on if lot lines are drawn.

Buildings with multiple residential units

Below is an example of a building with multiple residential units.



Figure 9: From Town of Shelburne's Form-Based Zoning Overlay District Regulations

Below is an example of such a building in Richmond:



Figure 10: Example multifamily dwelling use in Richmond

This type of form does not necessarily have to be exclusively residential. Compatible non-residential uses can be incorporated into regulations.

The Residential Streetscape

Below is a sketch of how a residential neighborhood with a mixture of housing types could look:

Figure 2-21. Residential Neighborhood Illustrated Building Standards

RESIDENTIAL NEIGHBORHOOD DISTRICT ALLOWS A RANGE OF HOUSING TYPES
DIVERSE BUILDING TYPES CAN BE COMPATIBLE WITH ONE ANOTHER THROUGH
CAREFUL ATTENTION TO MASSING, SCALE, FACADE ELEMENTS, AND DESIGN
ELEMENTS THAT CREATE AND MAINTAIN PRIVACY FOR RESIDENTS



Figure 11: From Town of Brattleboro's Land Use Regulations

In addition, below is a sketch of how a higher density residential street with some non-residential uses could look:

Figure 2-9. Village Center Illustrated Frontage Standards

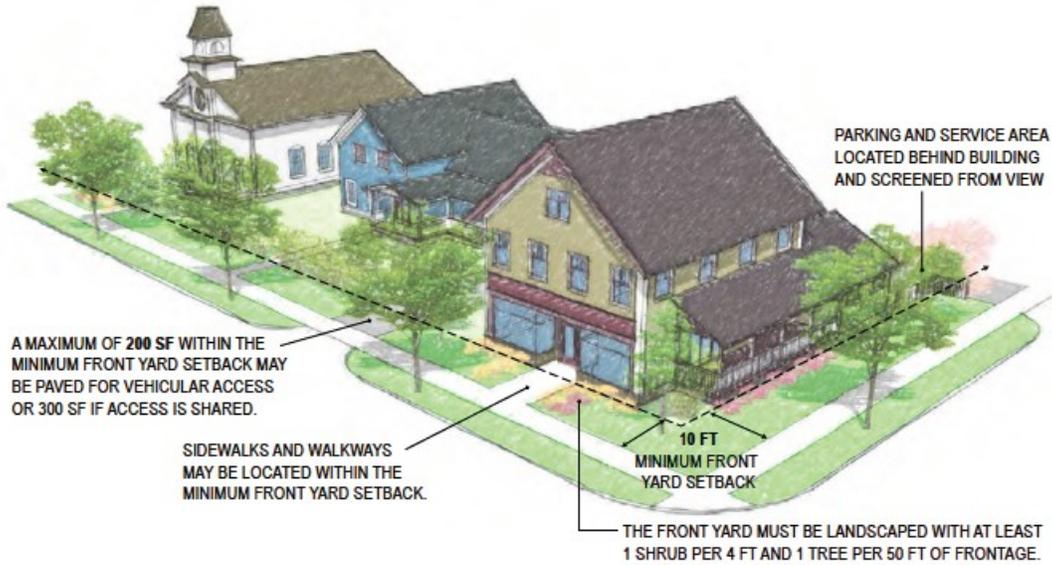


Figure 12: From Town of Brattleboro's Land Use Regulations

Mixed-use buildings and the mixed-use streetscape

Below is an example of the mixed-use commercially oriented building:



Figure 13: From Town of Shelburne's Form-Based Zoning Overlay District Regulations

In addition to building placement, and fenestration pattern requirements for the building, other parcel requirements could include:

- Screening requirements—especially between adjacent properties with dissimilar forms, uses, and scales of impacts
- Parking placed behind primary buildings
- Limits on number of curb cuts
- Stormwater management, in the form of rain gardens and drainage
- Signage aesthetics

Form-based code for mixed-use buildings usually include regulations for usage inside the building and the exterior form.

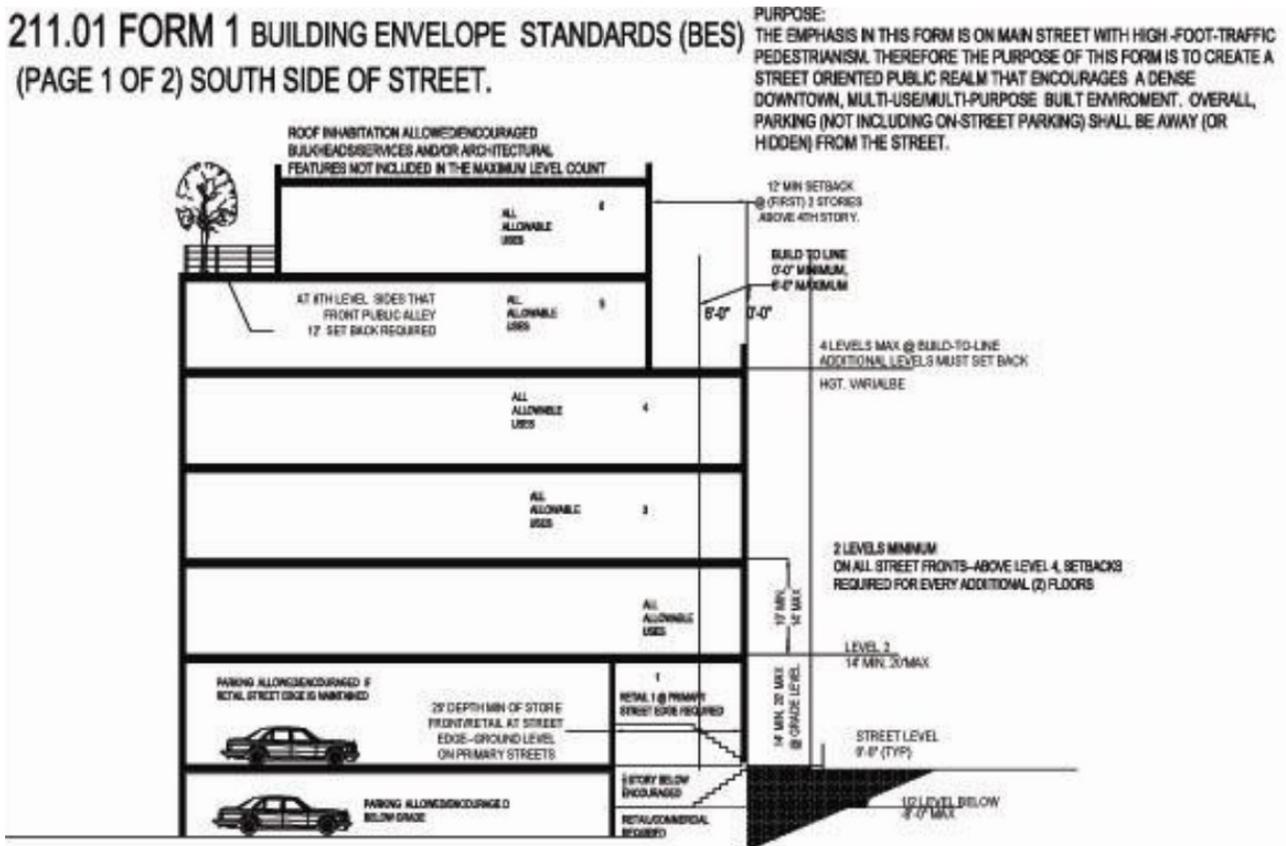


Figure 14: From City of Newport's Zoning Bylaw (Yes, even the bylaw is this blurry)

A prime example of a mixed-use building with form-based code elements would be the Masonic Block:

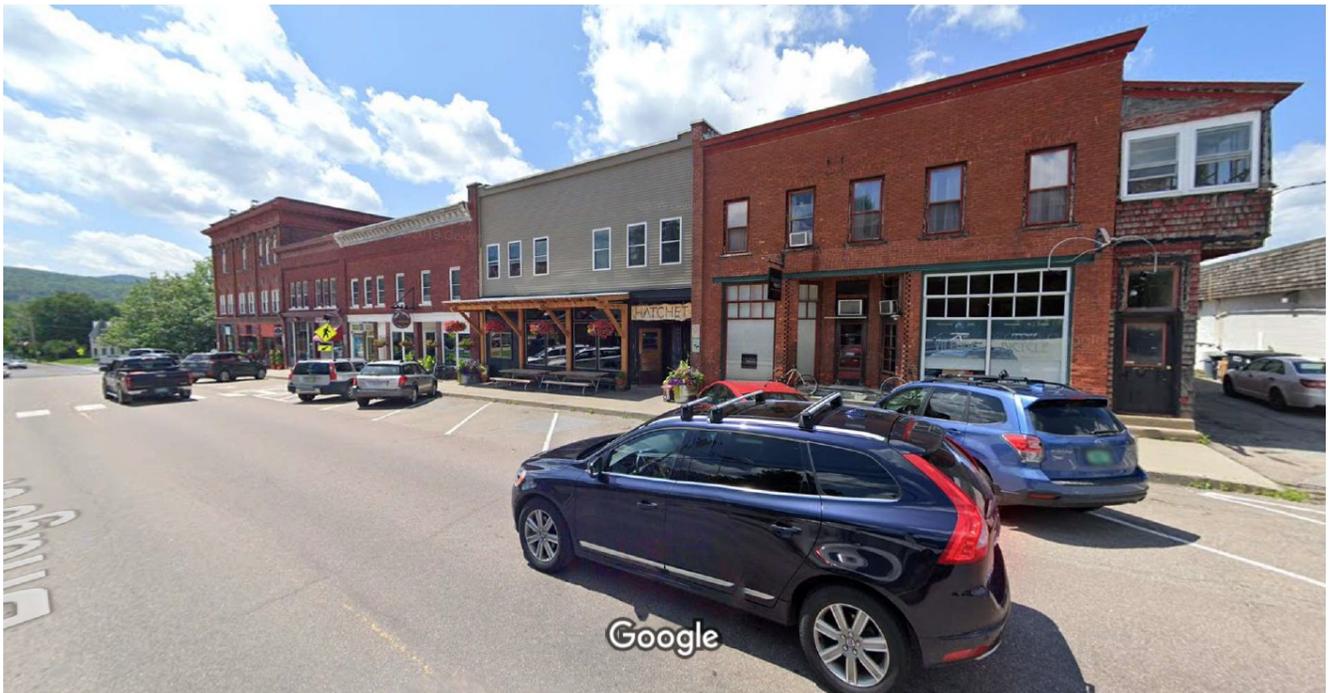


Figure 15: Bridge St., Richmond

The example streetscape would look like this:

Figure 2-4. Urban Center Illustrated Frontage Standards



Figure 16: From Town of Brattleboro's Land Use Regulations

TO: Richmond Planning Commission

FROM: Ravi Venkataraman

DATE: October 2, 2020

SUBJECT: “Zoning for Great Neighborhoods” Initiative

“Zoning for Great Neighborhoods” is an initiative by the Vermont Department of Housing and Community Development (DHCD) in partnership with the Congress for the New Urbanism (CNU). The overall goal of the initiative is to promote updating local zoning regulations to provide housing choices for more Vermonters. This includes advocating the development a variety of housing types in walkable communities and ways to adapt existing housing stock to fit the needs of the community.

Enclosed in your packet is “Enabling Better Places: A Zoning Guide for Vermont Neighborhoods”. This booklet lists a number of ways to implement the “Zoning for Great Neighborhoods” initiative. ways include:

- Modifying dimensional standards to reflect the existing built patterns while also preventing undue restrictions on a variety of housing options
- Reforming parking standards, because most zoning regulations require much more parking than what is necessary for the use and parking requirements may prevent the highest and best use of the property (such as housing)
- Revising the list of allowable uses, as the review process for certain uses in certain districts may be baseless because the impact of such uses are minimal
- Establishing street standards to promote multiple modes of users and to enable access
- Encourage the development of accessory dwelling units
- Eliminate unnecessary barriers by streamlining the development review process

Additional details on particular methods can be found in the booklet.

Based on the current conversations, I recommend that the Planning Commission consider the following methods listed in the booklet:

- Eliminating density caps on lots in the village – Most of the lots are under an acre, and these smaller lots are already constrained by parking requirements, setbacks, height limits, and lot coverage limits. These constraints already sets a limit to how many units the lot could host, and adding a density limit would be unnecessary.
- Aligning the dimensional standards with the existing or desired pattern in the Village – This would help to create a uniform streetscape for any new developments
- Removing requirements that forbid a second building on a lot in the Village – Similar to eliminating density caps, since smaller lots are already constrained by size and other requirements, smaller lots in the village have limited development potential, and the ability to add multiple primary structures and uses would cluster development in the village.
- Reexamine review processes for nonconforming buildings – Currently, the zoning regulations allow minimal expansion of nonconforming structures that were built prior to 1969 via the Conditional Use review process. Review processes may prevent landowners from adapting existing nonconforming structures. For particular projects, the review process may even be baseless and resource-intensive, since the development review process would take at least three months for Conditional Use and/or Site Plan Review versus about a month for administrative review.

- Establishing a “build-to-zone” or character-based frontage requirements for an attractive streetscape in the villages
- Revise parking standards, eliminate parking minimums, and require parking spaces to be placed behind buildings
- Revise PUD standards to allow for a variety of housing options
- Where practical, revise site plan review standards to allow for administrative review for certain projects

Report on Hinesburg Town Plan Revision

*For 10/28/2020 Planning Commission Public Hearing
prepared 9/25/2020 by Alex Weinhagen, Director of Planning & Zoning*

The Hinesburg Planning Commission will hold a public hearing on Wednesday, October 28, 2020, at 7pm to receive public comment on proposed changes to the Town Plan. Due to covid-19 and the closure of the Town Office, this public hearing will be held remotely via Zoom – meeting id 850 5578 1467; meeting password 123456; meeting connection link <https://us02web.zoom.us/j/85055781467>; dial-in phone number 1-646-558-8656.

Revisions are proposed to the energy chapter of the plan (chapter eight) – i.e., complete re-write of this chapter, and a series of nine new supporting maps. These revisions affect all of Hinesburg. Hinesburg adopted its first Town Plan in 1971. It was last revised on September 25, 2017. This report was prepared to explain the revision and to satisfy the requirement of VSA Title 24, Chapter 117, Section 4384c with regard to proposals to amend a town plan. This section requires that a report be prepared to “address the extent to which the plan, as amended, is consistent with the goals established in section 4302.” There are four general goals and 14 specific goals outlined in section 4302 that are discussed below.

This section also requires that the report address changes that would alter the designation of any land area. No specific alterations to land area designations are outlined in this plan revision; however, the new energy chapter does provide additional clarification on unsuitable areas and preferred sites for energy generation facilities. A series of new maps are also proposed to help illustrate this.

Copies of the proposed revision, new maps, this report, as well as the current Town Plan are available online -

<https://www.dropbox.com/sh/aisbaue5k37lk5s/AAAFjAv07TvcwS9UmEpDHOUya?dl=0>.

Additional information can be found on the Town web site (www.hinesburg.org), and by contacting Alex Weinhagen (Director of Planning & Zoning) at aweinhagen@hinesburg.org or 482-4209.

Consistency Section 4302 Goals:

The proposed plan revision is consistent with the goals outlined in the State statute as outlined below.

General Goals of VSA 24, 117, Section 4302

1) To establish a coordinated, comprehensive planning process and policy framework to guide decisions by municipalities, regional planning commissions, and state agencies.

Hinesburg has a well-established planning process and policy framework that began in the early 1970’s with the first Plan, Zoning Regulations, and Subdivision Regulations. Today, Hinesburg’s planning toolbox also includes a formally adopted Capital Budget & Plan, public safety impact fees, an Official Map of future community facilities and infrastructure, and a municipal planning & zoning department with dedicated full-time staffing. Our planning process continues with

the help of the Planning Commission, Development Review Board, Select board, other municipal boards/commissions, Town staff, and a host of committed community members.

Prior to vetting with the Planning Commission, the proposed revisions to the energy chapter were developed by our Town Energy Committee with assistance from staff from the Chittenden County Regional Planning Commission.

2) To encourage citizen participation at all levels of the planning process, and to assure that decisions shall be made at the most local level possible commensurate with their impact.

This plan update is the result of over a year of work by citizen volunteers on our Energy Committee. Additional citizen participation will be encouraged via the Planning Commission and Select Board review and public hearing process.

3) To consider the use of resources and the consequences of growth and development for the region and the state, as well as the community in which it takes place.

The proposed plan revision gives ample attention to the use of energy resources and the consequences of both the status quo and of proposed changes to energy use and energy generation. With the help of regional planning commission staff, the energy plan is specific to Hinesburg while being set in the context of county-wide energy planning and statewide goals. The energy plan represents Hinesburg's best attempt to outline how our community will work toward attainment of the goals in the statewide comprehensive energy plan.

4) To encourage and assist municipalities to work creatively together to develop and implement plans.

See response above.

Specific Goals of VSA 24, 117, Section 4302

1) To plan development so as to maintain the historic settlement pattern of compact village and urban centers separated by rural countryside.

This goal is not directly related to the proposed energy chapter revisions. With that said, energy usage is related to land use patterns. See below for how the overall plan is consistent with this goal.

The overall plan retains Hinesburg's long-time commitment to this goal. Overall, the plan seeks to achieve this goal through orderly growth of Hinesburg's existing village area where higher residential density and a wide variety of commercial, retail, and municipal uses can co-exist. Outside of the village growth area, the plan prioritizes lower density growth and natural resource conservation as well as innovative development techniques to preserve rural character. See Chapter 3 (Land Use) for details and specific recommendations on this front.

2) To provide a strong and diverse economy that provides satisfying and rewarding job opportunities and that maintains high environmental standards, and to expand economic opportunities in areas with high unemployment or low per capita income.

This goal is not directly related to the proposed energy chapter revisions. See below for how the overall plan is consistent with this goal.

The overall plan addresses this directly in the Economic Development chapter. Overall, the plan recognizes this as an important goal, and seeks to address it by allowing and encouraging continued economic development in the village growth area (redevelopment, in-fill, and new development) as well as appropriate industrial land use areas. The plan seeks to concentrate much economic development in the village growth area so as to provide services and employment close to higher density residential areas and public infrastructure like municipal water and sewer. With that said, this plan also advocates for the continuation of Hinesburg's tradition of small-scale home occupations and businesses that fit within the community. Home-based businesses often allow greater entrepreneurial opportunities with less upfront capital costs. Furthermore, these businesses enrich community life by increasing local activities, providing local services, saving energy on commuting, and reducing impact on local and regional transportation infrastructure. Hinesburg, and the greater Chittenden County area have low unemployment and generally high per capita income, and this plan recommends actions to maintain this strong and diverse local and regional economy. See Chapter 4 for details on economic development.

3) To broaden access to educational and vocational training opportunities sufficient to ensure the full realization of the abilities of all Vermonters.

This goal is not directly related to the proposed energy chapter revisions. See below for how the overall plan is consistent with this goal.

The overall plan addresses this goal to the extent possible. The plan recognizes the importance of educational opportunities, including our local elementary school and union high school and regional vocational/technical centers. Hinesburg's commitment to education is demonstrated by the community's strong support of the Champlain Valley Union High School, which the Town hosts. This commitment is further evidenced by the plan's language to address child care issues outside of the formal educational setting (see child care section in Chapter 6). At the same time, the plan reports on census data that shows the number of young children is declining here, just as it is across the rest of the state. These trends make efficiency considerations critical for any attempt to "broaden" access to educational opportunities.

4) To provide for safe, convenient, economic and energy efficient transportation systems that respect the integrity of the natural environment, including public transit options and paths for pedestrians and bicyclers.

The proposed revision includes new action items and discussion about energy efficient transportation. It details the changes needed to accomplish energy reduction and a transition from fossil fuels to electric in the transportation sector. Hinesburg takes its transportation systems very seriously, especially since it is the 2nd largest budget item (after schools) for property taxes. The plan includes a comprehensive transportation section (Chapter 7) that addresses the needs of conventional vehicular traffic as well as pedestrian, bicycle, and public transportation options. It tackles the difficulties related to the State highway (Route 116), which runs through the center of town, and constitutes Hinesburg's "Main Street" within the village core. It prioritizes the creation and maintenance of a truly "walkable community",

especially within the greater village area. It recognizes that the management of rural roads, especially dirt roads, requires special consideration in order to preserve the rural character and related recreational uses. The plan addresses this goal by detailing specific studies and road improvements, by recommending additional pedestrian and bicycle project areas, and by continuing to support public transportation – which came to fruition with new CCTA/ACTR bus service in 2012.

5) To identify, protect and preserve important natural and historic features of the Vermont landscape.

The proposed plan revision clarifies which natural features should be protected and preserved as energy generation facilities are developed. Just like for any other sort of development, the plan very clearly identifies and requires protection of important ecological and cultural resources. Hinesburg residents care deeply about the natural and historic features that define both the rural character and the industrial history of the community. A conservation ethic for significant natural areas, open space, and water resources permeates the entire plan – particularly in Chapter 5. The plan also includes two sections detailing the town’s historic resources (Chapter 9 and Appendix A).

6) To maintain and improve the quality of air, water, wildlife and land resources.

See above. As stated above, Hinesburg residents continually rate natural resources as important elements that need good stewardship, conservation, and preservation where appropriate. The planning process recognizes this shared community value, and the plan specifically incorporates it via a comprehensive natural resource section (Chapter 5). Water quality in particular is an issue highlighted again and again in the plan, with goals and actions items that anticipate an “all-in” approach to cleaning up Lake Champlain – e.g., municipal demonstration projects, municipal road stormwater control improvements, development regulations, public outreach, etc.

7) To encourage the efficient use of energy and the development of renewable energy resources.

It is this goal that the plan revision speaks most directly to. Energy efficiency and the development of renewable energy resources are thoroughly addressed in chapter 8 of the plan. This chapter borrows heavily from statewide comprehensive energy plan. Hinesburg has been very supportive of renewable energy development. The Town itself has a sizable ground-mounted solar installation on its property adjacent to the wastewater treatment facility. In 2020, the Town put out an RFP to solar companies in order to move new solar projects forward on municipal property. As a result, the Town is now actively working on solar projects on an old landfill site, on the roof of the Town highway facility, and other locations. With that said, this plan also provides clear guidance on factors to be considered in the siting of such facilities.

8) To maintain and enhance recreational opportunities for Vermont residents and visitors.

This goal is not directly related to the proposed energy chapter revisions. See below for how the overall plan is consistent with this goal.

Recreational activities abound in Hinesburg thanks to the varied landscape, rural land use, and multi-use back roads and trails. The plan recognizes the importance of rural recreation (hiking, hunting, snowmobiling, cross-country skiing, bicycling, etc.), and the role that public and private lands play in providing these opportunities. The Town is also committed to providing a wide variety of organized recreational programs, primarily through the Recreation Department and school programs. The plan recognizes the importance of recreation and advocates for continued and enhanced opportunities (see Chapter 6). The plan advocates a proactive stance on providing recreational opportunities within the Town's growth center. It also advocates for greater planning in the rural areas to develop networks of trails with connections to important residential areas and services. The trail vision map embodies this continuing effort.

9) To encourage and strengthen agricultural and forest industries.

This goal is not directly related to the proposed energy chapter revisions. See below for how the overall plan is consistent with this goal.

The plan includes a number of strategies to retain and bolster agricultural and forest uses. First and foremost, it identifies the bulk of town as a lower overall development density area where agricultural and forest uses receive priority (see Chapter 3). Secondly, it provides mechanisms for home-based businesses and rural-based enterprises (e.g., farm café, integrated agricultural uses, etc.), which allows producers greater flexibility in the manufacture and marketing of value-added agricultural and forest products. Lastly, it addresses the importance of agricultural and forest lands, along with strategies to ensure continued access to viable agricultural and forest parcels (see Chapter 5).

10) To provide for the wise and efficient use of Vermont's natural resources and to facilitate the appropriate extraction of earth resources and the proper restoration and preservation of aesthetic qualities of the area.

This goal is not directly related to the proposed energy chapter revisions. See below for how the overall plan is consistent with this goal.

Chapter 5 of the plan provides the background information and specific recommendations for Hinesburg's abundant natural resources. Earth or geological resources, and their importance to the community are identified. The planning process (i.e., conditional use review) makes adequate provisions for proper restoration, once extraction of these resources begins or ends.

11) To ensure the availability of safe and affordable housing for all Vermonters.

This goal is not directly related to the proposed energy chapter revisions. See below for how the overall plan is consistent with this goal.

Hinesburg's plan specifically addresses and encourages the creation of affordable housing, especially within the village growth area, where more municipal infrastructure is available. The plan includes definitions of both affordable and "reasonably-priced" housing. Both the plan and the Town's existing regulations provide for density bonuses as an enticement to build safe and affordable housing for a variety of income levels. In fact, the plan goes on to recommend that the Town expand its municipal services (e.g., wastewater treatment capacity, sidewalks, etc.) so as to further the provision of needed housing. See Chapter 2.

12) To plan for, finance and provide an efficient system of public facilities and services to meet future needs.

This goal is not directly related to the proposed energy chapter revisions. With that said, the energy chapter does encourage community solar projects that could meet the needs of residents who seek renewable energy opportunities (action item 8.2.9). The energy plan also encourages the creation of micro grid systems to enhance reliability and self-sufficiency of electrical service (action item 8.2.4). See below for how the overall plan is consistent with this goal.

The plan and the community recognize the importance of maintaining and fully utilizing our existing public facilities. As noted above, it recommends the expansion of certain critical pieces of infrastructure (e.g., public safety facilities, recreation fields & facilities, road improvements, etc.), and advocates for continued use of the capital budget to adequately plan for their creation and financing. Furthermore, the plan recommends the Town continue to utilize impact fees, or other comparable mechanisms, to help fund improvements that will undoubtedly be needed as the community grows. Fire and police protection, emergency medical services, schools, water supply and sewage and solid waste disposal are all addressed. Our regulatory process is designed to consider impacts to these services, and try to minimize these impacts wherever possible. See Chapter 6 (Community Facilities and Services) for details. Hinesburg is currently in need of infrastructure improvements to meet the vision outlined in the plan – e.g., water supply, wastewater treatment, new highway garage. The plan addresses these needs and recommends more work on development phasing to ensure growth and development doesn't outstrip the community's resources.

13) To ensure the availability of safe and affordable child care and to integrate child care issues into the planning process...

This goal is not directly related to the proposed energy chapter revisions. See below for how the overall plan is consistent with this goal.

This plan provides baseline information on available child care and demand. It goes on to make recommendations (see Chapter 6) to improve child care by addressing financing difficulties, ensuring adequate infrastructure, and assisting with business assistance and work force development. The plan strives to meet both the spirit and letter of this State standard/goal, while recognizing that there is only so much the community can do on this front.

14) To encourage flood resilient communities.

This goal is not directly related to the proposed energy chapter revisions. See below for how the overall plan is consistent with this goal.

This is addressed in Chapter 5, with flood hazard areas (including fluvial erosion areas) indicated on Map 7. New development in flood hazard areas and riparian areas is discouraged. The Zoning Regulations allow development in such areas only in keeping with flood proofing standards, and only after a demonstration of no undue adverse impacts on surrounding properties, upstream/downstream properties and infrastructure, as well as water quality. The

Town has actively worked to conserve important floodplain areas (e.g., LaPlatte Headwaters Town Forest). Building setbacks from streams have been required for decades in Hinesburg, but the plan further recommends the creation of vegetated riparian buffers to improve water quality and help minimize flood impacts.

Land Area Designation Considerations

1) The probable impact on the surrounding area, including the effect of any resulting increase in traffic, and the probable impact on the overall pattern of land use.

No specific alterations to land area designations are outlined in this plan revision; however, the new energy chapter does provide additional clarification on unsuitable areas and preferred sites for energy generation facilities. A series of new maps are also proposed to help illustrate this.

New energy generation facilities will have impacts – principally on aesthetics and the need for improved utility infrastructure (i.e., line and substation capacity upgrades). Energy generation facilities will not be invisible; however, the relatively robust screening requirements contained in section 5.6.6 of the Zoning Regulations (utilized by the Public Utility Commission during the certificate of public good review process) should help mitigate aesthetic impacts. There should be no appreciable increase in traffic due to new energy generation facilities. Perhaps even a reduction in traffic as fossil fuel deliveries diminish over time. The overall land use pattern will be maintained, given that the plan treats energy generation facilities similarly to other types of development (e.g., residential, commercial, etc.). With that said, there will be substantially more solar arrays in Hinesburg’s rural areas. This change will require some getting used to, but it is necessary and reasonable.

2) The long-term cost or benefit to the municipality...

The energy plan’s heavy focus on energy efficiency and weatherization will result in long-term cost savings to residents, businesses, and the municipality.

3) The amount of vacant land which is already subject to the proposed new designation, and actually available for that purpose, and the need for additional land for that purpose.

Again, no specific land designation changes are proposed. Certain preferred sites for energy generation are indicated, but beyond that the plan focuses on aggregate need for new renewable energy generation, rather than specific land areas. As noted in Figure 1 and Figure 2, the amount of land needed to meet the renewable energy goals is a tiny fraction of the available land area in Hinesburg.

4) The suitability of the area in question for the proposed purpose.

Chapter 8 provides clarity on constraints that limit where new energy generation facilities can be located. The suitability of the land for such facilities is addressed in the text and the town-wide mapping. With that said, site-specific analysis will always be an important element when such projects are reviewed.

TOWN OF HINESBURG
NOTICE OF PUBLIC HEARING

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Copies of the proposed revisions, new maps, a report on the plan’s consistency with State statute, as well as the current Town Plan are available online - <https://www.dropbox.com/sh/aisbaue5k37lk5s/AAAFjAv07TvcwS9UmEpDHOuya?dl=0>. Additional information can be found on the Town web site (www.hinesburg.org), and by contacting Alex Weinhagen (Director of Planning & Zoning) at aweinhagen@hinesburg.org or 482-4209. A list of the plan section headings follows, as required pursuant to Title 24, Chapter 117 V.S.A. Section 4444 (b).

Chapter 8 – Energy

Chapter 10 – Implementation (to be updated to reflect Chapter 8 action items)

Notice Date – October 1, 2020

Introduction

Energy planning has come to the forefront in Vermont in the 21st century. In addition to energy generation, distribution, and use, energy planning and policy are tied to economic development, land use, transportation, community, and Vermont's landscape. Sound energy policy not only recognizes the challenges posed by climate change, but also seeks to implement mitigation measures and chart a course to adapt to new realities. In 2016 Vermont adopted a Comprehensive Energy Plan (CEP) with specific goals for energy consumption, renewable energy and greenhouse gas emission reductions and, with Act 174, established an "enhanced energy planning process" aimed at helping regions and towns meet their share of the CEP goals. This Energy Chapter, as well as portions of Chapter 3 (Land Use; smart growth vision) and Chapter 7 (Transportation), have been written to be compliant Vermont's new municipal energy planning standards. This will benefit our ongoing energy planning efforts and provide Hinesburg with a greater voice in any energy siting proceedings before the Vermont Public Utilities Commission. Specifically, compliance with the State's enhanced energy planning requirements ensures that Town Plan recommendations will be given "substantial deference" by the Public Utilities Commission in their review of energy projects.

Underlying the new municipal planning standards is an acceptance of the goal of transforming the energy profile of Hinesburg's residents, businesses and Town government in ways consistent with our State's Comprehensive Energy Plan, which calls for greater energy efficiency, reduced reliance on fossil fuels and increased local generation of renewable energy, all leading to a major reduction in greenhouse gas emissions by 2050. This Chapter presents a quantification of one specific pathway to achieve this goal, recognizing that there are many possible pathways and that long-term success will require support from federal and state policies and continued gains in technology. The quantified targets were developed by the Chittenden County Regional Planning Commission using available regional and local data and a state-wide analysis performed by the Vermont Energy Investment Corp. (VEIC) using the Long-Range Energy Alternatives Planning System (LEAP), a widely-used software tool for energy and climate policy analysis. Acceptance of these goals will satisfy the State's enhanced energy planning requirements and will enable Hinesburg to receive "substantial deference" in energy siting hearings from the Public Utilities Commission. In the future Hinesburg will be free to develop new pathways with a different mix of quantitative objectives and will maintain "substantial deference" as long as the overall State goals are met.

Goal 8.1 Adopt the State enhanced energy planning goals for Hinesburg and develop strategies and shorter-term objectives to achieve them

Actions:

8.1.1 Identify long-term strategies and shorter-term objectives for the Town to meet efficiency and renewable energy goals for:

- Electrical Energy Use and Efficiency (see Table 2)
- Commercial and Thermal Energy Use, Weatherization, and Conversion to Renewable Technologies (see Table 5)
- Residential Thermal Energy Use, Weatherization, and Conversion to Renewable Technologies (see Table 6)
- Transportation Energy Use and Conversion to Electric Vehicles (See Table 8)
- Reducing per capita energy use by 2050 (see Tables 9 and 10)

- 8.1.2 Develop programs with specific measurable objectives to make progress toward each efficiency and renewable energy goal.
- 8.1.3 Use life cycle cost when evaluating energy-related Town capital expenditures, including vehicle acquisition.
- 8.1.4 Use benchmarking of municipal, institutional and commercial buildings to educate the owners of their buildings' energy performance relative to other buildings or past performance.
- 8.1.5 Work with the Energy Action Network, State and County agencies and other organizations to improve local data available from the Community Energy Dashboard, the Architecture 2030 Challenge for Planning and other sources and tools to better monitor and educate the community on Town progress.

Goal 8.2 Support the development of alternative renewable energy sources and business opportunities and site an additional 13,517 to 23,594 MWh of annual generation in Hinesburg to contribute to Vermont's goal of obtaining 90% of energy from renewable sources by 2050.

Actions:

- 8.2.1 Identify strategies to increase renewable energy generation within Hinesburg and meet electricity generation targets consistent with Town land use policies and values (see Table 12)
- 8.2.2 Encourage the use of renewable energy systems for onsite electricity generation and thermal energy. Analyze and realize the potential for renewable energy generation (particularly solar and wind) on municipal property for municipal and/or community use.
- 8.2.3 Encourage farmers to use renewable energy in the production of their goods.
- 8.2.4 Promote smart grid and micro grid systems.
- 8.2.5 Consistent with the Public Utilities Commission process, designate additional preferred sites for renewable energy generation on a case-by-case basis via the joint letter process with the CCRPC.
- 8.2.6 Periodically update Energy Maps including Existing Renewable and Preferred Sites, Known Constraints, Area Without Constraints, Potential Solar Resource Areas, Potential Wind Resource Areas, and Hydro-Electric Resource Locations to facilitate development of renewable energy by land owners and energy developers consistent with constraints and Town preferences.
- 8.2.7 Encourage owners to install rooftop solar and trackers on existing buildings and land.
- 8.2.8 Work with electric utilities to modernize the grid to facilitate development of renewable energy in Hinesburg.
- 8.2.9 Encourage energy storage facilities as a component of new renewable energy developments when appropriate.
- 8.2.10 Analyze the potential for community solar projects based on current State and Federal policy and financing options.

Goal 8.3 Preserve any existing or potential renewable energy resource.

Actions:

- 8.3.1 Strengthen zoning and subdivision regulations to require that all buildings be designed to maximize passive and active solar gain. Consider changing existing language from advisory (e.g., “should”) to required (e.g., “shall”) in section 5.26.2(5) of the Zoning Regulations and sections 5.1.12 and 6.12.4(6) of the Subdivision Regulations. Explore amending zoning and subdivision regulations to include design standards to preserve the southern exposure of buildings for passive and active solar gain. Balance this with other siting and design factors, especially in the Village Growth Area where compact development is more common and street trees are necessary.
- 8.3.2 Encourage plantings that maximize solar heating in the winter and provide shade in the summer.
- 8.3.3 Encourage ongoing sustainable forest management to maintain a local source of fuel wood (biomass).
- 8.3.4 Preserve open areas suitable for solar energy generation (e.g., southern aspect) that are situated close to the Village Growth Area. Such areas could be useful in the future for providing renewable energy to concentrated portions of Hinesburg Village.
- 8.3.5 Ensure that larger buildings with expansive roofs are adequately designed such that their roofs can support future solar installations. Consider a town-wide requirement (ordinance or zoning regulation) for solar ready roofs on all new construction.

Goal 8.4 *Improve energy efficiency, reduce building energy demand, and work towards 100% of businesses and homes being weatherized by 2050.*

Actions:

**Top
Priority**

- 8.4.1 Maximize the energy efficiency in Town-owned buildings and vehicles.**
- 8.4.2 Encourage homeowners and businesses to seek thermal efficiency upgrades and then invest in efficient renewable energy technologies.
- 8.4.3 Promote the use of energy efficient lighting, appliances, automatic setback thermostats and motion detecting light controls to save energy.
- 8.4.4 Promote the energy efficiency and weatherization services of Efficiency Vermont, Vermont Gas Systems, NeighborWorks, and the energy transformation programs of Vermont Electric Cooperative and Green Mountain Power (“Tier III”) and other efficiency programs. Keep track of how many homes are weatherized, with a goal of 60 homes per year in order to reach the 100% goal by 2050.
- 8.4.5 Promote cost-effective energy efficiency in future residential and commercial buildings by adopting Vermont’s stretch code for all development and major renovations in Hinesburg.
- 8.4.6 Work with Efficiency Vermont and other partners to develop a manual to educate homeowners on how to choose and complete the next step towards a net zero home. Highlight local success stories, including examples of net zero homes – both via new construction and via renovation of existing housing stock.
- 8.4.7 Consider future adoption of net zero ready requirements for new buildings to meet the State’s comprehensive energy plan goal of all new buildings being net zero by 2030.

Goal 8.5 *Reduce transportation related energy demand and switch transportation fuels to renewable electricity and renewable biofuel.*

Actions:

- 8.5.1 Promote cost-effective energy efficiency in future transportation planning.
- 8.5.2 Consider regulation or ordinance changes to require that new developments incorporate electric charging stations, and if possible, power these by solar photovoltaic systems.
- 8.5.3 Encourage the Town and the Champlain Valley School District to install electric charging stations, and to seek higher fuel efficiency and vehicles with alternative fuel types (e.g., biofuels, electric) when purchasing or leasing new vehicles.
- 8.5.4 Consider bicycle paths and lanes, pedestrian walkways, and mass transportation access in the review of all development proposals in the Village Growth Area. Support and promote bicycle and pedestrian use along existing roadways, including on-road bicycle lanes, and encourage these forms of transportation to neighboring town infrastructure.
- 8.5.5 Support efforts to increase public transit ridership (e.g., GMT, ACTR).
- 8.5.6 Promote more awareness of the State’s GoVermont connecting commuters carpool/rideshare program. Go Vermont is a free resource for travelers who want to reduce the cost and environmental impact of driving. Encourage residents to register at www.ConnectingCommuters.org.
- 8.5.7 Investigate why more school children don’t ride the school bus, and explore ways to increase ridership.

Goal 8.7 Encourage a balanced approach between the placement of utility services and the character of the rural and village areas.

Actions:

- 8.7.1 Continue to require new utility lines serving end users be underground, barring site limitations that make underground lines impossible. Seek to relocate existing above ground lines underground within the village core, especially along the “main street” portion of Route 116 from Mechanicsville Road to Friendship Lane.
- 8.7.2 Encourage cooperation between the town and Green Mountain Power to find a suitable site for a substation or other improvements that would increase power supply and reliability so that adequate electric power is available for both new development and three phase service for the Industrial 1 zone in South Hinesburg.

Goal 8.8 Continue to define the role of the Hinesburg Energy Committee.

Actions:

- 8.8.1 The Energy Committee should take the lead in the execution of Town Plan energy goals and recommendations.
- 8.8.2 Help property owners understand State energy efficiency building codes (Residential Building Energy Standards, RBES; Commercial Building Energy Standards, CBES) for new development and renovations – e.g., outreach when building permits are issued.

- 8.8.3 Identify utility, federal and state incentives to support energy conservation efforts and efficiency improvements. Educate the public about potential incentives for energy conservation and efficiency improvements (e.g., workshops, published information, etc.).
- 8.8.4 Participate in the public review processes of new utility facilities and municipal facilities and major residential and commercial developments. Review these projects for conformance with the Town Plan. Create an objective set of criteria to enable consistency in such reviews. Seek to preserve the Town's rural character while recognizing the important function these projects serve.
-

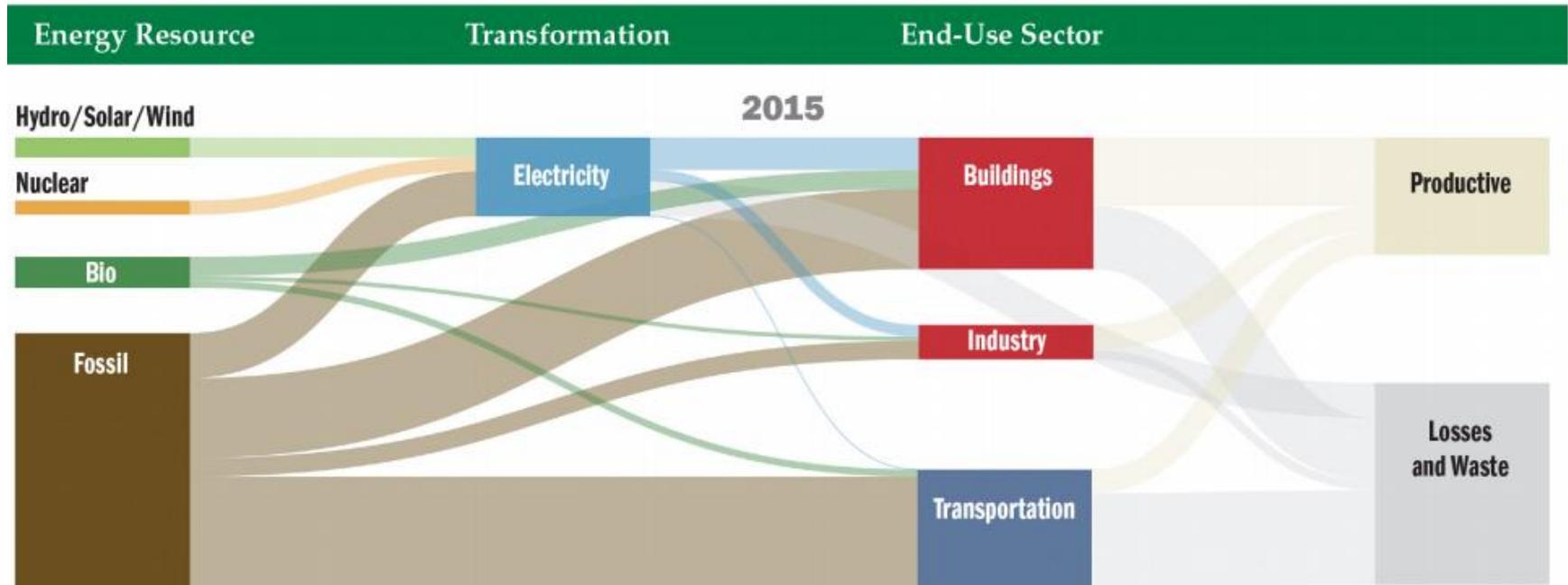
Enhanced Energy Planning

The foundation of enhanced energy planning is the goals established in the 2016 Vermont Comprehensive Energy Plan (CEP) - https://publicservice.vermont.gov/publications-resources/publications/energy_plan:

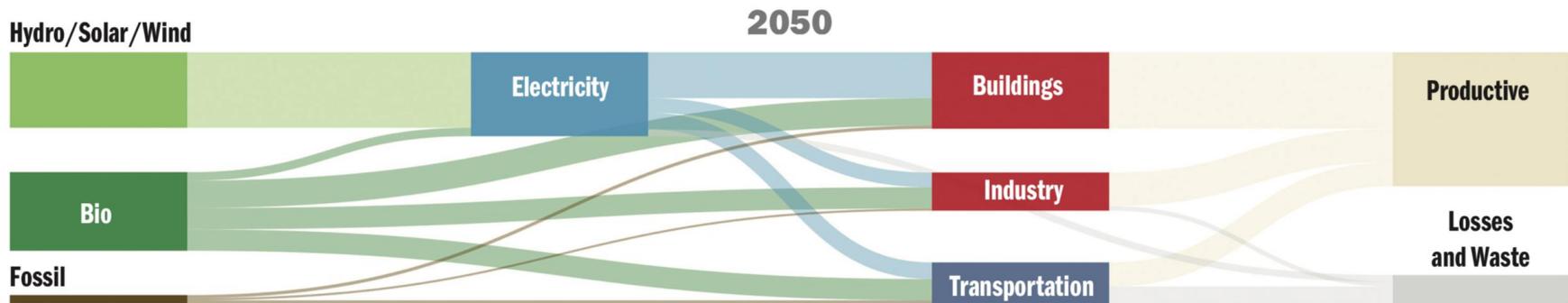
- Reduce total energy consumption per capita by 15% by 2025, and by more than one third by 2050.
- Meet 25% of remaining energy needs from renewable source by 2025, 40% by 2035, and 90% by 2050.
- Three end-use sector goals by 2025: 10% renewable transportation, 30% renewable buildings, and 67 % renewable electric power.
- Reduce greenhouse gas emissions from energy use by 40% below 1990 levels by 2030 and 80% to 95% by 2050.
- All new buildings to be net zero by 2030.

The effects of achieving these goals on the energy system in Vermont is illustrated by following two exhibits from the 2016 CEP for the years 2015 and 2050. These show graphically how a mix of primary energy resources, including fossil fuels and renewables, provide heat, light and power to end-users, as well as how much energy is transformed into electricity in the process and how much energy is ultimately productive or lost and wasted. From 2015 to 2050 the heavy reliance on fossil fuels (plus Vermont Yankee nuclear power) is replaced by renewable hydro/solar/wind power and bio-fuels. More energy resources are transformed into electricity and end-use of fossil fuels in buildings, industry and transportation is reduced to very low levels. Total energy use is also reduced by improved thermal efficiency in buildings and industry and greater efficiency of building equipment and lighting, industrial processes and vehicles. By 2050 light-duty vehicles are primarily EV's and heavy-duty vehicles and trucks are heavily reliant on bio-fuels.

Vermont Energy Flows (2015)



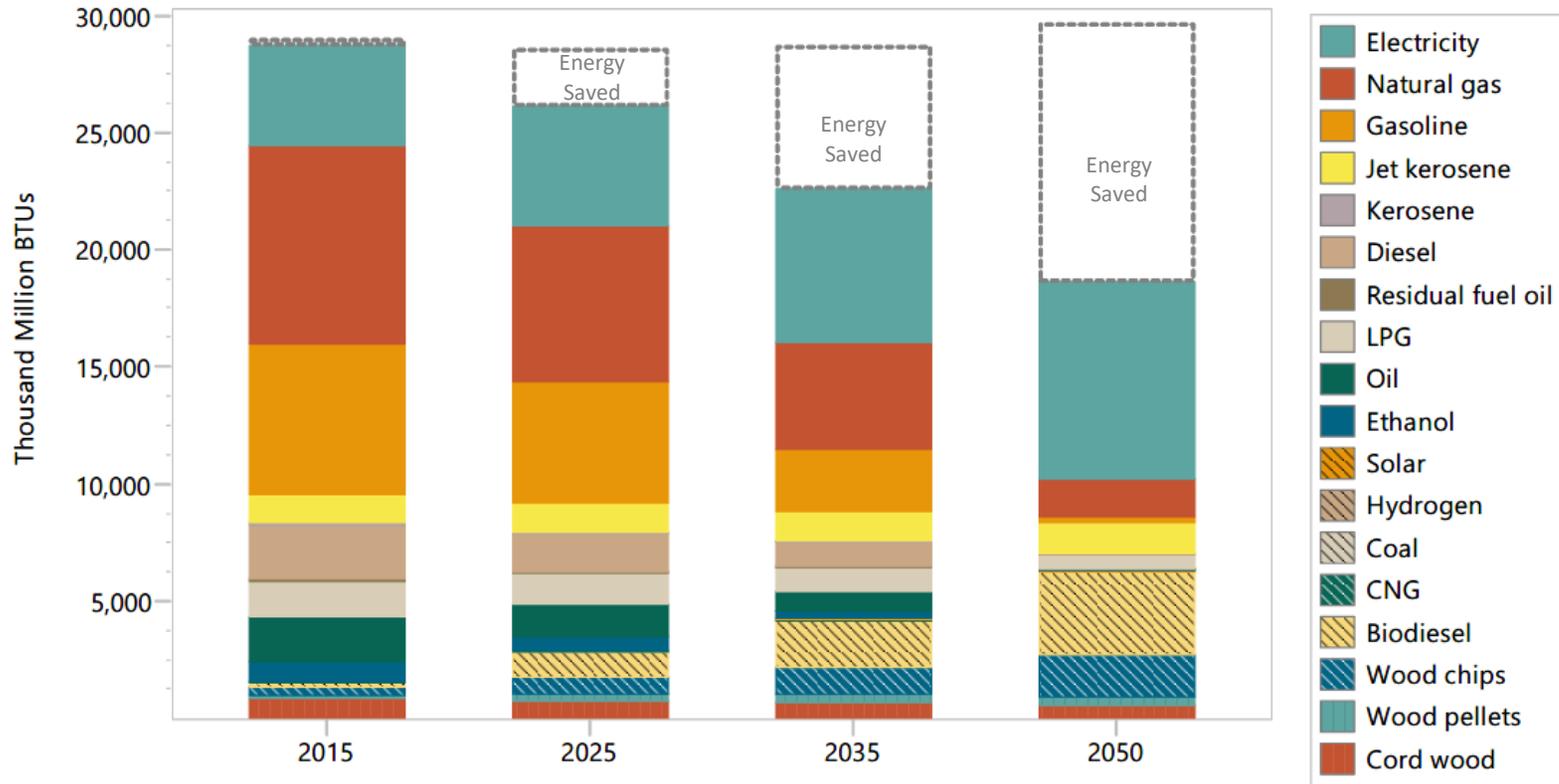
Source: Vermont Comprehensive Energy Plan 2016



How the transformation described above would affect the profile of energy use in Chittenden County is illustrated in the graphic below prepared by the CCRPC. This shows the LEAP model’s estimated change in energy use by fuel type for Chittenden County as well as energy saved across all sectors between

2015 and 2050. While the current mix of fuels for Hinesburg differs from that of the County as a whole, particularly in County’s heavier reliance on natural gas, the overall pattern of increased Energy Saved and Electricity end use and the substitution of renewables for fossil fuels for Hinesburg would be similar.

Chittenden County Energy Use by Fuel Source & Energy Saved Compared to “Business as Usual,” 2015-2050



Act 174 aims to facilitate this energy transformation through an enhanced energy planning process integrated with land use planning that establishes a new set of municipal and regional energy planning standards and goals, which if met would be consistent with the state-wide CEP goals. Enhanced energy planning is voluntary, but if the Hinesburg Town Plan is certified by the Chittenden County Regional Planning Commission as being in compliance our preferences on issues such as land use planning and siting of energy projects will receive “substantial deference” rather than “due consideration” in actions before the Vermont Public Utilities Commission. “Substantial deference” as defined in Act 174 means that “a land conservation measure or specific policy shall be applied in accordance with its terms unless there is a clear and convincing demonstration that other factors affecting the general good of the State outweigh the application of the measure or policy.” This gives considerably more weight to Hinesburg’s preferences in PUC proceedings than is provided by simple “due consideration.”

In order to be certified as in compliance with enhanced energy standards, this Town Plan must first be approved by the Chittenden County Regional Planning Commission (CCRPC) as consistent with the standards laid out in 24 VSA §4352. These standards include consistency with the state climate and energy goals and compatibility with the approved Regional Plan. The CCRPC has provided Hinesburg with planning standards and quantitative pathways for future action, that if adopted would meet these standards, enabling Hinesburg to receive the formal “determination of energy compliance” that provides “substantial deference.” This Energy Chapter adopts the CCRPC suggested pathway but recognizes that there are many ways to meet energy and climate goals and that Hinesburg may adopt other pathways in the future as our plans and circumstances progress.

The standards and data provided by the CCRPC are the most current and detailed available. Unfortunately, data on energy consumption and end-use energy equipment at the town level is currently limited. For example, data on electrical consumption for Hinesburg is available but data on home or vehicle fuel consumption is not. Where actual town data is not available, allocations of State or regional data or estimates based on surveys are used. Efforts are being made to improve the data available for regional and town planning and as better information becomes available, Hinesburg may revise its energy planning accordingly.

State statute (24 V.S.A. section 4382) requires that municipal plans include an energy plan including, “an analysis of energy resources, needs, scarcities, costs and problems within the municipality, a statement of policy on the conservation of energy...” This chapter addresses these issues and includes policy on the development of renewable energy, which has seen tremendous growth in Vermont. Related land use policies to help conserve energy (e.g., smart growth) are discussed more fully in Chapter 3. Related transportation policies are discussed in Chapter 7.

Enhanced Energy Planning Targets

The targets provided in the tables below are provided by the CCRPC and, taken as a whole, satisfy the requirements necessary for Hinesburg to receive a “determination of energy compliance” and receive “substantial deference” in hearings before the PUC.

They are developed with data from the Long-Range Energy Alternatives Planning (LEAP) model¹ to estimate one possible scenario to reach these goals. This scenario includes the following goals for Hinesburg for 2050 with interim targets for 2025 and 2035 as shown in the individual tables:

- Weatherization and Efficiency Upgrades: 28% of commercial and industrial establishments and 100% of residences will be weatherized. 84% of both commercial and industrial establishments and residences will have increased electric efficiency. Note – the scenarios only include weatherization of 28% of commercial and industrial establishments as that is the goal in the statewide CEP. As noted in goal 8.4, the Town’s goal is to strive for weatherization of 100% of commercial/industrial establishments and residences by 2050.
- Total Energy Use per Capita: Total energy use per capita will be 45% lower than it was in 2015.
- Transportation Fuels: Electric vehicles will increase to 89% of the light duty vehicle fleet, and 96% of energy used by heavy duty vehicles will come from biodiesel.

¹ For more information on the Long-Range Energy Alternatives Program and the work conducted by the Vermont Energy Investment Corporation, see the 2018 Chittenden County ECOS Plan, Appendix 6: http://www.ecosproject.com/wp/wp-content/uploads/2017/09/ECOSPlan_ProcessSupplement6_EnergyData_Methodology_Final20180615.pdf

- Increased Generation: Additional renewable energy generation of 13,517 - 23,594 MWh annually will be sited in Hinesburg.

Electricity

The power supply for Vermont’s electric utilities comes from many sources including Hydro Quebec, Seabrook, NH nuclear plant, small hydro, the New England power grid (predominately natural gas generation plants), biomass, wind, and solar. Hinesburg-based energy generation currently produces 1,458 MWh of electricity annually from renewable sources including building and ground-mounted photovoltaics on various properties, a small wind turbine on the north side of the village area (NRG Systems property). Electricity is also produced by diesel generators at Clifford Lumber and Hinesburg Sand and Gravel in the Industrial 1 district (necessitated by the lack of three phase power). Currently, Hinesburg’s local electric distribution is provided by Green Mountain Power and the Vermont Electric Cooperative. (See the “Renewables” section below for more information on generation in Hinesburg.) 2015 electric use in Hinesburg can be seen in Table 1 below.

Table 1. Electrical Energy Use, 2015 (MWh)

Residential	13,586
Commercial and Industrial	8,212
Total	21,797

Sources: Efficiency Vermont, October 2017

The Vermont Electric Power Company (VELCO) also maintains a high voltage (115kV) transmission line running north/south on the western side of the town. This line is part of VELCO’s statewide network of transmission lines that serve to bring electrical power into the state and to distribute it. The Town has a stake in future improvements to the VELCO line, especially given that much of the transmission line is located in the rural agricultural portion of Hinesburg. VELCO upgraded the transmission power poles on the high voltage lines extending through Hinesburg in 2014. Though energy use per capita must decrease to meet Vermont’s 2050 energy goals, the use of electricity will actually increase. Electricity from renewable sources will power things like vehicles and heat pumps, switching those sectors away from fossil fuels. See Table 2 below for the LEAP model’s projected electricity use between 2015-2050 to meet the State’s 2050 energy goals.

Table 2. LEAP Model Estimated Future Electrical Energy Use in Hinesburg, 2015-2050

	2015**	2025	2035	2050
Without Industrial (MWh)	14,480	17,446	22,236	28,816
Industrial Only (MWh)	3,990	5,661	7,320	9,825
Total (MWh)	18,470	23,106	29,555	38,641
Total Electric Energy Saved (MWh)	248	2,953	5,962	11,150
Residences that have increased their Electric Efficiency	3%	30%	58%	98%
Commercial and Industrial Establishments that have Increased Their Electric Efficiency	3%	30%	58%	98%

Source: LEAP Model

**Please note that industrial electricity use is recognized as the most difficult element to project in the LEAP model, because of regional discrepancies in data from the commercial and industrial sector. Therefore, projected electricity use and total energy use are reported two ways: with industrial electricity use included and excluded.*

***2015 numbers are derived from the LEAP model and may vary from the actual measurements reported by utilities.*

Thermal Energy Use

Natural Gas, Fuel Oil, Propane, Kerosene

“Most of the energy used in Vermont comes from non-renewable sources. Natural gas and petroleum products account for 62% of Vermont’s total energy usage... Vermont consumed 15.3 million barrels of petroleum and 9.6 billion cubic feet of natural gas in 2013, the most recent year for which data are available. Although they are the state’s biggest drivers of climate change and air pollution, fossil fuels continue to account for our majority share of energy consumption because of their relatively low price, well-established distribution system, compatibility with existing infrastructure and equipment, and on-demand characteristics” (from VT CEP, pg. 389). Fuel oil, propane and kerosene are widely used to heat homes in much of Hinesburg, with the exception of the village area where natural gas is available. Exact usage of natural gas is reported annually by Vermont Gas (see Table 4) but there are no other exact counts of home heating fuel use for Hinesburg. However, estimates from the US Census Bureau are shown in Table 3.

Table 3. 2017 Home Heating Estimates

Utility gas	18% of homes
Fuel oil, Kerosene	35% of homes
Propane	27% of homes
Wood	12% of homes

Please note that these are estimates with a relatively high margin of error and should be used with caution.

Sources: American Community Survey 2013-2017 5-Year Estimate, Table B25040: House Heating Fuel

Vermont Gas brought natural gas to Hinesburg in 2009. Pipes were laid to serve most of the greater village area. Approximately 500 homeowners and businesses have the option to use natural gas. As of 2014, the conversion to natural gas has been 78% of the residential and non-residential buildings able to connect to the system. This includes the majority of the municipal, commercial, and institutional buildings in Town. Natural gas usage in Hinesburg as of 2015 is shown in Table 4 below.

Table 4. Current Thermal Energy Use from Natural Gas, 2015

Total Residential Natural Gas Consumption (MMBtu)	24,483 (52% of total)
Total Commercial/Industrial Natural Gas Consumption (MMBtu)	22,388 (48% of total)
Total Municipal Natural Gas Consumption (MMBtu)	46,872

Sources: Vermont Gas

In 2014 Vermont Gas Systems became one of Vermont’s [energy efficiency utilities](#) and has been actively assisting home and building owners to conserve natural gas. The programs help owners identify, contract and pay for a portion of gas energy improvements for the more efficient use of this fuel. Meeting Vermont’s 2050 energy goals will require customers to switch away from natural gas to a renewable fuel. As of this writing, the town is debating a measure to prohibit additional pipeline expansions within Hinesburg.

Commercial Energy Use & Efficiency Services

There are approximately 87 commercial, industrial and institutional buildings and facilities in Hinesburg. Commercial/Institutional/Industrial (CII) buildings are defined as where people are not living on a permanent basis. CII buildings consume approximately one half of the total building energy in Hinesburg. Much room for improvement remains, even though many gains have been made over the years through high efficiency equipment, shell retrofit, above-code new construction and improved processes. Energy efficiency and recapture are also possible in commercial agricultural operations – e.g., reverse osmosis in sugaring operations, dairy farm methane digesters, etc. CII entities are typically focused on return on investment for reduced energy dollar expenditures instead of greenhouse gas emissions. The Energy Committee can help building owners understand that economically attractive energy efficiency projects will have ecological benefits as well. The Energy Committee plans to assist CII owners to conform to the updated and more stringent building code CBES 2015. Additionally, the committee will advise the Planning Commission and Selectboard on possible adoption of a Stretch Energy code. The LEAP model’s projected changes in commercial energy use to meet the State’s 2050 energy goals are shown in Table 5 below.

Table 5. LEAP Model Estimated Future Commercial Thermal Energy Use in Hinesburg, 2015-2050

	2015	2025	2035	2050
Total Commercial Thermal Energy Use (MMBtu)	49,770	48,708	46,394	41,036
Percent of Commercial Establishments Weatherized by Target Year	8%	15%	16%	28%
Energy Saved by Weatherization by Target Year (MMBtu)	1,195	2,618	3,630	8,749
Commercial Establishments Using Heat Pumps (%)	0%	16%	25%	28%
Commercial Thermal Energy Use by Heat Pumps (MMBtu)	92	3,950	7,807	11,665
Commercial Establishments Using Wood Heating (%)	5%	7%	8%	8%
Commercial Thermal Energy Use Attributable to Wood Heating (MMBtu)	3,697	5,894	8,118	11,885

Sources: LEAP Model, Department of Public Service, Department of Labor

Residential Energy Use & Efficiency Services

The residential sector of Hinesburg housing stock accounts for a significant proportion of energy use and Hinesburg’s carbon release to the atmosphere. Hinesburg’s housing stock varies significantly with regard to energy efficiency and the use of renewable energy. The LEAP model’s projected changes to residential heating to meet the 2050 goals can be seen in Table 6 below.

Table 6. LEAP Model Estimated Future Residential Thermal Energy Use in Hinesburg, 2015-2050

	2015	2025	2035	2050
Total Residential Thermal Energy Use (MMBtu)	173,852	155,857	132,149	91,494
Percent of Residences Weatherized by Target Year	1%	14%	36%	100%
Energy Saved by Weatherization by Target Year (MMBtu)	618	7,275	19,872	62,199
Percent of Residences Using Heat Pumps	3%	18%	37%	60%
Residential Thermal Energy Use from Heat Pumps (MMBtu)	1,739	10,102	20,783	30,470
Residences Using Wood Heating (%)*	14%	14%	14%	14%
Residential Thermal Energy Use from Wood Heating (MMBtu)	27,214	28,621	28,649	25,171

The LEAP model estimates a future scenario that shows one way for Chittenden County’s communities to meet the state’s 2050 energy goals. However, actually meeting these goals may take a different path than modeled. In Hinesburg, it may be more effective for residents to switch to wood heating systems rather than heat pumps, or to use wood heating as a backup system for heat pumps. Future iterations of this plan will examine new models to show an increased adoption of wood heating. This may also serve to reduce the small amount of natural gas energy that the LEAP model assumes will still be used in Hinesburg and other Chittenden County municipalities by 2050.

Sources: LEAP Model, Department of Public Service

To move toward the goal of 90% renewable energy by 2050 and all new homes at net zero energy by 2030, the following are recommended:

- All new homes built are recommended to be net zero energy by the year 2030. Between 2015 and 2020 25% of the energy required to electrify and heat new homes will be supplied from renewable energy. Between 2020 and 2025 50% of the energy required to electrify and heat new homes will be supplied from renewable energy. Between 2025 and 2030 75% of the energy required to electrify and heat new homes will be supplied from renewable energy.
- New homes should be encouraged to include photovoltaics to charge an electric vehicle as well as ready connections to charge an electric vehicle. Work on developing requirements for electric vehicle charging capacity in large residential developments and multifamily dwellings.
- Reaching 90% energy use from renewables by 2050 will require changes to existing homes. Hinesburg should encourage residents to improve energy efficiency of existing homes (e.g., weatherization), and shift to non-fossil fuel thermal sources of energy.
- Homeowners should be encouraged to take advantage of the energy audit services of the various state agencies that sponsor and/or offer these services. These audits should be comprehensive in nature, looking at ways to reduce energy use as a first measure and then look to supply renewable energy.
- Building permits being issued for changes to existing homes should include information as to how a home can achieve net zero energy.

- Those homes that do not have a reasonable site to capture renewable energy should consider community sources of renewable energy.
- Wood combustion appliances should meet the state requirements for allowable particulates released in to the atmosphere. Wood combustion should be a secondary source of thermal energy to a cleaner primary source whenever possible.
- Energy efficient lighting and appliances should be encouraged in all new homes.
- Hinesburg should consider requiring new construction to achieve a higher level of efficiency above energy code (RBES).
- Hinesburg should promote weatherization and fuel switching opportunities from Efficiency Vermont and utilities working towards their Renewable Energy Standard Tier III requirements,² and have an inventory of other financing options for homeowners wishing to pursue energy efficiency measures and renewable energy. Between 2015 and 2017, customers in Hinesburg saved a total of \$275,910 on electric and thermal energy bills due to energy efficiency measures. The Hinesburg Energy Committee would be the logical group for organizing and dissemination this information. Recent projects coordinated in Hinesburg by Efficiency Vermont can be found in Table 7 below. Other weatherization projects that were not affiliated with Efficiency Vermont have probably also taken place, but are not measured here.

Table 7. Recent Residential Energy Efficiency Projects

	2014	2015	2016	2017
Home Performance with ENERGY STAR® Projects	14	18	21	26
Total Residential Projects (includes Home Performance with ENERGY STAR® projects)	37	86	111	265

Source: Efficiency Vermont, November 2018

Transportation

Transportation accounts for a large part of the state’s overall energy usage, and is the leading producer of greenhouse gases in Vermont and Hinesburg. Gasoline continues to be the principal fuel for transportation.

In order to implement Vermont’s Comprehensive Energy Plan, effort must be made on the local level to reduce both the vehicle miles traveled and the reliance on fossil fuels used in transportation. Successes on this front include the Hinesburg Rides program formed in 2008, the introduction of a Burlington-Hinesburg-Middlebury bus route in 2012, the introduction of a local bus service throughout Hinesburg in 2018, and the installation of EV chargers, as discussed in the Transportation section of this plan.

² Visit the Vermont Public Utility Commission’s website for more information about renewable energy standards for Vermont electric distribution utilities: <https://puc.vermont.gov/electric/renewable-energy-standard>

New sidewalks and crosswalks in the village area have promoted more walking in the town as an alternative to vehicle use. Continuing to build more sidewalk systems, as well as adding bike lanes to town roads and in new developments will encourage more local economic development at the same time as residents are using less fossil fuel to get around and staying more physically fit.

The need for a much higher use of renewable energy in transportation will be a challenge in Hinesburg and the state. In 2017, the DMV reported 3,155 fossil fuel burning light duty vehicles registered in Hinesburg, compared to only 12 electric vehicles. Hybrid vehicles meet that goal to some extent, but Hinesburg needs to plan to accommodate the use of plug-in electric vehicles by our residents and other drivers passing through our town. Electric charging stations, powered by photovoltaic arrays and from the grid, will be an important addition to the region’s transportation infrastructure and should be considered as part of all new dwelling construction. Another way for Hinesburg to meet the goals of Vermont’s Comprehensive Energy Plan is to promote the use of biofuel as a replacement for petroleum-based fuel for heavy duty vehicles. Oil seed crops, such as sunflowers, grown on what are now unproductive fields, could be an economic boost to local farmers and oil seed processors. The LEAP model’s projected changes in transportation energy to meet the 2050 energy goals are shown in Table 8 below.

Table 8. LEAP Model Estimated Future Transportation Energy Use in Hinesburg, 2015-2050

	2015	2025	2035	2050
Total Light Duty Transportation Energy Use (MMBtu)	223,050	185,821	117,705	51,301
Electricity Used for Light Duty Transportation (MMBtu)	177	2,478	17,081	36,049
Light Duty Electric Vehicles (% of Vehicle Fleet)	0%	6%	41%	89%
Biofuel Blended* Energy Used for Light Duty Transportation (MMBtu)	222,873	183,343	100,625	15,252
Biofuel Blend*Light Duty Vehicles (% of Vehicle Fleet)	100%	94%	59%	11%
Heavy-Duty Transportation Energy Use from Biodiesel (Percent of Total)	94%	33%	58%	96%
Heavy-Duty Transportation Energy Use from Fossil Fuels (Percent of Total)	6%	67%	42%	4%

**This measures biofuels blended with fossil fuels. A common example is gasoline with ethanol mixed in.*

Sources: VTrans, LEAP Model

Total Energy Use

Making these changes to meet the Vermont state energy goals will result a large decrease in per-capita energy use, as shown in Tables 9 and 10 below. Future projects are shown with and without industrial energy use, as the sector is not well represented by the LEAP model and the projections for this energy type may not be reliable.

Table 9. LEAP Model Estimated Future Total Energy Use Per Capita (Including Industrial Electricity Use*) in Hinesburg, 2015-2050

	2015	2025	2035	2050
Total Energy Use (MMBtu)	509,692	469,224	397,090	315,675
Population	4,489	4,682	4,794	5,016
Total Energy Use Per Capita (MMBtu)	114	100	83	63
Reduction in Total Energy Use Per Capita since 2015	--	12%	27%	45%

Source: LEAP Model

**Please note that industrial electricity use is recognized as the most difficult element to project in the LEAP model, because of regional discrepancies in data from the commercial and industrial sector. Therefore, projected electricity use and total energy use are reported two ways: with industrial electricity use included and excluded.*

Table 10. LEAP Model Estimated Future Total Energy Use Per Capita (Excluding Industrial Electricity Use) in Hinesburg, 2015-2050

	2015	2025	2035	2050
Total Energy Use (MMBtu)	496,077	449,909	372,116	282,152
Population	4489	4682	4794	5016
Total Energy Use Per Capita (MMBtu)	111	96	78	56
Reduction in Total Energy Use Per Capita since 2015	--	13%	30%	49%

Source: LEAP Model

**Please note that industrial electricity use is recognized as the most difficult element to project in the LEAP model, because of regional discrepancies in data from the commercial and industrial sector. Therefore, projected electricity use and total energy use are reported two ways: with industrial electricity use included and excluded.*

Public Energy Education

The town has already identified the need to create programs, processes and systems to foster sustainable procurement and use of energy. In 2014 the Selectboard initiated a Hinesburg Energy Committee to formally promote the responsible use of energy. The committee consists of up to seven members of the community each serving three-year terms. This committee acts in an advisory capacity for the other boards and commissions in town. The energy committee has helped the town's overall effort to promote sustainability through several initiatives:

- The committee has advised town officials on how several potential developments under review could orient buildings on the plans to take advantage of passive solar gains and how the developments could incorporate renewable energy.
- The committee submitted a motion to have the town adopt the Energy Code Plus building standards instead of the Residential Building Energy Code.
- The committee presents an annual Efficiency Vermont Button Up workshop for the community each fall. The purpose of the presentation was to educate residents on the importance of making energy efficiency upgrades on homes and shows homeowners how they can properly install efficiency upgrades on their own homes.
- The committee held a four-meeting Net Zero Energy and Healthy Homes workshop series in 2018.

Renewable Energy Generation

In addition to reducing energy consumption, meeting Vermont’s renewable energy goals will require a significant increase in renewable energy generation in Hinesburg. Renewable energy resources are defined in State statute (24 V.S.A. §4303) as, “energy available for collection or conversion from direct sunlight, wind, running water, organically derived fuels, wood and agricultural sources, waste heat, and geothermal sources.” Achieving the State CEP goal of supplying 90% of our energy needs from renewables by 2050, requires an average increase in renewables of approximately 2.57% per year. The Town must promote this goal and work aggressively to achieve it. The Town has installed limited renewables on municipal property – e.g., solar trackers next to the wastewater treatment facility; solar powered lights for the Town Office park and ride. Residents and businesses have also increased usage of solar, wind, and biomass heat (e.g., wood pellets). As of May 2019, the Vermont Energy Dashboard (<http://www.vtenergydashboard.org/my-community/hinesburg/statistics>) showed 235 renewable energy sites in Hinesburg, as shown in Table 11 below.

Table 11. Existing Renewable Electricity Generation

	Sites	Power (MW)	Energy (MWh)
Solar	231	3.07	3,771
Wind	2	.012	29
Biomass (Wood)	2	Unknown	Unknown
Total	235	3.09	3,800

Source: Community Energy Dashboard, May 2019

Increasing the use of renewable energy sources will require concerted efforts by the entire community, such as:

- Additional renewables on municipal properties and facilities, particularly roof-mounted solar (e.g., Town Highway garage, etc.) and ground-mounted solar.
- Use of electric vehicles for light or medium duty municipal vehicles, and use of biofuel vehicles for heavy duty municipal vehicles to the extent possible. Provision of one or more public electric vehicle charging stations – e.g., Town Office, Police Station, Carpenter-Carse Library, etc.

- Ensure that new construction makes use of renewables to a far greater extent than currently mandated. Revise land use regulations to clarify and prioritize maximizing solar gain, such that any new construction must get as much direct sunlight as possible, while balancing the need to create vibrant streetscapes in the village growth area that necessarily include trees and variable building orientation.

In Hinesburg, these generation goals mean that annual generation capacity in Hinesburg must be increased by between 13,517 MWh and 23,594 MWh, as shown in Table 12 below.

Table 12. New Renewable Electricity Generation Targets

	2025		2035		2050	
	Low	High	Low	High	Low	High
Generation Targets – Any Technology (MWh)	3,862	6,741	7,724	13,482	13,517	23,594

Sources: LEAP Model and CCRPC Modeling

These targets are in addition to the 1,458 MWh generated annually in the municipality as of July 2017

Chittenden County Regional Planning Commission has set high and low generation targets for the county and each municipality (see Supplement 6 of the 2018 ECOS Plan for the methodology). Any amount of generation within this range means that the town is producing its share of renewable energy generation for the county.

The Town of Hinesburg has more than enough land area to meet these goals with current renewable energy technology. The graphics below show the amount of land needed to produce the generation targets with solar or wind. These hypothetical scenarios show that Hinesburg’s high generation goal could be met with as little as 0.6% of the Town’s total land area. Estimates of Hinesburg’s total generation capacity for various technologies can be found in Tables 13 and 14 below.

Figure 1. Land area needed to meet Hinesburg's generation targets with 100% solar

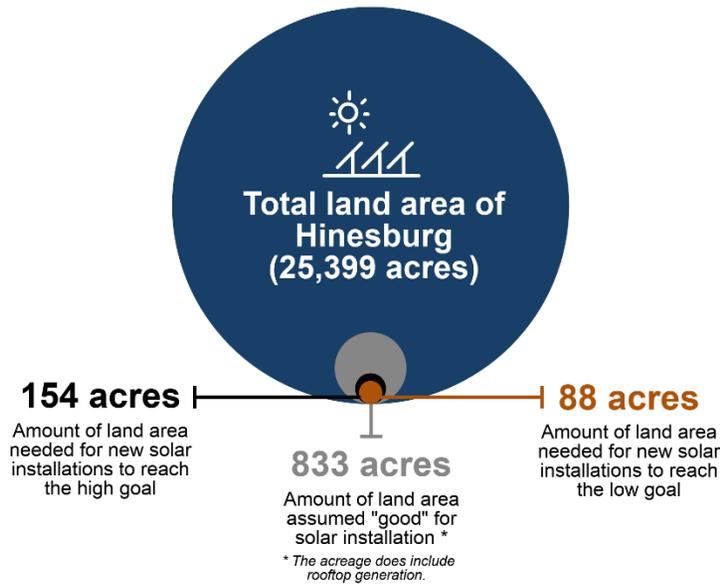


Figure 2. Land area needed to meet Hinesburg's generation targets with 100% wind

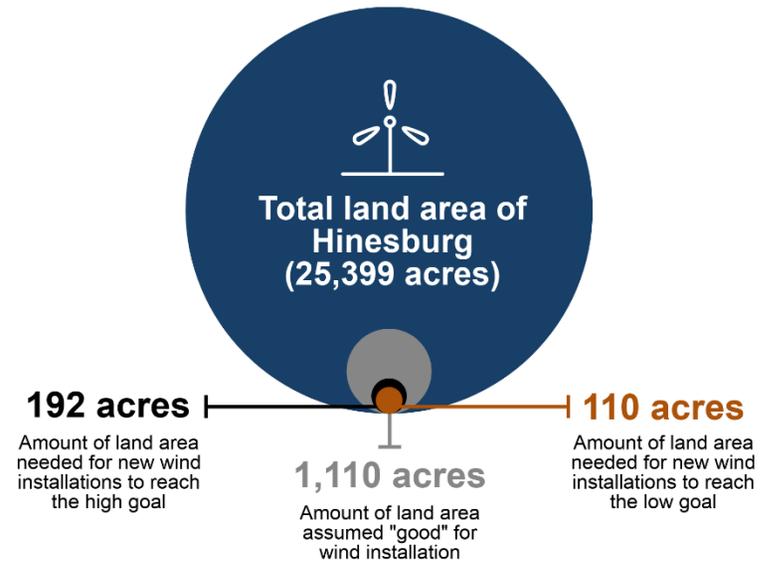


Table 13. Land Available for Wind and Solar Generation

	Prime Potential	Base Potential
Solar	833 acres (3% of town)	5,237 acres (21% of town)
Wind	1,110 acres (4% of town)	10,824 acres (43% of town)

Source: CCRPC and the Department of Public Service, Vermont Center for Geographic Information

Table 14. Projected Renewable Electricity Generation Potential

	Power (MW)	Energy (MWh)
Rooftop Solar*	4	4,463
Ground-Mounted Solar* – Prime	104	127,684
Ground-Mounted Solar* – Base	87	107,049
Wind – Prime	44	136,080
Wind – Base	433	1,327,422
Hydro	Future hydroelectric capacity may be available at existing small dams	
Biomass	See Map 6 for forested areas	

Source: CCRPC and the Department of Public Service

*Rooftop solar potential is calculated by assuming that a certain percentage of rooftops can hold solar systems. Ground-mounted solar potential reports how much land could be developed with solar based on its aspect and elevation, and does not remove space taken up by impervious surfaces like roofs. Therefore, rooftop solar potential cannot be added to ground-mounted solar potential, as this would lead to some generation potential being double counted.

Energy Siting & Screening Policies

Local Policies

Hinesburg encourages the development of renewable energy generation and storage facilities (e.g., solar, wind, etc.), but the scale, context and impacts of a project must be considered. Visual screening from public roads and neighboring residences is an important consideration for any ground-mounted facility over 15kw, and is particularly sensitive for facilities over 150kw. Such screening need not hide such facilities, rather it should be used to ensure the facilities blend with the surroundings. State statute (24 V.S.A. §4413b) prohibits municipal land use regulations from regulating energy generation and transmission facilities. Such facilities are instead reviewed by the VT Public Utility Commission (PUC) pursuant to 30 V.S.A. §248. Section 248 does require that ground-mounted solar generation facilities comply with municipal screening requirements as long as the PUC finds that compliance would not have the effect of prohibiting or interfering with the functional use of the facility. Hinesburg’s Zoning Regulations were revised in 2016 to include screening requirements for such facilities. Although important, screening is only a tool to help blend or hide development after a site has been selected. More importantly, such development must be properly sited in the first place.

This Town Plan provides clear guidance as to the sensitive natural and cultural features that shall inform site selection for any development. The policies in this plan shall be applied to energy generation facilities over 15kw and to transmission facilities, to ensure that such facilities will not unduly interfere with orderly development. **Because this plan is an “enhanced energy plan,” the following policies will be given “substantial deference” in proceedings before the Public Utilities Commission.**

- Primary resource areas are inappropriate for siting of energy generation facilities and shall be avoided. Primary resource areas are:
 - Class 1 and 2 wetlands (Vermont Significant Wetland Inventory and advisory layers) and associated buffers (Map 7)
 - Flood hazard areas (Map 7);
 - Steep slopes 25% or greater (Map 9)
 - Surface waters and setback areas (Map 7)
 - Rare, threatened, and endangered species locations and significant natural communities (Map 9)
- Secondary resource areas shall also be considered, and impacts to such areas shall be minimized. Secondary resources areas are:
 - Moderately steep slopes 15-25% (Map 9)
 - Prime and statewide agricultural soils (Map 5);
 - Core wildlife habitat (Map 14)
 - Wildlife corridors (Map 14)
 - Deer wintering areas (Map 9)
- Particularly in the most rural portions of town (i.e., AG & RR2 zoning districts) forest clearing and impacts to prime agricultural soils shall be minimized to protect the working landscape. Context is important. For example, it’s reasonable for a working farm to use a portion of its prime agricultural soils for ground-mounted solar if it supports the continuation of the larger agricultural land use. However, the wholesale conversion of forest and/or prime agricultural soils so as to exclude concurrent farm and/or forestry use of a particular property is unacceptable. Important natural features are discussed in depth in Chapter 5, and are depicted on the maps that support this plan.
- Development potential within the village growth area should also be respected. As Hinesburg’s sole growth center, land intensive energy generation and transmission facilities shall be avoided, unless incorporated into a preferred location as noted below. The intent is not to prohibit such facilities entirely in the village growth area. However, energy generation and transmission facilities in this area must preserve the following: buildout objectives as noted throughout this plan (e.g., affordable housing, senior housing, commercial/industrial, etc.), vibrant streetscapes, visual character of the village, ability to have actively used and interconnected greenspaces.
- Town-wide, preferred locations for energy generation facilities include already developed areas. For example: on structures (e.g., roof-mounted), in parking lots, within a grouping of structures and infrastructure (e.g., farm building complex, industrial campus/park, residential dwelling

ACT 174 AND SUBSTANTIAL DEFERENCE

In 2016, Act 174 established a process for “enhanced energy planning,” which encourages municipalities to write plans that are “energy compliant.” This plan meets the standards for energy planning established by Act 174 and outlined in 24 V.S.A. §4352. Therefore, the policies of this plan will receive substantial deference in §248 proceedings. The Public Utility Commission shall apply the land conservation measures or specific policies in accordance with their terms unless there is a clear and convincing demonstration that other factors affecting the general good of the State outweigh the application of the measure or policy. This is a higher standard of review than “due consideration,” which the municipal plan’s policies would otherwise receive.

cluster), on the old Town landfill site, in non-productive portions of gravel pits that have been through site reclamation. Many of these areas are already defined as preferred sites in the Vermont Net Metering Rules. Projects sited on preferred site benefit from larger generation limits and higher net metering rates. Hinesburg hopes to define other appropriate locations as preferred sites during the life of this plan. As sites are suggested in the future, there are two ways they can be formally defined as preferred sites: through an amendment to this plan or through a joint letter from Hinesburg's planning commission, Selectboard and the Chittenden County Regional Planning Commission.

- The Town's Subdivision Regulations require underground utility lines for new service to subdivisions. Although substantially more expensive to install, underground utility lines make sense given the community's interest in maintaining the Town's rural character and aesthetics. Although large scale transmission lines are difficult to place underground, energy generation facilities should utilize underground lines both within the project and to feed the facility.

State Policies

The policies above are not the only policies that apply to energy facility siting in Hinesburg. The State of Vermont has defined certain resources as known and possible constraints, some of which are the same as Hinesburg's primary and secondary resources and some of which are not. These areas are protected by the ECOS Regional Plan and state agency review during the Public Utility Commission review process. State defined known constraints are areas in which the State of Vermont finds that development, including renewable energy generation, is not appropriate. These resources are shown on the map of Known State Constraints. They are:

- FEMA Floodways
- DEC River Corridors
- National Wilderness Areas
- State-significant Natural Communities
- Rare, Threatened, and Endangered Species
- Vernal Pools (confirmed and unconfirmed)
- Class 1 and 2 wetlands (Vermont Significant Wetland Inventory and advisory layers)

State defined possible constraints are areas in which the State of Vermont finds that the effects of development, including renewable energy generation, may need to be mitigated. These resources are shown on the map of Possible State Constraints. They are:

- Agricultural Soils and Hydric Soils
- Act 250 Agricultural Soil Mitigation Areas
- FEMA Special Flood Hazard Areas
- Vermont Conservation Design Highest Priority Forest Blocks (Forest Blocks – Connectivity, Forest Blocks – Interior, Forest Blocks - Physical Land Division)
- Highest Priority Wildlife Crossings
- Protected Lands (State fee lands and private conservation lands)
- Deer Wintering Areas

Memorandum

TO:

Vermont Department of Housing and
Community Development
City of South Burlington Planning Commission
Town of Essex Planning Commission
Town of Hinesburg Planning Commission
Town of Jericho Planning Commission

Chittenden County Regional Planning
Commission
Town of Richmond Planning Commission
Town of Shelburne Planning Commission
Town of St. George Planning Commission
Village of Essex Junction Planning Commission

FROM: Matt Boulanger, AICP, Planning Director

DATE: October 2, 2020

SUBJECT: **Town of Williston Unified Development Bylaw – proposal to amend the following chapters:**

Chapter 29 Watershed Health

1-2 line description

Chapter 14 Parking

1-2 line description

Chapters 1-46 and Appendices A-I

1-2 line description

The Town of Williston is considering revising the portions of its development regulations related to parking requirements and watershed protection buffers. In addition to policy changes in these two areas of the bylaw, the Town is also considering changes throughout the document to correct errors and omissions, incorrect citations, and to add clarifying language to some existing policies.

The Williston Planning Commission will hold a public hearing to consider the proposed amendments to the *Williston Unified Development Bylaw* on Tuesday, October 20, 2020 at 7:00 PM via a Zoom meeting (Meeting ID 158-006-871 on zoom.us/join or 1-646-558-8656). Public comment at this hearing is welcomed and encouraged.

The proposed amendments to the Town’s *Unified Development Bylaw* are intended to reduce parking requirements and encourage shared parking wherever possible and to address nonconformities on currently developed properties within the Town’s watershed protection buffers. Proposed changes include:

Parking

- Reduce parking minimums by 20%.

- Reduce parking requirements for Accessory Dwelling Units and multifamily residential developments
- Allow further reduction in parking minimums through shared parking arrangements as well as the use of a new shared parking tool.

Watershed Protection Buffers

- Amend the watershed protection buffer regulations (WDB 29) to allow flexibility for existing nonconforming residential properties that were constructed prior to the 2009 adoption of watershed protection standards

Additional information can be obtained by contacting Matt Boulanger, Director of Planning at the Williston Planning Office by calling (802) 878-6704, or by email to mboulanger@willistonvt.org .

Attachments: Planning Commission Reporting Form for Municipal Bylaw Amendments
Copy of Public Notice
Williston Unified Development Bylaw Document with Proposed Changes

**Town of Williston, Vermont
7900 Williston Road
Williston, VT 05495**

**Planning Commission Reporting Form
for Municipal Bylaw Amendments**

The Town of Williston, Vermont is proposing changes to the town’s development regulations contained in the *Williston Unified Development Bylaw*. This report summarizes the proposed changes to the chapters of the *Unified Development Bylaw* being considered.

This report is in accordance with 24 V.S.A. §4441 (c) which states:

“When considering an amendment to a bylaw, the planning commission shall prepare and approve a written report on the proposal. A single report may be prepared so as to satisfy the requirements of this subsection concerning bylaw amendments and subsection 4384(c) of this title concerning plan amendments..... The report shall provide (:)

a) brief explanation of the proposed bylaw, amendment, or repeal andinclude a statement of purpose as required for notice under section §4444 of this title,

The Town of Williston is considering revising the portions of its development regulations related to parking requirements and watershed protection buffers. In addition to policy changes in these two areas of the bylaw, the Town is also considering changes throughout the document to correct errors and omissions, incorrect citations, and to add clarifying language to some existing policies. These changes will:

- Amend the watershed protection buffer regulations (WDB 29) to allow flexibility for existing nonconforming residential properties that were constructed prior to the 2009 adoption of watershed protection standards
- Amend the parking standards (WDB 14) to 1) allow flexibility for new and redeveloping properties to minimize the area devoted to surface parking while still ensuring that there is a reasonable supply of parking, 2) encourage shared parking, and 3) and provide clarity around bicycle parking and end-of-trip facility requirements
- Correct typographical errors and incorrect citations, as well as provide clarity to existing standards and definitions contained in WDB 1-46

b) and shall include findings regarding how the proposal:

1. Conforms with or furthers the goals and policies contained in the municipal plan, including the effect of the proposal on the availability of safe and affordable housing:

1. Objective 4.2.3 of the Williston 2016-2024 Comprehensive Plan calls for the Town of Williston to:

“Minimize the Surface Area Devoted to Parking. The town will continue to require adequate parking and to require shared parking where feasible to create “park once” conditions in the growth center. The “park once” concept requires a system that allows people to park their car once and circulate throughout the business district through a network of interconnected walking paths or transit. For both design and water quality reasons, the town will limit the number of spaces to no more than the number required. The town will also consider reducing or eliminating parking minimums.”

2. Policy 3.7.1, Refine Watershed Protection Buffers to Address Nonconforming Development, states:

“There are a number of existing houses built prior to the town’s current development regulations that were built within what are now watershed protections areas or buffers. The town currently does not have a mechanism for allowing any flexibility for these properties to have any additional development on a limited basis. The town shall consider amending its current regulations to try to accommodate some of these properties.”

2. Is compatible with the proposed future land uses and densities of the municipal plan:

The proposed changes do not alter any of the allowed uses of land or densities in the Unified Development Bylaw. The reduced parking requirements proposed may help property owners achieve the desired residential densities and provision of housing through accessory dwelling units as called for in the 2017 Williston Comprehensive Plan.

3. Carries out, as applicable, any specific proposals for any planned community facilities.

This is not applicable, these bylaw sections do not call for the construction of any community facilities.

Certification of Service

Vermont Agency of Commerce and Community Development
One National Life Drive
Deane C. Davis Building, 6th Floor
Montpelier, VT 05620-0501

Chittenden County Regional Planning Commission
110 West Canal Street, #202
Winooski, VT 05404

City of South Burlington Planning Commission
575 Dorset Street
South Burlington, VT 05403

Town of Essex Planning Commission
81 Main Street
Essex Junction, VT 05452

Town of Hinesburg Planning Commission
10632 Route 116
Hinesburg, VT 05461

Town of Jericho Planning Commission
P O Box 39
Jericho, VT 05465

Town of Richmond Planning Commission
P O Box 285
Richmond, VT 05477

Town of Shelburne Planning Commission
P O Box 88
5420 Shelburne Road
Shelburne, VT 05482

Town of St. George Planning Commission
1 Barber Road,
St. George, VT 05495

Village of Essex Junction Planning Commission
2 Lincoln St.
Essex Junction, VT 05452

Notice of Public Hearing

TOWN OF WILLISTON

October 20, 2020, 7:00 PM

To participate: zoom.us/join or call (646) 558-8656

Zoom Meeting ID 158 006 871

The Williston Planning Commission will hold a public hearing to consider amendments to the *Williston Unified Development Bylaw* on October 20, 2020 at 7:00 PM. The public hearing will be held virtually on Zoom. Public comment at this hearing is welcomed and encouraged.

The proposed amendments to the town's *Unified Development Bylaw* include:

- Amend the watershed protection buffer regulations (WDB 29) to allow flexibility for existing nonconforming residential properties that were constructed prior to the 2009 adoption of watershed protection standards
- Amend the parking standards (WDB 14) to 1) allow flexibility for new and redeveloping properties to minimize the area devoted to surface parking while still ensuring that there is a reasonable supply of parking, 2) encourage shared parking, and 3) and provide clarity around bicycle parking and end-of-trip facility requirements
- General clean up to correct typographical errors and incorrect citations, as well as provide clarity to existing standards and definitions

View the proposed changes online: <http://bit.ly/willistonbylaw2020>

Contact Matt Boulanger at the Williston Planning Office at (802) 878-6704 or mboulanger@willistonvt.org for additional information.

**Town of Williston, Vermont
7900 Williston Road
Williston, VT 05495**

**Planning Commission Reporting Form
for Municipal Bylaw Amendments**

The Town of Williston, Vermont is proposing changes to the town’s development regulations contained in the *Williston Unified Development Bylaw*. This report summarizes the proposed changes to the chapters of the *Unified Development Bylaw* being considered.

This report is in accordance with 24 V.S.A. §4441 (c) which states:

“When considering an amendment to a bylaw, the planning commission shall prepare and approve a written report on the proposal. A single report may be prepared so as to satisfy the requirements of this subsection concerning bylaw amendments and subsection 4384(c) of this title concerning plan amendments..... The report shall provide (:)

c) brief explanation of the proposed bylaw, amendment, or repeal andinclude a statement of purpose as required for notice under section §4444 of this title,

The proposed amendments to the Town’s *Unified Development Bylaw* are intended to focus the collection and expenditure of Town Transportation Impact fees on Town projects that will reduce the congestion that will otherwise be created by new development. Changes include:

- Raising the fee from \$700.00 per PM Peak Hour Vehicle Trip to \$2000.00 per PM Peak-Hour Vehicle Trip.
- Exempting units that will be perpetually affordable at 80% of the area median Income from the requirement to pay a transportation impact fee.
- Exempting new child care facilities from the requirement to pay the fee.
- Clarifying how developments that have constructed or contributed to the construction of impact fee projects will be able to credit that construction or contribution against impact fee liability.

d) and shall include findings regarding how the proposal:

2. Conforms with or furthers the goals and policies contained in the municipal plan, including the effect of the proposal on the availability of safe and affordable housing:

4. Objective 14.1 of the Williston 2016-2024 Comprehensive Plan calls for the Town of Williston to:

“revise its bylaws to be consistent with the policies adopted in this plan. These revisions will take the form of a unified development bylaw. These proposed changes will help

ensure that the town's development regulations are consistent with this recently adopted version of the town's comprehensive plan."

5. Policy 6.6.2, Monitor and Evaluate the Transportation Impact Fee, states:

"Williston has charged transportation impact fees since 1987, raising more than \$2 million. The current impact fee of \$700 per peak hour trip end was updated in 2008. The town will monitor and evaluate the effectiveness of the impact fee program and consider revising it to reflect current costs and match the priorities for improvements adopted in this plan."

6. The revised fee contains specific exemptions from the fee for perpetually-affordable housing units.

2. Is compatible with the proposed future land uses and densities of the municipal plan:

The revised list of transportation improvements upon which impact fee monies may be spent is focused on the construction of or improvements to the grid street network in the Town's state-designated Growth Center at Taft Corners, along with some funds to encourage the development of a multi-use path connecting Williston Village Designated Village Center to the Growth Center, in keeping with the land use goals of the 2016 Williston Comprehensive Plan and the 2018 amendment to that plan, the Williston Village Master Plan.

7. Carries out, as applicable, any specific proposals for any planned community facilities.

The list of impact fee projects is taken directly from policy goals and projects outlined in section 6.4 of the Williston Comprehensive Plan, with a heavy focus on projects the Town will be responsible for constructing.

Certification of Service

Vermont Agency of Commerce and Community Development
One National Life Drive
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Chapter 14

Off-Street Parking and Loading

This chapter sets standards for off-street parking and loading. Its intent, consistent with Policy 4.2.4 and other guidance from the *Town Plan*, is to minimize the area devoted to surface parking while still ensuring that there is a reasonable supply of parking, including spaces that can be safely used by those whose mobility or vision is impaired.

Minimizing the area devoted to surface parking will:

- protect watershed health, which may be adversely impacted by accelerated runoff from new impervious surfaces;
- conserve energy and make outdoor spaces more useable by moderating microclimatic extremes on intensively developed sites; and
- make it more pleasant to walk or cycle in Williston by contributing to streetscapes that are both comfortable and lively.

It is also specifically the intent of these standards to encourage shared parking arrangements, the use of parking structures, and the use of porous pavements.

14.1 Applicability

14.1.1 Do these standards apply to all development? Yes. The standards adopted in this chapter apply to all development for which an administrative or discretionary permit is required by this bylaw. Existing and proposed parking and loading areas must be clearly shown on the plans submitted with any application for a permit.

14.1.2 Do other requirements of this bylaw apply to off-street parking and loading areas? Yes. Off-street parking and loading areas must comply with all relevant standards of this bylaw. Some particularly relevant standards are cited below.

14.1.2.1 Drainage/Stormwater. Chapter 29 of this bylaw sets standards for stormwater management that apply to off-street parking and loading areas.

14.1.2.2 Landscaping. See Chapter 23 and specifically WDB 23.5 for the landscaping requirements that apply to off-street parking and loading areas.

14.1.2.3 Snow Removal/Storage. WDB 16.6 sets standards for snow removal and storage that apply to off-street parking and loading areas.

14.2 Off-Street Parking Requirements

14.2.1 How many off-street parking spaces are permitted for a given use? Table 14.A establishes the maximum number of off-street vehicle (Column A) and bicycle (Columns B and C) parking spaces that are required/allowed for typical land uses. For uses that are not listed in the table, see

~~WDB 14.2.3. The minimum number of accessible off-street vehicle parking spaces required is given by Table 14.B. It is important to understand that the numbers in Column A of Table 14.A are both minimums (you must provide at least this many vehicle parking spaces) and maximums (you may not provide more vehicle parking spaces). The required maximum allowed number of off-street parking spaces may be changed increased only on the basis of a shared parking analysis (see WDB 14.2.2) or as provided by WDB the criteria in 14.2.4 or 14.2.5. Spaces reserved, which allows adjustments for electrical porous pavement, structured parking, additional accessible spaces, and special spaces for electric vehicle charging, up to 5% of the required parking spaces may be counted as part of these totals shared vehicles, and carpool vehicles.~~

~~The minimum number of indoor and outdoor bicycle parking spaces and end-of-trip facilities is also established in Table 14.A. For uses that are not listed in the table, see WDB 14.2.3.~~

14.2.2 Can parking be shared by uses that have different peak hours of operation? Yes. In fact, this may be required. ~~Retail~~ Different uses of land generate widely varying demand for parking at different times of day, days of the week, and months of the year. Retail, residential, office, institutional and entertainment uses are expected to share off-street parking spaces wherever possible.

14.2.2.1 **Calculations.** The DRB may, when reviewing a pre-application, require that shared parking calculations be made for any development that includes uses with potentially different peak periods of parking demand. Shared parking analyses may also be voluntarily submitted by adjoining ~~land owners~~ landowners. In either case, the analysis shall be conducted using the shared parking methodology ~~published by~~ described in in appendix J of this bylaw. ~~In the Urban Land Institute review of an administrative permit that changes parking demand but does not otherwise call for a discretionary permit, like a change of use, the Zoning Administrator may require the submission of shared parking calculations before approving the permit.~~

14.2.2.2 **Distance To.** Shared off-street parking spaces shall be no more than 600 feet from a main entrance for customer parking and no more than 1000 feet from an employee entrance for employee parking.

14.2.2.3 **Easement.** Shared parking arrangements run with the land and must be honored by successors in interest. Failure to do so will be a violation of this bylaw, subject to enforcement as provided by WDB 7.4-7.6. Where different owners are involved in a shared parking arrangement, a draft easement providing for shared parking, including the number and location of the proposed shared spaces, must be submitted for review with the application for a discretionary permit. The signed easement, which must also specifically indicate how the costs of maintenance of the shared parking spaces will be shared, must be submitted with the final plans and recorded before a certificate of compliance may be issued, as provided by WDB 7.3.

14.2.2.4 **Accessible Spaces.** Given the need for proximity to the use served, the accessible parking spaces required by Table 14.B may not be shared.

14.2.3 What if a use is not listed in Table 14.A? The ~~required~~ maximum allowed number of off-street parking spaces shall be determined by the ~~DRB or~~ Administrator based on the similarity of the proposed use to one or more uses listed in Table 14.A and the Institute of Transportation Engineer's *Parking Generation*. The Administrator's determination of how many spaces ~~will be~~ are permitted is subject to appeal using the procedure for the appeal administrative permits provided by WDB 5.4 of this bylaw.

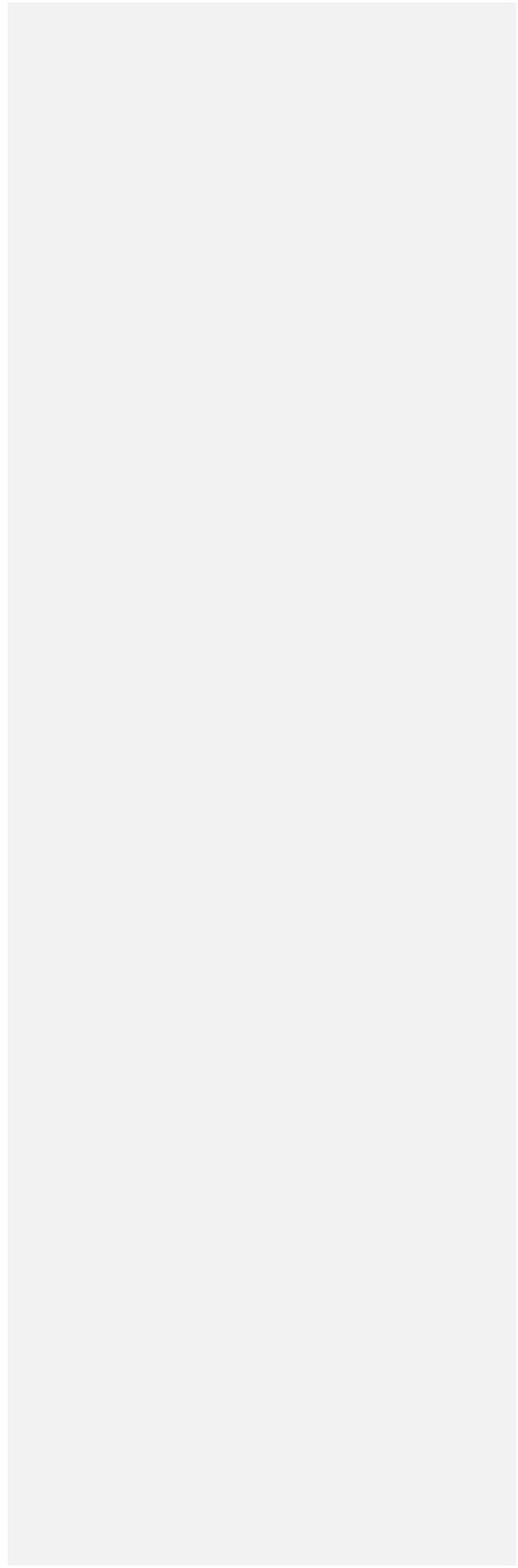


Table 14.A ~~Minimum/Maximum Off-Street Parking Permitted~~ ~~Minimum Bicycle Parking Permitted~~ Requirements

Land Use

Column A Maximum Off-Street Motor Vehicle Parking Permitted

Column B Minimum Bicycle Parking Required

The DRB may permit an exception to the bicycle parking requirements as provided by WDB 14.8.5

Column C

Off-Street Motor Vehicle Spaces

Total Bicycle Parking Spaces

Long Term Bicycle Parking Spaces

Land Use

per 1000 SF gross floor area, unless otherwise specified

per maximum motor vehicle spaces, unless otherwise specified

per minimum required bicycle spaces, unless otherwise specified

Industrial Uses

1.00

Industrial uses are very diverse. Use 1.00 spaces per 1000 SF GFA as a starting point. The actual requirement will be set by the Administrator or DRB.

5% of vehicular; minimum 4

75% ~~of required spaces~~

~~Residential Uses~~ **Residential Uses**

Parking spaces inside a garage, count toward this maximum.

- One and Two Family Dwellings
- Accessory Dwellings
- Multiple-Family Dwellings
- Senior Housing (independent living)
- Senior Housing (assisted living)

~~2.00 per dwelling~~ none
~~Two reserved spaces: See WDB 17.1.23.1.3.5~~ 1.00
 1.75 ~~50~~ per unit
 1.00 per dwelling
 0.35 per dwelling

none
~~none~~

none
~~none~~

10% of vehicular; minimum 4
 5% of vehicular; minimum 4
 5% of vehicular; minimum 4

1 per 4 units
 1 per 8 units
 75% ~~of required spaces~~

Lodging Uses

1.00 per room

Conference space and restaurants should be accounted for separately.

7% of vehicular; minimum 4

50% ~~of required spaces~~

Recreational Uses

- Health Club
- Other Recreational Uses

5.00

Too diverse to list. Will require individual analysis

10% of vehicular; minimum 4

50% ~~of required spaces~~

Theaters, Places of Assembly

Includes churches, live and movie theaters, and similar gathering places. Associated offices and other spaces should be accounted for separately. Church schools should be accounted for separately.

~~.25 per seat~~ Includes churches, live and movie theaters, and similar gathering places. Associated offices and other spaces should be accounted for separately. Church schools should be accounted for separately.
~~.25 per seat~~

~~7% of vehicular~~

~~7% of vehicular~~

~~none~~

7% of vehicular; minimum 4

none

NOTE: The DRB may permit an exception to the bicycle parking requirements as provided by WDB 14.8.5

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Table 14.A, cont.

Land Use		Off-Street Motor Vehicle Spaces	Total Bicycle Parking Spaces	Long-Term Bicycle Parking Spaces
		<i>per 1000 SF gross floor area, unless otherwise specified</i>		
Educational and Health Care Uses				
Child Care Centers, Pre-School	.35 per student		10% of vehicular	75% of required bicycle spaces
Schools, K-8	.35 per student		30% of vehicular	20% of required bicycle spaces
Schools, 9-12	.35 per student		30% of vehicular	20% of required bicycle spaces
Community Colleges	.35 per student		30% of vehicular	20% of required bicycle spaces
Libraries	4.25		30% of vehicular	20% of required bicycle spaces
Hospitals, Clinics, Medical Offices	5.00		7% of vehicular	75% of required bicycle spaces
Nursing Homes	1.50		5% of vehicular	75% of required bicycle spaces
Veterinary Clinics	2.00		5% of vehicular	75% of required bicycle spaces
Office Uses				
Office Building	3.50		7% of vehicular	50% of required bicycle spaces
Offices w/ High Turnover	5.00		10% of vehicular	50% of required bicycle spaces
Retail Uses				
Convenience Stores	4.00		7% of vehicular	20% of required bicycle spaces
Supermarket/Groceries	5.00		7% of vehicular	20% of required bicycle spaces
Drugs	2.50		7% of vehicular	20% of required bicycle spaces
Bulky Retail (furniture, lawn and garden)	3.00		7% of vehicular	20% of required bicycle spaces
General Retail, Shopping Centers	4.00		7% of vehicular	20% of required bicycle spaces
Services				
Banks	4.75		7% of vehicular	50% of required bicycle spaces
Quality Restaurant	20.00		7% of vehicular	20% of required bicycle spaces
Fast Food Restaurant (no drive-through)	15.00		7% of vehicular	20% of required bicycle spaces

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14.2.4 How could I increase the number of permitted off-street parking spaces?

14.2.4.1 Build a Parking Structure- or Solar Canopy. Consistent with Policy 4.2.3 of the *Town Plan* (which encourages the reduction of surface parking) developments may increase the number of permitted off-street parking spaces by 25% by providing a ~~multilevel~~-parking structure or energy-generating solar canopy. This incentive is available only where at least 30% of the off-street parking spaces required by Table 14.A are in the structure/s- or solar canopy. All of the additional parking spaces permitted must be in the structure/s or solar canopy. Note also that there is a building height incentive for the provision of structured parking in the MUCZD, MURZD, BPZD, and TCZD.

14.2.4.2 Use Porous Pavement. Developments may increase the number of permitted off-street parking spaces by 15% by using porous pavement for a majority of all vehicular parking spaces required by Column A of Table 14.A. Porous pavement specifications must be approved by the Administrator, with the advice of the DPW.

14.2.4.3 Provide Spaces for Alternate Fuel Vehicles and Carpools. Off-street parking spaces that are dedicated to vehicles that operate primarily on alternative fuels (electric, hydrogen, natural gas, biodiesel) or that are dedicated to vehicles participating in a carpooling program may be permitted in addition to the maximum allowed parking or may be integrated into the total required number of parking spaces. ~~These spaces—which must not make up more than five percent (5%) of the total number of off-street parking spaces required—These spaces~~ must be clearly identified with a placard reserving their use for vehicles that operate primarily on alternative fuels or that are participating in a carpooling program.

~~14.2.5 How could I decrease~~4.4 Provide Documentation of Additional Parking Demand The DRB may, at its discretion, consider a study using the number of off-street shared parking methodology in appendix J of this bylaw showing that existing shared parking resources cannot serve demand created by the new development.

14.2.4.5 Provide Additional Accessible Spaces Some uses may require additional accessible (ADA) parking spaces. ~~At the discretion of the DRB and based on testimony provided by the applicant, additional accessible spaces beyond the minimum required by in Table 14.B may be added to a site without counting toward the allowable maximum number of parking spaces in Table 14.A? Proposed reductions in the required.~~

14.2.5 What if I propose fewer motor vehicle spaces than the maximum allowed in Table 14.A? The stated intent of this chapter is “to minimize the area devoted to surface parking while still ensuring that there is a reasonable supply of parking.” Typically, at least 80% of the maximum number of off-street parking spaces must be approved by the DRB. They are not automatic- parking spaces allowed in Table 14.A will be required. When an application for an administrative or discretionary permit is made where the proposed amount of parking is less than 80% of the maximums allowed in Table 14.A, the DRB or Administrator will, before approving such an application, make written findings of fact that the proposal includes adequate parking based on one or more of the following criteria:

14.2.5.1 Be Close to Public Transit. The DRB or Administrator may permit a development that is within a ~~10-minute walk~~ 2,500 feet of a bus stop to reduce the required number of off-street parking spaces ~~by to as much little as 20%, but only where 60% of the maximum sin Table 14.A~~ the major employer ~~is~~ in the proposed development ~~commit~~ commits to active

participation in ~~the Chittenden County Transit Authority's discount bus pass program a transportation management association.~~

14.2.5.2 Have On-Street Parking. The DRB ~~or Administrator~~ may permit a one-to-one (on-street for off-street) reduction in the required number of off-street parking spaces for on-street parking ~~or a municipal parking lot~~ that is available within 600 feet of a main entrance of the proposed development. This reduction of the number of off-street parking spaces may not, however, reduce the number of off-street parking spaces to ~~less than two per dwelling, fewer than 1.5 per Dwelling Unit Equivalent (DUE) as defined in WDB 19. In considering the offset for nearby public parking, the DRB or Administrator shall require a shared parking analysis of the street spaces following the method described in appendix J of this bylaw.~~

14.2.5.3 Shared Parking. The number of off-street parking spaces required for a particular use may be reduced by a shared parking study required by WDB 14.2.2, ~~and described in Appendix J of this bylaw.~~

14.2.6 Can I reduce the area used for parking by using smaller spaces for compact cars? Yes. The DRB may permit compact car spaces (see Table 14.C for the dimensions) to comprise as many as 25% of the off-street parking spaces required by Table 14.A. These spaces shall be clearly identified by a sign and/or pavement marking that says "Compact Car Only."

14.2.7 Where must off-street parking spaces be located?

14.2.7.1 Ownership. Off-street parking spaces shall be provided on the same lot or parcel and under the same ownership as the use they serve, except where a shared parking arrangement is required or permitted by WDB 14.2.2.

14.2.7.2 Distance: Nonresidential. The off-street parking spaces serving nonresidential developments must be within 600 feet of a main entrance for uses requiring customer parking and within 1,000 feet of an employee entrance for employee parking.

14.2.7.3 Distance: Residential. The off-street parking space/s serving a dwelling must be within 100 feet of the principal entrance to that dwelling. The DRB may allow a longer distance between parking and a dwelling in mixed-use developments.

14.3 Accessible Parking. Note that these requirements are more demanding in some ways than those of the Americans with Disabilities Act (ADA).

14.3.1 What is the minimum required number of accessible off-street parking spaces? See Table 14.B:

Table 14.B – Required Number of Accessible Off-Street Parking Spaces	
Total Number of Spaces	Minimum Number of Accessible Spaces
<u>1-25</u>	<u>1</u>
<u>26-50</u>	<u>2</u>
<u>51-75</u>	<u>3</u>
<u>76-100</u>	<u>4</u>
<u>101-150</u>	<u>5</u>
<u>151-200</u>	<u>6</u>
<u>greater than 200 spaces</u>	<u>6+</u> <u>2% of the spaces greater than 100 rounded to the nearest whole number</u>

14.3.2 Don't some uses need more or fewer accessible off-street parking spaces? The DRB may find that a development needs more or fewer accessible off-street parking spaces than are required by Table 14.B and modify the requirements of that table accordingly. The DRB's action must still be consistent with the ADA. Examples of developments for which a modification may be appropriate include:

Table 14.B—Required Number of Accessible Off-Street Parking Spaces

Total Number of Spaces	Minimum Number of Accessible Spaces
<u>1-25</u>	<u>1</u>
<u>26-50</u>	<u>2</u>
<u>51-75</u>	<u>3</u>
<u>76-100</u>	<u>4</u>
<u>101-150</u>	<u>5</u>
<u>151-200</u>	<u>6</u>
<u>greater than 200 spaces</u>	<u>6+</u> <u>2% of the spaces greater than 100 rounded to the nearest whole number</u>

14.3.2.1 Hospitals and Medical Offices: at least 10% of the off-street parking spaces serving visitors and patients must be accessible. Specialty medical offices serving persons with mobility impairments may need as many as 20% accessible spaces.

14.3.2.2 Developments with Valet Parking: No accessible off-street spaces are required in parking areas used for valet parking. An accessible passenger loading zone is required.

14.3.2.3 Industrial Uses. Industrial uses may be permitted to meet the ADA standards – which are somewhat lower - for the required numbers of accessible off-street parking spaces.

14.3.3 Where should accessible off-street parking spaces be located? Accessible off-street parking spaces and the routes between those spaces and the buildings or other destinations they serve must be clearly identified on the plans submitted with applications for permits.

14.3.3.1 Location of Accessible Routes. There must be a clearly marked accessible route that meets all ADA standards between the accessible off-street parking space required by Table 14.B and an accessible building entrance or other destination. Where a development has multiple accessible entrances or destinations, the required accessible off-street parking spaces should be dispersed and located near each accessible entrance.

14.3.3.2 Design of Accessible Routes. Accessible routes must be as short as reasonably possible, safe and convenient for people with mobility and visual impairments. Accessible routes should not cross aisles, driveways, or any other part of the vehicular circulation system on the site. The DRB may, however, permit an exception to this standard where physical constraints like difficult terrain or existing development make compliance infeasible.

14.4 Dimensional Standards

14.4.1 What are the minimum required dimensions of off-street parking spaces? The dimensional standards for off-street parking spaces appear in Table 14.C.

14.4.1 What are the minimum required dimensions of off-street parking spaces? The dimensional standards for off-street parking spaces appear in Table 14.C. **Table 14.C - Minimum Parking Space Dimensions**

Angle of Parking Space	Width of Space	Length of Space	Width of Angled Space	Length of Angled Space	Minimum Back-Up Length
STANDARD SPACES					
Parallel Parking	9.0'	22.0'	-	-	-
45° Angle	9.0'	20.0'	12.7'	20.5'	15.0'
60° Angle	9.0'	20.0'	10.4'	21.8'	18.0'
90° Angle	9.0'	20.0'	9.0'	20.0'	24 20.0'
Minimum aisle width (one-way)			10'		
Minimum aisle width (two-way)			24 20'		
COMPACT SPACES					
Parallel Parking	8.0'	20.0'	-	-	-
45° Angle	8.0'	18.0'	11.2'	18.3'	13.0'

60° Angle	8.0'	18.0'	9.2'	14.8'	15.0'
90° Angle	8.0'	18.0'	8.0'	18.0'	20.0'

14.4.2 What are the minimum required dimensions for accessible off-street parking spaces and the associated aisles? Accessible off-street parking spaces must be designed to accommodate vans. They shall be at least nine feet (9') wide with an adjacent aisle at least eight feet (8') wide. A sidewalk may be used as an access aisle for end spaces.

14.4.2.1 Shared Aisles. Accessible off-street parking spaces may share an access aisle by using front-in and back-in parking.

14.4.2.2 Obstructions. Planters, curbs, wheel stops, and similar installations, including cars overhanging a sidewalk, must not obstruct accessible routes. There shall be no snow storage along accessible routes.

14.4.2.3 Grade. The aisle serving an accessible off-street parking space must be level with that space, with a grade that does not exceed 1:50 (2%) in any direction.

14.4.2.4 Curb Ramps. Curb ramps must be located outside the aisle and parking space. To put it another way, accessible parking spaces and the adjacent aisles must be level and on the same grade. Grade changes (ramps) must be built into the adjacent sidewalk.

14.4.2.5 Signs/Pavement Markings. Accessible off-street parking spaces must be marked by a sign showing the standard symbol of accessibility. This sign must be affixed to a post or a building where it will be clearly visible from a vehicle searching for accessible parking spaces. Aisles must be marked with contrasting stripes or hatching on the pavement.

14.5 Off-Street Loading

14.5.1 Where are off-street passenger loading areas required? Off-street passenger loading areas shall be provided as explained below.

14.5.1.1 Institutional and Entertainment Uses. Day care centers, theaters, schools, and other places for public assembly must provide at least one safe off-street passenger loading area. The DRB may require additional off-street loading passenger loading areas for institutional and entertainment uses that have more than one principal entrance.

14.5.1.2 Other Uses. The DRB may require that any other use which adjoins an arterial or collector road provide a safe, off-street passenger loading area.

14.5.2 Where are off-street freight loading areas required? Safe off-street freight loading areas must be provided for commercial and industrial development buildings that include more than 10,000 SF GFA. At least one off-street freight loading area of at least 600 square feet shall be provided, along with one additional off-street freight loading area for each additional 20,000 square feet of GFA.

14.6 Access to Off-Street Parking and Loading Areas. Chapter 13 of this bylaw establishes standards for all points of access, including those to parking and loading areas.

14.7 Circulation within Off-Street Parking Areas. The pattern of circulation in off-street parking areas shall provide safe and efficient access to individual parking spaces, protect pedestrians moving through the parking area, and facilitate safe access to adjoining roads.

14.7.1 Are there minimum aisle widths for parking areas? Yes. The minimum aisle widths are included in Table 14.C, which also provides dimensional standards for parking spaces.

14.7.2 Must directional signs and/or pavement markings be provided in parking areas? Yes. Directional signs and pavement markings shall be used to guide traffic through parking areas and structures.

14.7.3 How must pedestrian access around, through, and to parking areas be provided?

14.7.3.1 Around. There shall be safe pedestrian access in the form of sidewalks around all parking and loading areas. The DRB may permit the use of a recreation path or other pedestrian way as an alternative to a sidewalk.

14.7.3.2 To. Accessible routes must be provided from parking areas to the building/s of other destinations they serve. WDB 14.3 provides standards for accessible routes.

14.7.3.3 Through. The DRB will require that safe pedestrian access be provided through large parking areas.

14.8 Bicycle Parking. Proposed bicycle parking must be shown on the plans submitted with an application for a permit.

14.8.1 How many bicycle parking spaces are required? ~~Columns B and C of Table 14.A give~~ gives the minimum number of required total and long-term bicycle parking spaces for typical uses. There is no maximum. ~~Column B provides the basis for calculating the total number of bicycle parking spaces that will be required. To express it as a formula:~~

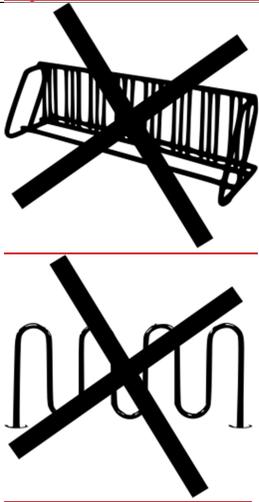
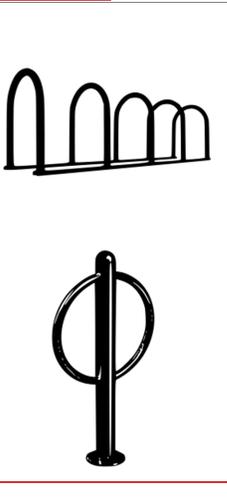
~~Total Required Bicycle Parking Spaces = Total Vehicular Parking Spaces Required (based on Column A) X the Percentage from Column B.~~

~~For example, a 40,000 SF industrial building will require 40 vehicular parking spaces (Column A requires 1 per 1,000 GFA) and 2 bicycle parking spaces (Column B requires 5% of the vehicular total).~~

14.8.2 What is a short-term bicycle parking space? A short-term bicycle parking space is a space in a bicycle rack that is large enough to accommodate a bicycle (approximately two by six feet), permits the locking of the bicycle frame and one wheel to the rack, and supports the bicycle in a stable position without damage. ~~The number of short term bicycle parking spaces that is required is calculated by subtracting the number of long term bicycle parking space required by Column C of Table 14.A from the total calculated using Column B. To express it as a formula:~~

~~Required Short-Term Bicycle Parking Spaces = Total Required Bicycle Parking Spaces - Required Long-Term Bicycle Parking Spaces from Column C~~

For example, a 100,000-SF GFA retail building needs 400 vehicular parking spaces (Column A requires 1 per 1,000 SF GFA), 28 total parking bicycle parking spaces, 6 long-term bicycle parking spaces (Column C says that 20% of all bicycle parking spaces must be long-term), and 22 short-term bicycle parking spaces.

Racks like this do not meet the requirements of WDB 14.8.2	Racks like this meet the requirements of WDB 14.8.2
	

14.8.3 Are there design standards for short-term bicycle parking? Yes. Short term bicycle parking must be as visible, as well lit, and as convenient for cyclists as the vehicular parking on the site is for drivers.

14.8.3.1 Visibility. Short-term bicycle parking or a directional sign leading to it shall be visible from the principal entrance of the building it serves. Short term bicycle parking serving buildings with multiple entrances shall be dispersed so that it serves every principal entrance. Short term bicycle parking will ideally be within 50 feet of the building entrance.

14.8.3.2 Security. Bicycle racks shall be securely anchored to the ground, allow the bicycle wheel and frame to be locked to the rack with a U-lock, and be in a well-lit, highly visible location.

14.8.3.3 Paving. Short-term bicycle parking shall be on a paved surface.

14.8.4 What is a long-term bicycle parking space? A long-term bicycle parking space provides secure storage in a bicycle locker or a bicycle storage room or enclosure. These facilities must protect the entire bicycle, including its components and accessories against theft and the weather. They must also include a clothes storage locker that has a minimum size of 12” wide, 18” deep, and 36” high. Lockers do not need to be in the same location as the long-term bicycle parking space. The required number of long-term bicycle parking spaces is given as a percentpercentage of the required number of total bicycle parking spaces and is listed in Column C of Table 1714.A.

14.8.5 Can the number of required bicycle parking spaces be reduced? The DRB or Administrator may reduce the bicycle parking requirements adopted in this chapter ~~where~~when they make a finding, based on testimony and evidence presented by the applicant, that the location and/or nature of the proposed development make the use of bicycles highly unlikely.

14.9 End-of-Trip Facilities

14.9.1 Why are end-of-trip facilities required? End-of-trip facilities are an important element in long range strategies to reduce energy consumption and dependence on nonrenewable energy resources. Few people can ride a bicycle even a modest distance to work if there is not a place to shower and change.

14.9.2 What end-of-trip facilities are required for developments? End-of-trip facilities include showers and a changing area. Facilities must be provided on-site or via an agreement with a nearby (within ~~600~~300 feet) use. Table 14.D outlines the minimum number of required end-of-trip facilities based on the number of long-term bicycle parking spaces required.

Table 14.D - Shower and Changing Facilities	
Required Long Term Bike Parking Spaces	Minimum Number of Required Shower and Changing Facilities
1-3	1
4- 17	1 per gender ²
18-30	2 per gender ⁴
30+	3 per gender ⁶

14.9.3 When are end-of-trip facilities required? Many developments in Williston were constructed before bicycle parking and end-or trip facilities were required. In addition to being required whenever vehicle parking areas are proposed to be constructed as part of new development or expanded when existing development is modified, end-of-trip facilities may be required by the DRB or Administrator as part of extensive interior fit-ups or remodels of existing commercial spaces. In making this determination, the DRB or Administrator will consider the estimated cost of the modifications and the relative cost of adding the end-of-trip facility. Where the estimated additional cost of adding an end-of-tip facility exceeds 5% of the estimated total project cost, the DRB may waive the end-of-trip facility requirement, after making findings regarding the relative difficulty of adding an end-of -trip facility and in consideration of the overall project size.

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Chapter 29

Watershed Health

These standards help protect water quality and watershed health in Williston by regulating construction site erosion and stormwater management in new developments and on redevelopment sites. This chapter also establishes standards for the provision and protection of watershed protection buffers along streams and around wetlands and lakes.

29.1 Purpose - Authority

29.1.1 What is the purpose of these standards? In adopting these standards the Selectboard makes the following findings:

- it is well documented that land development - which alters the volume, velocity, and quality of surface runoff – is likely to adversely affect nearby streams, including the capacity and stability of their channels, their physical and chemical characteristics, and the health of the biological communities they support;
- federal law (see 33 U.S.C. ~~4293~~1313(d)) requires the State of Vermont to maintain a list of streams that are impaired, that is, that do not fully support certain functions due to poor water quality;
- the Allen Brook, Williston’s principal stream, appears on that list because scientific surveys have shown it to be impaired for aquatic life support and contact recreation due to land development and the accompanying stormwater runoff and erosion;
- the Muddy Brook, Williston’s natural boundary with South Burlington, also appears on Vermont’s list of impaired waters because it fails to provide aquatic life support due to a lack of riparian buffers, land development, and erosion;

See http://www.anr.state.vt.us/dec/waterq/planning/docs/pl_2008_303d_Final.pdf <https://dec.vermont.gov/watershed/map/assessment#Winooski%20River%20Basin%20WQ%20Assessment%20Reports> for Vermont’s list of impaired waters. For factual background see ~~the Watershed Improvement Plan and Recommendations for a Total Maximum Daily Load (TMDL) for Sediment: Allen Brook, Williston Vermont: Final Report – March 29, 2003~~ by Lori Barg, Kari Dolan, Cully Hession, Chris Cianfrani, and Bob Kort, State of Vermont, Department of Environmental Conservation, Water Quality Division. ~~Basin 8 – Winooski River Watershed Water Quality and Aquatic Habitat Assessment Report June 2017~~ by Vermont Agency of Natural Resources Department of Environmental Conservation, Watershed Management Division, Monitoring Assessment and Planning Program.

- the Town of Williston is subject to state and federal permitting requirements as a municipal small separate storm sewer (MS4) operator;
- the general permit (3-9017, as amended) under which Williston operates as an MS4 requires the town to adopt “minimum control measures,” including

programs for the reduction of pollutants from construction sites and for the post-construction management of stormwater runoff from new developments and redevelopment sites;

- while the town has actively worked on watershed health through its investments in stream restoration and the application of its regulations, restoring the health of the Allen Brook, preventing the addition of other local streams to the list of impaired waters, and complying with the requirements imposed by the MS4 permit make it necessary to adopt these standards.

29.1.2 Under what authority does the town adopt these standards? These standards are adopted under the authority of 24 V.S.A. § 441~~74~~(2), (8), (9). As noted in WDB 29.1.1, above, their adoption is also specifically required by ~~4.2.36.2.4~~ and 64.2.5 of General Permit 3-9014 (as amended ~~January 17~~ July 27, 201~~8~~3), as issued by Vermont Agency of Natural Resources, Department of Environmental Conservation.

29.2 Applicability

29.2.1 What activities are subject to these standards? These standards apply to any development for which a permit is required by this bylaw.

29.2.2 Are there any exceptions from these standards? As provided by WDB 4.2.1.2., accepted agricultural and forestry practices are exempt from the standards adopted in this chapter. Developments in which the total cumulative land disturbance including all clearing, grading, and excavation, is less than ¼ (one-quarter) acre are exempt from the runoff and erosion control standards provided in sections WDB 29.3 – 29.6 in this chapter, but are encouraged to monitor and minimize runoff and erosion, taking whatever measures are needed to protect neighboring properties and water quality.

29.2.3 What about small projects? These standards recognize that the level of runoff and erosion control required to protect water quality varies with the size and location of the proposed development.

29.2.3.1 Low Risk Development. WDB 29.3 sets relatively simple runoff and erosion control standards for smaller developments that pose a relatively low risk of accelerated runoff, erosion, and sedimentation.

29.2.3.2 All Other Development. WDB 29.4 establishes runoff and erosion control standards for larger developments and development in vulnerable areas.

29.2.4 What about routine maintenance? What about emergencies? These standards do not apply to the routine maintenance of public and private roads or utilities, including stormwater management works, nor do they apply to emergency repairs required by flooding, slope failures, or other natural hazards or civil emergencies, like a bridge failure. It is understood, however, that runoff and erosion control measures will be incorporated into maintenance activities where necessary, as part of the “good housekeeping” practices required by the town’s MS4 permit.

29.3 Low Risk Development

29.3.1 What is a Low Risk Development? A low risk development is one in which the cumulative land disturbance is greater than ¼ (one-quarter) acre, but less than two (2) acres, in which all land that will be disturbed is outside the watershed protection buffers established by this chapter, and in which all land that will be disturbed has a slope of less than eight percent (8%).

29.3.2 What runoff and erosion control standards apply to Low Risk Development?

29.3.2.1 State Handbook. Applications for permits for low risk developments shall be accompanied by a completed Runoff and Erosion Control Checklist that shows how the applicant will comply with the guidance provided in the current edition of Vermont’s *Low Risk Site Handbook for Erosion Prevention and Erosion Control*.

Where can I find the *Low Risk Site Handbook for Erosion Prevention and Erosion Control*? On-line at: http://dec.vermont.gov/sites/dec/files/wsm/stormwater/docs/StormwaterConstructionDischargePermits/sw_low_risk_site_handbook.pdf

29.3.2.2 Additional Standards. Low risk developments must also comply with WDB 29.5.1 and 29.5.9-12.

29.4 Runoff and Erosion Control Plans for Other Developments

29.4.1 When must a runoff and erosion control plan be submitted? All applications for permits for developments that are not exempted by WDB 29.2.3.1, or defined as ‘low risk’ by WDB 29.3.1, above, shall be accompanied by a professionally-prepared runoff and erosion control plan that shows how compliance with the performance standards of WDB 29.5 will be attained both during the construction of the proposed development and the continuing use of the site.

29.4.2 What must be included in a runoff and erosion control plan? Runoff and erosion control plans shall be based on a grading plan of the site and its immediate environs, showing existing and proposed contours at intervals of no more than two feet and all information required by the Erosion and Runoff Control Plan Checklist. EXCEPTION: Detailed contour mapping is not required for portions of a site that will not be disturbed, but sufficient information must be provided to show how the transition from disturbed to undisturbed areas will be made.

29.4.3 How will a proposed runoff and erosion control plan be reviewed? The town’s review of a proposed runoff and erosion control plan will begin with a meeting between the Administrator and the DPW or their designees and the applicant’s designer. This meeting will ordinarily be on-site. If the application for a permit is approved, there will also be a pre-construction meeting, as required by WDB 29.5.3.

29.5 Runoff and Erosion Control Standards. Because these performance standards recognize that there is a different solution for every site, they sometimes use permissive terms, like ‘should.’ The use of permissive terms does not constitute an exception to a performance standard. It indicates only that the town is willing to review a variety of possible ways of achieving compliance.

29.5.1 Design to minimize runoff and erosion. The proposed site plan should fit the site, with the area to be disturbed, cut and fill, and impervious surfaces being minimized.

29.5.1.1 Avoid Slopes. Development should be directed away from slopes. This bylaw calls for reduced densities on slopes over 15% (see Chapter 19 and the various zoning districts).

Development is prohibited (except where a variance can be justified) on slopes of 30% or more.

29.5.1.2 Fit the Terrain. Architectural forms and site improvements should fit the terrain. Access drives and roads, parking and loading areas, utility lines, and the long axes of buildings should run more or less parallel to, not more or less perpendicular to slopes. Where buildings cross slopes, floors should be staggered with the slope. Additional site planning and design standards designed to ensure that development fits the terrain are imposed in some zoning districts, including the ARZD, GZDN, GZDS, and RZD.

29.5.1.3 Phase Construction. The area disturbed at any one time shall be minimized in both time and space. The runoff and erosion control plan shall show how clearing, grading, excavation, and fill will be phased so that disturbance is promptly followed by revegetation, and/or structural stabilization of the site, including temporary stabilization where areas will remain disturbed for more than 15 days. A copy of the phasing schedule and a checklist on which the installation of measures by phases is recorded shall be maintained on the site for review by the town when inspections are made.

29.5.1.4 Minimize Impervious Surfaces. The extent of paving and other impervious surfaces should be minimized by thoughtful site planning that keeps roads as narrow and as short as possible, and that keeps surface parking areas small. The use of porous pavements where site conditions permit is also strongly encouraged, and may be required of uses that propose to place extensive parking areas in impaired watersheds.

29.5.2 Mark disturbance limits. Land disturbance (clearing, grading, excavation, and fill) shall be confined within limits that are clearly marked on the site during construction. Disturbance limits must be shown on the runoff and erosion control plan, then established in the field, subject to inspection before any clearing, grading, excavation, or fill begins. Disturbance limits must be marked with a fence or other barrier sufficiently durable to last through the anticipated construction period. This fence or barrier should be supplemented with brightly colored flagging or tape. Work outside the approved disturbance limits is a violation of this bylaw, subject to enforcement, as provided by WDB 7.4-7.6.

29.5.3 Hold a pre-construction meeting. Before any work for which a runoff and erosion control plan is required is begun, the disturbance limits shall be marked on the site and the applicant shall arrange an on-site preconstruction meeting between the town staff and all design professionals, contractors, and subcontractors who will be responsible for the observance of those limits. The purpose of this meeting shall be to review the runoff and erosion control plan for construction, including the sequence and schedule for the installation of runoff and erosion control measures, and the importance of maintaining those measures during the construction period.

29.5.4 Divert runoff from disturbed areas. Disturbed areas shall be protected from surface runoff by diversion dikes or channels, silt barriers, filter strips, or other measures until they are revegetated or otherwise stabilized.

29.5.5 Stockpile and replace topsoil. All topsoil removed shall be stockpiled and used in the revegetation of the site. To put it another way, the topsoil from the site shall be used there, and not replaced with an inferior material.

29.5.5.1 Silt Fence. Topsoil stockpiles shall be surrounded by a silt fence or an equally effective sediment control measure that also protects the stockpile from damage during construction activity.

29.5.5.2 Temporary Cover. Topsoil stockpiles shall be stabilized with mulch that is renewed weekly or, if the stockpile will not be worked for more than a week, by a mulch followed by a temporary cover crop.

29.5.6 Protect retained vegetation. Existing vegetation that is to be retained must be protected from damage during construction, as required here and, in more detail, by the *Public Works Standards*. The runoff and erosion control plan must include a schedule (see the *Runoff and Erosion Control Plan Checklist*) showing that all measures required to protect existing vegetation will be put in place before other construction activities begin. This schedule may apply to the entire site or to sequential phases of construction.

29.5.6.1 Earthwork Within the Dripline. There should be no clearing, grading, excavation, or other construction activity, including the placement of underground utilities, within the drip line of trees that are to be retained. The Administrator may permit minor exceptions to this standard where the terrain or the location of existing utilities and/or buildings make compliance infeasible.

29.5.6.2 Storage Within the Dripline. There shall be no storage or parking of construction equipment, materials, vehicles, or waste on or around trees and roots or other vegetation that is to be retained. This specifically prohibits the dumping of paint, petroleum products, concrete or stucco mix, dirty water, or any other material that may be deleterious to vegetation that is to be retained.

29.5.6.3 Use of Trees. The use of trees as a winch supports or anchorages, as temporary power poles, as sign posts, or for other similar functions is prohibited.

29.5.6.4 Pruning. Trees and shrubs that are to be retained should be properly pruned before construction begins. This will maximize their ability to withstand damage.

29.5.6.5 Porous Pavement. See WDB 29.5.1.4, above. The use of porous pavements protects existing root systems.

29.5.7 Anticipate and limit accelerated runoff

29.5.7.1 Channel Design. All filter strips, swales, grassed waterways, other channels, and outlets shall be designed and constructed to handle the anticipated increase in the volume and velocity of runoff without flooding or channel erosion.

29.5.7.2 Pre-Construction Rate. Runoff shall be retained on site and infiltrated and/or released at a rate not exceeding the pre-development rate of release.

29.5.8 Trap sediment on-site. Sediment resulting from accelerated soil erosion shall be retained on the site, with proposed provisions for regular maintenance and sediment disposal included in the construction schedule and in the maintenance manual and schedule required by the *Runoff and Erosion Control Plan Checklist*.

29.5.9 Make runoff and erosion control measures an asset. Filter strips, swales, grassed waterways and others channels, stormwater ponds, and other erosion and runoff structures shall be integrated into the landscaping plan for a site, contributing to the appearance and marketability of the proposed development and the community, as well as to watershed protection.

29.5.9.1 Lower Density Development. In lower density developments, erosion and runoff control measures should blend in with the topography and vegetation of surrounding woods and fields. As much runoff retention and sediment trapping as possible shall occur on the surface or in shallow structures that mimic the vegetative composition and structure of natural wetlands and riparian areas.

29.5.9.2 Higher Density Development. Landscaped areas in higher density developments, including those required by Chapter 18 of this bylaw, should also, to the extent possible, be used for stormwater management. Given the higher impervious coverage, underground storage and mechanical treatment may also be used to comply with these performance standards.

29.5.10 Use appropriate plant materials. Proposed plant materials and planting mixes shall be suitable for the site and the intended application. The requirements of WDB 23.7 apply to all plant materials specified in runoff and erosion control plans.

29.5.11 Maintain runoff and erosion control measures. Runoff and erosion control measures must be installed as designed and properly maintained. Failure to maintain the required measures is a violation of this bylaw, subject to enforcement as provided by WDB 7.4-7.6.

29.5.12 Schedule inspections during construction. In order to ensure proper functioning and maintenance of required erosion and runoff control measures during the construction period, the applicant shall provide for regular inspections of all runoff and erosion control measures by a qualified professional during the construction period. An inspection and the repair or restoration of all measures is required after any precipitation event exceeding one inch. Reports on routine inspections shall be provided to the Administrator and DPW within five working days after each inspection is made.

29.5.13 Winter Construction. It is best to avoid winter construction, but Williston recognizes that this is not always possible. Where it is not, additional runoff and erosion control measures may be required. These measures are established in the state handbooks that are adopted by reference in WDB 29.5.14.

29.5.14 Where can I find more specific guidance for complying with these performance standards?

29.5.14.1 State Handbook: Construction. All construction site erosion control measures shall comply with the *Vermont Handbook for Soil Erosion and Sediment Control on Construction Sites*, Special Publication No. 3, Vermont Geological Survey, or its successors, and with the current edition of the *Town of Williston Public Works Standards*.

29.5.14.2 State Handbook: Permanent. All long-term runoff and erosion control measures shall comply with *The Vermont Stormwater Management Manual for Watershed Improvement Permits, Volumes I and II*, Vermont Agency of Natural Resources, April and

August, 2002 or their successors, and with the current edition of the *Town of Williston Public Works Standards*.

Additional Resources. The Vermont Agency of Natural Resources provides resources about low impact design to minimize stormwater runoff at https://anrweb.vt.gov/PubDocs/DEC/WSMD/stormwater/docs/sw_LID%20Guide.pdf

29.6 Required Improvements. All runoff and erosion control measures required for compliance with the standards established in this chapter are required improvements, subject to the requirements of Chapter 7 of this bylaw.

29.7 Discharge of Non-Stormwater Waste. Discharging non-stormwater wastes into any stormwater or street drainage system, public or private is a violation of this bylaw, subject to enforcement, as provided by WDB 7.4-7.6.

29.7.1 May I connect footing, foundation, or roof drains, or sump pumps to stormwater systems? Footing, foundation, and roof drains, and sump pumps should ordinarily be daylighted or infiltrated. They may be connected directly to a stormwater system only with the written permission of the DPW.

29.7.2 Must existing connections to stormwater systems be disconnected from stormwater systems? Whenever possible. Approval of any permit may be conditioned on the disconnection of existing footing, foundation, and/or roof drains or sump pumps.

29.8 Wetlands Protection

29.8.1 How will I know if I have wetlands on the site of my proposed development? A wetlands delineation prepared by a professional wetlands scientist in accord with the current guidelines of the Army Corps of Engineers must accompany all applications for discretionary permits for development on sites where wetlands are known or suspected to exist. The need for a wetlands delineation will be determined during pre-application review.

What is a wetland? Wetlands are lands transitional between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is covered by shallow water. For purposes of this classification wetlands must have one or more of the following three attributes: (1) at least periodically, the land supports predominantly hydrophytes; (2) the substrate is predominantly undrained hydric soil; and (3) the substrate is nonsoil and is saturated with water or covered by shallow water at some time during the growing season of the year."

29.8.2 Are Class II wetlands protected in Williston? Class II wetlands are protected by state law and this bylaw. They must generally remain in their natural vegetation, but may be crossed by roads, trail, or utility lines where there is no feasible alternative to such a crossing and where all work is conducted in compliance with an approved runoff and erosion control plan and a Conditional Use Permit approved by the Agency of Natural Resources.

29.8.3 Are Class III wetlands protected in Williston? Class III wetlands generally are not protected by state law, but may be protected by this bylaw and are definitely regulated by the Army Corps of Engineers. The DRB may, upon the recommendation of the Conservation Commission, require that Class III wetlands with significant functional values remain in their natural vegetation. The Conservation Commission may also recommend, and the DRB require, that a functional

assessment of the Class III wetlands on the proposed development site be provided along with the delineation.

Wetlands Classes? State and Federal Wetland Regulations. There are no Class I wetlands in Williston. Class II wetlands appear on, or are contiguous to wetlands that appear on, the *Vermont Significant Wetlands Inventory Maps* prepared by the Agency of Natural Resources. Class III includes all other wetlands. Information on Vermont's state wetlands regulations may be found on-line at: <http://dec.vermont.gov/watershed/wetlands>. Information on the Army Corps of Engineers regulation of wetlands may be found at <http://www.usace.army.mil/Missions/Civil-Works/Regulatory-Program-and-Permits/>

29.9 Watershed Protection Buffers. This section establishes watershed protection buffers for all streams, ponds, and lakes, and for certain wetlands.

29.9.1 Are buffers required around lakes and ponds? Yes. There shall be a buffer of at least 150 feet above the ordinary high water mark of all ponds or lakes that have more than a half-acre (21,780 SF) of water surface, except for properties in the Lake Iroquois Shoreland Protection Area defined in WDB 29.9.2;

29.9.2 Lake Iroquois Shoreland Protection Area. The Lake Iroquois Shoreland Protection Area (LISPA) means all land located within 250 of the mean water level of Lake Iroquois. All development within this area must comply with the Vermont Lake Shoreland Protection Standards as provided by 10 V.S.A. § 1441-1454. All applications for an administrative permit will be required to provide documentation that the proposed development will be in conformance with these standards.

29.9.2.1 New structures. New structures in the LISPA must be set back a minimum of 100 feet from the mean water level of Lake Iroquois.

29.9.2.2 Existing structures. Existing, non-conforming structures within the LISPA may be expanded under limited circumstances as provided by WDB 31.3.4.

29.9.3 Are buffers required along streams? Yes.

29.9.3.1 Named Streams. There shall be a buffer of at least 150 feet above the ordinary high water mark of the Allen Brook, the Muddy Brook, the Sucker Brook, and the Winooski River.

29.9.3.2 Other Streams. There shall be a buffer of at least 50 feet above the ordinary high water mark of all unnamed streams – perennial or intermittent - identified on the 7.5' U.S. Geological Survey quadrangles covering the town, or on the Williston Field Stream Survey maps of the Allen and Muddy Brook watersheds prepared by the Vermont Department of Environmental Conservation.

29.9.4 Are buffers required around wetlands? Yes.

29.9.4.1 Class II Wetlands. There shall be a buffer of at least 50 feet above the delineated boundary of any Class II wetland.

29.9.4.2 Class III Wetlands. The DRB may, upon the recommendation of the Conservation Commission, require a buffer above Class III wetlands that have important functional values.

29.9.5 What is the relationship of watershed protection buffers and special flood hazard areas?

The watershed protection buffers required by ~~WDB 29.9 WDB 28.6.1 through 28.6.3~~ shall be expanded, where necessary, to include special flood hazard areas.

Special Flood Hazard Areas. These areas are mapped for the National Flood Insurance Program and may sometimes include more area than the watershed protection buffers required by WDB 29.9. The official maps are on file with Williston Planning. See Chapter 28 of this bylaw for additional regulations applicable to Special Flood Hazard Areas.

Commented [MS1]: This is confusing. Does it really mean the regulatory floodway? Or does it refer to watershed protection buffers as defined in this chapter?

29.9.6 Can any use be made of the land in watershed protection buffers? Watershed protection buffers shall remain undeveloped, except as provided here.

29.9.6.1 Vegetation. Watershed protection buffers shall remain in native or cultivated vegetation that serves as an effective filter for surface runoff. Where effective filtering vegetation is not present, the buffer shall be restored to a combination of wetland, riparian, forest, and/or meadow vegetation appropriate to the site. Removal or cutting of live or dead vegetation from a watershed protection buffer is prohibited except where the buffer is used for accepted agricultural or forestry practices, where a hazardous tree is present, or where it is necessary to control invasive species. All native vegetation cut within the buffer should be left in place whenever possible.

29.9.6.2 Lawns. Conventional turf grass lawns do not provide an effective filter for surface runoff and ~~shall may~~ not be included in the watershed protection buffers required by this section.

29.9.6.3 Impervious Surfaces. Development within watershed protection buffers shall be limited to utility and road crossings; trails and trail crossings, with minor related facilities like signs and benches; and runoff and erosion control measures.

- All work within a watershed protection buffer shall proceed in accordance with the runoff and erosion control standards of this chapter.
- Utility and road crossings of watershed protection buffers shall be consolidated wherever possible, and both the width and length of such crossings minimized. Minimum disturbance trenching may be required for utility lines.
- The runoff and erosion control measures permitted in watershed protection buffers shall be limited to outfall structures or other measures whose function requires such a location. Permanent stormwater works, including above or below ground detention and treatment, shall be permitted only where no alternative, upland location is feasible.

29.9.6.4 Outdoor Storage. Outdoor storage is not permitted in watershed protection buffers.

29.9.6.5 Lawn Chemicals. No lawn chemicals, including fertilizers, herbicides, and pesticides may be used in watershed protection buffers. The Administrator may permit an exception to this standard for the control of invasive plants by, or under the direction, of a public agency. This prohibition does not apply to accepted farm and forest practices, which

are exempt, nor does it prohibit the use of compost or another organic fertilizer in conservation plantings.

29.9.6.6 Owners' Responsibilities. The covenants for developments that include watershed protection buffers shall include a reference to the standards adopted here (WDB 29.9.5) and in WDB 29.9.6. In developments where an owner's association is required, that association is responsible for the protection of the watershed protection buffers.

Commented [MS2]: This is confusing. Should it be simply WDB 29.9.6?

29.9.7 How will people know where watershed protection buffers are? Watershed protection buffers must be marked on the ground as well as on the final plans. This may be accomplished using plantings, fences, or other landscape features, like a line of boulders. The DRB may permit an exception to this standard where a watershed protection buffer is marked by a definite change in the terrain.

29.9.8 Are there any exceptions to the watershed protection standards?

29.9.8.1 Waiver. For properties with development that pre-dates the adoption of standards under WDB 29.8 and 29.9 (nonconforming properties), additional development within the 150ft watershed protection buffer of Named Streams and/or Ponds or the 50-foot buffer to Class II wetlands and Unnamed Streams may be permitted via waiver from the DRB. Such development is limited to minor improvements such as decks, patios, driveways, garages or sheds, the scope of which is further defined in WDB 29.9.8.1.1 – 29.9.8.1.5. Proposed development within watershed protection buffers must be compensated for by one or more buffer enhancement measures, such as the establishment of a no-mow area and/or riparian plantings, or the implementation of best stormwater management practices. To approve such a waiver, the DRB must make all of the findings required by WDB 29.9.8.1.1-6, as follows:

29.9.8.1.1 Feasible Location. No other feasible location on the property exists for the proposed improvement, as determined by the DRB.

29.9.8.1.2 Slopes. The project site has slopes not exceeding 15%.

29.9.8.1.3 Impervious Cover. Impervious cover-- existing plus that resulting from the proposed development - shall comprise no more than 20% of the parcel within the Watershed Protection Buffer.

29.9.8.1.4 Impervious Cover and Mowed Areas. Combined impervious and mowed areas shall comprise no more than 40% of the parcel within the Watershed Protection Buffer. To improve water quality and soil health, mowing in approved areas within the watershed protection buffer shall leave a grass height of no less than 3 inches.

29.9.8.1.5 Buffer Width. The development permitted by waiver will leave the largest buffer possible consistent with the need to allow a permitted use. In no case shall a 150-foot buffer be reduced to less than ~~50~~50 feet.

29.9.8.1.6 Buffer Enhancement. The development must incorporate buffer enhancement measures such as a no-mow zone, riparian plantings, or best practices for stormwater management. Such enhancements should be done in coordination with the Conservation Commission and Stormwater Program.

~~29.9.8.2 Variance Is it possible to obtain a variance to permit more development within a watershed protection buffer? Additional development within watershed protection buffers may be made possible by variance, as provided by Chapter 8 of this bylaw. To approve such a variance, the DRB must make all of the findings required by WDB 29.9.7.1 and 29.9.7.2 as well as all findings required by WDB 8.1.~~

~~29.9.8.1 Impervious Cover. The development permitted by variance will result in a total impervious cover of no more than 10 percent within the buffer.~~

~~29.9.8.2 Buffer Width. The development permitted by variance will leave the largest buffer possible consistent with the need to allow a permitted use. In no case shall a 150-foot buffer be reduced below 75 feet or a 50-foot buffer be reduced below 25 feet.~~

~~29.9.8.3 Special Flood Hazard Areas. There are additional limitations on variances in special flood hazard areas. See WDB 28.7.1.~~

~~**29.9.9 What about Can existing nonconforming uses and structures in watershed protection buffers be maintained, repaired replaced or enlarged?** Nonconforming uses and structures located within watershed protection buffers may be changed, maintained, repaired, enlarged, and replaced as provided by Chapter 2 of this bylaw, but only if all work complies with the standards established in this chapter. EXCEPTION: No change in use that permits the processing, manufacture, storage, or handling of regulated hazardous materials, other potential pollutants, or materials that could be dispersed downstream during a flood will be permitted.~~

~~29.9.9.1 Within SFHA's. As provided by WDB 28.16 and the requirements of the National Flood Insurance Program, nonconformities located in watershed protection buffers that are also Special Flood Hazard Areas may not be maintained, repaired, replaced, or enlarged unless it has been demonstrated through hydrologic and hydraulic analyses conducted in accordance with standard engineering practices and certified by a registered professional engineer that the proposed work will result in no increase in flood levels during the occurrence of the base flood.~~

~~29.9.9.2 Outside SFHAs. Nonconformities located in watershed protection buffers that are not also Special Flood Hazard Areas may be maintained, repaired, replaced, and enlarged provided that the degree of nonconformity is not increased, and that all exterior work is subject to the runoff and erosion control requirements of Chapter 29 of this bylaw, but no change that permits or expands the processing, manufacture, storage, or handling of regulated hazardous materials or materials that could float and be dispersed downstream during a flood may be permitted.~~

29.10 Source Water Protection Areas

29.10.1 What is a source water protection area? Source water protection areas contribute, or at least potentially contribute, ground or surface water to drinking water supplies.

Source Water Protection? Williston currently includes two source water protection areas. One surrounds the well that serves the Porterwood development on Old Creamery Road. The other is the watershed of Lake Iroquois, which is part of the larger watershed of Shelburne Bay. Shelburne Bay is the source for the Champlain Water District, which supplies water to Williston and other communities.

29.10.2 What additional standards apply to development in source water areas? No specific standards apply, but the administrator may refer any proposed development in a source water protection area to the water provider for comment.



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[VPA] VPA Legislative Update - grand finale - 10/15/20

Alex Weinhagen <aweinhagen@hinesburg.org>
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Thu, Oct 15, 2020 at 4:22 PM

VPA Members,

The Legislature's extended session closed on September 25, and Governor Scott finished up his review of bills on October 12. Law making in 2020 has finally come to a close! Here's what happened on the three planning-related bills that made it to the Governor this fall. Following that, I've updated and revised information from my July 2, 2020 update on the outcome of other bills with a planning nexus – so that you've got it all in one message. The 2019-2020 biennium is over! Any bills that didn't make it across the finish line are dead. Resurrection is possible for some of them, but they will have to be re-introduced and start over in the next session.

For additional perspective, and information on a host of other bills related to municipalities, check out the legislative summaries done by the Vermont League of Cities and Towns (VLCT). They produced two summaries this session. One in July after the Legislature recessed for the summer - <https://www.vlct.org/news/2020-legislative-wrap>. One in on October 9 after the Legislature adjourned - <https://www.vlct.org/news/2020-supplemental-legislative-wrap>.

For more perspective on bills related to planning, check out the upcoming VT Department of Housing and Community Development (DHCD) legislative summary - <https://accd.vermont.gov/community-development/resources-rules/planning>. This one is isn't ready yet, but will be posted in the coming weeks. DHCD staff are highly involved in the legislative action, and often report on bills with a planning connection that VPA didn't focus on. In other words, I highly recommend checking out their summary when it becomes available.

The Big Three:

-

H.926 – Act 250 Reform – Vetoed by the Governor on October 5

The House-passed version of this bill was a comprehensive reform package. The Senate stripped this down to a tiny nub that only dealt with a temporary solution for trails jurisdiction and a new review criteria to minimize forest fragmentation. The House agreed to the Senate's stripped down version, but the Governor did not. Looks like Act 250 reform will get a "do over" in the 2021 session. All legislative leaders say this will be a priority, but we won't really know about that until after the Legislature convenes in January. Unclear if the comprehensive version of H.926 will be resurrected, or if there will be a fresh start.

S.237 (Act 179) – Housing Bill – Signed by the Governor on October 12

As passed by the Senate, this bill had some very problematic provisions, including dictates on minimum lot sizes for areas served by municipal water and sewer. These provisions were stripped out of the bill in the House. The Senate agreed to the House version, as did the Governor. The new law (Act 179) took effect when the Governor signed it on October 12. Here's what the law stipulates:

- Accessory dwelling unit allowances expanded. Required provisions for municipal bylaws:
- Size expansion – must allow ADUs of at least 30% the size of the single-family dwelling or 900 square feet, whichever is greater.

- Review options – must use same review that applies to single-family dwellings – i.e., no more conditional use review in districts where single-family dwellings are a permitted use.
- Short-term rental differentiation – can regulate short-term rentals distinctly from longer-term residential rentals.
- Existing small lot development expanded. Currently, municipalities can prohibit development on extremely small, existing lots that are less than one-eighth acre or have a lot width or depth dimension less than 40 feet. The bill modifies this provision so that it does not apply to small lots that are served by and able to connect to municipal sewer and water service.
- Conditional use character of the area standard limited for multiunit dwellings of four or less units. Such multiunit dwellings may reviewed as a conditional use, but may not be denied solely due to an undue adverse effect on the character of the area.
- Municipalities granted authority to regulate short-term rentals by means of an ordinance or bylaw. Definition of short-term rental includes, "... rented to the transient, traveling, or vacationing public for a period of fewer than 30 consecutive days and for more than 14 days per calendar year."
- Invalidates deed restrictions, covenants, or similar HOA-style restrictions created after January 1, 2021 that prohibit land development allowed under a municipality's bylaws. In other words, for new developments, no more restrictions on accessory apartments, home occupations, and other types of land development that a municipality's zoning bylaws allow. Such restrictions in existing developments will remain unaffected.
- Loan restructuring, forgiveness, and assistance from the Department of Environmental Conservation for the Town of Brattleboro and the Tri-Park Cooperative mobile home park. Also, authorizes the State Treasurer to provide financing for mobile home park infrastructure projects.

Municipal planners and regulators should take notice of the first three items – e.g., accessory dwelling units, existing small lot development, conditional use review for multiunit dwellings. These new State provisions take precedence over any contradictory provisions in municipal zoning bylaws. As of October 12 – i.e., no phase in period. Undoubtedly, this will impact allowances for accessory dwelling units (aka accessory apartments) in many municipalities. Next time you update your zoning, you'll want to make sure it complies with these statutory provisions. Until then, you'll need to go by the State statutory provisions.

S.54 (Act 164) – Cannabis Tax & Regulate – Became law on October 7 without the Governor's signature

Medical use of cannabis (aka marijuana) was legalized in Vermont in 2004. Possession of one ounce or less was decriminalized in 2013. Recreational use of cannabis was legalized in Vermont in 2018. The circle is now complete with the legalization of production, testing, distribution, and retail sales. The Senate passed the bill in the 2019 session, and the House early in the 2020 session. Ultimately, the House/Senate conference committee was able to hammer out a compromise that both chambers approved. The Governor saw the writing on the wall, and allowed the bill to become law on October 7 without his signature. The law does not become fully effective until 2022. The new tax and regulate system is still very much a work in progress, with responsibility for some details left to the new Cannabis Control Board, which will be formed in 2021. Some interesting facets (especially for municipal planners):

- Retail sales will only be allowed in communities that vote to opt-in. No deadline for that, but even so, prepare for some interesting community conversations, petitions, and votes in 2021 and early 2022!
- Cultivation, testing, warehousing, and distribution are NOT subject to any municipal opt-in – i.e., they can happen whether you like it or not.

- Municipalities cannot issue blanket prohibitions of cannabis establishments via ordinance or zoning. However, the bill empowers communities to create local cannabis control commissions, and for such commissions to condition issuance of a local license on any zoning bylaw adopted pursuant to 24 V.S.A, section 4414.
- My reading is that municipalities can make cannabis establishments subject to conditional use review/approval, and perhaps even craft new conditional use review standards pursuant to 24 V.S.A, section 4414(3)(B)(v). Essentially, municipalities can use all of the tools in section 4414 – e.g., zoning districts, conditional use review, performance standards, perhaps even overlay districts.
- Cannabis shall not be regulated as “farming”, and cultivated cannabis shall not be considered an agricultural product or agricultural crop under relevant State laws. It appears that municipalities will have the power to regulate cannabis cultivation through zoning, unlike traditional agricultural practices and agricultural structures.

Other legislation:

H.681 (Act 92) – Covid-19 Flexibility Government Operations – Signed by the Governor 3/30/20

A variety of accommodations for government operations during the covid-19 state of emergency – elections, open meetings protocol, and water/wastewater system disconnection moratorium.

- Open meeting law accommodations during the state of emergency:
 - Allows boards to meet electronically in lieu of a meeting at a physical location.
 - Requires that information be posted on how to access electronic meetings, with the same access information included in the meeting agenda.
 - Requires that such electronic meetings be recorded, unless unusual circumstances make it impossible.
 - Allows for meeting minutes to be posted in 10 days instead of the usual 5 days – in the event of staffing shortages.
- Extension of deadlines:
 - State licenses, permits, programs, plans issued to municipalities and RPCs – extended by 90 days after the end of the state of emergency.
 - Municipal licenses, permits, programs, plans – shall remain valid for 90 days after the end of the state of emergency.
 - Municipalities also given the authority to extend or waive deadlines.

S.345 (Act 113) – Covid-19 Municipal Provisions – Signed by the Governor 6/15/20

More accommodations for municipalities during the covid-19 state of emergency – i.e., open meeting posting, borrowing funds.

- Allows municipalities to post meeting agendas and notices in two designated electronic locations in lieu of the normal requirement for posting in two designated physical locations.
- Requires that agendas and notices be posted in/near the municipal clerk’s office, and that a copy of each agenda or notice be provided to the newspapers of general circulation for the municipality. **Not sure they understood that last provision that requires agendas and notices be forwarded to newspapers, since that is rather onerous.

H.948 (Act 106) – Covid-19 Municipal Meetings – Signed by the Governor 6/15/20

Additional accommodations for municipalities during the covid-19 state of emergency.

- Allows quasi-judicial proceedings to be conducted via electronic means without designating a physical location.
- Allows Boards of Civil Authority to forgo physical inspection of properties that are the subject of an appeal (e.g., property valuation/assessment).

H.966 (Act 137) – Covid-19 Funding & Economic Relief – Signed by the Governor 7/2/20

One of the big covid-19 relief bills to spend a portion of the over \$1.25 Billion the State received as part of the federal CARES act. For details and funding amounts, see the summary of the bill by section. Provides funding for:

- Direct grants to businesses and individuals
- Local government grants – for covid-19 reimbursable expenses (municipalities, RPCs, solid waste districts)
- Digitizing municipal land records
- Housing assistance:
 - Legal and counseling services for those at risk of homelessness, and for landlord / tenant assistance
 - VHCB for new housing facilities
 - VHFA for foreclosure protection to low- and moderate-income homeowners
 - VT State Housing Authority for rental assistance and eviction protection
 - DHCD for a re-housing recovery program to renovate properties that are vacant, blighted, or in violation of housing laws for persons with COVID-related needs
 - Various programs for homelessness assistance (rental subsidies, motel vouchers, housing navigation / case management, direct financial assistance, and incentives for landlords)
- Broadband expansion and emergency services

S.301 (Act 125) – Telecom PUC Review Authority – Signed by the Governor 7/1/20

Extends the authority of the Public Utility Commission to review telecom facilities until July 1, 2023. This authority was supposed to sunset and revert back to municipalities several times. Another in a long list of extensions to this sunset provision.

H.656 (Act 129) – Miscellaneous Agricultural Subjects (definition of “local”) – Signed by the Governor 7/1/20

Only one small section with a planning nexus – sort of... agricultural planning, or if you like to eat local. Section 17 (pages 18-22) provides definitions of “local”, “local to Vermont”, “locally grown or made in Vermont”, “raw agricultural product”, and more.

H.688 (Act 153) – Global Warming Solutions Act – Became law on 9/23/20 pursuant to an override of the Governor’s veto

The much talked about law to require reductions in Vermont’s greenhouse gas emissions. Essentially putting some teeth into implementation of the State’s Comprehensive Energy Plan goals. The law creates a Vermont Climate Council, and requires the council to adopt a Climate Action Plan by 12/1/2021 (to be updated every four years) that will set forth specific programs and strategies. It requires that the Vermont Agency of Natural Resources adopt rules by 12/1/2022 to implement the plan. Allows any person to take the State to court if the ANR rules aren’t adopted or if the rules are insufficient to meet the required emission reductions in the plan.

H.611 (Act 156) – Older Vermonters Act – Signed by the Governor 10/5/20

I found this new law interesting, even though it isn’t directly related to the types of planning most VPA members are engaged in. It includes principles for a comprehensive and coordinated system of services and supports for older Vermonters and addresses the role and duties of the Department of Disabilities, Aging, and Independent Living (DAIL). It requires DAIL to adopt a State Plan on Aging at least once every four years.

H.967 (Act 161) – Family Child Care Homes – Signed by the Governor 10/5/20

A minor and temporary revision to allowances for the number of children at family child care homes. Until September 2021, such homes will be allowed to expand service for part-time, school-age children from four hours per day to full day.

H.673 (Act 171) – Tree Wardens – Signed by the Governor 10/8/20

A bunch of positive changes to clarify the powers and responsibilities of Municipal Tree Wardens.

S.220 (Act 178) – Professional Regulation & State Energy Goal Education – Signed by the Governor 10/12/20

A variety of changes to the regulation of various professionals. For our purposes, the interesting part is in sections 33-37 of the new law, which requires certain that certain professionals obtain continuing education (two hours) on the State's energy goals. Specified professions include: architects, landscape architects, pollution abatement facility operators, potable water supply and wastewater system designers, professional engineers, property inspectors, real estate appraisers, real estate brokers and salespersons, gas appliance installers, oil burning equipment installers, limited oil burning equipment installers, boiler inspectors, electricians, and plumbers.

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