

Planning Advisory Committee Agenda

Wednesday, April 8, 2020 2:30pm to 4:30pm

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Agenda

- **2:30** Welcome and Introductions, Joss Besse
- 2:35 Approval of February 12, 2020 Minutes*
- 2:40 FY21 UPWP Review and Recommendation, *Regina Mahony* Review the draft FY21 CCRPC UPWP and make a recommendation to the Board. This document is linked on the PAC page as a standalone document; it is not within this packet.
- **2:55 2019 Housing Construction***, *Melanie Needle* Review and discussion of the enclosed initial results of new housing construction for 2019.
- **3:10 COVID-19 Legislation**, *Regina Mahony and Taylor Newton* Discussion of <u>COVID legislation</u> regarding the open meeting law and expiration dates.

3:30 Town of Underhill Plan Review*, *Taylor Newton*

This <u>draft 2020 Underhill Town Plan</u> is a full re-write of the town plan, and the town is seeking a Determination of Energy Compliance as well.

- a. Open the Hearing
 - b. Accept Public Comment
 - c. Close the Hearing
 - d. Review Staff Summary
 - e. Questions and Comments
- f. Recommendation to the CCRPC Board

3:50 Williston Energy Plan Review*, Taylor Newton

This is a plan amendment to include a new enhanced energy plan, and the town is seeking a Determination of Energy Compliance.

a. Open the Hearing

In accordance with provisions of the Americans with Disabilities Act (ADA) of 1990, the CCRPC will ensure public meeting sites are accessible to all people. Requests for free interpretive or translation services, assistive devices, or other requested accommodations, should be made to Emma Vaughn, CCRPC Title VI Coordinator, at 802-846-4490 ext *21 or evaughn@ccrpcvt.org, no later than 3 business days prior to the meeting for which services are requested.



- b. Accept Public Comment
- c. Close the Hearing
- d. Review Staff Summary
- e. Questions and Comments
- f. Recommendation to the CCRPC Board

4:10 Regional Act 250/Section 248 Projects on the Horizon, Committee Members

4:20 Other Business

VHFA was contracted by the State of Vermont to prepare its 2020 Housing Needs Assessment. DHCD recently
made the full report and its 10 fact sheets available on their website:
https://accd.vermont.gov/housing/plans-data-rules/needs-assessment.

4:30 Adjourn

* = Attachment

NEXT MEETING: June 10, 2020 unless anyone needs a review earlier

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CHITTENDEN COUNTY REGIONAL PLANNING COMMISSION PLANNING ADVISORY COMMITTEE - MINUTES

DATE: Wednesday, February 12, 2020 2:30 p.m. to 4:30 p.m. TIME: PLACE: CCRPC Offices, 110 West Canal Street, Suite 202, Winooski, VT

Members Present:

Joss Besse, Bolton Eric Vorwald, Winooski Matt Boulanger, Williston Andrew Strniste, Underhill Larry Lewack, Bolton Paul Conner, South Burlington Darren Schibler. Essex Meagan Tuttle, Burlington David White, Burlington Sean Cannon, Colchester Wayne Howe, Board Rep/Jericho Ravi Venkataraman, Richmond Alex Weinhagen, Hinesburg

Staff:

Regina Mahony, Planning Program Manager Melanie Needle, Senior Planner Charlie Baker, Executive Director Bryan Davis, Senior Transportation Planner Marshall Distell, Transportation Planner Jason Charest, Senior Transportation Planning Engineer

Other:

Dave Roberts, VEIC/Drive Electric Vermont David Grover, RSG Taylor Newton

10 **1. Welcome and Introductions**

Joss Besse called the meeting to order at 2:36 p.m. Regina Mahony welcomed Taylor Newton. Taylor will be starting at CCRPC next week.

2. Approval of December 11, 2019 Minutes

Darren Schibler made a motion, seconded by Paul Conner, to approve the December 11, 2019 minutes. No further discussion. MOTION PASSED. Ravi Venkataraman abstained.

19 3. Act 250 comments

20 Charlie Baker explained that CCRPC's ad hoc Act 250 Committee met to review the VNRC-Administration joint Act 250 proposed bill and have prepared draft comments. Then the House Natural Resources Committee generated a new draft bill 19-0040 dated 2/4. In response, Charlie Baker edited the draft comments and presented them as draft to the 22 House Natural Resources Committee on Feb. 5th. The PAC reviewed the draft comments and responded to specific 23 24 questions from Charlie Baker.

The PAC had the following comments/questions:

- Charlie Baker asked if the emphasis on use of maps for jurisdiction is a comment the PAC agrees with. There was some discussion about using maps for jurisdiction. Charlie indicated that in other places he's worked maps were used in this way, and they don't need to be exact they just need to be a helpful understanding of where jurisdiction applies and where it doesn't. There was a comment that it doesn't have to be all or none, for example, Comment 6 - 2,000' within an interchange - is a measurable thing that can be mapped.
- Eric Vorwald stated that overall, jurisdictional relief is the most important amendment in the bill; if it isn't ٠ included in future bills then that is a real problem. Paul Conner added that he doesn't think New Town Centers need to be added to the jurisdictional relief because they are intended to have the NDA on top and would thereby become exempt. However multiple municipalities expressed the need for more than one state designation per municipality. There are growth areas that don't qualify because you can't have more than one designation: Shelburne Road in So. Burlington; New North End in Burlington; Essex Town Center if the Town and Village merges. Meagan Tuttle added that the comments from last year regarding the regional areas planned for growth versus the miniscule land area this bill proposes to exempt should be included in this year's comments.

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- David White suggested that the framework and standards for exempting Act 250 from the interchange areas would be a great framework for municipal delegation of Act 250 review. Why not use this for delegation of full authority for a municipality?
 - There was a discussion regarding the inequity between a 10 acre commercial site (this very large) threshold, and the 10 dwelling unit threshold that could be on a ½ acre.
 - Feedback on the proposed road rule is that it is too blunt of a tool to address habitat fragmentation.
- Feedback on the shift from District Commissions to an alternative board is that it's confusing in the new draft of the bill. This may create more problems than it is solving. The PAC indicated that jurisdiction should be made at a staff level; there is no reason that the District Commissions need to make that decision. Instead there should be more support for the District Coordinators to address the inconsistency challenges in the various regions. Also, if jurisdiction is so confusing, then jurisdiction should be simplified (i.e. maps).
- The current bill does a good job of requiring updating of the maps; however the connection to the Capability and Development Plan is lost in this version of the bill. Standards and maps support a plan. While the mapping on its own will be helpful, there should still be a study to update the Capability and Development Plan. The Plan would provide us with a much more comprehensive process. Planning is more than a series of maps and broad policy statements. There is a balancing and prioritization that happens in the process. There has been a lot of local/regional mapping and planning done, perhaps this can be rolled up.
 - Definition of forest blocks is way too broad.
 - Regarding extinguishing existing Act 250 permits in the exempt designations and transferring the conditions to the local approval (comment #21), this could be a challenge in Winooski as a majority of the development is approved administratively and doesn't follow the same process (no AMP, no facts and findings). There was also a question about what if the District Commission (or whoever this evolves to) doesn't like the municipal decision; can they appeal it? There was a discussion that perhaps the District Coordinators should have the role of extinguishing permits along with the conditions.
 - Regarding comment #22 high priority river corridors the note in the comment about downtowns and villages is very important.

Regarding next steps: it appears that the House Natural Resources Committee is trying to vote this bill out tomorrow.
These comments will likely be used for other committees as the bill evolves. There are also housing provisions in the
proposed bill that encourage private and non-profit housing developers to coordinate on affordable housing.
CCRPC's comments are currently silent on that. Meagan Tuttle stated that while the Priority Housing Projects
encouraged people to work together, removal of a barrier to housing production (i.e. Act 250) is overall more helpful
to the production of housing. There is a concern that the private developers are losing the pressure to add affordable
to their projects. There was a suggestion to instead add housing tool components to the designations to solve this.

36 4. <u>Electric Vehicle Charging Permit Process Review</u>

Melanie Needle provided an introduction. Dave Roberts provided a presentation on Drive Electric Vermont, and a
 review of municipal bylaws to see how electric vehicle charging is permitted. The presentation is attached. A few key
 points from the presentation include:
 80% of new cars in Vermont are cross-overs. AWD, trucks, etc and Dave Roberts expects that more EVs will

- 80% of new cars in Vermont are cross-overs, AWD, trucks, etc and Dave Roberts expects that more EVs will be coming out in this category.
- The state needs to double EV registrations in order to hit the 2025 goals.
- It's important that people have the ability to charge at home at night the most efficient time to charge. Public charging is necessary but most EV drivers are not using them every day.
- Drive Electric Vermont has a charging installation guide: the chargers should be as close to the electric panel as possible; a wall unit is cheaper than a standalone bollard. Multi-unit dwellings can be tricky for home charging. BED and GMP are currently piloting chargers for multi-unit buildings so they might be able to help with the cost of installation.
- VT Building Energy Stretch Code commercial: about 2% of parking EV ready; residential: 10+ units need 4% of parking. Also the new stretch code requires single family homes require level 1 charging (just means a regular plug within 5' of the parking). Discussion about how these percentages are quite low if we are supposed to meet the state's energy goals. Dave Roberts explained that municipalities can go beyond these base standards. Dave Roberts briefly reviewed a variety of local bylaw provisions that can be done. South

Burlington requires the stretch energy code throughout the City; Williston incentivizes electric vehicle charging through its growth management plan and other provisions. Dave Roberts and Melanie Needle will be reviewing local bylaws in Burlington, Colchester, Shelburne, Winooski, Essex Junction, and Richmond. If any other municipalities are interested, they should contact Melanie.

5. Shared Parking Model

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Bryan Davis provided an introduction to the project. Matt Boulanger explained that they have some good parking 8 parameters already, including 25% reduction for shared parking and transit access, etc. The impetus for this project 9 was that the landowner of Maple Tree Place wanted to add more parking because Maple Tree place as it exists today 10 has 200 less parking spaces than it should in strict adherence to the regulations. However, on the ground there are 11 plenty of parking spaces. There are large parking lots that sit empty because they aren't accessible. 12

13 David Grover, RSG, played a video showing the parking demand at various times of the week and year. Then 14 explained the inputs and outputs associated with the shared parking tool. The tool identifies a prioritization of 15 parking lots that a user would choose depending on the business location. These are self-defined. The output is 16 availability (shows how many spaces are left) but could be about demand. There was discussion about how large of 17 an area this could be used for, and use of it in a development review application. The tool can also be used by a 18 parking manager because you can see the highly used areas and maybe time limiting those areas would make sense. 19 The presentation is attached. 20

21 6. Bolton Energy Plan

22 This is a plan amendment to include a new enhanced energy plan, and the town is seeking a Determination of Energy 23 Compliance. Paul Conner opened the public hearing. No public provided any comments. Paul Conner closed the 24 public hearing. 25

26 Melanie Needle provided an overview of the Bolton Energy plan. This is an amendment so the expiration date will 27 remain the same (2025). The Plan has met the requirements and Melanie found it to be a good Plan. Melanie added 28 that Bolton has been doing great energy work including an energy forum. Melanie explained that Staff had provided 29 comments for the Planning Commission public hearing and those have been made. 30

Larry Lewack stated that he appreciated the Staff comments and was able to incorporate those in the Plan.

33 PAC comments/questions:

- There was a question about the amount of energy generation on the orange polygons (pg. 168 in the PAC packet) to the west of Notch Road. It doesn't seem that this area really could be used for solar. The base solar area already pulls out the constraints. There was discussion that this is not the map used to determine where exactly solar can and can't go; the constraints are the land use policies that are used in the PUC process. This map is really a modeling tool to help generally understand if the targets can be met or not.
- The plan does not include specific preferred sites. •
- Pg. 13 biomass heating – might be good to include a concept about carbon sequestration as an additional benefit for Bolton's heavily forested landscape.
- Pg. 4 great graphic about different dwelling unit types. Next time consider using the same colors from one type to another.
- Pg. 14 very readable image regarding how the energy generation targets could be met. •

47 Eric Vorwald made a motion, seconded by Ravi Venkataraman, that the PAC finds that the proposed Town of Bolton 48 Town Plan Energy Elements (draft 1/29/2020) meet the requirements of the enhanced energy planning standards 49 ("determination") set forth in 24 V.S.A. §4352. 50

51 Upon notification that the municipality has adopted the amendments, CCRPC staff will review the plan, and any 52 information relevant to the confirmation process. If staff determines that that substantive changes have been made, the materials will be forwarded to the PAC for review. Otherwise the PAC recommends that the draft Energy Plan,
should be forwarded to the CCRPC Board for an affirmative determination of energy compliance.

4 Larry Lewack and Joss Besse abstained.

5 6 7. <u>Regional Act 250/Section 248 Projects on the Horizon</u>

- 7 Hinesburg: nothing to be discussed now.
- 8 Underhill: amending Act 250 permit for dwelling.
- 9 Winooski: amendment for a sign in downtown.
- 10 Williston: 141 units on old Catamount golf course at corner of Mtn. View and CIRC ROW. Finney Crossing
- 11 restaurant.
- 12 Jericho: nothing
- 13 Richmond: 5 lot commercial subdivision, but might trigger with
- 14 Bolton: nothing
- 15 Essex: nothing new. Allen Martin Drive approved awhile ago. Leo Industrial Park ag soil mitigation is a lot.
- 16 So. Burlington: Fayette Drive new Larkin building master plan for the whole area. 4 to 5 additional 3 story
- buildings (movie theater). Subdivisions in JAM golf course coming forward. Airport got approval for a 4 story hotelon the south side of the garage. Rejected by FAA because in radar cone. So starting again on the other side of the
- 19 building.

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Burlington: City Place 2.0 will now have to go to Act 250 because it no longer meets the residential threshold.

8. <u>Other Business - none</u> a. Annual housing, co

- a. Annual housing, commercial & industrial, and walking/biking infrastructure data development request was sent to you on Jan. 16th. Please submit this data as soon as possible if you haven't done so already.
- b. CENSUS PSAP Update. Melanie explained that about a year ago we altered the blocks and tracts, and those have been approved by the CENSUS, however the Census Designated Places are accepted with the exception of Colchester and Williston they just need to be re-submitted. The deadline is April 15th. Go to https://tigerweb.geo.census.gov/tigerweb/ if you'd like to see these boundaries.
- c. The next PAC meeting will either be on March 11th or April 8th.

31 32 9. Adiourn

- Larry Lewack made a motion, seconded by Andrew Strniste, to adjourn at 4:42p.m. MOTION PASSED
 34
- 35 Respectfully submitted, Regina Mahony





Overview

- 1. Plug-in Electric Vehicle Overview
- 2. EV Incentives
- 3. EV Charging
- 4. State Building Energy Code Requirements
- 5. Planning & Permitting Recommendations
- 6. Discussion



Vermont Greenhouse Gas Emissions

Vehicle Efficiency



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Types of Plug-in Vehicles



Popular Models



Other Electric Options



Monthly Cost Comparison





Vermont EV Registrations

Purchase Incentives

Federal Tax Credit

- Up to \$7,500, based on battery size
- Begins to sunset when manufacturer reaches 200,000 EV sales
- Claim on income taxes (unless leasing)
- Does not carry-over into future years

State of Vermont

- For new EVs with starting MSRP under \$40,000
- Households below about \$96,000 annual income
- \$1.1 million in funding, currently about \$900,000 remaining

State EV Incentive

Vehicle Type	State of Vermont Incentive For \$96,122 Household Income or Less	Larger State of Vermont Incentive for Lower Income Households
Plug-in Hybrid Electric Vehicle	\$1,500	\$4,000
All-Electric Vehicle	\$2,500	\$5,000

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http://www.driveelectricvt.com/buying-guide/purchase-incentives

Electric Utility Incentives

	echic ARTMENT	\$1,200 on new all-electric or PHEV; \$800 for a used EV + Up to \$600 for low and moderate income households + \$400 rebate toward qualifying level 2 charger
GRE MOU POV	EN JNTAIN VER	\$1,500 on new all-electric; \$1,000 for PHEV; \$750 for a used EV + Up to \$1,000 for low and moderate income AEV + Free home charging equipment
VERW	IONT CO TRIC OR	\$500 on new or used all-electric \$250 on new or used plug-in hybrid + Nissan LEAF discount program
	See o othe	nutilities
nt		http://www.driveelectricvt.com/buying-guide/purchase-incentives

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Drive Elect

Combined Incentive Example

Description	Nissan LEAF 150 Mile Range	Nissan Sentra
Starting Price	\$29,990	\$17,890
Federal Tax Credit	-\$7,500	
State of Vermont Incentive	-\$2,500	
Nissan Discount	-\$5,000	
Utility Incentive	-\$1,500	
Price after Incentives	\$13,490	\$17,890





Charging Equipment



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EV Charging Summary

	Level 1	Level 2	DC Fast Charging		
Voltage	120 V	208 / 240 V	208 / 480 V		
Amperage	15 A	15 – 40 A	50 – 200+ A		
Power	1.4 kW	3 – 7 kW	20 – 350 kW		
Typical Duration of Charge Event	6-10 hours	1-4 hours	30-60 minutes		
Range per hour of charging	5 miles	10-20 miles	75+ miles		
Equipment Cost	\$30 – 900	\$500 – 9,000	\$15,000 - 40,000+		
Installation Cost	\$200 - 1,000+	\$1,000 - 10,000+	\$10,000 - 30,000+		
Plug Connector	SAE J1772 / Tesla	SAE J1772 / Tesla	SAE CCS / CHAdeMO / Tesla		
Typical Uses	 Standard outlet for home use Employee parking during the work day Long term (8+ hours) parking at a commuter/airport lot 	 Home use for faster charging Charging in a commercial area while shopping or doing business Workplace charging 	 Fast charging while on a long trip in order to reach a destination or extend the length of a trip EV owners without access to home charging 		

EV Public Charging Availability



rive ectric

<u>PlugShare.com</u>

EV Charging - How



Considerations

- Power
- Futureproofing
- ADA access
- Walkways
- Cell service
- Snow removal

EV Charging – How – Multiunit

Multi-Unit Dwelling (MUD) Considerations

- Dedicated parking vs Shared access
- Metering / usage fees
- Potential service upgrades required for existing structures
 Power management systems may alleviate this issue
- Condo/HOA agreements for homeowner/tenant charging
- Range of equipment and management options

Electric

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EV Charging - How



DC Fast Considerations

- 3 Phase Power
- Up to 300kW as of 2020
- Demand Charge Issues
- Redundancy
- Heavy Duty Vehicles

EV Charging - When



- New development
- Redevelopment
- EV driver demand
- Building out "safety net" of charging

EV Charging – Grants & Incentives

- State of Vermont ACCD has offered grants with VW diesel settlement funds for public, workplace and MUD locations. Future grants will require additional State appropriations https://accd.vermont.gov/community-development/funding-incentives/electric-vehicle-supply-equipment-evse-grant-program
- Utilities are offering public/workplace/MUD incentives for Renewable Energy Standard Tier 3 credits
 - GMP is around \$500 per Level 2 port
 - Others generally around \$250 per port
- Tesla destination charging program
 - Free equipment, but host pays for installation and energy costs
 - 1 generic EV charging unit for every 2 Tesla
 - Oriented toward lodging/attraction businesses

https://www.tesla.com/charging-partners

Drive
lectric)

Public Charging Availability



VT Building Energy Stretch Code

Stretch code compliance required for Act 250

Commercial (Section C708.1)

- About 2% of parking EV ready
- Half ready to go on occupancy
- Level 1 and/or 2

Residential

- Multifamily with 10+ units
- 4% of parking
- Level 1 or 2 receptacles

Drive Electric

2019 CBES EV Requirements

C405.10 Electric Vehicle Charging Stations

New buildings with occupancy groups listed in Table 405.11 shall provide the electrical service capacity to serve the number of Electric Vehicle Charging Parking Spaces in Table C405.11. Electrical service capacity includes use of a listed cabinet, box, or enclosure connected to a conduit linking the parking spaces with the electrical service. Parking lots serving multiple occupancy groups shall use the occupancy group with the largest square feet of finished area Exception: Parking spaces are not counted in Table 405.11 if one of the following conditions apply:

- 1. Parking spaces are intended exclusively for storage of vehicles for retail sale or vehicle service
- 2. Parking spaces are separated from the meter by a public right-of-way.
- 3. Parking spaces which are limited to parking durations of less than an hour

50% of the parking spaces indicated in Table C405.11, rounded up to the nearest whole number, is the minimum number of Electric Vehicle Supply Equipment (EVSE) or receptacles necessary to function as available electric vehicle charging upon building occupancy. The number of parking spaces indicated in Table C405.11 minus the number of installed EVSE parking spaces is the minimum number of parking spaces that are required to be pre-wired, allowing for future installations when they are needed for use by customers, employees or other users (EVSE-ready). If level 1 service is provided, the required EV Charging Parking Spaces shall also be "Level 2 ready" as defined below in this Section C405.10. Electrical service capacity includes use of a listed cabinet, box or enclosure connected to a conduit linking the parking spaces with teh electrical service. For parking lots with 25 or more parking spaces, Table C405.11 can be satisfied by either Option A or B in the table.

Parking spaces with EVSE shall be marked for EV use only.

- Exception: 1. In Group R-2 buildings the number of parking spaces with EVSE that are marked for "EV use only" need not exceed the number of EV cars driven by occupants of the building. This exception does not reduce the number of EVSE spaces, just
 - 2. In structured parking lots 1/2 of parking spaces, rounded up, with EVSE shall be marked for "EV use only", while the remainder need not be marked for "EV use only". This exception does not reduce the number of EVSE spaces, just the number that are marked for EV use only.

Level 1 Electric Vehicle Charging Parking requires one 120V 20 amp grounded AC receptacle, NEMA 5-20R or equivalent, within 5 feet of the centerline of each EV Charging Parking Space.

Level 2 Electric Vehicle Charging Parking requires one 208/240V 40 amp grounded connection for each electric vehicle charging through dedicated Electric Vehicle Supply Equipment (EVSE) with J1772 connector or AC receptacle, NEMA 14-50, or equivalent, within 5 feet of the centerline for each EV Charging Parking Space.

DC Fast Charging, also referred to as Level 3, Electric Vehicle Charging Parking requires one, direct-current (DC) plug for eelctric vehicle charging through dedicated Electric Vehicle Supply Equipment (EVSE) with either a CHAdeMO or SAE Combined Charging System (CCS) format connector, within 5 feet fo the centerline for each EV Charging Parking Space. Other DC Fast Charging plug standards may be accepted as they are developed.

The guideline does not stipulate how use of the EVSE is provided.

If the design intent is to only provide level 2 charging stations, then the level 1 and level 2 requirements should be added together.

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2019 CBES EV Requirements

TABLE C405.11 ELECTRIC VEHICLE CHARGING PARKING SPACES

Commercial Building	Minimu	Minimum Number of EVSE and EVSE-ready Parking Spaces ^b				Spaces ^b
Occupancy ^a	Whole numbers represent actual number of required spaces.					spaces.
	Fractional	percentages	shall be rou	unded up to r	earest wh	ole number.
	<25	Parking			>25	Parking
	Snac	es in Lot	≥25 Parki	ng Spaces	Space	es in Lot
	Opuo		in	Lot	Opac	ES IT LOU
			Opt	ion A		
	option A			Option B		
	Level 1	Level 2 or	Level 1	Level 2 or	Level 1	Level 2 or
		DC Fast		DC Fast		DC Fast
		Charge		Charge		Charge
Groups A & M ^{c,d}	0	0	0%	4%	0%	10
Groups B, E, F, & H	1	1	3%	3%	2%	5
Groups I-1, I-2, I-3, & R-4	1	1	2%	4%	1%	10
Group R-1	0	1	0%	2%	1%	10
Group R-2	1	0	8%	0%	3%	5

See occup ancy classification in section C202. If more than one occupancy type, use the occupancy type with the most square feet

of finished building area. 50% of the parking spaces, rounded up to the nearest whole number, shall have EVSE or receptacles necessary to function as available electric vehicle charging upon building occupancy. The remainder shall be EVSE-ready. Motor liquid fuel-dispensing facilities (gas stations) are exempt from the requirement to provide electric vehicle charging parking b. C.

- spaces. Stand-alone retail stores with fewer than 50 spaces are exempt from the requirement to provide electric vehicle charging parking d.

Assembly Group A is the occupancy group used for buildings that are for the gathering of persons for purposes such as civic, social or religious functions; recreation, food or drink consumption or awaiting transportation.

Business Group B is the occupancy group used for office, professional or service-type transactions, including storage or records and accounts.

Educational Group E is the occupancy group used by six or more persons at any one time for educational purposes through the 12^{h} grade.

Factory Industrial Group F is the occupancy group used for disassembling, fabricating, finishing, manufacturing, packaging, repair or processing operation that are not classified as Group H or Group S. High-hazard Group H is the occupancy group used for manufacturing, processing, generation or storage of materials that constitute a physical or health hazard.

Institutional Group I is the occupancy group used for more than 16 persons, excluding staff, who reside on a 24-hour basis in a supervised environment and receive custodial care.

Mercantile Group M is the occupancy group used for the display and sale of merchandise, and involves stocks of goods, wares or merchandise

Residential Group R is the occupancy group used for buildings that include sleeping rooms and are not institutional. There are four different occupancy groups within R.

The first occupancy group is R-1. This group is for transient uses like hotels, motels and boarding hou

R-2 is occupancies containing sleeping units or more than two dwelling units where the occupants are primarily permanent. This includes apartments, dormitories, fraternities and sororities. It also includes vacation timeshares (with more than two units) and convents and monasteries. Boarding houses or congregate living facilities with 16 or fewer occupants go into group R-3.

R-3 is for permanent occupancies that are not R-1, R-2, or R-4.

R-4 is for occupancies for more than five but not more than 16 persons, excluding staff, who reside on a 24-hour basis in a supervised residential environment and receive custodial care.

2019 RBES EV Requirements

R404.3 Electric vehicle charging

New parking lots serving multifamily developments of 10 or more units shall provide either level 1 or level 2 electrical service within 5 feet of the centerline of the parking space ("EV Charging Parking Space") with the capacity to serve the number of Electric Vehicle Charging Parking Spaces in Table R404.3. Electrical service capacity includes the use of a listed cabinet, box or enclosure connected to a conduit linking the parking spaces with the electrical service.

Exception: Parking spaces are not counted in Table 405.11 if one of the following conditions apply:

- 1. Parking spaces are intended exclusively for storage of vehicles for retail sale or vehicle service.
- 2. Parking spaces are separated from the meter by a public right-of-way.
- 3. Parking spaces which are limited to parking durations of less than an hour.

Parking spaces with Electric Vehicle Supply Equipment ("EVSE") shall be marked for EV use only.

Exception:

1. The number of parking spaces with EVSE that are marked for "EV use only" need not exceed the number of EV cars driven by occupants of the building. This exception does not reduce the number of EVSE spaces required, just the number that are marked for EV use only.

Level 1 Electric Vehicle Charging Parking requires one 120V 20 amp grounded AC receptacle, NEMA 5-20R or equivalent, within 5 feet of the centerline of each EV Charging Parking Space.

Level 2 Electric Vehicle Charging Parking requires one 208/240V 40 amp grounded connection for each electric vehicle charging through dedicated Electric Vehicle Supply Equipment (EVSE) with J1772 connector or AC receptacle, NEMA 14-50, or equivalent, within 5 feet of the centerline for each EV Charging Parking Space.

https://publicservice.vermont.gov/content/building-energy-standards-update

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2019 RBES EV Requirements

TABLE R404.3

REQUIRED ELECTRIC VEHICLE CHARGING PARKING SPACES FOR MULTIFAMILY BUILDINGS (BASE and STRETCH CODE)

NUMBER OF PARKING SPOTS	REQUIRED NUMBER OF EV CHARGING PARKING SPACES
10–25	1
26–50	2
51–75	3
76–100	4
>100	4% of parking spots, rounded up to the nearest whole number

R407.4 Electric vehicle charging for Stretch Code. For single family housing, one Level 1 parking space is required with accessible socket.

Parking lots serving multifamily developments of 10 or more dwelling units shall provide level 1 or level 2 electrical service to the required number of Electric Vehicle Charging Parking Spaces to tever2 sectorizes are vide a service and equine or discuss or discuss or discuss or disguing ranking opace in Table R404.3. If level 1 service is provided, the required EV Charging Parking Spaces shall also be "Level 2 ready" as defined, below in this Section R407.4. Electrical service capacity includes use of a listed cabinet, box or enclosure connected to a conduit linking the parking spaces with the electrical service.

https://publicservice.vermont.gov/content/building-energy-standards-update

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Planning & Permitting - Definitions

Electric Vehicle Charging Station (EVCS)

Electric Vehicle Charging Station (EVCS) means the public or private parking space(s) served by electric vehicle supply equipment (EVSE), including all signs, information, pavement, surfaces, surface markings, fee collections systems, and protective equipment in which a vehicle is recharged.

Electric Vehicle Supply Equipment (EVSE)

Electric Vehicle Supply Equipment (EVSE) means the protective system which communicates with electric vehicles and monitors electrical activity to ensure safe charging, inclusive of all components: the conductors; the undergrounded, grounded, and equipment grounding conductors; electrical vehicle connectors; attachment plugs; and all other fittings devices, power outlets, or apparatus installed specifically for the purposes of delivering energy from the grid to an electric vehicle.

Electric Vehicle (EV)

Electric Vehicle means a class of automobiles that use electric motors powered by energy drawn from the grid or off-grid electric sources into a battery system for propulsion. This definition includes allelectric (AEV) and plug-in hybrid electric vehicles (PHEV).

Charging Levels

Standardized indicators of electrical force, or voltage, at which an EV's battery is recharged. EVSE is classified into categories by the rate at which batteries are charged: Alternating Current (AC) Level 1; AC Level 2; and Direct Current Fast Charging (DCFC).

Drive Electric

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Planning & Permitting – VT ACCD Resource

EVSE-friendly Development Regulations for Municipalities



Planning & Permitting – Accessory Use

Accessory Use Standards

Electric vehicle charging stations are permitted as an accessory residential and non-residential use within an approved parking area or approved fueling station service area in any zoning district and will not be subject to the provisions of this section.

Accessory Structure Standards

Electric vehicle charging stations and above-ground electric vehicle supply equipment are permitted as an accessory structure in any zoning district subject to the provisions of this section. (Typical accessory structure provisions include footprint maximums, modest setbacks, and height limitations.)

https://accd.vermont.gov/community-development/funding

Planning & Permitting - Exemptions

Landowners do not need to obtain a zoning permit for:

- Interior alterations to an existing structure for electric vehicle charging stations that do not change any of the structure's exterior dimensions;
- The installation of Electric Vehicle Charging Stations within a public right-of-way.

Planning & Permitting – Parking Standards

The applicant:

- May provide electric vehicle charging stations within parking areas as an allowed accessory use in any zoning district;
- Will not have to provide additional parking when spaces are converted and/or reserved for charging vehicles;
- Must provide a cord of sufficient length to accommodate port variations in passenger vehicles or otherwise allow vehicles to park front-to-back or back-to-front;
- Must protect and place ground and wall-mounted equipment to prevent physical damage to the control device by vehicles and snow plows (e.g. bollards and/or curbing);
- Must count electric vehicle charging station parking spaces toward the minimum amount of parking requirements (if any) under this section;
- May/Must provide a minimum of one accessible electric vehicle charging station parking space in close proximity to the building entrance with a maintained and barrier-free route of travel (It is not necessary to designate the accessible EV Charging Station exclusively for disabled users; however, the Americans with Disabilities Act (ADA) may require EV Charging Stations to meet accessibility requirements separate from these regulations.);
- May/Must provide a minimum of 1 charging station for every 10 parking spaces required.



Planning & Permitting – Sign Standards

The applicant:

 Must provide each electric vehicle charging station with on-site signs approved by the Manual Uniform Traffic Control Devices to identify electric vehicle parking (general service signs) and restrict access (regulatory signs) by stating, "no parking except for electric vehicle charging" unless waived by the appropriate municipal panel or zoning administrator (see example signage above). For purposes of this section, "charging" means that an electric vehicle is parked at an electric vehicle charging station and is connected to the electric vehicle supply equipment port. If time limits or vehicle removal provisions are to be enforced, regulatory signage including parking restrictions shall be installed immediately adjacent to, and visible from the electric vehicle charging station.

Drive Electric Vermont	https://accd.vermont.gov/community-development/funding-incentives/electric-vehicle-supply-equipment-evse-grant-program

Performance Standards

The applicant:

- Must demonstrate that the proposed development has been designed to facilitate use of energy-efficient modes of transportation such as walking, biking, transit, and electric vehicles as feasible and appropriate given the location and use (If subject to site plan or conditional use review)
- May establish and collect a service fee for the use of an approved electric vehicle charging station without affecting the land use classification of the property;
- Must construct with equipment and service facilities that are designed and/or located to prevent water from entering or accumulating within the components in river corridor areas;
- Must place charging equipment and manage cords to avoid tripping hazards in public locations;
- Must locate ancillary mechanical equipment and components (but not the charging station itself) so that they will be screened from view to the maximum extent feasible, and if adequate screening is not possible use materials and colors that will camouflage the ancillary equipment.



Conclusion

- EVs are here
- · Home charging options are critical for most EV drivers
- Building new EV-ready housing offers massive savings compared to retrofitting charging
- Municipalities can help by:
 - Ensuring new developments take EV charging into consideration
 - Streamlining EV charging planning and permitting requirements
 - Considering EVs for fleet vehicles and supporting employee/public charging
 - Spreading the word through energy committees, events, etc



Discussion



Contact

Dave Roberts droberts@veic.org

Drive-----Electric Vermont



Project Background

Project Team:

Matt Boulanger – Planning Director and Zoning Administrator, Town of Williston Bryan Davis – Senior Transportation Planner, CCRPC Marshall Distel – Transportation Planner, CCRPC Jonathan Slason – Director, RSG David Grover – Consultant, RSG Gabby Freeman – Analyst, RSG



Agenda

- Why do this project?
- What is shared parking?
- The Shared Parking Analysis tool
- Example
- Questions





Why Do This Project?

 Most U.S. communities are observing an oversupply of parking

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- Parking standards are excessive and err toward oversupply
- Parking is routinely required but overall supplies are not monitored
- Infill development can increase value without increasing impervious area
- Turn parking lots into useful buildings
- How much parking do we really need?

Picture from Black Friday Parking Survey - Results November 23, 2018 - Williston, VT

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Shared Parking

- One spot for two or more land uses without conflict or encroachment
- Different land uses = different peak demand times





- · Assigns parking spaces based on:
 - Demand
 - Supply
 - Parking lot preference
- Models parking demand all time combinations
- Excel input data
- Output: demand and utilization across parking lots and time combinations
- Python script run in ArcMap
- Free and open source



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Input Data

- Parking Lots file (Excel file)
- Generators file (Excel file)
- Land Use Demand file (Excel file)
- Adjustment Factors file (python pickle file)
- Files can be generated in GIS or in Excel



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Input Data – Parking Lots File

• Parking Lots file (Excel file, user created)

Name	Spaces	Lot_UID
Harvest Ln	102	1
Harvest Ln	58	2
Harvest Ln	316	3
Harvest Ln	198	4
Harvest Ln	318	5
Harvest Ln	215	6



Input Data – Generators File

- Name Name of the parking generator
- Location Unique GIS ID
- LUC and Type type of land use
- · Size and Unit type
- Gen_ID Unique ID associated with each generator.
- ParkingLots Parking lot preferences

Name	Location	LUC	Туре	Size	Unit	Gen_UID	ParkingLots
Optometrist	10482	63	Medical/Dental Office	3.643	ksf GFA	1	3;5;2;6;1
Salon	10859	10	Retail	7.176	ksf GLA	2	3;5;2;6;1
HOME DEPOT U.S.A., INC.	11052	10	Retail	100	ksf GLA	3	3;6;5;1;4
WAL-MART STORES, INC.	11105	10	Retail	100	ksf GLA	4	3;5;2;6;1



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Input Data – Generators File

- "ParkingLots" column determines parking preference
 - Everyone chooses parking lot 3 first
 - Walmart customers choose lot 5 next
 - Home Depot customers choose lot 6 next

Name	ParkingLots
Optometrist	3;5;2;6;1
Salon	3;5;2;6;1
HOME DEPOT U.S.A., INC.	3;6;5;1;4
WAL-MART STORES, INC.	3;5;2;6;1

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Input Data – Demand and Adjustment Factors

- Demand equals product of:
 - Peak demand
 - Time of day factor
 - Weekday/weekend factor
 - Month factor
 - 500 total combinations
- Factors from Shared Parking
 - Can be changed by user, e.g.
 - ITE Parking Generation
 - Town or City Regulations
 - Shared Parking, Third Edition



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Caveats

- · Model is only as good as the input data
 - Generator sizes should be confirmed
 - User determines lot preference order
- · Factors are averages of national studies
 - Calibrate to local conditions for better accuracy
- Balance accuracy with expediency
 - Consider goals and effort required for large areas



Example Model Run – Walmart and Home Depot



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Month

Day

December

Weekend

13

Example Model Run – Walmart and Home Depot

The lowest space availablility occurs at 2:00 ${\rm PM}$ on a weekend in December.

All demand is met for all generators.

•	Shows spaces
	left

- Lots 3 and 6 fully utilized
- Lots 1, 2, and 4 empty

Sum of spaces	Column Labels						
Row Labels 🛛 🔻	1	2	3	4	5	6	Grand Tot
12:00 AM	102	58	316	198	318	215	1207
6:00 AM	102	58	293	198	318	215	1184
7:00 AM	102	58	258	198	318	215	1149
8:00 AM	102	58	170	198	318	215	1061
9:00 AM	102	58	0	198	296	215	869
10:00 AM	102	58	0	198	220	140	718
11:00 AM	102	58	0	198	143	101	602
12:00 PM	102	58	0	198	103	41	502
1:00 PM	102	58	0	198	87	0	445
2:00 PM	102	58	0	198	20	0	378
3:00 PM	102	58	0	198	20	0	378
4:00 PM	102	58	0	198	53	0	411
5:00 PM	102	58	0	198	89	6	453
6:00 PM	102	58	0	198	114	63	536
7:00 PM	102	58	0	198	127	92	577
8:00 PM	102	58	0	198	186	108	652
9:00 PM	102	58	0	198	237	173	768
10:00 PM	102	58	9	198	318	215	900
11:00 PM	102	58	192	198	318	215	1083

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Example Model Run – Add a Restaurant



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Example Model Run – Add a Restaurant

Month	December	T,						
Day	Weekend	T,						
Sum of spaces	Column Labels	Ŧ						
Row Labels 🔻	1		2	3	4	5	6	Grand Total
12:00 AM	52		58	316	198	318	215	1157
6:00 AM	102		58	293	198	318	215	1184
7:00 AM	99		58	258	198	318	215	1146
8:00 AM	98		58	170	198	318	215	1057
9:00 AM	93		58	0	198	296	215	860
10:00 AM	91		58	0	198	220	140	707
11:00 AM	78		58	0	198	143	101	578
12:00 PM	48		58	0	198	103	41	448
1:00 PM	44		58	0	198	87	0	387
2:00 PM	53		58	0	198	20	0	329
3:00 PM	53		58	0	198	20	0	329
4:00 PM	53		58	0	198	53	0	362
5:00 PM	36		58	0	198	89	6	387
6:00 PM	11		58	0	198	114	63	444
7:00 PM	6		58	0	198	127	92	481
8:00 PM	2		58	0	198	186	108	552
9:00 PM	11		58	0	198	237	173	676
10:00 PM	11		58	9	198	318	215	809
11:00 PM	13		58	192	198	318	215	993

- · Shows spaces left
- Lots 3 and 6 fully utilized
- Lot 1 (restaurant) almost full
- Lots 2 and 4 empty
- Don't build more parking for restaurant!

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Example Uses

- Mandate shared parking for new developments when parking supply is excessive
- Test shared parking plans (or lack thereof)
- Estimate parking demand in planned mixeduse developments
- Examine the effects of converting parking spaces to a higher value use



Questions?

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Draft Chittenden County Housing Development for 2019

Date: April 1, 2020

The table below indicates the net dwelling unit count of homes built in 2019 based on the municipal development reports submitted to CCRPC.

The net count of dwelling units account for demolitions and new homes so demolitions are subtracted from the total housing built. Therefore, the number reported below nets out the number of demolished homes.

CCRPC also cross-referenced addresses with our housing database to check if addresses have been previously reported for prior years. The purpose of this is to identify any duplications and ensure a more accurate housing count year to year. Any address that was previously counted in a prior year in our database was not included in the table below. Bolton and Burlington are the only municipalities with addresses that have been counted in previous years. Milton and Shelburne are the only towns which cross-referencing with the CCRRPC database has not yet occurred. CCRPC staff will reach out to planners soon to work through duplications with town staff. Staff will also continue to cross reference the data with our housing database.

Town	Submitted Net Dwelling					
	Unit Count					
Bolton	3					
Burlington	201					
Colchester	81					
Charlotte	10					
Essex	41					
Essex Junction	47					
Hinesburg	16					
Huntington	1					
Jericho	11					
Milton	14*					
Richmond	16					
Shelburne	8*					
South Burlington	108					
St. George	2					
Underhill	13					
Westford	2					
Williston	162					
Winooski	43					
Total	779					

Please review the number for your town and let us know if it is not correct.
Staff Review of the 2020 Underhill Town Plan, Including Enhanced Energy Plan Review Taylor Newton, Senior Planner Regina Mahony, Planning Program Manager Reviewed by the CCRPC Planning Advisory Committee on April 8, 2020

The Town of Underhill has requested, per 24 V.S.A §4350, that the Chittenden County Regional Planning Commission (1) approve its 2020 Underhill Town Plan; and (2) confirm its planning process.

Additionally, the Town of Underhill has requested that the Chittenden County Regional Planning Commission issue a determination of compliance with the enhanced energy planning standards set forth in 24 V.S.A. §4352 for the 2020 Underhill Town Plan.

This draft 2020 Underhill Town Plan is a full re-write of the town plan. At the time of this review, the Town Plan is a final draft. CCRPC staff have completed this formal review of the plan in advance of the Underhill Planning Commission's public hearings. The Underhill Planning Commission scheduled to hold public hearings on March 26, April 4, 2020, and April 9, 2020. However, these public hearings have been postponed to late April or May due to COVID-19.

In accordance with statute, adoption means that this is a fully compliant plan that will expire eight years after adoption by the Selectboard. CCRPC reviewed the 2015 plan in May 2018 as part of an informal review and consultation process. The 2019 Underhill Plan addresses the comments from that initial review, includes new required elements, provides updated data, addresses recent changes to the community, and includes an enhanced energy plan.

A copy of the Underhill Town Plan can be found on the Town of Underhill website.

Confirming and Approving the Municipal Plan

Following the Chittenden County Regional Planning Commission's (CCRPC's) *Guidelines and Standards for Confirmation of Municipal Planning Processes and Approval of Municipal Plans (2018)* and the statutory requirements of 24 V.S.A. Chapter 117, CCRPC staff have reviewed the draft 2020 Underhill Town Plan to determine whether it is:

- Consistent with the general goals of §4302;
- Consistent with the <u>specific goals</u> of §4302;
- Contains the <u>required elements</u> of §4382;
- Compatible with the 2018 Chittenden County Regional Plan, entitled the 2018 Chittenden County ECOS *Plan* (per §4350); and
- Compatible with approved plans of other municipalities (per §4350).

Additionally, CCRPC staff have reviewed the planning process requirements of §4350.

Staff Review Findings and Comments

1. The 2020 Underhill Town Plan is consistent with the <u>general goals</u> of §4302. See the attached Appendix A submittal that describes how the Plan is consistent with these goals.

CCRPC Staff & PAC Review – 2020 Underhill Town Plan (Enhanced Energy Plan Review)

- 2. The 2020 Underhill Town Plan is consistent with the <u>specific goals</u> of §4302, with the exception of the edit in #2 below. See the attached Appendix A submittal that describes how the Plan is consistent with these goals.
- 3. The 2020 Underhill Town Plan contains the <u>required elements</u> of §4382. See the attached Appendix A submittal that describes how the Plan is consistent with these goals.
- 4. The 2020 Underhill Town Plan is generally compatible with the planning areas, goals and strategies of the 2018 Chittenden County Regional Plan, entitled the 2018 Chittenden County ECOS Plan.
- 5. The 2020 Underhill Town Plan is compatible with the municipal plans for Bolton, Cambridge, Jericho, Stowe, and Westford; however, the compatibility of the future land uses should be clarified as stated in edit #1 below.
- 6. Underhill has a <u>planning process</u> in place that is sufficient for an approved plan. In addition, Underhill has provided information about their planning budget and CCRPC finds that Underhill is maintaining its efforts to provide local funds for municipal and regional planning.

The following edits are needed for CCRPC approval:

1. The Town Plan should specifically reference the compatibility of Underhill's future land use districts with the future land use districts located immediately adjacent to Underhill in surrounding communities. CCRPC suggests the following edit to the fourth paragraph, second sentence on page 14 of the Underhill Town Plan:

The goals, policies, strategies, <u>and future land uses</u> set out in this Town Plan are compatible with those of its neighbors: focusing development in traditional rural village centers, supporting and encourage the protection of natural resources, and maintaining a high quality of life for all residents.

2. The Town Plan does not include a goal "to broaden access to educational and vocational training opportunities" for all Vermonters. This State goal should be added to the Plan before passage.

In addition, here are a few minor recommendations to strengthen the plan:

- 3. The tables summarizing the policies and strategies in Appendix A are well done and link "actions" to the relevant Town policy. Adding page numbers to this appendix would be helpful.
- 4. Aesthetic resources (page 45-46) will likely need to be better defined to ensure that the plan can be effectively used in Act 250 and Section 248. Underhill may also want to consider adding a strategy to assess if there are "scenic roads" or other scenic resources in Town that should be included in the Town Plan.
- 5. The Underhill Town Plan has a strong natural resources chapter. While the plan does well to discuss forest fragmentation, a clearer policy statement about minimizing forest fragmentation would strengthen this part of the plan. CCRPC suggests the following edits to the Natural Resources policies and strategies on page 32:

Natural Resources Policy 2:

Collaborate with property owners to Maintain and improve forest blocks, significant wildlife habitat, and habitat connectors, <u>and minimize forest fragmentation in order to promote the health</u>, viability, and ecological function of forests.

Natural Resources Strategy 2(7):

Assess the minimum lot size requirement in the Rural Residential, Water Conservation, Mt. Mansfield Scenic Protection, and Soil and Water Conservation zoning districts and the impact of the minimum lot size requirement and subdivision upon forest fragmentation in Underhill.

Enhanced Energy Plan Review

Following the statutory requirements of 24 V.S.A. §4352 and Vermont Department of Public Service's Energy Planning Standards for Municipal Plans, CCRPC staff reviewed the draft 2020 Underhill Town Plan to determine whether:

- 1. The 2020 Underhill Town Plan includes an energy element that has the same components as described in 24 V.S.A. §4348a(a)(3) for a regional plan and is confirmed under the requirements of 24 V.S.A. §4350.
- 2. The 2020 Underhill Town Plan is consistent with following State goals:
 - a. Vermont's greenhouse gas reduction goals under 10 V.S.A. § 578(a);
 - b. Vermont's 25 by 25 goal for renewable energy under 10 V.S.A. § 580;
 - c. Vermont's building efficiency goals under 10 V.S.A. § 581;
 - d. State energy policy under 30 V.S.A. § 202a and the recommendations for regional and municipal energy planning pertaining to the efficient use of energy and the siting and development of renewable energy resources contained in the State energy plans adopted pursuant to 30 V.S.A. §§ 202 and 202b (State energy plans); and
 - e. The distributed renewable generation and energy transformation categories of resources to meet the requirements of the Renewable Energy Standard under 30 V.S.A. §§ 8004 and 8005.
- 3. The 2020 Underhill Town Plan meets the standards for issuing a determination of energy compliance included in the State energy plans as developed by the Vermont Department of Public Service.

Staff Review Findings and Comments

Consistency with the requirements above is evaluated through the Vermont Department of Public Service's Vermont Department of Public Service's Energy Planning Standards for Municipal Plans, which is attached to this document and briefly summarized below.

Standard	Met	Not Met	N/A
1. Plan duly adopted and approved		Necessary for	
		final	
		determination	
2. Submit a copy of the adopted plan		Necessary for	
		final	
		determination	
3. Plan contains an energy element	Х		
4. Analysis of resources, needs, scarcities, costs and problems in the	Х		
municipality across all energy sectors			
5.a. Report Current energy use for heating, electricity, and transportation	X		
5.b. Report 2025, 2035 and 2050 targets for energy use	X		

5.c. Evaluation of thermal-sector energy use changes	Х		
5.d. Evaluation of transportation-sector energy use changes	Х		
5.e. Evaluation of electric-sector energy use changes	Х		
6.a. Encourage conservation by individuals and organizations	Х		
6.b. Promote efficient buildings		Х	
6.c. Promote decreased use of fossil fuels for heat	X		
6.d. Demonstrate municipal leadership re: efficiency of municipal buildings?	X		
7.a. Encourage increased public transit use	X		
7.b. Promote shift away from single-occupancy vehicle trips	Х		
7.d. Promote shift from gas/diesel to non-fossil fuel vehicles?	Х		
7.e. Demonstrate municipal leadership re: efficiency of municipal transportation?	Х		
8.a. Promote Smart growth land use policies	Х		
8.b. Strongly prioritize development in compact, mixed use centers	Х		
9.a. Report existing renewable energy generation	X		
9.b. Analyze generation potential	Х		
9.c. Identify sufficient land to meet the 2050 generation targets	Х		
9.d. Ensure that local constraints do not prevent the generation targets from being	Х		
met			
9.e. Include policy statements on siting energy generation	Х		
9.f. Maximize potential for generation on preferred sites	Х		
9.g. Demonstrate municipal leadership re: deploying renewable energy	X		
10. Include maps provided by CCRPC	X		

The following edits are needed for CCRPC to grant an affirmative determination of energy compliance to the Town of Underhill:

- 1. The 2020 Underhill Town Plan must include a strategy that more clearly promotes energy efficient buildings (Standard 6.b). CCRPC staff suggests that the Town of Underhill include the following strategy under Energy Policy 1 (pg. 54):
 - 8. <u>Promote the use of the residential building energy standards (RBES) and commercial building energy</u> <u>standards (CBES) by distributing code information to permit applicants.</u>

Provided that the above edit is made, CCRPC staff finds that the draft 2020 Underhill Town Plan meets the requirements of the enhanced energy planning standards ("determination") set forth in 24 V.S.A. §4352.

In addition, CCRPC staff makes the following recommendation to strengthen the plan:

CCRPC staff also strongly recommends that the Town of Underhill make the following edit to more clearly explain the municipal prohibition on large-scale wind facilities to ensure conformance with municipal enhanced energy determination standard 9.e:

Page 64, Paragraph 1:

After much deliberation, the Town of Underhill concluded that the best way to attain its renewable energy targets, and at the same time, maintain the Town's goals, policies and strategies of this Plan, especially the Town's efforts to maintain its rural character, excluding is to prohibit new large-scale wind power generation in Underhill would be in the Town's best interest. This decision is primarily based on Underhill's long-time prohibition of all development above 1,500 feet elevation, and the incorporation of State and local known and possible constraints in the planning process, which CCRPC Staff & PAC Review – 2020 Underhill Town Plan (Enhanced Energy Plan Review)

effectively makes any development of large-scale wind unviable in Underhill. This is supported by the mapping shown on Map 3.2. Concerns about the aesthetic impact of large-scale wind power generation on the Mt. Mansfield Scenic Preservation District also factored into Underhill's decision. Therefore, large-scale wind power generation shall be prohibited in with the Town of Underhill.

Proposed Motion & Next Steps:

PROPOSED MOTION: The PAC finds that the draft 2020 Underhill Town Plan, will meet all statutory requirements for CCRPC approval with Confirming and Approving the Municipal Plan edit #'s 1 and 2 described in this staff report, and that the municipality's planning process meets all statutory requirements for CCRPC confirmation.

The PAC also finds that the draft 2020 Underhill Town Plan will meet the requirements of the enhanced energy planning standards ("determination") set forth in 24 V.S.A. §4352 with Enhanced Energy Plan Review edit #1 described in this staff report.

Upon notification that the Plan has been adopted by the municipality, CCRPC staff will review the plan, and any information relevant to the confirmation process. If staff determines that the required data and reference have not been added, or that substantive changes have been made, the materials will be forwarded to the PAC for review. Otherwise the PAC recommends that the Plan, and the municipal planning process, should be forwarded to the CCRPC Board for approval, confirmation, and an affirmative determination of energy compliance.

Appendix A – Municipal Plan Review Tool Chittenden County Regional Planning Commission Guidelines and Standards for Confirmation of Municipal Planning Processes and Approval of Municipal Plans

This form addresses the statutory requirements of the State of Vermont for town plans, as cited in the Vermont Municipal and Regional Planning and Development Act, Title 24 V.S.A Chapter 117 (the Act). It includes the 12 required elements found in § 4382 of the Act; the four planning process goals found in § 4302(b), the 14 specific goals found in § 4302(c); and the standard of review found in § 4302(f), which covers consistency with goals and compatibility standards.

During the Regional approval and confirmation process, specified in § 4350 of the Act, the regional planning commission is required to assess town plans and the process whereby they are developed according to the criteria of the Act. Sections of relevant statute are quoted at each question.

	Required Elements § 4382	Met	Not Met
1	Statement of Objectives, Policies, Programs	\boxtimes	
2	Land Use Plan	\boxtimes	
3	Transportation Plan	\boxtimes	
4	Utility and Facility Plan	\boxtimes	
5	Rare Natural Resources/Historic Resources	\boxtimes	
6	Educational Facilities Plan	\boxtimes	
7	Implementation Program	\boxtimes	
8	Development Trends	\boxtimes	
9	Energy Plan	\boxtimes	
10	Housing Element	\boxtimes	
11	Economic Development Element	\boxtimes	
12	Flood Resiliency Plan	\boxtimes	
1	State Planning Goals § 4302 Development Pattern	Met	Not Met
1 2	State Planning Goals § 4302 Development Pattern Economy	Met ⊠	Not Met
1 2 3	State Planning Goals § 4302 Development Pattern Economy Education	Met ⊠ ⊠	Not Met
1 2 3 4	State Planning Goals § 4302 Development Pattern Economy Education Transportation	Met ⊠ □ ⊠	Not Met
1 2 3 4 5	State Planning Goals § 4302 Development Pattern Economy Education Transportation Natural and Historic Resources	Met ⊠ □ ⊠	Not Met
1 2 3 4 5 6	State Planning Goals § 4302Development PatternEconomyEducationTransportationNatural and Historic ResourcesQuality of Resources	Met	Not Met
1 2 3 4 5 6 7	State Planning Goals § 4302Development PatternEconomyEducationTransportationNatural and Historic ResourcesQuality of ResourcesEnergy	Met X L X X X X X	Not Met
1 2 3 4 5 6 7 8	State Planning Goals § 4302Development PatternEconomyEducationTransportationNatural and Historic ResourcesQuality of ResourcesEnergyRecreation	Met	Not Met
1 2 3 4 5 6 7 8 9	State Planning Goals § 4302Development PatternEconomyEducationTransportationNatural and Historic ResourcesQuality of ResourcesEnergyRecreationAgriculture and Forest Industries	Met	Not Met
1 2 3 4 5 6 7 8 9 10	State Planning Goals § 4302Development PatternEconomyEducationTransportationNatural and Historic ResourcesQuality of ResourcesEnergyRecreationAgriculture and Forest IndustriesUse of Resources	Met	Not Met
1 2 3 4 5 6 7 8 9 10 11	State Planning Goals § 4302Development PatternEconomyEducationTransportationNatural and Historic ResourcesQuality of ResourcesEnergyRecreationAgriculture and Forest IndustriesUse of ResourcesHousing	Met X X X X X X X X X	Not Met
1 2 3 4 5 6 7 8 9 10 11 12	State Planning Goals § 4302Development PatternEconomyEducationTransportationNatural and Historic ResourcesQuality of ResourcesEnergyRecreationAgriculture and Forest IndustriesUse of ResourcesHousingPublic Facilities	Met	Not Met
1 2 3 4 5 6 7 8 9 10 11 12 13	State Planning Goals § 4302Development PatternEconomyEducationTransportationNatural and Historic ResourcesQuality of ResourcesEnergyRecreationAgriculture and Forest IndustriesUse of ResourcesHousingPublic FacilitiesChild Care	Met X X X X X X X X X X X	Not Met
1 2 3 4 5 6 7 8 9 10 11 12 13 14	State Planning Goals § 4302Development PatternEconomyEducationTransportationNatural and Historic ResourcesQuality of ResourcesEnergyRecreationAgriculture and Forest IndustriesUse of ResourcesHousingPublic FacilitiesChild CareFlood Resiliency	Met	Not Met

TOWN PLAN REQUIRED ELEMENTS

Title 24 Chapter 117: Municipal and Regional Planning and Development

24 V.S.A. § 4382. The plan for a municipality

(a) A plan for a municipality may be consistent with the goals established in section 4302 of this title and compatible with approved plans of other municipalities in the region and with the regional plan and shall include the following:

(1) A statement of objectives, policies and programs of the municipality to guide the future growth and development of land, public services and facilities, and to protect the environment.

Comments: Objectives, policies and strategies have been provided under the land use (page 17), services (page 85), infrastructure (page 80) and natural resources (32) sections of the proposed Town Plan.

(2) A land use plan, consisting of a map and statement of present and prospective land uses, that indicates those areas proposed for forests, recreation, agriculture (using the agricultural lands identification process established in 6 V.S.A. § 8), residence, commerce, industry, public and semipublic uses and open spaces, areas reserved reserved for flood plain, and areas identified by the State, the regional planning commission, or the municipality that require special consideration for aquifer protection; for wetland protection, for the maintenance of forest blocks, wildlife habitat, and habitat connectors; or for other conservation purposes; sets forth the present and prospective location, amount, intensity and character of such land uses and the appropriate timing or sequence of land development activities in relation to the provision of necessary community facilities and service; identifies those areas, if any, proposed for designation under chapter 76A of this title, together with, for each area proposed for designation, an explanation of how the designation would further the plan's goals and the goals of § 4302 of this title, and how the area meets the requirements for the type of designation to be sought; and indicates those areas that are important as forest blocks and habitat connectors and plans for land development in those areas to minimize forest fragmentation and promote the health, viability, and ecological function of forests.

Comments: The existing land use context can be found on page 18, while discussion of the future land can be found on page 24. The existing land use map can be found on Page 27, while the future land use map can be found on page 30. Maps depicting information relating to the floodplains, prime agricultural soils, forest block, wildlife habitat blocks, and water resources can be found on Pages 50-52. The related context can be found in the natural resources chapter, which commences on page 31.

(3) A transportation plan, consisting of a map and statement of present and prospective transportation and circulation facilities showing existing and proposed highways and streets by type and character of improvement, and where pertinent, parking facilities, transit routes, terminals, bicycle paths and trails, scenic roads, airports, railroads and port facilities, and other similar facilities or uses, with indications of priority of need;

Comments: The transportation chapter begins on Page 71, with the goals, policies and strategies on page 72. The transportation map is on Page 78. There are no proposed highways/streets proposed over the course of this plan. Other features such as bicycle paths and trails would need to be explored and researched.

Choose an item. Pages: 17, 32, 80 and 85.

Choose an item. Pages: 31-52

Choose an item.

 \times

Pages: 78

Transportation

MAP

MAPS Present Land Use Plan ✓ Prospective Land Use Plan ⊠ (4) A utility and facility plan, consisting of a map and statement of present and prospective community facilities and public utilities showing existing and proposed educational, recreational and other public sites, buildings and facilities, including hospitals, libraries, power generating plants and transmission lines, water supply, sewage disposal, refuse disposal, storm drainage and other similar facilities and activities, and recommendations to meet future needs for community facilities and services, with indications of priority of need, costs and method of financing;

Comments: A utilities and facilities has been provided on Page 94. Discussion about facilities and utilities is provided in Chapter 6 - Services. The Map for utilities and facilities are provided on page 94, with cell phone coverage maps provided on Page 95.

(5) A statement of policies on the preservation of rare and irreplaceable natural areas, scenic and historic features and resources;

Comments: Policies have been provided about rare and irreplaceable natural areas Scenic features in the natural resources chapter (Page 31), specifically Policy 1 (Page 32) and Policy 4 (Page 33). In addition, the proposed plan

includes a chapter pertaining to historic and cultural resources, which contains their own policies (Page 112).

(6) An educational facilities plan consisting of a map and statement of present and projected uses and the local public school system;

Comments: A map (Map 6.1) depicts the locations of public schools in the Town (Page 94). Details about education within Underhill can be found on Page 91, within the Services Chapter.

(7) A recommended program for the implementation of the objectives of the development plan;

Comments: Strategies relating to development in Underhill can be found in the Land Use Chapter (Chapter 1 – Page 17), Infrastructure (Chapter 5 – Page 80), Housing (Chapter 7 – Page 97) and Economic Development (Chapter 8 – Page 106).

(8) A statement indicating how the plan relates to development trends and plans of adjacent municipalities, areas and the region developed under this title;

Comments: The Purpose & Introduction Section of this Plan (Page 12-15) Provides background on how the Plan relates to development trends And plans of adjacent municipalities, areas and the region.

(9) 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, including programs, such as thermal integrity standards for buildings, to implement that policy, a statement of policy on the development of renewable energy resources, a statement of policy on patterns and densities of land use likely to result in conservation of energy;

Pages: 32, 33 and 112.

MAP Educational Facility

Choose an item. Pages: 17, 80, 97 & 106.

Choose an item. Pages: 12-15

Choose an item. Pages: 91-92 & 94.

Choose an item.

MAP

Choose an item.

Pages: 84-95.

Utility and Facility \square

Comments: The Town of Underhill is seeking certification of its Energy Plan as an Enhanced Energy Plan. The aforementioned criteria addressed in this element can be found in Chapter 3, which commences on Page 53.

(10) A housing element that shall include a recommended program for addressing low and moderate income persons' housing needs as identified by the regional planning commission pursuant to subdivision 4348a(a)(9) of this title. The program should account for permitted accessory dwelling units, as defined in subdivision 4412(1)(E) of this title, which provide affordable housing.

Comments: The proposed plan addresses housing in Chapter 7, beginning on Page 96. The Town recognizes the need for affordable housing and

housing options for low and moderate income persons; however, has struggled to find implementation measures that will facilities this goal. The obtainment of a grant to pursue a housing needs study will hopefully lead to recommended implementation measures the Town can implement to help address issue.

(11) An economic development element that describes present economic conditions and the location, type, and scale of desired economic development, and identifies policies, projects, and programs necessary to foster economic growth.

Comments: The proposed plan outlines the Town's economic conditions and strategies for enhancing its economic development status in the future. Policies and strategies have been provided within that chapter on Page 106.

(12)(A) A flood resilience plan that:

(i) identifies flood hazard and fluvial erosion hazard areas, based on river corridor maps provided by the Secretary of Natural Resources pursuant to 10 V.S.A. § 1428(a) or maps recommended by the Secretary, and designates those areas to be protected, including floodplains, river corridors, land adjacent to streams, wetlands, and upland forests, to reduce the risk of flood damage to infrastructure and improved property; and

(ii) recommends policies and strategies to protect the areas identified and designated under subdivision (12)(A)(i) of this subsection and to mitigate risks to public safety, critical infrastructure, historic structures, and municipal investments.

(B) A flood resilience plan may reference an existing local hazard mitigation plan approved under 44 C.F.R. § 201.6.

Comments: Floodplains and flood resiliency is addressed in the natural resources Chapter, specifically pages 42-43. In addition, River Corridor planning can be found in the land use chapter on pages 22-23. Goals, policies and strategies relating to the these topics can be found in the Natural Resources Chapter (Policies 9 and 10 on Page 34).

§4382(c) Data:

Where appropriate, and to further the purposes of subsection 4302(b) of this title, a municipal plan shall be based upon inventories, studies, and analyses of current trends and shall consider the probable social and economic consequences of the proposed plan. Such studies may consider or contain, but not be limited to:

(1) population characteristics and distribution, including income and employment;

(2) the existing and projected housing needs by amount, type, and location for all economic groups within the municipality and the region;

Choose an item. Pages: 53 – 70.

Choose an item.

Choose an item.

Pages: 105-110. Goals, Policies & Strategies located on Page 106.

Choose an item. Pages: 22-23, 34 and 42-43.

Pages:

(3) existing and estimated patterns and rates of growth in the various land use classifications, and desired patterns and rates of growth in terms of the community's ability to finance and provide public facilities and services.

Comments: The proposed plan identifies population characteristics throughout the Plan; however, the Purpose & Introduction section (Pages 12-15) of the Plan addresses some of the population characteristics within

Pages:12-15, 100-101 & 107-108

Underhill. Income and employment data can be found housing chapter, specifically Pages 100-101, as well as in the economic development chapter (Pages 107-108).

GOALS AND STANDARDS OF REVIEW

GOALS

24 VSA § 4302

(a) General purposes . . .

(b) It is also the intent of the legislature that municipalities, regional planning commissions and state agencies shall engage in a continuing planning process that will further the following goals:

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

(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.

(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.

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

(c) In addition, this chapter shall be used to further the following specific goals:

Goal 1:

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

(A) Intensive residential development should be encouraged primarily in areas related to community centers, and strip development along highways should be discouraged.

(B) Economic growth should be encouraged in locally designated growth areas, or employed to revitalize existing village and urban centers, or both.

(C) Public investments, including construction or expansion of infrastructure, should reinforce the general character and planned growth patterns of the area.

How has the Town Plan addressed this goal: Maintaining the historic settlement pattern of compact villages and urban centers separated by the rural countryside emerges in various locations within the Plan. The village designations are addressed in Chapter 8 (Economic Development – Page 108), as well as in Chapter 9 (Historic & Cultural Resources – Page 114). Additionally, the land use chapter specifically addresses development in the two village centers (Policy #1 – Page 17), as well as addressing development outside the two village centers (Policy #2 – Page 17). The Town of Underhill goes not contain "intense" areas of residential development, relatively speaking; however, recognizes the two village centers as potential areas to increase density and economic growth, as outlined in the aforementioned chapters. In addition, no infrastructure development is currently plans in the two village centers, largely due to budgetary and environmental constraints (explained in Chapters 5 – Infrastructure on Page 81, and 6 – Services on Pages 88-90).

If the goal is not relevant or attainable, how does the plan address why:

Goal 2:

Pages: 17, 81, 88-90, 108 & 114.

Appendix A - CCRPC Guidelines and Standards for Municipal Plan Review, as amended on September 19, 2018, Page 7 of 11

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 incomes.

How has the Town Plan addressed this goal: The proposed Town Plan discusses economic development in Chapter 8 (Page 107). Specifically, the recognizes

that there is room to enhance economic opportunities within the Town, and has formulated strategies to help facilitate the growth of economic development within the Town while maintaining the Town's rural character.

If the goal is not relevant or attainable, how does the plan address why:

Goal 3:

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

How has the Town Plan addressed this goal: the Town only addresses broadening educational opportunities in field of providing better opportunities for child care, which is not necessarily on point with this goal.

If the goal is not relevant or attainable, how does the plan address why: the proposed Plan does not directly address the reasons why the Town is not proposing to broaden access to educational and vocational training opportunities. However, the reason for not broadening access is due to the Underhill being a municipality in a regionalize school district. Therefore, the Town is largely at the will of the school district on what opportunities are provided. The proposed Plan does inform the reader that Underhill is part of a regionalized school district (Page 91-92).

Goal 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.

(A) Highways, air, rail and other means of transportation should be mutually supportive, balanced and integrated.

How has the Town Plan addressed this goal: The proposed plan discusses this goal in Chapter 4 – Transportation (page 71). The plan utilizes much of the same language through this chapter and in the goals, policies and strategies.

If the goal is not relevant or attainable, how does the plan address why:

Goal 5:

To identify, protect and preserve important natural and historic features of the Vermont landscape including:

(A) significant natural and fragile areas;

(B) outstanding water resources, including lakes, rivers, aquifers, shorelands and wetlands;

(C) significant scenic roads, waterways and views;

Choose an item. Pages: 31-52 and 111-115

Choose an item. Pages: 71-78.

Choose an item. Pages: 91 & 92.

Choose an item. Pages:106-108

(D) important historic structures, sites, or districts, archaeological sites and archaeologically sensitive areas

How has the Town Plan addressed this goal: The proposed plan addresses sub-goals A-C in the natural resources chapter (Page 31-52) Sub-goal D is addressed in the Historic & Cultural Resources Chapter, which commences on Page 111.

If the goal is not relevant or attainable, how does the plan address why:

Goal 6:

To maintain and improve the quality of air, water, wildlife, forests and other land resources.

How has the Town Plan addressed this goal: Quality of air (Pages 48-

- 49), Water (Pages 39-41), wildlife (Page 43-44), forests (Pages 37-
- 38) and other land resources (35-37) are discussed in the
- natural resources chapter, commencing on Page 31.

If the goal is not relevant or attainable, how does the plan address why:

Goal 7:

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

How has the Town Plan addressed this goal: The Town of Underhill is seeking to obtain certification for its energy chapter as an enhanced energy plan. Renewable resources are discussed throughout the entirety of the chapter (Pages 53-70).

If the goal is not relevant or attainable, how does the plan address why:

Goal 8:

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

(A) Growth should not significantly diminish the value and availability of outdoor recreational activities.

(B) Public access to noncommercial outdoor recreational opportunities, such as lakes and hiking trails, should be identified, provided, and protected wherever appropriate.

How has the Town Plan addressed this goal: The proposed plan expanded upon the recreation chapter in this iteration of the Town Plan, and outlines the approach the Town will take in enhancing recreation opportunities within Town (Pages 116-121). Recreation is also discussed in the services chapter on Pages 92 to 93.

If the goal is not relevant or attainable, how does the plan address why:

Goal 9:

To encourage and strengthen agricultural and forest industries.

(A) Strategies to protect long-term viability of agricultural and forestlands should be encouraged and should include maintaining low overall density.

Appendix A - CCRPC Guidelines and Standards for Municipal Plan Review, as amended on September 19, 2018, Page 8 of 11

Choose an item. Pages: 31-52, specifically: 32-41, 43-44 and 48-49.

> Choose an item. Pages: 53-70.

Choose an item. Pages: 92-93 and 116-121.

Choose an item. Pages: 17-18, 32, 35-38 and 106-107. (B) The manufacture and marketing of value added agricultural and forest products should be encouraged.

(C) The use of locally-grown food products should be encouraged.

(D) Sound forest and agricultural management practices should be encouraged.

(E) Public investment should be planned so as to minimize development pressure on agricultural and forest land.

How has the Town Plan addressed this goal: The proposed Plan references maintaining the Town's rural character throughout, and as part of the maintaining the rural character, maintaining the Town's agricultural and forestry industries are essential. The Plan specifically addresses the encouragement of the agricultural and forestry industries in the land use chapter (Pages 17 (Policy 2) & 18), the natural resources chapter (Page 32 (Policy 1), 35-38) and the economic development chapter (Pages 106 (Policy 2) – 107).

If the goal is not relevant or attainable, how does the plan address why:

Goal 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 the aesthetic qualities of the area.

Choose an item. Pages: 31-52, specifically page 47. Also Page 55 (Energy) & Page 80 (Infrastructure).

How has the Town Plan addressed this goal: The proposed plan addresses natural resources, specifically geological resources under Chapter 2 (Page 47), as well

as aesthetic considerations and sensitive natural areas (Pages 44-47). The Plan also considers extraction of earth resources as strategies in the energy chapter (Page 55) and infrastructure (Page 80).

If the goal is not relevant or attainable, how does the plan address why:

Goal 11:

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

(A) Housing should be encouraged to meet the needs of a diversity of social and income groups in each Vermont community, particularly for those citizens of low and moderate income.

(B) New and rehabilitated housing should be safe, sanitary, located conveniently to employment and commercial centers, and coordinated with the provision of necessary public facilities and utilities.

(C) Sites for multi-family and manufactured housing should readily available in locations similar to those generally used for single-family conventional dwellings.

(D) Accessory apartments within or attached to single family residences which provide affordable housing in close proximity to cost-effective care and supervision for relatives or disabled or elderly persons should be allowed.

How has the Town Plan addressed this goal: The proposed plan specifically addresses "affordability" on Pages 98 & 103. As mentioned in the Plan, the Town has struggled to find effective methods to encourage affordable housing and diversify the housing stock in Town. The Town is hoping to use capitalize on the housing needs assessment to implements recommended strategies to increase affordable housing and the available housing stock to address many of the goals outlined directly above (A-D).

If the goal is not relevant or attainable, how does the plan address why:

Choose an item.

Pages: 96-104

Goal 12:

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

(A) Public facilities and services should include fire and police protection, emergency medical services, schools, water supply and sewage and solid waste disposal.

(B) The rate of growth should not exceed the ability of the community and the area to provide facilities and services.

How has the Town Plan addressed this goal: The proposed plan provides for a section on maintaining and updating the Town's Capital Improvement Plan (Page 80 & 83). In addition, discussion about the services listed above are located in the Services Chapter on Page 84. The rate of growth in the Town of Underhill is anticipate to stay steady and is not expected to exceed the ability of the community, nor are there any newly plan facilities and services.

If the goal is not relevant or attainable, how does the plan address why:

Goal 13:

To ensure the availability of safe and affordable child care and to integrate child care issues into the planning process, including child care financing, infrastructure, business assistance for child care providers, and child care work force development.

How has the Town Plan addressed this goal: Child care is specifically discussed on Page 91 of the Town Plan, specifically in regards to trying to research and implement measures that will facilitate greater opportunities for child care in the Town of Underhill. A specific goal has been provided for child care services on Page 85.

If the goal is not relevant or attainable, how does the plan address why: N/A

Goal 14:

To encourage flood resilient communities.

(A) New development in identified flood hazard, fluvial erosion, and river corridor protection areas should be avoided. If new development is to be built in such areas, it should not exacerbate flooding and fluvial erosion.

(B) The protection and restoration of floodplains and upland forested areas that attenuate and moderate flooding and fluvial erosion should be encouraged.

(C) Flood emergency preparedness and response planning should be encouraged.

How has the Town Plan addressed this goal: This plan recommends the periodic review of the floodplain regulations to determine if they should be strengthen in order to obtain a higher ERAF number. In addition, this Plan recommends the creation of River Corridor regulations. Discussion of floodplains and flood resiliency commences on Page 42 with River Corridors being discussed in the land use chapter on Page 22. The Town has provided for flood emergency preparedness with the services chapter in the Goals, Policies and Strategies on Page 85.

If the goal is not relevant or attainable, how does the plan address why: N/A

Choose an item. Pages: 85 & 91

Choose an item. Pages: 22 & 23; 42 & 43; 85

STANDARD OF REVIEW

24 V.S.A. § 4302(f)

(1) As used in this chapter, "consistent with the goals" requires substantial progress toward attainment of the goals established in this section, unless the planning body determines that a particular goal is not relevant or attainable. If such a determination is made, the planning body shall identify the goal in the plan and describe the situation, explain why the goal is not relevant or attainable, and indicate what measures should be taken to mitigate any adverse effects of not making substantial progress toward that goal. The determination of relevance or attainability shall be subject to review as part of a consistency determination under this chapter.

(2) As used in this chapter, for one plan to be "compatible with" another, the plan in question, as implemented, will not significantly reduce the desired effect of the implementation of the other plan. If a plan, as implemented, will significantly reduce the desired effect of the other plan, the plan may be considered compatible if it includes the following:

(A) a statement that identifies the ways that it will significantly reduce the desired effect of the other plan;

(B) an explanation of why any incompatible portion of the plan in question is essential to the desired effect of the plan as a whole;

(C) an explanation of why, with respect to any incompatible portion of the plan in question, there is no reasonable alternative way to achieve the desired effect of the plan, and

(D) an explanation of how any incompatible portion of the plan in question has been structured to mitigate its detrimental effects on the implementation of the other plan.

Details of CCRPC's review process can be found in "Guidelines and Standards for Confirmation of Municipal Planning Processes, Approval of Municipal Plans and Granting Determinations of Energy Compliance," as amended on September 19, 2018.

Energy Planning Standards for Municipal Plans

Instructions

Before proceeding, please review the requirements of Parts I and II below, as well as the Overview document. Submitting a Municipal Plan for review under the standards below is entirely voluntary, as enabled under <u>Act 174</u>, the Energy Development Improvement Act of 2016. If a Municipal Plan meets the standards, it will be given an affirmative "determination of energy compliance," and will be given "substantial deference" in the Public Service Board's review of whether an energy project meets the orderly development criterion in the Section 248 process. Specifically, with respect to an in-state electric generation facility, the Board:

[S]hall give substantial deference to the land conservation measures and specific policies contained in a duly adopted regional and municipal plan that has received an affirmative determination of energy compliance under 24 V.S.A. § 4352. In this subdivision (C), "substantial deference" 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. The term shall not include consideration of whether the determination of energy compliance should or should not have been affirmative under 24 V.S.A. § 4352.

Municipal Plans should be submitted by the municipality's legislative body to the Regional Planning Commission (RPC) if the Regional Plan has received an affirmative determination of energy compliance. If a Regional Plan has not received such a determination, until July 1, 2018¹, a municipality may submit its adopted and approved Municipal Plan to the Department of Public Service (DPS) for a determination of energy compliance (determination), along with the completed checklist below. After a Municipal Plan and completed checklist have been submitted to the RPC (or DPS), the RPC or DPS will schedule a public hearing noticed at least 15 days in advance by direct mail to the requesting municipal legislative body, on the RPC or DPS website, and in a newspaper of general publication in the municipality. The RPC or DPS shall issue a determination in writing within two months of the receipt of a request. If the determination is negative, the RPC or DPS shall state the reasons for the denial in writing and, if appropriate, suggest acceptable modifications. Submissions for a new determination following a negative determination shall receive a new determination within 45 days.

The plans that Municipalities submit must:

- Be adopted
- Be confirmed under 24 V.S.A. § 4350
- Include an energy element that has the same components as described in 24 V.S.A. § 4348a(a)(3)
- Be consistent with state energy policy (described below), in the manner described in 24 V.S.A. § 4302(f)(1)
- Meet all standards for issuing a determination of energy compliance (see below)

¹ These standards will be revised after July 1, 2018 to reflect that Municipal Plans should be submitted only to the Regional Planning Commissions – which will all have had an opportunity to seek a determination of energy compliance – from that point forward.

Municipalities are encouraged to consult with their reviewer (either their RPC or DPS) before undertaking the process of plan adoption, which may help in identifying any deficiencies or inconsistencies with the standards or other requirements that would be more difficult to remedy after a plan has gone through the formal adoption process.

The state's Comprehensive Energy Plan (CEP) is revised on a 6-year basis. When the next CEP is published in 2022, it will include a revised set of standards, as well as Recommendations that are customized to regions and municipalities. The Recommendations that accompany this initial set of Standards represent a subset of recommendations from the 2016 CEP, which were not written with regions and municipalities specifically in mind. A Guidance document – which is expected to evolve as best practices from regions and municipalities emerge – will be published shortly after the Standards are issued. It will serve as the warehouse for relevant recommendations from the 2016 CEP, links to data sources, instructions on conducting analysis and mapping, and sample language/best practices. Once issued and until the 2022 CEP is published, this Guidance document will supplant the Recommendations document.

Affirmative determinations last for the life cycle of a revision of the Municipal Plan, and Municipal Plans that are submitted after the 2022 CEP is issued will be expected to meet the Standards that are issued at that time. Municipalities are encouraged to consult with their RPC or DPS regarding interim amendments that might affect any of the standards below, to discuss whether a new review is triggered.

If you wish to submit your Municipal Plan to your RPC or to DPS for a determination, please read closely the specific instructions at the start of each section below, and attach your Municipal Plan to this checklist.

Determination requests to an RPC (and any other questions) should be submitted to your RPC's designated contact. Determination requests to DPS until July 1, 2018 – and only for municipalities whose Regions' plans have not received an affirmative determination – should be submitted to: <u>PSD.PlanningStandards@vermont.gov</u>.

Part I: Applicant Information				
The plan being submitted for review is a:	Municipal Plan in a region whose regional plan has received an affirmative determination of energy compliance from the Commissioner of Public Service	 Municipal Plan in a region whose regional plan has <u>not</u> received a determination of energy compliance Until July 1, 2018, please submit these to the DPS. 		
	Please submit these plans to your RPC	After July 1, 2018, this option ceases to exist.		
Applicant:	Town of Underhill, Vermont			
Contact person:	Andrew Strniste, Planning Director & Zoning Administrator			
Contact information:	(802) 899-4434, ext. 106 or astrniste@underhillvt.gov			
Received by: Click here to enter text.	Date: Click here to enter text.			

Part II: Determination Standards Checklist

The checklist below will be used to evaluate your plan's consistency with statutory requirements under Act 174, including the requirement to be adopted and approved, contain an enhanced energy element, be consistent with state energy policy, and meet a set of standards designed to ensure consistency with state energy goals and policies.

Please review and attach your plan (or adopted energy element/plan, along with supporting documentation) and self-evaluate whether it contains the following components. Use the Notes column to briefly describe how your plan is consistent with the standard, including relevant page references (you may include additional pages to expand upon Notes). If you feel a standard is not relevant or attainable, please check N/A <u>where it is available</u> and use the Notes column to describe the situation, explaining why the standard is not relevant or attainable, and indicate what measures your municipality is taking instead to mitigate any adverse effects of not making substantial progress toward this standard. If N/A is not made available, the standard must be met (unless the instructions for that standard indicate otherwise) and checked "Yes" in order to receive an affirmative determination. There is no penalty for checking (or limit on the number of times you may check) N/A where it is available, as long as a reasonable justification is provided in the Notes column.

Plan Adoption Requirement

Act 174 requires that municipal plans be adopted and approved in order to qualify for a determination of energy compliance. In the near term, it is likely municipalities will revise and submit isolated energy plans or elements, particularly due to long planning cycles. Therefore, the plan adoption requirement can be met through an amendment to an existing plan in the form of an energy element or energy plan, as long as the amendment or plan itself is duly adopted as part of the municipal plan and incorporated by reference or appended to the underlying, full plan (i.e., is officially "in" the municipal plan), as well as approved for confirmation with the region. If this route is chosen, the municipality should also attach the planning commission report required for plan amendments under 24 V.S.A. § 4384, which should address the internal consistency of the energy plan/element with other related elements of the underlying plan (particularly Transportation and Land Use), and/or whether the energy plan/element supersedes language in those other elements. Standards 1 and 2 below must be answered in the affirmative in order for a plan to receive an affirmative determination of energy compliance.

1. Has your plan been duly adopted and approved for confirmation	Yes. Adoption date:	🖾 No	The existing plan is set to expire on June
according to <u>24 V.S.A. § 4350</u> ?	Click here to enter text.		23, 2020. The proposed enhance
	Confirmation date:		energy plan is part of a written plan,
	Click here to enter text.		which is scheduled to be approved in
			the future. Due to the coronavirus, the
			adoption date has been delay to an
			uncertain date.

2. Is a copy of the plan (or adopted energy element/plan, along with	🛛 Yes	🗆 No	Notes: See attached materials.
underlying plan and planning commission report addressing consistency of			
energy element/plan with other elements of underlying plan) attached to			
this checklist?			

Energy Element Requirement

To obtain a determination of energy compliance, Act 174 requires municipalities to include an "energy element" that contains the same <u>components</u> described in 24 V.S.A. § 4348a(a)(3), which was revised through Act 174 to explicitly address energy across all sectors and to identify potential and unsuitable areas for siting renewable energy resources:

An energy element, which may include an <u>analysis of resources</u>, needs, scarcities, costs, and problems within the region across all energy sectors, including electric, thermal, and transportation; a statement of policy on the conservation and efficient use of energy and the development and siting of renewable energy resources; a statement of policy on patterns and densities of land use likely to result in conservation of energy; and an identification of potential areas for the development and siting of renewable energy resources and areas that are unsuitable for siting those resources or particular categories or sizes of those resources.

The standards below are generally organized to integrate each component of the enhanced energy element with related determination standards that evaluate the plan's consistency with state goals and policies. **Energy element components are identified in bolded text.**

While municipalities may choose to primarily address energy used for heating, transportation, and electricity in the required energy element, they may also choose to address some of these components in related plan elements (e.g., Transportation and Land Use) and should indicate as much in the Notes column. To the extent an energy element is designed to comprehensively address energy, it should be complementary to and reference other relevant plan elements.

3. Does the plan contain an energy element, that contains the same	🛛 Yes	🗆 No	Page: 53-70 (Entire Chapter)
components described in 24 V.S.A. § 4348a(a)(3)?			Notes: Throughout the entirety of the Energy Plan,
Individual components of the energy element will be evaluated through the			the various components outlined above are
standards below.			addressed in some way or another.

Consistency with State Goals and Policies Requirement

Act 174 states that regional and municipal plans must be consistent with the following state goals and policies:

- Greenhouse gas reduction goals under <u>10 V.S.A. § 578(a)</u> (50% from 1990 levels by 2028; 75% by 2050)
- The 25 x 25 goal for renewable energy under 10 V.S.A. § 580 (25% in-state renewables supply for all energy uses by 2025)
- Building efficiency goals under <u>10 V.S.A. § 581</u> (25% of homes or 80,000 units made efficient by 2020)
- State energy policy under <u>30 V.S.A. § 202a</u> and the recommendations for regional and municipal planning pertaining to the efficient use of energy and the siting and development of renewable energy resources contained in the <u>State energy plans</u> adopted pursuant to <u>30 V.S.A. §§ 202</u> and <u>202b</u>

 The distributed renewable generation and energy transformation categories of resources to meet the requirements of the Renewable Energy Standard under <u>30 V.S.A. §§ 8004</u> and <u>8005</u>

The standards in the checklist below will be used to determine whether a plan is consistent with these goals and policies. The standards are broken out by category. *Analysis and Targets* standards address how energy analyses are done within plans, and whether targets are established for energy conservation, efficiency, fuel switching, and use of renewable energy across sectors. *Pathways (Implementation Actions)* standards address the identification of actions to achieve the targets. *Mapping* standards address the identification of suitable and unsuitable areas for the development of renewable energy.

Municipalities may choose to incorporate the information necessary to meet the standards in their energy elements, and/or in other sections of their plans (many transportation items may fit best in the Transportation chapters of plans, for instance). However, plans must be internally consistent, and applicants should cross-reference wherever possible.

Analysis and Targets Standards

For the *Analysis & Targets* determination standards below, municipalities will be provided with analyses and targets derived from regional analyses and targets no later than April 30, 2017 (and likely much sooner). Municipalities may choose to rely on these "municipalized" analyses and targets to meet the standards in this section. Municipalities which elect to use the analysis and targets provided by a region will be presumed to have met the standards in this section. Alternatively, municipalities may develop their own custom analyses and targets or supplement the analyses and targets provided by the regions with specific local data; if this option is chosen, the analysis and targets must include all of the same components and meet the standards required of regions, as described below.

For municipalities that choose to undertake their own analysis and target-setting (and for regions), DPS is providing a guidance document to explain the expected level of detail in and data sources and methodologies available for meeting the standards (including areas where it is understood data at the municipal level is unavailable, and therefore not expected). Note that standards 5A-4E are all derived directly from requirements in Act 174 (with minor modifications to make them feasible) and must be met affirmatively in order for a municipal plan to receive an affirmative determination of energy compliance.

Targets set by regions and municipalities should be aligned with state energy policy (see the goals and policies listed above). Where targets (and efforts to reach them) depart significantly from state energy goals and policies, an explanation for how the plan otherwise achieves the intent of the state goal or policy should be provided. The guidance document also offers additional clarification on alignment with state goals and policies.

The analysis items below are intended to provide regions and municipalities with an overview of their current energy use, and with a sense of the trajectories and pace of change needed to meet targets, which can be translated into concrete actions in the *Pathways* standards below. Targets provide regions and municipalities with milestones or checkpoints along the way toward a path of meeting 90% of their total energy needs with renewable energy, and can be compared with the potential renewable energy generation from areas identified as potentially suitable in the *Mapping* standards exercise below to give regions and municipalities a sense of their ability to accommodate renewable energy that would meet their needs.

 4. Does your plan's energy element contain an analysis of resources, needs, scarcities, costs, and problems within the municipality across all energy sectors (electric, thermal, transportation)? 5. Does your plan contain an analysis that addresses A-E below, either as provided by your Regional Planning Commission or as developed by your municipality? <i>Municipalities may meet this standard by using the analysis and targets provided by their regions, or by developing their own analyses and targets. If using the analysis & targets provided by your region, please answer "Yes-Region" and skip ahead to #6. If developing a custom analysis, please answer "Yes-Custom" and address 5A-5E separately, below.</i> 	 ✓ Yes Pes- Region Yes- Custom 	□ No	Page: 61-66 Notes: These pages address future generation targets that are required to attain the renewable energy goals by 2050. Page: Click here to enter text. Paragraph #: Click here to enter text. Notes: Click here to enter text.
A. Does the plan estimate current energy use across transportation, heating, and electric sectors?	⊠ Yes	□ No	Page: 59 -61 Paragraph #: Click here to enter text. Notes: Part 1 (which are the pages provided above) outlines the current energy use across sectors identified.
B. Does the plan establish 2025, 2035, and 2050 targets for thermal and electric efficiency improvements, and use of renewable energy for transportation, heating, and electricity?	⊠ Yes	□ No	Page: 62-64 Paragraph #: Click here to enter text. Notes: The pages (more specifically, the tables) provide the future targets for sectors identified.
C. Does the plan evaluate the amount of thermal-sector conservation, efficiency, and conversion to alternative heating fuels needed to achieve these targets?	⊠ Yes	□ No	Page: 62-63 Paragraph #: 3 rd on Page 62 and 1 st on Page 63 Notes: None
D. Does the plan evaluate transportation system changes and land use strategies needed to achieve these targets?	⊠ Yes	□ No	Page: 19, 58, 62 Paragraph #: Page 19, Paragraph 2-4; Page 58, Paragraphy 2 & 3; and Page 62, 2 nd Paragraph. Notes: The land use aspect is covered in the energy chapter (page 58) and in the land use chapter on Page 19, which discusses compact land use strategies
E. Does the plan evaluate electric-sector conservation and efficiency needed to achieve these targets?	⊠ Yes	🗆 No	Page: 63-65 Paragraph #: Click here to enter text.

Pathways (Implementation Actions) Standards

This section examines whether plans meet the Act 174 expectation that they include pathways and recommended actions to achieve the targets identified through the *Analysis and Targets* section of the Standards (above). Plans are expected to include or otherwise address all of the pathways (implementation actions) below; some actions may not be applicable or equally relevant to all applicants (small vs. large municipalities, for instance), in which case N/A may be checked (if available) and the justification provided in the Notes column. There is no penalty for choosing N/A one or more times, as long as a reasonable justification is provided in the Notes column, preferably including an explanation of how the plan alternatively achieves attainment of the targets should be included. If N/A is not provided as an option, the standard must be met, and "Yes" must be checked, in order for the plan to meet the requirements for a determination (unless the instructions particular to that standard indicate otherwise).

DPS will be issuing a guidance document in the near term providing potential implementation actions derived from the Comprehensive Energy Plan (relevant formal Recommendations as well as opportunities not specifically called out as Recommendations), from recent regional and municipal plans, and from other sources. The guidance document will be revised after the regions have compiled best practices from early municipalities pursuing energy planning to seek a determination of energy compliance, in the summer of 2017.

For the time being, we offer potential implementation action options for consideration as italicized text under each standard. Plans are encouraged to promote as diverse a portfolio of approaches as possible in each sector, or if not, to explain why they take a more targeted approach. Implementation actions may fit best in a holistic discussion contained within a plan's energy element, though cross-referencing to other relevant plan elements is also acceptable.

Municipalities must demonstrate a commitment to achieving e	ach standard in both policies and	implementation measures in clear,	action-oriented language.
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6. Doe: conser	s your plan's energy element contain a statement of policy on the vation and efficient use of energy?	∐ Yes	∐ No	Page: Click here to enter text. Paragraph #: Click here to enter text.
Α.	Does the plan encourage conservation by individuals and organizations? (Actions could include educational activities and events such as convening or sponsoring weatherization workshops, establishing local energy committees, encouraging the use of existing utility and other efficiency and conservation programs and funding sources, etc.)	⊠ Yes	□ No	Page: 57 Paragraph #: 1-3 Notes: Also in Policy 1 on Page 54
В.	Does the plan promote efficient buildings? (Actions could include promoting compliance with residential and commercial building energy standards for new construction and existing buildings, including additions, alterations, renovations and repairs; promoting the implementation of residential and commercial building efficiency ratings and labeling; considering adoption of stretch codes, etc.)	⊠ Yes	□ No	Page: 57, 60, 63 Paragraph #: Page 57, Paragraphs 1-3; Page 60, Paragraphs 2 & 3; Page 63, Paragraphs 1 & 2. Notes: Also in Policy 1 on Page 54

C.	Does the plan promote decreased use of fossil fuels for heating? (Actions and policies could promote switching to wood, liquid biofuels, biogas, geothermal, and/or electricity. Suitable devices include advanced wood heating systems and cold-climate heat pumps, as well as use of more energy efficient heating systems; and identifying potential locations for, and barriers to, deployment of biomass district heating and/or thermal-led combined heat and power systems in the municipality)	⊠ Yes	□ No	Page: Page 62 Paragraph #: 3 Notes: Click here to enter text.
D.	Does the plan demonstrate the municipality's leadership by example with respect to the efficiency of municipal buildings? (Actions could include building audits and weatherization projects in schools and town offices, etc.)	⊠ Yes	□ No □ N/A	Page: Various examples throughout the Energy C Paragraph #: Click here to enter text. Notes: Provided in the strategies (Policy 1 2 & 3)
E.	Other (please use the notes section to describe additional approaches that your municipality is taking)	□ Yes	□ No ⊠ N/A	Page: Click here to enter text. Paragraph #: Click here to enter text. Notes: Click here to enter text.
7. Does transpo use of	s your plan's energy element contain a statement of policy on reducing ortation energy demand and single-occupancy vehicle use, and encouraging renewable or lower-emission energy sources for transportation?	⊠ Yes	□ No	Page: Policy 3 (Energy – Page 55); Policy 3 (Transportation – Page 72) Paragraph #: Click here to enter text. Notes: Click here to enter text.
A.	Does the plan encourage increased use of public transit? (Actions could include participation in efforts to identify and develop new public transit routes, promote full utilization of existing routes, integrate park-and-rides with transit routes, etc.)	⊠ Yes	□ No □ N/A	Page: 75 Paragraph #: Last Paragraph (onto Page 76, including Active Transportation Section) Notes: None
В.	Does the plan promote a shift away from single-occupancy vehicle trips, through strategies appropriate to the municipality? (Actions could include rideshare, vanpool, car-sharing initiatives; efforts to develop or increase park-and-rides; enhancement of options such as rail and telecommuting; education; intergovernmental cooperation; etc.)	⊠ Yes	□ No	Page: Policy 3 (Transportation – Page 72); 75- 76 Paragraph #: Last Paragraph (onto Page 76 including Active Transportation Section) Notes: Click here to enter text.
C.	Does the plan promote a shift away from gas/diesel vehicles to electric or other non-fossil fuel transportation options through strategies appropriate to the municipality? (Actions could include promoting the installation of electric vehicle charging infrastructure, providing education and outreach to potential users, supporting non-fossil fuel vehicle availability through outreach to vehicle dealers, etc.)	⊠ Yes	□ No	Page: Policy 3 & 4 (Energy – Page 55); Page 62 Paragraph #: Page 62, Paragraph 2 Notes: Click here to enter text.

D. Does the plan facilitate the development of valking and biking infrastructure through strategies appropriate to the municipality? (Actions could include studying, planning for, seeking funding for, or implementing improvements that encourage sofe and convenient wolking and biking: adopting a "Complete Streets" policy, retc) NA Page: Policy 3 (Energy – Page 55); Page 62 E. Does the plan demonstrate the municipality's leadership by example with respect to the efficiency of municipality's leadership by example with respect to the efficiency of municipal ransportation? (Actions could include purchasing energy efficient municipal and fleet vehicles when practicoble, installing electric vehicle charging infrastructure, etc.) NA Page: Policy 3 (Energy – Page 55); Page 62 F. Other (please use the notes section to describe additional approaches that your municipality is taking) NA Page: Click here to enter text. Notes: Click here to enter text. 8. Does the plan include land use policies (and descriptions of current and future land use categories) that demonstrate a commitment to reducing sprawi and minimizing limited sever service areas, maximum building sizes along highways, policies or zoning that require design features that minimize the characteristics of strip development? (Actions could include adopting limited sever service areas, maximum building sizes along highways, policies or zoning that require design features that minimize the characteristics of strip development (nutryle stories, parking lot to the side or back of the store], and requirements that development in those such compact text, dwardowan, new town enters, or growth centers, certs, dwardowan, new frequired essing foatures that enable compact development in compact, mixed-use centers, when physically feasible and appropriate					
Intrody strategies appropriate to the municipality? Intrody is strategies appropriate to the municipality? (Actions could include studying, planning for, seeking funding for, or implementing improvements that encourage safe and convenient walking and biking; adopting a "Complete Streets" policy, etc.) Intervention E. Does the plan demonstrate the municipality's leadership by example with respect to the efficiency of municipal transportation? Intervention Paragraph #: Entire Active Transportation Section. Notes: Click here to enter text. Present to sould include purchasing energy efficient municipal and fleet vehicles when practicable, installing electric vehicle charging infrastructure, etc.) Intervention Paragraph #: Entire Active Transportation Section. Notes: Click here to enter text. 8. Does your plan's energy element contain a statement of policy on patterns and densities of land use likely to result in conservation of energy? Intervent to enter text. Notes: Click here to enter text. 8. Does the plan include land use policies (and descriptions of current and future land use categories) that demonstrate a commitment to reducing sprawl and minimizing low-density development? Intervent to enter text. Notes: None 9. Does the plan include land use policies (and descriptions of current and building sizes olong highways, policies or zoning that require design features that development in those areas be connected by means other than roads and cars; adopting a capital budget and program that furthers land use and transportation policies; etc.) No Page: Policy 1 (Land Use – Page 17); Page 19	D.	Does the plan facilitate the development of walking and biking infrastructure	🛛 Yes	🗆 No	Page: 76-77
(Actions could include studying, planning for, seeking junding for, or Section. implementing improvements that encourge sqle and convenient walking Notes: Click here to enter text. and biking; adopting a "Complete Streets" policy, etc.) No E. Does the plan demonstrate the municipality's leadership by example with respect to the efficiency of municipality is leadership by example with respect to the efficiency of municipality is taking) No F. Other (please use the notes section to describe additional approaches that your municipality is taking) Page: Policy 1 (Land Use – Page 17); Page 58, Paragraph #: Page 58, Paragraph 2 & 3 A. Does the plan include land use policies (and descriptions of current and future land use categories) that demonstrate a commitment to reducing sprawing low-density development in toread reduce reads, maximum building sizes along highways, policies or zoning that require meaks that development in these areas be connected by means other than roads and cars; adopting a capital budget and program that furthers land use and transportation policies; etc.) No B. Does the plan include land use of the development in cods and cars; adopting a capital budget and program that furthers land use and transportation policies; etc.) No Page: Policy 1 (Land Use – Pag		through strategies appropriate to the municipality?		🗆 N/A	Paragraph #: Entire Active Transportation
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your municipality is taking) N/A Paragraph #: Click here to enter text. Notes: Click here to enter text.	C	Other (please use the notes section to describe additional approaches that			Page: Click here to enter text.
Notes: Click here to enter text.		vour municipality is taking)			Paragraph #: Click here to enter text.
					Notes: Click here to enter text.

9. Does develo	s your plan's energy element contain a statement of policy on the	🛛 Yes	🗆 No	Notes: Policy 2, Page 54.
A.	Does the plan evaluate (estimates of or actual) generation from existing renewable energy generation in the municipality? <i>Municipalities should be able to obtain this information from their regions.</i>	⊠ Yes	□ No	Page: 61 Paragraph #: 1 Notes: Click here to enter text.
Β.	Does the plan analyze generation potential, through the mapping exercise (see <i>Mapping</i> standards, below), to determine potential from preferred and potentially suitable areas in the municipality? <i>Municipalities should be able to obtain this information from their regions.</i>	⊠ Yes	□ No	Page: Page 64, 65 Paragraph #: Entire "Projected Renewable Energy Generation Potential" section. Notes: Mention of Maps in Policy 2, Page 54; Maps 3.1 & 3.2.
C.	Does the plan identify sufficient land in the municipality for renewable energy development to reasonably reach 2050 targets for renewable electric generation, based on population and energy resource potential (from potential resources identified in the <i>Mapping</i> exercise, below), accounting for the fact that land may not be available due to private property constraints, site-specific constraints, or grid-related constraints? <i>If N/A, please describe how you are working with your regional planning commission to ensure overall regional objectives are achieved.</i>	⊠ Yes	□ No □ N/A	Page: Page 64, 65 Paragraph #: Entire "Projected Renewable Energy Generation Potential" section. Notes: Mention of Maps in Policy 2, Page 54. Maps 3.1 & 3.2.
D.	Does the plan ensure that any local constraints (locally designated resources or critical resources, from12B and 12C under <i>Mapping</i> , below) do not prohibit or have the effect of prohibiting the provision of sufficient renewable energy to meet state, regional, or municipal targets? <i>If N/A, please describe how you are working with your regional planning</i> <i>commission to ensure overall regional objectives are achieved.</i>	⊠ Yes	□ No □ N/A	Page: Page 64, 65 Paragraph #: Entire "Projected Renewable Energy Generation Potential" section. Notes: Table 3.1; Maps 3.1 & 3.2.
E.	Does the plan include statements of policy to accompany maps (could include general siting guidelines), including statements of policy to accompany any preferred, potential, and unsuitable areas for siting generation (see 12 and 13 under <i>Mapping</i> , below)?	□ Yes	□ No	Page: Page 64, 65 Paragraph #: Entire "Projected Renewable Energy Generation Potential" section. Notes: Table 3.1; Maps 3.1 & 3.2.
F.	Does the plan maximize the potential for renewable generation on preferred locations (such as the categories outlined under 12E in the <i>Mapping</i> standards, below)?	⊠ Yes	□ No □ N/A	Page: Page 64, 65 Paragraph #: Entire "Projected Renewable Energy Generation Potential" section. Notes: Table 3.1; Maps 3.1 & 3.2.
G.	Does the plan demonstrate the municipality's leadership by example with respect to the deployment of renewable energy? (Actions could include deploying renewable energy to offset municipal electric use, etc.)	⊠ Yes	□ No □ N/A	Page: Page 58; Policy 1 & 2 (Energy Pages 54 & 55) Paragraph #: Page 58, Paragraph 1

			Notes: Reference to Beartown Gravel Pit Solar
			Array
H. Other (please use the notes section to describe additional approaches that	🗆 Yes	🗆 No	Page: Click here to enter text.
your municipality is taking)		🖾 N/A	Paragraph #: Click here to enter text.
		-	Notes: Click here to enter text.

Mapping Standards

Act 174 requires plans to identify potential areas for the development and siting of renewable energy resources and areas that are unsuitable for siting those resources or particular categories or sizes of those resources. It furthermore requires that the standards address the potential generation from the potential siting areas.

The *Mapping* standards lay out a sequence of steps for planners to examine existing renewable resources and to identify potential (and preferred) areas for renewable energy development, and to identify likely unsuitable areas for development, by layering constraint map layers on to raw energy resource potential map layers. The maps should help municipalities visualize and calculate the potential generation from potential areas, and compare it with the 2025, 2035, and 2050 targets from the *Analysis and Targets* standards to get a sense of the scale and scope of generation that could be produced within the region to meet the municipality's needs. DPS will provide additional guidance to accompany the standards that fleshes out the steps, layers, and standards more fully.

Plans must include maps that address all of the standards below, unless N/A is provided as an option, in which case a compelling reason why the standard is not applicable or relevant should be provided in the Notes column. Regions must develop their own maps (already underway through support being provided to regions by DPS), and to then break out the maps for their municipalities, who can use their region-provided maps to meet the municipal *Mapping* standards (such "municipalization" work is being supported through a training & technical assistance contract between DPS and regions, and all regions must supply completed maps to their municipalities by April 30, 2017, though many are expected to do so much sooner).

Municipalities may choose to rely on the maps provided by the regions to meet the standards in this section. Those maps should be somewhat familiar to municipalities, who are expected to be consulted as regions develop their maps. Alternatively, municipalities may choose to undertake their own mapping, according to the same set of standards as regions. Additionally, municipalities are expected to work collaboratively with their regions and with neighboring municipalities to ensure compatibility between the final products.

The map and the text describing the policies or rules used to construct the map, as well as the text describing specific policies applicable to map features, should be complementary. That should help ensure that any "land conservation measures and specific policies" that might be given substantial deference in the context of a particular project review under 30 V.S.A. § 248 are clearly identifiable in the text, should a map lack sufficient clarity or granularity regarding the area in which a project is proposed.

10. Does your plan contain one or more maps that address 11-13 below, as	🛛 Yes-	🗆 No	Page: Click here to enter text.
provided by your Regional Planning Commission or as developed by your	Region		Paragraph #: Click here to enter text.
municipality?	□ Yes-		Notes: Click here to enter text.
	Custom		

Municipalities may meet this standard by using the maps provided by their regions, or by developing their own maps. If using the maps provided by your region, please answer "Yes-Region" and skip ahead to #14. If developing custom maps, please answer "Yes-Custom" and address 11-13 separately, below. 11. Does the plan identify and map existing electric generation sources? Maps may depict generators of all sizes or just those larger than 15 kW, as long as information on generators smaller than 15 kW is summarized and provided or referenced elsewhere. It is expected that the best available information at the time of plan creation will be used. This information is available from the DPS.	⊠ Yes	□ No □ N/A	Page: 69 Paragraph #: Click here to enter text. Notes: Map 3.3
12. Does the plan identify potential areas for the development and siting of renewable energy resources and the potential generation from such generators in the identified areas, taking into account factors including resource availability, environmental constraints, and the location and capacity of electric grid infrastructure? Maps should include the following (available from VCGI and ANR), and the resulting Prime and Secondary Resource Maps will together comprise "potential areas":	⊠ Yes	□ No	Page: 67 & 68 Paragraph #: Click here to enter text. Notes: Maps 3.1 & 3.2
 A. Raw renewable energy potential analysis (wind and solar), using best available data layers (including LiDAR as appropriate) 	🖾 Yes	□ No	Page: 67 & 68 Paragraph #: Click here to enter text. Notes: Maps 3.1 & 3.2
 B. Known constraints (signals likely, though not absolute, unsuitability for development based on statewide or local regulations or designated critical resources) to include: Vernal Pools (confirmed and unconfirmed layers) DEC River Corridors FEMA Floodways State-significant Natural Communities and Rare, Threatened, and Endangered Species National Wilderness Areas Class 1 and Class 2 Wetlands (VSWI and advisory layers) Regionally or Locally Identified Critical Resources <i>If areas are constrained for the development of renewable energy due to the desire to protect a locally designated critical resource (whether a natural resource or a community-identified resource), then the land use policies</i> 	⊠ Yes	□ No	Page: 50-52 Paragraph #: Click here to enter text. Notes: Maps 2.1, 2.2 and 2.3.

			r
applicable to other forms of development in this area must be similarly restrictive; for this category, policies must prohibit all permanent development (and should be listed in the Notes column). These areas should be subtracted from raw renewable energy resource potential maps to form Secondary Resource Maps			
 C. Possible constraints (signals conditions that would likely require mitigation, and which may prove a site unsuitable after site-specific study, based on statewide or regional/local policies that are currently adopted or in effect), including but not limited to: Agricultural Soils FEMA Special Flood Hazard Areas Protected Lands (State fee lands and private conservation lands) Act 250 Agricultural Soil Mitigation areas Deer Wintering Areas ANR's Vermont Conservation Design Highest Priority Forest Blocks (or Habitat Blocks 9 & 10, for plans using regional maps in regions whose plans will be submitted for adoption at the regional level by March 1, 2017) Hydric Soils Regionally or Locally Identified Resources <i>If locations are constrained for the development of renewable energy due to the desire to protect a locally designated resource (whether a natural resource or community-identified resource, like a view), then the land use policies applicable to other forms of development must be similarly restrictive (and should be listed in the Notes column). These areas should be subtracted from Secondary Resource Maps to form Prime Resource Maps.</i> 	⊠ Yes	□ No	Page: 27, 50-52 Paragraph #: Click here to enter text. Notes: Maps 1.1, 2.1, 2.2, 2.3
 D. Transmission and distribution resources and constraints, as well as transportation infrastructure. (Including three-phase distribution lines, known constraints from resources such as Green Mountain Power's solar map, known areas of high electric load, etc.) 	⊠ Yes	□ No	Page: 94 Paragraph #: Click here to enter text. Notes: Map 6.1

	E.	Preferred locations (specific areas or parcels) for siting a generator or a specific size or type of generator, accompanied by any specific siting criteria for these locations <i>Narrative descriptions of the types of preferred areas in</i>	□ Yes	⊠ No □ N/A	Page: Click here to enter text. Paragraph #: Click here to enter text. Notes: The Town has elected not map preferred sites at this time: however, has listed preferred
		accompanying plan text are acceptable, though mapping of areas and especially specific parcels (to the extent they are known) is highly encouraged, to signal preferences to developers, particularly for locally preferred areas and specific parcels that do not qualify as a statewide preferred location under i. below. The locations identified as preferred must not be impractical for developing a technology with regard to the presence of the renewable resource and access to transmission/distribution infrastructure.			types of preferred locations on Page 58, as well as created two strategies in identifying preferred sites (see Policy 2 – Energy, Page 54).
	i	 Statewide preferred locations such as rooftops (and other structures), parking lots, previously developed sites, brownfields, gravel pits, quarries, and Superfund sites 	□ Yes	□ No ⊠ N/A	Page: Click here to enter text. Paragraph #: Click here to enter text. Notes: See above note under 12E.
	i	 Other potential locally preferred locations For example, customer on- or near-site generation, economic development areas, unranked and not currently farmed agricultural soils, unused land near already developed infrastructure, locations suitable for large-scale biomass district heat or thermal-led cogeneration, potential locations for biogas heating and digesters, etc. These are particularly important to map if possible, as "a specific location in a duly adopted municipal plan" is one way for a net metering project to qualify as being on a preferred site. 	□ Yes	□ No ⊠ N/A	Page: Click here to enter text. Paragraph #: Click here to enter text. Notes: See above note under 12E.
13.	Do ene Eitl uns wit	es the plan identify areas that are unsuitable for siting renewable ergy resources or particular categories or sizes of those resources? her Yes or No ("No" if the plan chooses not to designate any areas as suitable) is an acceptable answer here. "Resources" is synonymous th "generators."	 ☑ Yes ("Yes" for A and B must also be selected below) 	□ No	Page: 57 Paragraph #: Click here to enter text. Notes: Table 3.1 – Known & Possible Constraints.
	Α.	Are areas identified as unsuitable for particular categories or sizes of generators consistent with resource availability and/or land use policies in the regional or municipal plan applicable to other types of	⊠ Yes	 No N/A (if no unsuita 	Page: 64-65 Paragraph #: 1 Notes: Large-scale Wind Power is prohibited; however, the Town is permitting small-scale wind

	land development (answer only required if "Yes" selected above,		ble	power, which is defined as wind power up to 100
	indicating unsuitable areas have been identified)?		areas	kW, which will allow for the use of residential
	If areas are considered unsuitable for energy generation, then the		are	wind-power generation.
	land use policies applicable to other forms of development in this		identifie	
	area should similarly prohibit other types of development. Please		d)	
	note these policies in the Notes column.			
В.	Does the plan ensure that any regional or local constraints	🛛 Yes	🗆 No	Page: 64
	(regionally or locally designated resources or critical resources, from			Paragraph #: Table 3.15
	12b-12c above) identified are supported through data or studies, are			Notes: In mapping all of the State and local
	consistent with the remainder of the plan, and do not include an			constraints. CCRPC was able to determine that
	arbitrary prohibition or interference with the intended function of			thore was enough land (acroage wise) available to
	any particular renewable resource size or type?			most the goals through salar power and wind
	Please explain in the Notes column.			
				power generation.
14. Mu	nicipalities seeking a determination of energy compliance from the	🖾 Yes	🗆 No	Page: Click here to enter text.
Dep	artment and not using their region's maps only: Does the plan	(also		Paragraph #: Click here to enter text.
ensi	ure that its approach, if applied regionally, would not have the effect	check Yes		Notes: None
of p	rohibiting any type of renewable generation technology in all	if seeking		
loca	tions?	determina		
		tion from		
		region, or		
		from DPS		
		but using		
		region-		
		provided		
		maps)		



Town of Underhill

P.O Box 120, Underhill, VT 05489 www.underhillvt.gov Phone: (802) 899-4434 Fax: (802) 899-2137

CCRPC Municipal Plan & Planning Process Review Request Letter

March 11, 2020

Charlie Baker, Executive Director Regina Mahony, Planning Program Manager Chittenden County Regional Planning Commission 110 West Canal Street Winooski, VT 05404

Dear Charlie & Regina,

The Town of Underhill has entered into the process of updating the Underhill Town Plan, which was last adopted on June 23, 2015 and approved by the CCRPC on July 15, 2015. This Plan has been updated because the current plan will expire.

This letter is a formal request that the Chittenden County Regional Planning Commission review the 2020 Underhill Town Plan for regional approval and confirmation of Underhill's planning process in accordance with 24 VSA §4350. The information needed for plan review and confirmation as outlined in the CCRPC's "Guidelines and Standards for Confirmation of Municipal Planning Processes and Approval of Municipal Plans" is attached.

The Planning Commission's public hearings are scheduled for the following dates:

- Thursday, March 26, 2020 @ 6:00 PM at Underhill Town Hall, 12 Pleasant Valley Road, Underhill Vermont;
- Saturday, April 4, 2020 @ 10:00 AM at Deborah Rawson Library, 8 River Road, Jericho, Vermont; and
- Thursday, April 9, 2020 @ 6:00 PM at Underhill Town Hall, 12 Pleasant Valley Road, Underhill, Vermont.

If you have any questions about the 2020 Underhill Town Plan or the documents I have provided for your review, please feel free to contact me via phone at (802) 899-4434 or email at <u>astrniste@underhillvt.gov</u>.

Sincerely,

Andrew Strniste Director of Planning & Zoning Administrator



Town of Underhill

P.O Box 120, Underhill, VT 05489 www.underhillvt.gov Phone: (802) 899-4434 Fax: (802) 899-2137

PLANNING COMMISSION REPORT FOR MUNICIPAL PLAN ADOPTION

This report is prepared in accordance with 24 V.S.A. §§ 4384(c) which states:

When considering an amendment to a plan, the planning commission shall prepare a written report on the proposal. The report shall address the extent to which the plan, as amended, is consistent with the goals established in § 4302 of this title. If the proposal would alter the designation of any land area, the report should cover [24 V.S.A. §§ 4384(c)(1)-(5)].

The proposed Town Plan to be adopted does not propose to alter any designations of land area, and therefore, responding to the criteria enumerated under 24 § 4384(c) does not apply. Note that the Planning Commission is proposing to conduct additional research and analysis prior to any potential change to any of the land use categories or any alterations to designations of land.

Brief Explanation of Proposed Amendments:

On June 23, 2020, Underhill's 2015 Town Plan, as amended December 18, 2018, is set to expire. Over the course of the past year, the Underhill Planning Commission updated the previous plan. Various changes were made throughout the plan, which captures the feedback that was obtained from the 2019 Town-wide survey, as well as four public feedback forums.

As part of this update, the Planning Commission carried over, as well as created new, goals, policies and strategies for each chapter (ten total) that reflect the public feedback that was received. In addition, the Planning Commission worked to provide more context relating to Underhill-specific issues within each chapter. While significant changes were made to the context of the Land Use chapter, which includes specifically outlining the unique issues observed by Staff, the Planning Commission and the Development Review Board, no immediate action is recommended that would alter any designations of land. Additionally, the Planning Commission, in coordination with the Energy Committee and Chittenden County Regional Planning Commission (CCRPC) reworked the Energy Chapter in an effort towards attaining an "enhanced energy plan" status, which is expected to be approved by CCRPC as part of this process. With an enhanced energy plan, the Town's position during a Public Utility Commission hearing is given more weight so long as the Town's position is supported by the Town Plan. Other areas where the Plan was significantly updated pertains to the Housing, Recreation, and Historic and Cultural Resources chapters.

The following matrix demonstrates how the *Draft 2020 Underhill Town Plan* is consistent with the goals established in § 4302.

	Purpose & Introduction	Land Use	Natural Resources	Energy	Transportation	Infrastructure	Services	Housing	Economic Development	Historic & Cultural Resources	Recreation	Appx. A – Implementation Plan
Required Elements (24 V.S.A. § 4382												
Statement of Objectives, Polices, Programs		Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	
Land Use Plan (and present and prospective map)		Х										
Transportation Plan (and map)					Х							
Utility and Facility Plan (and map)							Х					
Rare Natural Resources/Historic Resources			Х							Х		
Educational Facilities Plan (and map)							Х					
Implementation Program												Х
Development Trends	Х	Х										
Energy Plan				Х								
Housing Element								Х				
Economic Development Element									Х			
Flood Resiliency Plan		Х	Х									
Current Analysis and Data (24 V.S.A. § 4382(c))	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
State Planning Goals												
Development Pattern	Х	Х										
Economy									Х			

	Purpose & Introduction	Land Use	Natural Resources	Energy	Transportation	Infrastructure	Services	Housing	Economic Development	Historic & Cultural Resources	Recreation	Appx. A – Implementation Plan
Education							Х					
Transportation					Х	Х						
Natural and Historic Resources			Х									
Quality of Resources			Х							Х		
Energy				Х								
Recreation											Х	
Agricultural and Forest Industries		Х	Х						Х			
Use of Resources		Х	Х									
Housing								Х				
Public Utilities				X		X	Х					
Child Care							Х					
Flood Resiliency		Х	Х									

Planning & Zoning Department Budget: FY2021 through FY2025	FY	2016^	FY	2017	FY	FY2018		2019	FY	2020
Salaries/Benefits	\$	32,559.00	\$	76,911.00	\$	77,990.00	\$	78,720.00	\$	79,423.00
CCRPC Dues	\$	4,700.00	\$	4,638.00	\$	4,511.00	\$	4,469.00	\$	4,471.00
CCMPO Dues	\$	-	\$	-	\$	-	\$	-	\$	-
GBIC Dues	\$	-	\$	-	\$	-	\$	-	\$	-
Miscellaneous*	\$	17,597.00	\$	13,928.00	\$	10,491.00	\$	15,382.00	\$	16,831.00
Total	\$	54,856.00	\$	95,477.00	\$	92,992.00	\$	98,571.00	\$	100,725.00

*All other expenses – e.g., special projects (may include grant funds), telephone, notices, supplies, etc.

^ Without Planning Staff for a large portion of the fiscal year
Staff Review of the Town of Williston Enhanced Energy Plan Taylor Newton, Senior Planner Reviewed by the CCRPC Planning Advisory Committee on April 8, 2020

The Town of Williston has requested that the Chittenden County Regional Planning Commission issue a determination of compliance with the enhanced energy planning standards set forth in 24 V.S.A. §4352 for the Town of Williston Town Plan's energy elements.

Williston is amending their Town Plan to incorporate enhanced energy element and amendments related to public health. The attached draft includes the sections that have been amended. In accordance with statute, an amendment is not a full rewrite of the Town Plan and the Town Plan expiration date will remain in 2025. Therefore, CCRPC's previous Town Plan approval and confirmation of Williston's planning process remains in effect.

CCRPC staff reviewed the proposed amendments related to public health. All proposed public health-related amendments do not impact CCRPC's regional approval of the Williston Town Plan.

CCRPC staff completed a review of a previous draft (draft 9/24/2019) against the Vermont Department of Public Service's Energy Planning Standards for Municipal Plans. The Planning Commission generally agreed to the edits recommended by Staff and the edits were made to the draft now attached to this final staff report (draft 3/17/2020).

Enhanced Energy Plan Review

Following the statutory requirements of 24 V.S.A. §4352 and Vermont Department of Public Service's Energy Planning Standards for Municipal Plans, CCRPC reviewed the draft Williston Town Plan Enhanced Energy element to determine whether:

- 1. The Town Plan includes an energy element that has the same components as described in 24 V.S.A. \$4348a(a)(3) for a regional plan and is confirmed under the requirements of 24 V.S.A. \$4350.
- 2. The Town Plan is consistent with following State goals:
 - a. Vermont's greenhouse gas reduction goals under 10 V.S.A. § 578(a);
 - b. Vermont's 25 by 25 goal for renewable energy under 10 V.S.A. § 580;
 - c. Vermont's building efficiency goals under 10 V.S.A. § 581;
 - d. State energy policy under 30 V.S.A. § 202a and the recommendations for regional and municipal energy planning pertaining to the efficient use of energy and the siting and development of renewable energy resources contained in the State energy plans adopted pursuant to 30 V.S.A. §§ 202 and 202b (State energy plans); and
 - e. The distributed renewable generation and energy transformation categories of resources to meet the requirements of the Renewable Energy Standard under 30 V.S.A. §§ 8004 and 8005.
- 3. The Town Plan meets the standards for issuing a determination of energy compliance included in the State energy plans as developed by the Vermont Department of Public Service.

Staff Review Findings and Comments

Consistency with the requirements above is evaluated through the Vermont Department of Public Service's Vermont Department of Public Service's Energy Planning Standards for Municipal Plans, which is attached to this document and briefly summarized below.

Standard	Met	Not Met	N/A
1. Plan duly adopted and approved		Necessary for	
		final	
		determination	
2. Submit a copy of the adopted plan		Necessary for	
		final	
		determination	
3. Plan contains an energy element	X		
4. Analysis of resources, needs, scarcities, costs and problems in	X		
the municipality across all energy sectors			
5.a. Report Current energy use for heating, electricity, and	X		
transportation			
5.b. Report 2025, 2035 and 2050 targets for energy use	X		
5.c. Evaluation of thermal-sector energy use changes	X		
5.d. Evaluation of transportation-sector energy use changes	X		
5.e. Evaluation of electric-sector energy use changes	X		
6.a. Encourage conservation by individuals and organizations	X		
6.b. Promote efficient buildings	X		
6.c. Promote decreased use of fossil fuels for heat	X		
6.d. Demonstrate municipal leadership re: efficiency of municipal	X		
buildings?			
7.a. Encourage increased public transit use	X		
7.b. Promote shift away from single-occupancy vehicle trips	Х		
7.d. Promote shift from gas/diesel to non-fossil fuel vehicles?	X		
7.e. Demonstrate municipal leadership re: efficiency of municipal	X		
transportation?			
8.a. Promote Smart growth land use policies	X		
8.b. Strongly prioritize development in compact, mixed use	X		
centers			
9.a. Report existing renewable energy generation	X		
9.b. Analyze generation potential	X		
9.c. Identify sufficient land to meet the 2050 generation targets	X		
9.d. Ensure that local constraints do not prevent the generation	X		
targets from being met			
9.e. Include policy statements on siting energy generation	X		
9.f. Maximize potential for generation on preferred sites	X		
9.g. Demonstrate municipal leadership re: deploying renewable	X		
energy			
10. Include maps provided by CCRPC	X		
11 Doog the plan identify and man aviating alectric concreting	v		
resources?			
	1		

12a-e. Does the plan identify area for the development and siting	Х		
of renewable energy resources?			
13a-b. Does the plan identify areas that are unsuitable for siting		Х	
renewable energy resources or particular categories or sizes of			
those resources?			
14. DPS Review			Х

The proposed enhanced energy element demonstrates a strong commitment to implementing best practices for advancing the State energy goals at the municipal level and for planning additional renewable energy generation which are balanced with local land use policies.

However, the following edits are required for CCRPC to grant an affirmative determination of energy compliance to the Town of Williston:

1. CCRPC finds that Williston's Siting Policies #3 and #4 do not meet the Department of Public Service's Energy Planning Standards for Municipal Plans. Specifically, the siting policies do not meet Standards #13(A) and (B).

Standard #13(A) states that if an area is identified as "unsuitable for energy generation, then the land use policies applicable to other forms of development in this area should similarly prohibit other types of development." Siting Policy #3 contains language that is more restrictive than policies applied to other types of land development in Williston particularly in regard to the removal of forest.

Standard #13(B) states that the plan must "ensure that any regional or local constraints identified are supported through data or studies, are consistent with the remainder of the plan, and do not include an arbitrary prohibition or interference with the intend function of any particular renewable resource size or type." Siting Policy #4's conservation requirement will likely arbitrarily prohibit or interfere with the siting of renewable energy facilities in several areas in Williston. This may have a particular impact on restricting the siting of net-metered solar facilities. Further, the inclusion of "Conservation Areas" as a local possible constraint, combined with Siting Policy #1 which requires developers to "minimize impacts to state and local constraint," may effectively provide the same protection as Siting Policy #4, but without calling into question the Plan's conformance with Department of Public Service's Energy Planning Standards for Municipal Plans.

CCRPC suggests the following edits to ensure that Standards #13(A) and (B) can be met:

3. Development, including energy generation, distribution, storage, transmission facilities and fencing, should be carefully located and designed to avoid habitat fragmentation and impacts that would demonstrably reduce the ecological function on a parcel in conservation areas/wildlife travel corridors/wildlife core habitat. Forest blocks should be preserved. If more than 1 acre of forest is removed the project must demonstrate that the solar/wind generation will have a net benefit, factoring in impacts from forest removal such as reduction of carbon sequestration and increased surface runoff.

4. Installation of an energy generation facility within a conservation area/ should result in permanent conservation of the remainder of the conservation area (see Map 18) that is within the same ownership (Source bylaw, 21.4.3.3).

CCRPC staff finds that the draft Williston Town Plan meets the requirements of the enhanced energy planning standards ("determination") set forth in 24 V.S.A. §4352 provided that the above edits are completed by the Town of Williston.

<u>CCRPC</u> staff makes the following recommendations to the Town of Williston regarding the proposed siting policies to improve the effectiveness of the Plan in the Section 248 process. These changes are not required:

- 2. Staff recommends that references to the Development Review Board be removed from Siting Policy #2. The Planning Commission and the Selectboard are the municipal parties identified in statute that are enabled to participate in the Section 248 process. Development Review Boards are not directly enabled in statute to participate in the Section 248 process. Referencing the Williston Development Review Board in this siting policy may raise legal questions about the municipality's review process and participation in a particular case.
- 3. Staff recommends removing Siting Policy #5 as this policy is redundant to Siting Policy #1.
- 4. Staff recommends the following edit to Siting Policy #6 to eliminate redundancy with Siting Policy #1:

6. Watershed protection buffers will follow state regulations when solar or wind generation is developed in the buffer and shall remain undeveloped with the exception of consolidating existing utility infrastructure (See Table 1 in the 2016-2024 Comprehensive Plan for specific buffer distances). (Bylaw 29.9.6.1.

- 5. Provide additional justification regarding the logic behind Siting Policy #8 and Siting Policy #9. These are logical policies, but additional language on the intent would aid the Public Utility Commission's acknowledgement of them. Further, does Williston purposefully differentiate between referencing designated Village Centers and Growth Centers in Siting Policy #8 and "historic districts" in Siting Policy #9? If not, a clarification would be helpful. CCRPC can assist in drafting language to clarify this policy.
- 6. Staff recommends removal of Siting Policy #10 or Siting Policy #12 as the Town of Williston likely does not have the jurisdiction to enforce these policies.
- 7. Staff recommends moving Policy #11 to Siting Policy #1 in order to clarify the intent of these policies. Further, this policy should clarify that a site will be deemed locally to be a "preferred site" if it meets all local siting policies (this shall not apply to sites that already constitute State-designated "preferred sites."). Below is recommended language:
 - The Town of Willison will use these siting policies while reviewing all Section 248 applications. The Town will also use these siting policies to determine support for designating a municipal preferred sites when a site does not meet the criteria to be a State-designated preferred site and in the review of Section 248 applications. Municipally-identified preferred sites shall meet the intent of the following siting policies.
- 8. Staff recommends removal of Siting Policy #13, as the topic raised in this siting policy, co-location of electricity storage and generation within PUDs, is already included as a pathway in the plan. While this is a great idea, it isn't something that will be implemented through the Public Utility Commission. It

may be more effective for the Town to investigate its authority to require co-located electricity generation and storage through its development regulations.

The following comments are related to typos or points that need clarification:

- 9. References in the document to the "Public Utilities Commission" should be changed to "Public Utility Commission." Further, the plan should generally use either the phrase "Public Utility Commission" or the acronym "PUC." The terms are used interchangeably throughout the document.
- 10. On line 330, the number "325" should be replaced with "319."
- 11. In Table 11 (page 17), light duty electric vehicles (% of vehicle fleet) should be 89%, not 41% in the year 2050.
- 12. In Table 13 (page 18), please cite the source of the calculation of acres per MW of solar. The amount of acreage cited (2.5 acres) is well below the number commonly cited by the Vermont Department of Public Service (8 acres) and those in the solar industry.
- 13. In Table 14 (page 19), please cite the calculation used to estimate the amount of possible rooftop solar MW possible in Williston.
- 14. The intent of Pathway 2.4 is to increase the number of vehicles parking at park-and-ride facilities, not all parking lots, correct? Please clarify.
- 15. Pathway 5.2 (page 31) is supposed to reference Pathway 5.1 instead of Pathway 1, correct? Further, CCRPC recommends directly referencing the Residential Building Energy Standards in this pathway instead of referencing the "certificate of compliance."
- 16. Williston may want to consult with the Town Attorney regarding Williston's jurisdiction to impose Pathway 5.5 and Pathway 5.6. Williston may not have the ability to compel developers to install new renewable energy generation and/or on-site storage. Williston also may not have the ability to compel developers to work with Efficiency Vermont or electric utility companies on site planning for energy conservation and renewable energy generation.
- 17. Staff recommends that Pathway 6.8 be removed as it is redundant with Pathway 6.5.
- 18. Please clarify that the "focal points of viewsheds" identified on page 39 are those viewsheds protected by the local possible constraint "scenic viewshed outside of the growth center."

Proposed Motion & Next Steps:

The PAC finds that the proposed Town of Williston Town Plan Energy Elements (draft 1/29/2020) meets the requirements of the enhanced energy planning standards ("determination") set forth in 24 V.S.A. §4352 with edit #1 described in this staff report.

Upon notification that the municipality has adopted the amendments with the required edits, CCRPC staff will review the plan, and any information relevant to the confirmation process. If staff determines that that substantive changes have been made, the materials will be forwarded to the PAC for review. Otherwise the

CCRPC Staff & PAC Review – Town of Williston Enhanced Energy Plan April 8, 2020

PAC recommends that the draft Energy Plan should be forwarded to the CCRPC Board for an affirmative determination of energy compliance.

Energy Planning Standards for Municipal Plans

Instructions

Before proceeding, please review the requirements of Parts I and II below, as well as the Overview document. Submitting a Municipal Plan for review under the standards below is entirely voluntary, as enabled under <u>Act 174</u>, the Energy Development Improvement Act of 2016. If a Municipal Plan meets the standards, it will be given an affirmative "determination of energy compliance," and will be given "substantial deference" in the Public Service Board's review of whether an energy project meets the orderly development criterion in the Section 248 process. Specifically, with respect to an in-state electric generation facility, the Board:

[S]hall give substantial deference to the land conservation measures and specific policies contained in a duly adopted regional and municipal plan that has received an affirmative determination of energy compliance under 24 V.S.A. § 4352. In this subdivision (C), "substantial deference" 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. The term shall not include consideration of whether the determination of energy compliance should or should not have been affirmative under 24 V.S.A. § 4352.

Municipal Plans should be submitted by the municipality's legislative body to the Regional Planning Commission (RPC) if the Regional Plan has received an affirmative determination of energy compliance. If a Regional Plan has not received such a determination, until July 1, 2018¹, a municipality may submit its adopted and approved Municipal Plan to the Department of Public Service (DPS) for a determination of energy compliance (determination), along with the completed checklist below. After a Municipal Plan and completed checklist have been submitted to the RPC (or DPS), the RPC or DPS will schedule a public hearing noticed at least 15 days in advance by direct mail to the requesting municipal legislative body, on the RPC or DPS website, and in a newspaper of general publication in the municipality. The RPC or DPS shall issue a determination in writing within two months of the receipt of a request. If the determination is negative, the RPC or DPS shall state the reasons for the denial in writing and, if appropriate, suggest acceptable modifications. Submissions for a new determination following a negative determination shall receive a new determination within 45 days.

The plans that Municipalities submit must:

- Be adopted
- Be confirmed under 24 V.S.A. § 4350
- Include an energy element that has the same components as described in 24 V.S.A. § 4348a(a)(3)
- Be consistent with state energy policy (described below), in the manner described in 24 V.S.A. § 4302(f)(1)
- Meet all standards for issuing a determination of energy compliance (see below)

¹ These standards will be revised after July 1, 2018 to reflect that Municipal Plans should be submitted only to the Regional Planning Commissions – which will all have had an opportunity to seek a determination of energy compliance – from that point forward.

Municipalities are encouraged to consult with their reviewer (either their RPC or DPS) before undertaking the process of plan adoption, which may help in identifying any deficiencies or inconsistencies with the standards or other requirements that would be more difficult to remedy after a plan has gone through the formal adoption process.

The state's Comprehensive Energy Plan (CEP) is revised on a 6-year basis. When the next CEP is published in 2022, it will include a revised set of standards, as well as Recommendations that are customized to regions and municipalities. The Recommendations that accompany this initial set of Standards represent a subset of recommendations from the 2016 CEP, which were not written with regions and municipalities specifically in mind. A Guidance document – which is expected to evolve as best practices from regions and municipalities emerge – will be published shortly after the Standards are issued. It will serve as the warehouse for relevant recommendations from the 2016 CEP, links to data sources, instructions on conducting analysis and mapping, and sample language/best practices. Once issued and until the 2022 CEP is published, this Guidance document will supplant the Recommendations document.

Affirmative determinations last for the life cycle of a revision of the Municipal Plan, and Municipal Plans that are submitted after the 2022 CEP is issued will be expected to meet the Standards that are issued at that time. Municipalities are encouraged to consult with their RPC or DPS regarding interim amendments that might affect any of the standards below, to discuss whether a new review is triggered.

If you wish to submit your Municipal Plan to your RPC or to DPS for a determination, please read closely the specific instructions at the start of each section below, and attach your Municipal Plan to this checklist.

Determination requests to an RPC (and any other questions) should be submitted to your RPC's designated contact. Determination requests to DPS until July 1, 2018 – and only for municipalities whose Regions' plans have not received an affirmative determination – should be submitted to: <u>PSD.PlanningStandards@vermont.gov</u>.

Part I: Applicant Information				
The plan being submitted for review is a:	Municipal Plan in a region whose regional plan has received an affirmative determination of energy compliance from the Commissioner of Public Service	Municipal Plan in a region whose regional plan has <u>not</u> received a determination of energy compliance		
		Until July 1, 2018, please submit these to the DPS.		
	Please submit these plans to your RPC	After July 1, 2018, this option ceases to exist.		
Applicant:	Town of Williston			
Contact person:	Emily Heymann			
Contact information:	802-878-6704 ext3; eheymann@willistonvt.org			
Received by: Click here to enter text.	Date: Click here to enter text.			

Part II: Determination Standards Checklist

The checklist below will be used to evaluate your plan's consistency with statutory requirements under Act 174, including the requirement to be adopted and approved, contain an enhanced energy element, be consistent with state energy policy, and meet a set of standards designed to ensure consistency with state energy goals and policies.

Please review and attach your plan (or adopted energy element/plan, along with supporting documentation) and self-evaluate whether it contains the following components. Use the Notes column to briefly describe how your plan is consistent with the standard, including relevant page references (you may include additional pages to expand upon Notes). If you feel a standard is not relevant or attainable, please check N/A where it is available and use the Notes column to describe the situation, explaining why the standard is not relevant or attainable, and indicate what measures your municipality is taking instead to mitigate any adverse effects of not making substantial progress toward this standard. If N/A is not made available, the standard must be met (unless the instructions for that standard indicate otherwise) and checked "Yes" in order to receive an affirmative determination. There is no penalty for checking (or limit on the number of times you may check) N/A where it is available, as long as a reasonable justification is provided in the Notes column.

Plan Adoption Requirement

Act 174 requires that municipal plans be adopted and approved in order to qualify for a determination of energy compliance. In the near term, it is likely municipalities will revise and submit isolated energy plans or elements, particularly due to long planning cycles. Therefore, the plan adoption requirement can be met through an amendment to an existing plan in the form of an energy element or energy plan, as long as the amendment or plan itself is duly adopted as part of the municipal plan and incorporated by reference or appended to the underlying, full plan (i.e., is officially "in" the municipal plan), as well as approved for confirmation with the region. If this route is chosen, the municipality should also attach the planning commission report required for plan amendments under 24 V.S.A. § 4384, which should address the internal consistency of the energy plan/element with other related elements of the underlying plan (particularly Transportation and Land Use), and/or whether the energy plan/element supersedes language in those other elements. Standards 1 and 2 below must be answered in the affirmative in order for a plan to receive an affirmative determination of energy compliance.

1. Has your plan been duly adopted and approved for confirmation according to 24 V.S.A. § 4350?	☑ Yes. Adoption date: 8/22/2017	🗆 No	
	Confirmation date:		
	9/20/2017		
2. Is a copy of the plan (or adopted energy element/plan, along with	🛛 Yes	🗆 No	Notes:
underlying plan and planning commission report addressing consistency of			
energy element/plan with other elements of underlying plan) attached to			
this checklist?			

Energy Element Requirement

To obtain a determination of energy compliance, Act 174 requires municipalities to include an "energy element" that contains the same <u>components</u> described in 24 V.S.A. § 4348a(a)(3), which was revised through Act 174 to explicitly address energy across all sectors and to identify potential and unsuitable areas for siting renewable energy resources:

An energy element, which may include an <u>analysis of resources</u>, needs, scarcities, costs, and problems within the region across all energy sectors, including electric, thermal, and transportation; a statement of policy on the conservation and efficient use of energy and the development and siting of renewable energy resources; a statement of policy on patterns and densities of land use likely to result in conservation of energy; and an identification of potential areas for the development and siting of renewable energy resources and areas that are unsuitable for siting those resources or particular categories or sizes of those resources.

The standards below are generally organized to integrate each component of the enhanced energy element with related determination standards that evaluate the plan's consistency with state goals and policies. **Energy element components are identified in bolded text.**

While municipalities may choose to primarily address energy used for heating, transportation, and electricity in the required energy element, they may also choose to address some of these components in related plan elements (e.g., Transportation and Land Use) and should indicate as much in the Notes column. To the extent an energy element is designed to comprehensively address energy, it should be complementary to and reference other relevant plan elements.

3. Does the plan contain an energy element, that contains the same	🛛 Yes	🗆 No	Page: Town Plan Chapter 11 (pgs 82-89); Energy Plan
components described in 24 V.S.A. § 4348a(a)(3)?			Draft 03-17-2020
Individual components of the energy element will be evaluated through the			Notes:
standards below.			

Consistency with State Goals and Policies Requirement

Act 174 states that regional and municipal plans must be consistent with the following state goals and policies:

- Greenhouse gas reduction goals under 10 V.S.A. § 578(a) (50% from 1990 levels by 2028; 75% by 2050)
- The 25 x 25 goal for renewable energy under 10 V.S.A. § 580 (25% in-state renewables supply for all energy uses by 2025)
- Building efficiency goals under 10 V.S.A. § 581 (25% of homes or 80,000 units made efficient by 2020)
- State energy policy under <u>30 V.S.A. § 202a</u> and the recommendations for regional and municipal planning pertaining to the efficient use of energy and the siting and development of renewable energy resources contained in the <u>State energy plans</u> adopted pursuant to <u>30 V.S.A. §§ 202</u> and <u>202b</u>
- The distributed renewable generation and energy transformation categories of resources to meet the requirements of the Renewable Energy Standard under <u>30 V.S.A. §§ 8004</u> and <u>8005</u>

The standards in the checklist below will be used to determine whether a plan is consistent with these goals and policies. The standards are broken out by category. *Analysis and Targets* standards address how energy analyses are done within plans, and whether targets are established for energy conservation, efficiency, fuel switching, and use of renewable energy across sectors. *Pathways (Implementation Actions)* standards address the identification of actions to achieve the targets. *Mapping* standards address the identification of suitable and unsuitable areas for the development of renewable energy.

Municipalities may choose to incorporate the information necessary to meet the standards in their energy elements, and/or in other sections of their plans (many transportation items may fit best in the Transportation chapters of plans, for instance). However, plans must be internally consistent, and applicants should cross-reference wherever possible.

Analysis and Targets Standards

For the *Analysis & Targets* determination standards below, municipalities will be provided with analyses and targets derived from regional analyses and targets no later than April 30, 2017 (and likely much sooner). Municipalities may choose to rely on these "municipalized" analyses and targets to meet the standards in this section. Municipalities which elect to use the analysis and targets provided by a region will be presumed to have met the standards in this section. Alternatively, municipalities may develop their own custom analyses and targets or supplement the analyses and targets provided by the regions with specific local data; if this option is chosen, the analysis and targets must include all of the same components and meet the standards required of regions, as described below.

For municipalities that choose to undertake their own analysis and target-setting (and for regions), DPS is providing a guidance document to explain the expected level of detail in and data sources and methodologies available for meeting the standards (including areas where it is understood data at the municipal level is unavailable, and therefore not expected). Note that standards 5A-4E are all derived directly from requirements in Act 174 (with minor modifications to make them feasible) and must be met affirmatively in order for a municipal plan to receive an affirmative determination of energy compliance.

Targets set by regions and municipalities should be aligned with state energy policy (see the goals and policies listed above). Where targets (and efforts to reach them) depart significantly from state energy goals and policies, an explanation for how the plan otherwise achieves the intent of the state goal or policy should be provided. The guidance document also offers additional clarification on alignment with state goals and policies.

The analysis items below are intended to provide regions and municipalities with an overview of their current energy use, and with a sense of the trajectories and pace of change needed to meet targets, which can be translated into concrete actions in the *Pathways* standards below. Targets provide regions and municipalities with milestones or checkpoints along the way toward a path of meeting 90% of their total energy needs with renewable energy, and can be compared with the potential renewable energy generation from areas identified as potentially suitable in the *Mapping* standards exercise below to give regions and municipalities a sense of their ability to accommodate renewable energy that would meet their needs.

4. Does your plan's energy element contain an analysis of resources, needs,	🛛 Yes	🗆 No	Page: Existing Town Plan pages 9-19
scarcities, costs, and problems within the municipality across all energy sectors			Notes:
(electric, thermal, transportation)?			
5. Does your plan contain an analysis that addresses A-E below, either as provided	🛛 Yes-	🗆 No	Page: Enegy Plan pages 4-19
by your Regional Planning Commission or as developed by your municipality?	Region		Paragraph #:
Municipalities may meet this standard by using the analysis and targets provided by	🗆 Yes-		Notes:
their regions, or by developing their own analyses and targets. If using the analysis &	Custom		
targets provided by your region, please answer "Yes-Region" and skip ahead to #6. If			

developing a custom analysis, please answer "Yes-Custom" and address 5A-5E			
separately, below.			
A. Does the plan estimate current energy use across transportation, heating,	🛛 🖾 Yes	🗆 No	Page: Tables 1-5
and electric sectors?			Paragraph #:
			Notes:
B. Does the plan establish 2025, 2035, and 2050 targets for thermal and	🛛 Yes	🗆 No	Page: Table 8, 9 (thermal); Table 10
electric efficiency improvements, and use of renewable energy for			(electric); Table 11 (transportation)
transportation, heating, and electricity?			Paragraph #:
			Notes:
C. Does the plan evaluate the amount of thermal-sector conservation,	🛛 Yes	🗆 No	Page: Table 8, 9
efficiency, and conversion to alternative heating fuels needed to achieve			Paragraph #:
these targets?			Notes:
D. Does the plan evaluate transportation system changes and land use	🛛 Yes	🗆 No	Page: Table 11 (transportation); Town Plan
strategies needed to achieve these targets?			Land Use Chapter (pg. 12-19)
			Paragraph #:
			Notes:
E. Does the plan evaluate electric-sector conservation and efficiency needed	l to 🛛 🖾 Yes	🗆 No	Page: Table 10
achieve these targets?			Paragraph #:
			Notes:

Pathways (Implementation Actions) Standards

This section examines whether plans meet the Act 174 expectation that they include pathways and recommended actions to achieve the targets identified through the *Analysis and Targets* section of the Standards (above). Plans are expected to include or otherwise address all of the pathways (implementation actions) below; some actions may not be applicable or equally relevant to all applicants (small vs. large municipalities, for instance), in which case N/A may be checked (if available) and the justification provided in the Notes column. There is no penalty for choosing N/A one or more times, as long as a reasonable justification is provided in the Notes column, preferably including an explanation of how the plan alternatively achieves attainment of the targets should be included. If N/A is not provided as an option, the standard must be met, and "Yes" must be checked, in order for the plan to meet the requirements for a determination (unless the instructions particular to that standard indicate otherwise).

DPS will be issuing a guidance document in the near term providing potential implementation actions derived from the Comprehensive Energy Plan (relevant formal Recommendations as well as opportunities not specifically called out as Recommendations), from recent regional and municipal plans, and from other sources. The guidance document will be revised after the regions have compiled best practices from early municipalities pursuing energy planning to seek a determination of energy compliance, in the summer of 2017.

For the time being, we offer potential implementation action options for consideration as italicized text under each standard. Plans are encouraged to promote as diverse a portfolio of approaches as possible in each sector, or if not, to explain why they take a more targeted approach. Implementation actions may fit best in a holistic discussion contained within a plan's energy element, though cross-referencing to other relevant plan elements is also acceptable.

Municipalities must demonstrate a commitment to achieving each standard in both p	olicies and	implement	tation measures in clear, action-oriented language.
6. Does your plan's energy element contain a statement of policy on the conservation and efficient use of energy?	⊠ Yes	🗆 No	Page: Paragraph #:
A. Does the plan encourage conservation by individuals and organizations? (Actions could include educational activities and events such as convening or sponsoring weatherization workshops, establishing local energy committees, encouraging the use of existing utility and other efficiency and conservation programs and funding sources, etc.)	⊠ Yes	□ No	Page: Local Objectives 1, 4, 5, 6, 9, 13, 14 Page: Local Objectives 1-15 Paragraph #: Click here to enter text. Notes: Pathways 1.2, 2.2, 4.1-4.8
 B. Does the plan promote efficient buildings? (Actions could include promoting compliance with residential and commercial building energy standards for new construction and existing buildings, including additions, alterations, renovations and repairs; promoting the implementation of residential and commercial building efficiency ratings and labeling; considering adoption of stretch codes, etc.) 	⊠ Yes	□ No	Page: Local Objectives 1, 4, 5, 6, 9 Paragraph #: Notes: Pathways 5.1, 5.2, 5.6, 5.7, 5.10; 6.1- 6.8
C. Does the plan promote decreased use of fossil fuels for heating? (Actions and policies could promote switching to wood, liquid biofuels, biogas, geothermal, and/or electricity. Suitable devices include advanced wood heating systems and cold-climate heat pumps, as well as use of more energy efficient heating systems; and identifying potential locations for, and barriers to, deployment of biomass district heating and/or thermal-led combined heat and power systems in the municipality)	⊠ Yes	□ No	Page: Local Objectives 2, 4, 10 Paragraph #: Notes: Pathways 6.1-6.8
 D. Does the plan demonstrate the municipality's leadership by example with respect to the efficiency of municipal buildings? (Actions could include building audits and weatherization projects in schools and town offices, etc.) 	⊠ Yes	□ No □ N/A	Page: Local Objective 1, 4, 5, 8, 11 Paragraph #: Notes: Pathways 3.1, 3.3, 3.4, 3.6, 3.11, 3.13
E. Other (please use the notes section to describe additional approaches that your municipality is taking)	⊠ Yes	□ No □ N/A	Page: Also Pathways "Consumption + Recycling" and "Agriculture" Paragraph #: Notes: Pathways 7.1-7.6 and 8.1-8.5
7. Does your plan's energy element contain a statement of policy on reducing transportation energy demand and single-occupancy vehicle use, and encouraging use of renewable or lower-emission energy sources for transportation?	🛛 Yes	🗆 No	Page: Local Objectives 2, 7, 8, 12 Paragraph #: Notes: Pathways 2.1-2.13

Α.	Does the plan encourage increased use of public transit?	🛛 Yes	□ No	Page: Local Objective 12
	(Actions could include participation in efforts to identify and develop new public transit routes, promote full utilization of existing routes, integrate park-and-rides with transit routes, etc.)		∐ N/A	Paragraph #: Notes: Pathwyas .4, 2.5, 2.8, 2.9
B.	Does the plan promote a shift away from single-occupancy vehicle trips, through strategies appropriate to the municipality? (Actions could include rideshare, vanpool, car-sharing initiatives; efforts to develop or increase park-and-rides; enhancement of options such as rail and telecommuting; education; intergovernmental cooperation; etc.)	⊠ Yes	□ No	Page: Pathways 2.1, 2.3, 2.4, 2.5, 2.8, 2.9, 2.12, 2.13 Paragraph #: Notes:
C.	Does the plan promote a shift away from gas/diesel vehicles to electric or other non-fossil fuel transportation options through strategies appropriate to the municipality? (Actions could include promoting the installation of electric vehicle charging infrastructure, providing education and outreach to potential users, supporting non-fossil fuel vehicle availability through outreach to vehicle dealers, etc.)	⊠ Yes	□ No	Page: Pathways 2.1, 2.2, 2.4, 2.6, 2.7, 2.10, 2.11 Paragraph #: Notes:
D.	Does the plan facilitate the development of walking and biking infrastructure through strategies appropriate to the municipality? (Actions could include studying, planning for, seeking funding for, or implementing improvements that encourage safe and convenient walking and biking; adopting a "Complete Streets" policy, etc.)	⊠ Yes	□ No □ N/A	Page: Pathways 2.3, 2.9, 2.12, 2.13, Paragraph #: Notes:
E.	Does the plan demonstrate the municipality's leadership by example with respect to the efficiency of municipal transportation? (Actions could include purchasing energy efficient municipal and fleet vehicles when practicable, installing electric vehicle charging infrastructure, etc.)	⊠ Yes	□ No □ N/A	Page: Pathways 2.4, 2.6, 2.10 Paragraph #: Notes:
F.	Other (please use the notes section to describe additional approaches that your municipality is taking)	⊠ Yes	□ No □ N/A	Page: See the Transportation Chapter of the Williston Town Plan as well (pg. 37-47) Paragraph #: Notes:
8. Doe s	s your plan's energy element contain a statement of policy on patterns and	🛛 Yes	🗆 No	Page: Local Objectives 11, 13, 15
densiti	es of land use likely to result in conservation of energy?			Paragraph #: Notes:
Α.	Does the plan include land use policies (and descriptions of current and future land use categories) that demonstrate a commitment to reducing sprawl and minimizing low-density development?	⊠ Yes	□ No	Page: Land Use Chapter in Williston Town Plan (pg.11-18) Paragraph #: Notes: Pathways 5.10-5.13

	(Actions could include adopting limited sewer service areas, maximum building sizes along highways, policies or zoning that require design features that minimize the characteristics of strip development [multiple stories, parking lot to the side or back of the store], and requirements that development in those areas be connected by means other than roads and cars; adopting a capital budget and program that furthers land use and transportation policies; etc.)			
B.	Does the plan strongly prioritize development in compact, mixed-use centers when physically feasible and appropriate to the use of the development, or identify steps to make such compact development more feasible? (Actions could include participating in the state designation program, such as obtaining state designated village centers, downtowns, neighborhoods, new town centers, or growth centers; exploration of water or sewage solutions that enable compact development; etc.)	⊠ Yes	□ No □ N/A	Page: Land Use Chapter in Williston Town Plan (pg.11-18); Energy Plan Pathways 5.10 Paragraph #: Notes: Williston has State Designated Village and Growth Centers, a Sewer Service Area Ordinance
C.	Other (please use the notes section to describe additional approaches that your municipality is taking)	⊠ Yes	□ No □ N/A	Page: See also the Land Use Chapter of the Williston Town Plan (pg. 11-18) Paragraph #: Notes: See other Regenerative Agriculture Pathways
9. Doe develo	s your plan's energy element contain a statement of policy on the poment and siting of renewable energy resources?	🛛 Yes	□ No	Notes: Local Objectives 3, 10
Α.	Does the plan evaluate (estimates of or actual) generation from existing renewable energy generation in the municipality? <i>Municipalities should be able to obtain this information from their regions.</i>	🛛 Yes	🗆 No	Page: Table 6 Paragraph #: Notes:
В.	Does the plan analyze generation potential, through the mapping exercise (see <i>Mapping</i> standards, below), to determine potential from preferred and potentially suitable areas in the municipality? <i>Municipalities should be able to obtain this information from their regions.</i>	⊠ Yes	□ No	Page: Table 13, Table 14 Paragraph #: Notes:
C.	Does the plan identify sufficient land in the municipality for renewable energy development to reasonably reach 2050 targets for renewable electric generation, based on population and energy resource potential (from potential resources identified in the <i>Mapping</i> exercise, below), accounting for the fact that land may not be available due to private property constraints, site-specific constraints, or grid-related constraints? <i>If N/A, please describe how you are working with your regional planning commission to ensure overall regional objectives are achieved.</i>	⊠ Yes	□ No □ N/A	Page: Table 13, 14 Paragraph #: Notes:

D.	Does the plan ensure that any local constraints (locally designated resources	🛛 Yes	🗆 No	Page: Table 12 and 13
	or critical resources, from12B and 12C under <i>Mapping</i> , below) do not		🗆 N/A	Paragraph #:
	prohibit or have the effect of prohibiting the provision of sufficient			Notes:
	renewable energy to meet state, regional, or municipal targets?			
	If N/A, please describe how you are working with your regional planning			
	commission to ensure overall regional objectives are achieved.			
Ε.	Does the plan include statements of policy to accompany maps (could	🖾 Yes	🗆 No	Page: Renewable Energy Generation Siting
	include general siting guidelines), including statements of policy to			Policies, starting on pg. 40
	accompany any preferred, potential, and unsuitable areas for siting			Paragraph #:
	generation (see 12 and 13 under <i>Mapping</i> , below)?			Notes: Consider moving these into the body
				of the plan rather than an appendix where
				they are easily overlooked
E.	Does the plan maximize the potential for renewable generation on preferred			Page: Renewable Energy Generation Siting
	locations (such as the categories outlined under 12E in the Manning			Policy 11 starting on pg 21
	standards below)?			Policy 11, starting on pg. 51
				Palagiapii #.
6	Doos the plan domenstrate the municipality's leadership by example with			Notes.
G.	respect to the deployment of renewable energy?	⊠ res		Page: Pathway 6.2
	Actions could include deploying renewable energy?		⊔ N/A	Paragraph #:
	(Actions could include deploying renewable energy to ojjset municipal			Notes:
	<u>Crectific use, etc.)</u>			
н.	Other (please use the notes section to describe additional approaches that	🖾 Yes		Page: Outlining steps to encourage renewable
	your municipality is taking)		⊔ N/A	energy generation through Renewable
				Energy Pathways 6.1-6.8
				Paragraph #:
				Notes:

Mapping Standards

Act 174 requires plans to identify potential areas for the development and siting of renewable energy resources and areas that are unsuitable for siting those resources or particular categories or sizes of those resources. It furthermore requires that the standards address the potential generation from the potential siting areas.

The *Mapping* standards lay out a sequence of steps for planners to examine existing renewable resources and to identify potential (and preferred) areas for renewable energy development, and to identify likely unsuitable areas for development, by layering constraint map layers on to raw energy resource potential map layers. The maps should help municipalities visualize and calculate the potential generation from potential areas, and compare it with the 2025, 2035,

and 2050 targets from the Analysis and Targets standards to get a sense of the scale and scope of generation that could be produced within the region to meet the municipality's needs. DPS will provide additional guidance to accompany the standards that fleshes out the steps, layers, and standards more fully.

Plans must include maps that address all of the standards below, unless N/A is provided as an option, in which case a compelling reason why the standard is not applicable or relevant should be provided in the Notes column. Regions must develop their own maps (already underway through support being provided to regions by DPS), and to then break out the maps for their municipalities, who can use their region-provided maps to meet the municipal *Mapping* standards (such "municipalization" work is being supported through a training & technical assistance contract between DPS and regions, and all regions must supply completed maps to their municipalities by April 30, 2017, though many are expected to do so much sooner).

Municipalities may choose to rely on the maps provided by the regions to meet the standards in this section. Those maps should be somewhat familiar to municipalities, who are expected to be consulted as regions develop their maps. Alternatively, municipalities may choose to undertake their own mapping, according to the same set of standards as regions. Additionally, municipalities are expected to work collaboratively with their regions and with neighboring municipalities to ensure compatibility between the final products.

The map and the text describing the policies or rules used to construct the map, as well as the text describing specific policies applicable to map features, should be complementary. That should help ensure that any "land conservation measures and specific policies" that might be given substantial deference in the context of a particular project review under 30 V.S.A. § 248 are clearly identifiable in the text, should a map lack sufficient clarity or granularity regarding the area in which a project is proposed.

10. Does your plan contain one or more maps that address 11-13 below, as	🗆 Yes-	🗆 No	Page: Click here to enter text.
provided by your Regional Planning Commission or as developed by your	Region		Paragraph #:
municipality?	🛛 Yes-		Notes:
Municipalities may meet this standard by using the maps provided by their	Custom		
regions, or by developing their own maps. If using the maps provided by your			
region, please answer "Yes-Region" and skip ahead to #14. If developing			
custom maps, please answer "Yes-Custom" and address 11-13 separately,			
below.			
11. Does the plan identify and map existing electric generation sources?	🛛 Yes	🗆 No	Page: Map 22
Maps may depict generators of all sizes or just those larger than 15 kW, as		🗆 N/A	Paragraph #:
long as information on generators smaller than 15 kW is summarized and			Notes: See also Table 6
provided or referenced elsewhere. It is expected that the best available			
information at the time of plan creation will be used. This information is			
available from the DPS.			
12. Does the plan identify potential areas for the development and siting of	🛛 Yes	🗆 No	Page: Maps 22-26
renewable energy resources and the potential generation from such			Paragraph #:
generators in the identified areas, taking into account factors including			Notes:
resource availability, environmental constraints, and the location and			
capacity of electric grid infrastructure?			

Maps should include the following (available from VCGI and ANR), and the resulting Prime and Secondary Resource Maps will together comprise "potential areas":			
 Raw renewable energy potential analysis (wind and solar), using best available data layers (including LiDAR as appropriate) 	⊠ Yes	🗆 No	Page: Map 25, 26 Paragraph #: Notes:
 B. Known constraints (signals likely, though not absolute, unsuitability for development based on statewide or local regulations or designated critical resources) to include: Vernal Pools (confirmed and unconfirmed layers) DEC River Corridors FEMA Floodways State-significant Natural Communities and Rare, Threatened, and Endangered Species National Wilderness Areas Class 1 and Class 2 Wetlands (VSWI and advisory layers) Regionally or Locally Identified Critical Resources If areas are constrained for the development of renewable energy due to the desire to protect a locally designated critical resource (whether a natural resource or a community-identified resource), then the land use policies applicable to other forms of development in this area must be similarly restrictive; for this category, policies must prohibit all permanent development (and should be listed in the Notes column). These areas should be subtracted from raw renewable energy resource potential maps to form Secondary Resource Maps 	⊠ Yes	□ No	Page: Map 23 Paragraph #: Notes:
 C. Possible constraints (signals conditions that would likely require mitigation, and which may prove a site unsuitable after site-specific study, based on statewide or regional/local policies that are currently adopted or in effect), including but not limited to: Agricultural Soils FEMA Special Flood Hazard Areas Protected Lands (State fee lands and private conservation lands) Act 250 Agricultural Soil Mitigation areas 	⊠ Yes	□ No	Page: Map 24a, 24b, 24c Paragraph #: Notes: The Planning Commission added Priority Forest Blocks as a possible constraint

	 Deer Wintering Areas ANR's Vermont Conservation Design Highest Priority Forest Blocks (or Habitat Blocks 9 & 10, for plans using regional maps in regions whose plans will be submitted for adoption at the regional level by March 1, 2017) Hydric Soils Regionally or Locally Identified Resources If locations are constrained for the development of renewable energy due to the desire to protect a locally designated resource (whether a natural resource or community-identified resource, like a view), then the land use policies applicable to other forms of development must be similarly restrictive (and should be listed in the Notes column). These areas should be subtracted from Secondary Resource Maps to form Prime Resource Maps. 			
D.	Transmission and distribution resources and constraints, as well as	🛛 Yes	🗆 No	Page: Map 21, 25, 26
	transportation infrastructure.			Paragraph #: Click here to enter text.
	resources such as Green Mountain Power's solar man known greas			Notes: Click here to enter text.
	of high electric load etc.)			
F	Preferred locations (specific areas or parcels) for siting a generator			Page: Man 21
L.	or a specific size or type of generator, accompanied by any specific			Paragranh #: Click here to enter text
	siting criteria for these locations			Notes: Click here to enter text
	Narrative descriptions of the types of preferred areas in			Notes, ellek here to enter text.
	accompanying plan text are acceptable, though mapping of areas			
	and especially specific parcels (to the extent they are known) is highly			
	encouraged, to signal preferences to developers, particularly for			
	locally preferred areas and specific parcels that do not qualify as a			
	statewide preferred location under i. below.			
	The locations identified as preferred must not be impractical for			
	developing a technology with regard to the presence of the			
	renewable resource and access to transmission/distribution			
	infrastructure.			
	i. Statewide preferred locations such as rooftops (and other	🛛 Yes	🗆 No	Page: Map 21
	structures), parking lots, previously developed sites, brownfields,		🗆 N/A	Paragraph #:
	gravel pits, quarries, and Superfund sites			Notes:

	ii.	Other potential locally preferred locations	🗆 Yes	🗆 No	Page:
		For example, customer on- or near-site generation, economic		🖾 N/A	Paragraph #:
		development areas, unranked and not currently farmed			Notes:
		agricultural soils, unused land near already developed			
		infrastructure, locations suitable for large-scale biomass district			
		heat or thermal-led cogeneration, potential locations for biogas			
		heating and digesters, etc.			
		These are particularly important to map if possible, as "a specific			
		nocation in a duly adopted municipal plan is one way for a net			
13. C)oes	the plan identify areas that are unsuitable for siting renewable	X Yes		Page: Constraints Mans 23, 24a-c
e	nera	v resources or particular categories or sizes of those resources?	("Yes" for		Paragraph #: Click here to enter text
E	ithe	r Yes or No ("No" if the plan chooses not to designate any areas as	A and B		Notes: Click here to enter text.
u	insui	table) is an acceptable answer here. "Resources" is synonymous	must also		
V	vith	"generators."	be		
			selected		
			below)		
A	. А	re areas identified as unsuitable for particular categories or sizes of	🛛 Yes	🗆 No	Page: Click here to enter text.
	g	enerators consistent with resource availability and/or land use		🗆 N/A	Paragraph #: Click here to enter text.
	р	olicies in the regional or municipal plan applicable to other types of		(if no	Notes: See 13B below. Most remaining forested
	la	and development (answer only required if "Yes" selected above,		unsuita	areas are in the ARZD where rural residential and
	Ir	idicating unsuitable areas have been identified)?		ble	agriculture are the only allowed uses. Subidvisions
	lf	areas are considered unsuitable for energy generation, then the		areas	must set aside 75% open space. Though
	10	ind use policies applicable to other jorms of development. In this		are	exempted ag and forestry practices can take place
	u n	ate these policies in the Notes column		Identifie	in the open space, the land cannot be clear cut for
				a)	development.
E	3. D	oes the plan ensure that any regional or local constraints	🛛 Yes	🗆 No	Page: Click here to enter text.
	(r	regionally or locally designated resources or critical resources, from			Paragraph #: Click here to enter text.
	1	2b-12c above) identified are supported through data or studies, are			Notes: Siting Policy #3 restricts the clear cutting of
	C	onsistent with the remainder of the plan, and do not include an			land for energy generation. Our bylaws require
	а	rbitrary prohibition or interference with the intended function of			75% open space preservation for rural
	a	logso exploin in the Notes column			subdivisions and some provision of open space in
	Ρ				denser residential subdivisions. Therefore,
					restricting how much land is cleared for energy
					generation is no more restrictive than our other
					development standards.

14. Municipalities seeking a determination of energy compliance from the	🛛 Yes	🗆 No	Page: Click here to enter text.
Department and not using their region's maps only: Does the plan	(also		Paragraph #: Click here to enter text.
ensure that its approach, if applied regionally, would not have the effect	check Yes		Notes: Click here to enter text.
of prohibiting any type of renewable generation technology in all	if seeking		
locations?	determina		
	tion from		
	region, or		
	from DPS		
	but using		
	region-		
	provided		
	maps)		

00/11
Williston
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VERMONT

Energy Plan

8	
9	March 17, 2020
10	Draft for Public Hearing and Planning Action Committee (PAC) Review
11	Respectfully submitted by the Planning Commission:
12 13	Chapin Kaynor, Meghan Cope, Cate Lamar, Ron Bomer, Jill Pardini, G. Miller, Shayla Livingston
14	
15	September 24, 2019
16	First Draft Respectfully Submitted by the Energy Plan Task Force:
17	Brian Forrest, G. Miller, Kevin Batson, John Butterfield, Reed Parker, Carl Peach
18	
19	
20	

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Executive Summary

- 49 Scientific evidence points to our planet in crisis, and the impacts of climate change will 50 increasingly become a matter of public safety and economic prosperity as extreme weather 51 events occur with greater frequency and intensity. In looking towards the future, action must 52 take place at all levels to cut greenhouse gas (GHG) emissions that result from the use of fossil 53 fuels and to mitigate their impacts. To meet these challenges, towns need to design and implement plans that ensure safe, sustainable, and thriving communities in the context of a 54 55 changing climate and energy landscape. The 2020 Williston Energy Plan was developed in accordance with the Vermont Department of Public Service's energy planning standards. This is 56 57 the first attempt by our local municipality to achieve the goals outlined by the 2016 State of 58 Vermont Comprehensive Energy Plan (CEP). Beginning with the Energy Plan Task Force in July 59 2018, volunteer residents devised this energy plan with guidance from town staff and 60 Chittenden County Regional Planning Commission (CCRPC) staff, and oversight from the 61 Planning Commission, to provide direction for the reduction of greenhouse gas emissions by
- 62 focusing attention on five key areas:
- 63 1) transportation and land Use
- 64 2) building energy usage
- 65 3) recycling and consumption
- 66 4) renewable energy generation
- 67 5) agriculture
- 68 Within each major focus area, the plan articulates measurable *goals* the town aims to achieve,
- 69 outlines *objectives* to achieve said goals, identifies *pathways* that list the responsible entities,
- 70 and suggests a timeline for task completion. As with any plan, there are limitations to what can
- 71 be accomplished without investing sufficient resources for implementation. Yet, the Town of
- 72 Williston is in a unique position to establish our community as a leader in innovation and
- 73 sustainability at a time when environmentally driven action can no longer wait for the sake of
- 74 our residents, our town, and our planet.

48

Vision

To create a community powered by renewable, locally produced and owned energy, fed by town farms,

- 78 housed in efficient homes with an environmentally responsible transportation system, all sustained by a
- vibrant, local economy and social network. We believe our resources are finite; and that we are an
- 80 integral part of nature.

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81

Introduction

82 While the State has set goals for 2050 through the 2016 Comprehensive Energy Plan (CEP), the August 83 2018 report of the International Panel on Climate Change (IPCC) states that, "we must switch from 84 fossil fuels to renewable, non-carbon based energy sources by 2030 to avoid a 1.5 degree increase in 85 global temperature; a change which is projected to cause catastrophic risks to human systems." This 86 means that Williston needs to take an all-in approach with bold, aggressive actions to move the town off 87 fossil fuels and onto renewable energy sources. Climate change is an issue of public safety with severe 88 weather events sure to occur with greater frequency and intensity. Therefore, addressing climate 89 change deserves attention and resources on a similar scale to our other town public safety departments. 90 91 This plan has several functions: 92 It is a stand-alone document and a supplement to the 2016-2024 Williston Comprehensive Plan 93 It is a plan to help Vermont achieve the goals of the state Comprehensive Energy Plan (CEP) at • 94 the local level 95 It is a plan to obtain a "determination of energy compliance" from the Chittenden County • 96 Regional Planning Commission (CCRPC) that will assure the plan will receive "substantial 97 deference" when siting renewable energy projects within the town. 98 99 This plan was developed according to the Vermont Department of Public Service's energy planning 100 standards. The energy planning standards focus on a long-term horizon. The Town of Williston will 101 consider accelerating the pace of change needed to implement the pathways outlined in this plan. The 102 plan is written based on current technologies, with the flexibility to adapt to future technological 103 advances. 104 105 While the town can educate and inform, it has limited power to effect change by itself. The town 106 recognizes that progress will only be achieved through the leadership, innovation and actions of 107 residents, businesses, partners and government entities.

- 108 The major areas addressed in this plan, since they create the bulk of the greenhouse gas (GHG)
- 109 emissions and the energy budget, are:
- 110 Transportation
- 111 Building Energy Usage
- 112 Recycling and Consumption
- 113 Electrical Energy Generation
- 114 Agriculture
- 115

116 The sections of this plan are organized into:

- 117 *Goals* that tell us what we are aiming for.
- 118 *Local Objectives* that indicate the areas we will address to get to our *goals*.
- Pathways that identify the task, the responsible entity, and a time frame to accomplish each
 local objective.

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.

State Goals

The 2016 State of Vermont Comprehensive Energy Plan (CEP) and Vermont Statute set ambitiousstatewide energy goals:

- To reduce greenhouse gas emissions, with a 50% reduction below 1990 levels (8.59 MMTCO2e)¹
 by 2028, and 75% reduction below 1990 levels by 2050 (10 V.S.A. § 578).
- To reduce total energy consumption per capita by 15% by 2025 and by more than 33% by 2050.
- To meet 25% of remaining energy needs from renewable sources by 2025, 40% by 2035, and
 90% by 2050.
- 130

121 122

131 Three goals to achieve by 2025, identified in the 2016 Vermont CEP, are:

- 132 10% renewable transportation energy
- 30% renewable building energy use
- 134 67% renewable electric power
- An additional 2020 goal is: To substantially improve the energy efficiency of 25% of the state's housingstock by 2020.
- 137 Going forward, Vermont is expecting to rely more on electricity as an energy source. This includes
- 138 shifting most light duty vehicles to electric vehicles and transforming the way buildings are heated. Even
- 139 though more electricity is being used, electric appliances such as heat pumps and electric vehicles are
- 140 more energy efficient than fossil fuel counterparts, resulting in a reduction in total per capita energy
- 141 use. Building and retrofitting structures from an energy efficiency perspective while generating and
- 142 using more renewable energy is also a critical step. The Community Energy Profile section of this plan
- 143 provides quantitative details of Williston's current energy profile and the magnitude of change needed
- 144 to make these transformations.

¹ Vermont Greenhouse Gas Emissions Inventory Update (1990-2015), June 2018

145 146

Local Objectives

147 148	Meeting the State goals at the local level will require ambitious action to transform the way Williston uses and produces energy. This transformation will enhance the health and vigor of the Town's local
149	economy and long-term affordability for residents. To do so, Williston will increase public awareness of
150	energy issues, assess local energy use, and identify opportunities for conservation, energy source
151	conversion, and renewable energy generation.
152	Between now (2020) and 2050 Williston intends to:
153	1. Reduce total energy use per capita by 27%
154	2. Reduce greenhouse gas emissions, with a 50% reduction below 1990 levels by 2028, and a
155	75% reduction below 1990 levels by 2050.
156	3. Double the amount of renewable energy generation sited in Williston
157	4. Reduce energy used to heat, cool and power buildings by individuals, organizations and the
158	Town of Williston.
159	5. Weatherize 90% of homes and at least 50% of commercial and industrial establishments
160	 Require all new construction to verify that it meets defined energy efficiency standards. Increase the charge of light duty electric vehicles registered in Willisten to 10% by 2025 and
160	
102	89% by 2050.
167	8. Fuel 96% of neavy-duty municipal vehicles with renewable resources and work with the
165	9 Equip 84% of homes with cold-climate heat numps (CCHP) and 14% of homes with wood
166	beat as a primary heat source
167	10. Shift from fossil fuels as the primary heat source to renewable sources of heat energy
168	including heat numps nowered by renewable energy and wood heating
160	11 Educate Williston citizens, town government, Champlain Valley School District (CVSD) and
170	nrivate husinesses about the economic and environmental value of transitioning from a
171	fossil-fuel vehicle society
172	12. Act to decrease transportation energy demand by promoting electric vehicles, increasing the
173	awareness of and supporting the use of nublic transit walking/hiking infrastructure
174	carsharing, and ridesharing.
175	13. Continue a land-use policy that embraces smart and sustainable growth
176	14. Reduce our waste stream by reducing consumption, expanding the sharing economy and
177	fixer-spaces, and recycling 100% of our materials thereby reducing energy needed to
178	produce these materials.
179	15. Increase the use of regenerative design principles in landscaping, agriculture and
180	conservation land management methods
181	
182	Meeting 90% of energy needs with renewable sources by 2050 will require Williston to produce an
183	additional 14.775 MWh to 44.819 MWh megawatt hours (MWh) of electricity annually by 2050. It is
184	essential that Williston move to a distributed energy system which utilizes solar, wind, biomass, storage
185	and microgrids. Williston produces 29,872 MWh from solar, wind, and hydro facilities (see the

185 and microgrids. Williston produces 29,872 MWh from solar, wind, and186 Renewable Energy Generation section and Table 6 for more details).

- 187 Finally, improving the energy efficiency of
- 188 90% of the town's housing stock will
- 189 require a major effort on the part of the
- 190 town's government. This should include
- 191 partnering with outside organizations, and
- 192 educating homeowners to ensure that the
- 193 housing stock is weatherized and energy
- 194 efficient.
- 195 The transformation of the energy landscape
- 196 in Williston also can increase energy
- 197 security and economic stability for
- 198 residents, if the goals are met equitably.
- 199 Residents and businesses can save money
- 200 by retrofitting buildings to be more energy
- 201 efficient as the cost of efficiency
- 202 improvements is lower than the cost of



Figure 1 Source: Efficiency Vermont, 2017 Annual Report

purchasing additional energy (see Figure 1.0). The cost of saving electricity through improved efficiency
is 3.6 cents/kWh vs a cost of 8.4 cents/kWh for supplying electricity. Additionally, the cost of saving
fossil fuel through improved efficiencies, compared to the cost of supplying fossil fuel is \$16.56/MMBtu
vs. \$18.08/MMBtu. The savings between efficiency and supplying fossil fuels is small because oil and gas
are cheap today (2020). Regardless, efficiency is still a sound investment for residents, the town, and
local business.

209

Residents of all income levels must be able to access weatherization services, more efficient technology,
 and renewable energy. A Williston Energy Committee and other parties within Williston will strive to

ensure equal access to services and technology by leveraging a network of partners and funding sources.

213 The work to move towards a more equitable and efficient energy system involves everyone and can

- 214 benefit the entire community. Energy efficiency and renewable energy development also support green
- 215 jobs and adds to the local economy.

Details on changes that must occur within Williston to meet these goals are described in the following
sections. Meeting these goals will require a great deal of work in the short term. Progress towards the
weatherization goals set in the 2016 Comprehensive Energy Plans and legislation is already behind
schedule. For example, Vermont's statutory energy goals call for the weatherization of 60,000 homes in
Vermont by 2017, and 80,000 by 2022. According to the Energy Action Network 2017 Annual Report,

- only 23,397 homes in the state had been weatherized. Unfortunately, data is not available for the Town
- of Williston that provides an accurate count of the number of homes weatherized to date. Going
 forward, the Chittenden County Regional Planning Commission (CCRPC), in collaboration with Efficier
- forward, the Chittenden County Regional Planning Commission (CCRPC), in collaboration with Efficiency Vermont, hopes to be able to better track progress on building weatherization and be able to share the
- data. The following paragraph describes assumptions that can be made on the energy efficiency of the
- current housing stock based on the age of the housing and the year when the Vermont Energy Code
- became effective. Assumptions for the commercial stock cannot be made.

228 The 1997 Vermont Residential Building Energy code became effective in 1998. According to the CCRPC's 229 housing data 2,674 housing units were built in Williston before or during 1997 and 1,321 units were built 230 after 1997. Therefore, about 33% of homes were likely built according to the energy code effective at 231 the time of construction. Amendments to the energy code are made periodically. This is not intended to 232 mean that Williston has met its weatherization goal. Rather it is background information to assist the 233 town with understanding how to prioritize efforts to promote weatherization strategies for the housing 234 stock that predates the energy code. Additionally, energy modeling has indicated that Williston needs to 235 weatherize 90% of housing. This energy plan is intended to put the town back on track towards meeting 236 the vital goals stated above.

Energy Compliance

237 238

247

In 2016, Act 174 established a process for "enhanced energy planning," which encourages municipalities
to write plans that are "energy compliant." This plan is written to meet the standards for energy
planning established by Act 174 and outlined in 24 V.S.A. §4352. After the plan is adopted by the town
Selectboard, the town will seek an affirmative determination of energy compliance for this plan from
the CCRPC. A plan with an affirmative determination gains "substantial deference" in Public Utility
Commission (PUC) proceedings. Substantial deference means the plan's policies will be used to
determine if a proposed energy project meets the orderly development criteria in the Section 248

246 process unless other factors affecting the general good of the State outweighs this plan.

Community Energy Profile

248 Where we are today: Estimates of Current Energy Consumption

249 The energy profile for Williston provides an estimate of current energy consumption in the heating,

- electricity, and transportation sectors. These estimates are intended to be a baseline starting point to
- assist the town with understanding where they are in respect to Vermont's energy goals. Where
- 252 possible, data estimates on actual consumption are included. Where such data is not available, data
- substitutes are used. For example, consumption data for non-utility gas in Williston is extrapolated from
 Williston's proportionate share of Vermont's total consumption.

255 Heating

- 256 Williston consists of government and community buildings, homes, commercial/industrial buildings,
- farms, and other agricultural uses. About 89% of homes are heated with fossil fuels, with natural gas
- being the fuel type that about 65% of homes rely upon. Second to natural gas is fuel oil/kerosene at
- 15%. Propane is also utilized in Williston with about 9% of homes being heated with propane.Additionally, 6% of homes use wood and 5% of homes use electricity for heat. (See Table 1)
- 261 261
- 262 The Town of Williston needs to increase the proportion of homes that rely on renewable heat sources.
- 263 This increase will help the town to reduce the amount of fossil fuels and greenhouse gas emissions from
- 264 heating and advance local energy goals. Technology to heat homes with electricity and wood has

advanced significantly. For example, air source cold climate heat pumps are cost effective to operate
 and require electricity to move air inside and outside to heat and cool spaces. Further, the efficiency of
 wood heating has also improved with the advent of wood pellets and high-efficiency stoves.

Table 1 Home Heating Fuel Type

Fuel Type	Number of Homes	Margin of Error	Percent of Homes			
Utility Gas	2,495	+/- 198	65%			
Propane	339	+/-108	9%			
Electricity	180	+/-94	5%			
Fuel oil/Kerosene	556	+/-161	15%			
Wood	212	+/-108	6%			
Other Fuel	43	+/-44	1%			
Total Homes 3,825 +/-165 100%						
Source: American Community Survey Table B25040 2013-2017 5-year estimates						



Figure 2: Typical Heat Pump Circuit (Courtesy Carrier Corporation)

Data on heating fuel types used in the commercial/industrial sector are not available. This plan assumes
that businesses use natural gas because of its cost effectiveness at heating large spaces. See Table 2 on
natural gas consumption for more detail on this sector.

278 The proportion of natural gas across the residential and commercial/industrial sectors has remained

- 279 steady. Residential customers use approximately 35% of natural gas in Williston and
- 280 commercial/industrial customers use about 65%. Though it is difficult to know for certain the reason,

overall natural gas consumption has decreased since 2015 likely due to milder winters and progressmade in building weatherization.

289

Table 2 Natural Gas Consumption by Sector (2015-2017) (Ref Table A3)

	2015			2016	2017	
	MMBtu	Percentage of Consumption	MMBtu	Percentage of Consumption	MMBtu	Percentage of Consumption
Residential	209,111	35%	191,447	36%	197,809	35%
Commercial/Industrial	391,079	65%	336,171	64%	363,277	65%
Total	600,190		527,618		561,086	
Source: Vermont Gas						
MMBtu: Million British Thermal Units						

290

291 For all types of heating fuel types weatherization is important to ensure that fuel is not wasted, and that 292 the building envelope is heated or cooled efficiently. Weatherization is the practice of modifying a 293 building to reduce energy consumption and optimize energy efficiency. A properly weatherized building 294 typically is either built with or is retrofitted with insulation and air sealing. Air sealing greatly reduces 295 outside air from entering the building. While insulation, keeps the conditioned air inside the building. Air 296 sealing and insulation go hand in hand for maintaining comfort and saving money and are necessary on 297 any surface of the building that divides the interior from the exterior. Between 2016-2018, 418 Home 298 Performance with Energy Star Projects [®] have been completed in Williston (Source: Efficiency Vermont 299 CCRPC Report December 11, 2019). Please note that a project may be associated with multiple 300 customers and the number of homes weatherized to date is not available at the time of writing this 301 plan.

302 Electricity

Total electricity use in Williston has decreased between 2015 and 2017 even though population and the
 number of businesses has increased. This decrease is likely due to the installation of energy efficient
 appliances, lighting, and smart technologies.

306 307

Table 3 Electricity Consumption (2015-2017)						
Sector	2015	2016	2017			
Commercial & Industrial (MWh)	94,236	93,545	91,410			
Residential (MWh)	26,228	26,111	25,337			
Total (MWh)	120,464	119,655	116,747			
Number of Residential Units	3,783	3,869	3,916			
Average Residential Usage (KWH / Residential Unit)	6,933	6,749	6,470			
Source: Efficiency Vermont, No	vember 2018					

308

309 Energy Efficiency

310 Energy efficiency is a suite of products and services intended to reduce the amount of energy required

- 311 to power lights, appliances, and building heating, ventilation and air conditioning (HVAC).
- 312

Between 2015-2017 customers in the Town of Williston have saved a significant amount of money (\$1.2 million) through energy efficiencies. This is the result of reduced consumption of electricity (8.2 million KWh), and thermal energy (4.7 million MMBTUs). These savings are the result of a variety of projects ranging from HVAC upgrades, lighting controls, and building envelope insulation and air sealing. Further details on energy savings are described in Table 4 below.

318

	1	1	1	1	
	2015	2016	2017	Total	
Electric Savings (MWh)	2,051	2,630	3,549	8,229	
Residential	1,244	1,110	1,140	3,493	
Commercial & Industrial	807,026	1,519,719	2,409,459	4,736,204	
Thermal Savings (MMBTU)	2,720	867	1,277	4,864	
Residential	1,204	1,436	2,216	4,857	
Commercial & Industrial	1,516	(570)	(939)	7	
	[[[
Total Customer Cost Savings	\$314,518	\$384,531	\$504,137	\$1,203,186	
Residential	\$214,483	\$191,133	\$200,425	\$606,040	
Commercial & Industrial	\$100,036	\$193,398	\$303,712	\$597,146	
Source: Efficiency Vermont, November 2018					

319 Table 4 Electric and Thermal Savings (2015-2017)

320

321

322 Transportation

The Town of Williston relies on fossil-fuels for most of its transportation needs. In 2015, there were6,605 fossil-fuel burning light duty vehicles registered in the community. Additionally, there were

325 several heavy-duty vehicles. In 2017, 35 electric cars were registered in Williston.

- 326
- 327

Table 5 Number and Type of Vehicles (Ref Table A1)

Туре	Number	
Fossil Fuel Burning Light Duty Vehicles	6 605	
(2015)	0,005	
Heavy Duty Vehicles	Unknown	
Electric Light Duty Vehicles (July 2017)	35	
Source: DMV, Drive Electric Vermont	-	

328

329 Renewable Energy Generation

Renewable energy generation in Williston is produced by 325 solar sites, 1 small net-metered wind site,

- and a hydro dam. The energy generation produced by the hydro dam on the Winooski River is shared
- 332 with Essex Junction, according to guidance from the Department of Public Service which states that
- 333 generation be counted based on its physical location.
- 334
- 335

Table 6 Existing	g Renewable Energy	Generation (2019)

	Sites	Power (MW)	Energy (MWh)
Solar	319	10.358	11,909
Wind	1	0.0095	23
Hydro	1	4.025	18,300
Total	321	14	30,232

³³⁶

Source: Energy Action Network, Community Energy Dashboard (September 2019)

337 Where we are going: Estimated Future Energy Targets

The data included in this section illustrates one path that Williston could take to meet the energy goals
described earlier in this plan. The path to meet these goals is discussed in terms of targets. The targets
are intended to be a demonstration of one possible scenario to reach 90% renewable by 2050.

341

342 To meet the goals, Williston must:

- Plan for a major shift away from fossil fuels to renewable sources of energy in the transportation, heating, agricultural, and industrial sectors.
- Improve efficiencies in transportation, heating, and other electricity consumption.
 - Increase renewable energy generation sited in Williston.

However, the actual path may change. Actions or technology will likely evolve between now and 2050 asnew and improved technologies become available.

349

346

The targets in this section provide checkpoints for future energy use across all sectors (transportation, heating, and electricity). The estimates also include renewable energy generation targets. Williston's targets represent the amount of renewable energy generation that the community will site in order to meet the amount of local renewable energy generation required. Please note that these data are a starting point for considering a renewable energy future. This information will provide the framework for a discussion about changes that will need to occur within Williston to ensure energy goals are met. Targets for future energy use are drawn from the Long-Range Energy Alternatives Planning (LEAP)

- 358 analysis for Chittenden County. Completed by the Vermont Energy Investment Corporation (VEIC), the
- 359 LEAP model is an accounting framework that provides targets which represent one way to achieve the
- 360 energy goals. Other strategies may allow Williston to meet its goals (for example, switching some wood
- 361 heating systems to heat pump systems). See the <u>2018 Chittenden County ECOS Plan Supplement 6</u> for
- 362 information about the methodology.
- 363

To achieve these targets, a concerted effort in Williston is needed to engage all stakeholders to conserve

- energy and transition to renewable sources. The Energy Plan Task Force has recommended multiple
 projects in each area. Despite the initial investment, completing the projects will lead to energy savings
- 366 projects in each area. Despite the initial investment, completing the projects will lead to energy saving 367 and an improved quality of life for all residents in Williston through financial savings, improved air
- 368 quality, health, and reduced greenhouse gas emissions.

369 Total Energy Use Per Capita

The LEAP model estimates that total future energy use will decrease over the next 30 years, even as fuel switching occurs from fossil fuels to renewably-sourced electricity, including the transportation and heating sectors. As shown in the table below, total energy use and per capita energy use decrease (even as population increases) because of technological advances in more efficient electric appliances such as electric vehicles and cold climate heat pumps, which use less energy than fossil fuel counterparts.

375

376

Table 7 Future Total Energy Use Per Capita Estimates (2015-2050) (Ref Table B5)

	2015	2025	2035	2050
Total Energy				
Use	1,563,338	1,521,745	1,426,100	1,321,309
(MMBTU)				
Population	9,409	10,014	10,402	10,926
Total Energy				
Use Per	166	152	137	121
Capita	166			
(MMBTU)				
Reduction in				
Total Energy		_0%	_17%	_77%
Use Per		-976	-1776	-2776
Capita				
Source: LEAP (includes industrial energy use)				
Note: The per capita use only includes the people which reside in Willison. It does not include the				

employment population.

377 Heating Targets for the Commercial and Residential Sectors

378 Thermal targets for Williston in 2050 estimate a reduction in total commercial thermal energy use (see

379 Table 8 below) This will primarily be achieved through weatherization and the use of more efficient

380 heating technologies such as cold climate heat pumps (CCHP) and biomass/wood heat. These targets

also estimate that renewable sources of heat will become more common. By 2050, 35% of businesses

382 are projected to be using heat pumps and 10% of businesses to be using wood heating.

383 Thermal energy use in Williston homes is projected to decrease (see Table 8 and 9 below). Residential

buildings will use less energy for space heating due to an increase in the percent of buildings that are

385 weatherized, and by increased efficiencies in heating technology. To achieve the projected energy

386 savings, 90% of homes in Williston need to be weatherized by 2050. Additionally, the percent of homes

- relying on heat pumps needs to increase to 86%.
- 388

389 Heat pumps are powered by renewably sourced electricity are a more efficient way to heat a building

390 compared to fossil fuels, including fuels such as propane delivered by vehicle. Wood heating also plays

an important role in reducing thermal energy use and increasing the amount of renewable fuel sources

392 for the thermal sector. The LEAP model estimates that at least 14% of homes will rely on wood heat for

393 space heating by 2050.

394

395 Table 8 Future Commercial Thermal Energy Use Estimates (2025-2050) (Ref Table B2)

396

	2025	2035	2050
Total Energy Usage (MMBtu)	376,345	358,468	317,071
Percent of Commercial	100/	200/	240/
Buildings Weatherized	18%	20%	34%
Energy Saved by	20,231	28,051	67,601
Weatherization (MMBtu)			
Percent of Total Buildings	19%	31%	35%
using Heat Pumps*			
Heat Pump Energy (MMBtu)	30,517	60,326	90,134
Percent of Total Buildings	00/	9%	10%
using Wood Heat	070		
Wood Heat Energy (MMBtu)	45,538	62,722	91,827
Source: LEAP Model			
*Heat pumps fueled by renewably sourced electricity			

397

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399

400

Table 9 Future Residential Thermal Energy Use Estimates (2025-2050) (Ref Table B3)

	2025	2035	2050 01
Total Energy Usage (MMBtu)	338,820	287,280	198,9 4002
Percent of Residential	1 / 0/	260/	403
Buildings Weatherized	14 /0	3076	⁹⁰ 404
Energy Saved by	15,816	43,200	135, 2⁴95
Weatherization (MMBtu)			406
Percent of Buildings using	18%	37%	60% ⁰⁷
Heat Pumps			408
Heat Pump Energy (MMBtu)	21,960	45,180	66,2 4 09 410
Percent of Total Buildings			411
using Wood Heat	14%	14%	14%412
Mood Hoot From (MAADtu)	62.220	62 290	EA 74,13
wood Heat Energy (WIVIBtu)	02,220	62,280	<u> </u>

Electricity Targets The electricity targets (shown in Table 10) for Willison estimate that electricity consumption will increase as the heating and transportation move to renewably-sourced electricity. Although, an increase in electricity is estimated to occur in future years, residential use of electricity

415 will continue to decline as household appliances become even more advanced and efficient given smart

416 technology and behavior management. Regardless of the end use, electricity demand will likely require

417 new approaches to load management for homes and businesses. Additionally, Emerging appliances

418 need to be paired with electricity storage technologies to manage peak demands, and store excess

419 power generated by intermittent renewable sources. These will become more important as the
420 technology develops and the proportion of generation from renewable sources increases. The

421 community will work with electric utility companies to support these infrastructure needs and educate

422 residents and businesses on changes in technology.

reported with and without the industrial sector.

- 423
- 424

Table 10 Estimated Future Electricity Demand

	2025	2035	2050
Commercial/Residential (MWh)	92,341	117,696	152,528
Industrial (MWh)	29,963	38,743	52,006
Total (MWh)	122,304	156,439	204,533
Total Electricity Saved by Residences (MWh)	6,420	12,960	24,240
Target percentage of Residences that need to increase their Electrical Efficiency	30%	58%	98%
Target percentage of Commercial/Industrial Establishments that need to increase their Electrical Efficiency	30%	58%	98%
Source: LEAP Model *Please not that industrial electricity use is recognized as the most difficult element to estimate because of variations in the sector. Therefore, future electricity use and total electricity is			

425 **Transportation**

- The transportation energy targets for Williston, are described in Table 11 below. These represent an ambitious electrification of the transportation sector to increase the amount of renewable energy used to power passenger vehicles. To meet the energy goals, fossil fuel consumption from light duty vehicles will need to decrease. This will primarily be achieved by converting fossil fuel vehicles to more efficient electric vehicles. The LEAP model shows that to achieve this reduction, 89% of passenger vehicles must be electric. Electrifying the light duty sector will also lead to a dramatic increase in electricity use in the transportation sector and a significant decrease in gasoline consumption.
- 433

434 The LEAP model estimates that the heavy-duty sector will transition to biodiesel as its primary fuel

435 source. Biodiesel energy use is projected to increase to about 96% for heavy duty fleet vehicles by 2050.

436 This plan disagrees with that assumption and projects that electric and fuel celled vehicles will replace

- 437 fossil fueled vehicles in all categories as technology develops and cost are lowered.
- 438

439 In addition to switching to electric vehicles, Williston can reduce the energy used in the transportation

- sector through Transportation Demand Management (TDM) strategies. TDM strategies are low-cost
- 441 programs that focus on decreasing use of Single Occupancy Vehicles (SOVs) and increasing the use of
- 442 other modes of transportation. Williston already has some transit and bike path infrastructure.
- 443 Improvements could be made to increase the frequency of transit service and availability of bike lanes

and bike paths to better enable residents to use these modes more regularly. Low cost pilot projects
could also be helpful in locating separated bike lanes. Open Street Programs, such as Burlington's Open
Streets Program may educate and motivate residents to bike more. TDM has great potential for saving
energy as automobiles are identified as the predominant mode of transportation for Williston residents.
Reducing single occupancy rides for local trips and replacing the former 1V bus route with a micro-bus
system that engages all of Williston's neighborhoods should be an energy-reducing strategy.

- 450
- 451
- 452

Table 11 Future Transportation Energy Use Estimates (2025-2050) (Ref Table B1)

			-
	2025	2035	2050
Total Light Duty Transportation	200 270		107 170
Energy Use (MMBtu)	309,270	240,582	107,470
Electricity Used for Light Duty	5 101	25 792	75 520
Transportation (MMBtu)	5,191	35,762	75,520
Light Duty Electric Vehicles (% of	69/	110/	110/
Vehicle Fleet)	0%	4170	41%
Biofuel Blended* Energy Used for			
Light Duty Transportation	384,087	210,800	31,951
(MMBtu)			
Biofuel Blend*Light Duty Vehicles	0.49/	59%	11%
(% of Vehicle Fleet)	94%		
Heavy-Duty Transportation Energy	33%	58%	96%
Use from Renewable Energy			
Heavy-Duty Transportation Energy			
Use from Fossil Fuels (Percent of	67%	42%	4%
Total)			
*This estimate measures biofuels blended with	fossil fuels. Source: VTr	ans, LEAP Mo	del. While the
CCRPC believes that biofuels will play a major part in reducing GHGs, there is no evidence that the			ence that the
market is pivoting to this strategy and this plan	believes that electric vel	hicles will event	ually replace
combustion technologies in all sectors. The tra	combustion technologies in all sectors. The transportation pathways in this plan are based upon this		

belief.

453 **Renewable Energy Generation Targets and Generation Potential**

454 The 2018 Chittenden County ECOS Plan estimates the regional and municipal roles in advancing the

455 State goal. The ECOS Plan sets high and low regional renewable energy targets. The Chittenden County

456 targets are 756,250 MWh (Megawatt hours) of energy to meet the low target, and 1,265,134 MWh to

- 457 meet the high target.
- 458

459 Regionally, this means an additional 255,054 MWh of generation capacity to meet the low target, or

- 460 763,938 MWh to meet the high target. The ECOS Plan allocates the total amount of renewable energy to
- 461 each municipality based on each municipality's share of the region's population and electricity
- 462 consumption, and nets out existing renewable energy generation. Williston's generation target for 2050
- is an additional 14,775 MWh on the low end and 44,819 MWh on the high end.
- 464

The generation targets are technology neutral, meaning Williston can use any form of renewable generation (wind, solar, biomass, hydroelectric, etc.) to meet its goals. For example, if the targets were met with current solar technology only, meeting the target would require 192 acres to 292 acres of land dedicated to solar (See Figure 2). For more information on the methodology to estimate generation targets see the ECOS Plan Supplement 6.

- 470
- 471 472

473

Table 12 Renewable Energy Generation Target (Ref

ECOS Plan Table 29)

	Low Target	High Target
Existing (MWh)	29,	872
Additional (MWh)	14,775	44,819
Total (MWh)	44,647	74,691
Source: CCRPC		



474

475 The amount of wind and solar generation potential is

476 estimated in tables 13 and 14. This illustrates Williston's

477 ability to meet the targets described above. Energy

478 generation is represented by the total acreage required for

479 prime solar, base solar, or wind.

Requirements

481 **Prime solar or prime wind** are areas where models show the appropriate conditions for electricity482 generation, and where there are no constraints.

483

484 **Base solar or base wind** are areas where models show the appropriate conditions for electricity 485 generation, but where there are possible constraints. These constraints must be considered and may 486 reduce the development potential of a site. The siting policies in this plan indicate that "development 487 will be located to avoid state and local known constraints that have been field verified, and to minimize 488 impacts to state and local possible constraints that have been field verified". Please see the list on page 489 38 for the list of constraints. Williston's reported land available for existing and potential wind and solar 490 generation are based on models of the elevation, slope, and aspect of land, or the modeled wind speed, 491 in a municipality. These models do not remove existing impervious surfaces. Therefore, land-based 492 generation potential may be over-estimated in more developed areas.

493 494

495

Table 13 Land Available for Wind and Solar Generation (Ref Table C1, ECOS Plan Tables 30 & 31)

	Prime Acres	Base Acres	
Solar	501 acres (3% of town)	4,556 acres (19% of town)	
Wind	931 acres (5% of town)	9,464 acres (48% of town)	
Source: CCRPC, VCGI, DPS			
Note: It takes about 2.5 acres of solar panels to generate 1 MW of solar electricity			

496

497 Table 14 Estimated Renewable Energy Generation Potential (Ref Table C2)

⁴⁸⁰

	Power (MW)	Energy (MWh)
Rooftop Solar	9	11,495
Prime Ground	62	76 802
Mounted Solar	05	70,805
Base Ground	570	608 425
Mounted Solar	570	038,433
Prime Wind	37	114,178
Base Wind	379	1,160665

Source: CCRPC and the Department of Public Service

*Rooftop solar potential is calculated by assuming that a certain percentage of both residential and commercial rooftops can hold solar systems. Some rooftops cannot physically bear the weight of solar panels, therefore 100% 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 generation potential being double counted.

498

Implementation

500 Implementation Overview

499

501 Williston will achieve the energy goals in a holistic way by conserving and using energy efficiently, 502 reducing fossil fuels, and generating more renewable energy that will benefit the transportation, 503 heating, and electrical energy sectors. Williston's implementation methodology for taking energy action 504 is rooted in a logical progression of concepts along the continuum of influencers and entities within 505 town government, regional and local partners, residents, and business. The methodology begins with 506 the state energy goals found in the State of Vermont Comprehensive Energy Plan of 2016 and is 507 required to be included in the plan by the Vermont Department of Public Service's energy planning 508 standards. The state energy goals are the framework and reason for enhanced energy planning at the 509 local level. Making progress towards these goals requires an all-in approach as the State will not be able 510 to meet these goals alone. The Town of Williston has embraced these goals as their own and has set 511 local objectives which describes the activity to be undertaken. In order to meet these objectives, the 512 Town of Williston intends to work with partners, residents, and businesses on pathways that are either 513 policy changes, education, or administrative initiatives. A critical key to the implementation of the 514 energy goals is accountability. Accountability comes in the form of identifying who will be leading the 515 action and the timeframe for completion (short/medium/long). 516 517 This plan has presented the following logic model for implementation: 518 519 State Goals -----> Local Objectives -----> Pathways 520 521 Williston will do its part to assist in achieving the macro state goals by using the local objectives 522 identified in this plan as the guiding points. The pathways are the "boots on the ground" components 523 for implementing the plan, which are a means to achieve the local objectives and therefore the state 524 goals. 525 526 The following are pathways to achieve the local objectives identified by issue area. The timeframes 527 established are as follows: 528 529 Short term: 1-3 years 530 Medium term: 4-7 years 531 Long term: 8-10 years 532 533 To ensure successful accomplishment of the local objectives and state goals, the timeframes for many of 534 the goals is front-loaded. Many of them are shorter or medium term rather than long term.

1. General Pathways

536	Local Objectives 1-14
537	This is a vast plan over many years and to execute the pathways recommended, the town will require
538	sufficient funding and human resources.
539	
540	Pathways
541	1.1 Hire an Energy Coordinator on a full-time basis and additional staff as required to implement the
542	Energy Plan in the timeframes established in the plan. The Energy Coordinator will ensure that the goals
543	defined in Renewable Energy Generation Target (table 12) are met.
544	
545	Lead Entity: Selectboard
546	Timeframe: Short term
547	
548	1.2 Establish a permanent, volunteer staffed Energy Committee to assist the Energy Coordinator with
549	implementing the measures contained in the Energy Plan. The Committee will monitor the energy plan
550	pathways to assess progress made against the plan's stated benchmarks, and make recommendations
551	to alter the pathways to assure that the town will reach its energy goals. The Energy Committee will be
552	appointed by and report to the Selectboard and contain 5-7 members including the Town Energy
553	Coordinator. The Energy Committee will serve as the liaison to the community. Subcommittee
554	volunteers may be added as needed.
555	
556	Lead Entity: Selectboard
557	Timeframe: Short term
558	
559	1.3 Monitor changes to state and federal policies as they relate to energy plan goals and objectives.
560	Continue to proactively participate in the legislative process. Seek out funding opportunities beyond
561	existing municipal revenue sources such as utility companies, public-private partnerships, state funding,
562	and federal funding to achieve stated pathways while minimizing burden on Williston taxpayers.
563	
564	Lead Entity: Energy Committee
565	Timeframe: Ongoing
566	

567 **2. Transportation Energy**

568 Local Objectives

569 570	1. Educate Williston citizens, town government, Champlain Valley School District (CVSD) and private businesses about the economic and environmental value of transitioning from a
571 572 573	 Act to decrease transportation energy demand by promoting electric vehicles, increasing the awareness of and supporting the use of public transit, walking/biking infrastructure,
574 575 576	 Increase the share of light-duty electric vehicles registered in Williston to 10% by 2025 and 89% by 2050.
577 578 570	4. Fuel 96% of heavy-duty municipal vehicles with renewable resources and work with the school district to fuel school vehicles with renewable sources Pathways
580 581 582 583 584 585 586	2.1 Partner with Drive Electric Vermont and Go-Vermont, for-profit and nonprofit organizations, vehicle dealers and manufacturers, and state agencies to organize high-visibility events where people can see and test drive Electric Vehicles (EVs), such as energy fairs and other community events. Events will also leverage local media and public access coverage to showcase residents and organizations that are helping to propel the transition to EVs. Host a "show and tell" day featuring different kinds of EVs and giving people interested in purchasing them an opportunity to talk with fellow community members who own them.
587 588 589	Lead Entity: Energy Committee Timeframe: Short-term/On-going
590 591 592	2.2 Promote the Drive Electric Vermont webpage, which connects users to financial incentives, dealers, and recharging stations for EVs. Work with the town to add a link to this page on the Town of Williston web site.
594 595 595	Lead Entity: Energy Committee Timeframe: Short-term
597 598 599	2.3 Continue to work with Local Motion to make Williston safe and welcoming for bicycling, walking, running, skiing, etc. Identify issues and opportunities for walk-bike improvements and connections.
600 601	Lead Entity: Planning Commission or a new Mobility Committee Timeframe: Ongoing
602 603 604 605 606	2.4 Create local park-and-ride spaces and explore opportunities to expand the number of vehicle parking and EV charging spaces. Provide greater connectivity between public transit and park-and-ride locations. (Town Plan 6.4.4)
607 608	Lead Entity: Town Administration Timeframe: Ongoing

609		
610 611 612 613 614 615 616	2.5 Work with Green Mountain Transit (GMT) to create a diverse mobility solution to connect the residential areas of Williston to the Taft Corners commercial area. To be successful, the transit schedule must be frequent and cost of ridership inexpensive. The benefits of this approach include improving transportation services for Town residents, reducing single occupancy vehicle usage, and reducing transportation energy and emissions. This is an emerging field of transportation that has high levels of operational flexibility.	
617 618 619	Lead Entity: Town Administration Timeframe: Short Term	
620 621 622 623	2.6 Work with public utilities to assess current access to public and workplace EV charging stations. Identify strategic locations where charging stations will be added. The town will work with non- governmental entities to encourage the installation of EVs at these strategic locations. The town will provide charging stations at prominent publicly owned locations such as municipal parking lots.	
624 625	Leading Entity: Town Administration Timeframe: Short-term	
626 627 628 629 630 631	2.7 Create a provision in the town's Unified Development Bylaw that requires any new commercial, industrial or residential development to install an appropriate quantity of EV charging stations, and establish infrastructure for future expansion. This also applies to significant changes to existing commercial, industrial or residential development.	
632 633 634	Leading Entity: Planning Commission Timeframe: Short-term	
635 636 637 638 639	2.8 Work with the school district to maximize ridership for public school buses by improving and promoting the school bus schedule and busing policies, encourage walking (Safe routes to School), minimize use of private vehicles for student transport, and to replace their buses with electric buses when the individual buses are due for replacement.	5
640 641 642	Leading Entity: Town Administration Timeframe: Ongoing	
643 644 645 646 647	2.9 Support employer and residential property manager programs to encourage transit use, telecommuting, carpooling, vanpooling, walking, and biking for employees' commute trips. Encourage employers to offer such programs and provide information on tax benefits that may be available for doing so. Work with Go Vermont and other organizations.	
648 649	Leading Entity: Town Administration Timeframe: Ongoing	
650		

651 2.10 The town will replace their light duty vehicles with EVs (electric vehicles) as the individual vehicles 652 are due for replacement. Heavy duty municipal will be replaced as their electric counterpart become 653 available. 654 655 Leading Entity: Town Administration 656 Timeframe: Medium term 657 658 2.11 Explore a tiered electric transportation (for example, electric vehicles or bicycles, public transit 659 fares) rebate program, ensuring it is not regressive and explore funding mechanisms available to the 660 town. 661 662 Leading Entity: Energy Committee 663 **Timeframe: Short Term** 664 665 2.12 The town should establish a multimodal path plan to ensure that it is adequate to address the 666 greater need to conserve energy by moving single occupant vehicle trips to bicycle and pedestrian 667 commuting, including connections to neighboring jurisdictions. The greatest need is to create paths 668 that support commuting with the secondary benefit of recreation activities. 669 670 Lead Entity: Town Administration 671 Timeframe: Short Term 672 673 2.13 Maintain bike paths and sidewalk year-round to provide an alternative transportation option. Town 674 highway infrastructure should utilize street design that reduces speeding, supports safe use of 675 shared road facilities, provide protected on and off-road infrastructure for cyclists, and safe 676 pedestrian connections. 677 678 Lead Entity: Town Administration 679 Timeframe: Short Term

680

681 **3. Building Energy Usage**

682 Local Objectives: 683 1. Shift from fossil fuels as the primary heat source to renewable sources of heat energy, including 684 heat pumps powered by renewable energy and wood heating. 685 2. Weatherize 90% of homes and at least 50% of commercial and industrial establishments 686 3. Equip 84% of homes with cold-climate heat pumps (CCHP) and 14% of homes with wood heat as 687 a primary heat source. 688 689 Pathways: 690 3.1 The town will publish a summary of energy used by Town buildings and vehicles in the annual 691 report, as well as the estimated or calculated impact of efficiency measures already taken. The 692 report will describe the progress the town is making towards the goals of the town's energy plan 693 using the summarized Energy Star Portfolio Platform. The energy consumed (gallons of oil/cubic foot 694 of natural gas, kilowatt hours of electricity used, etc.) will be summarized along with costs and 695 benchmarking to show changes. Building performance should be represented in terms of an energy 696 use index of millions of BTUs per square foot and energy star rating, over a 12-month period. 697 698 Leading Entity: Town Administration 699 Timeframe: Ongoing 700 701 3.2 The Energy Coordinator will work with the Champlain Valley School District (CVSD) to publish a 702 summary of energy used by school buildings in their annual report, as well as the estimated or 703 calculated impact of efficiency measures already taken. The report will describe the process the 704 schools are making toward the goals of the state's Comprehensive Energy Plan of 2016 using the 705 summarized Energy Star Portfolio Platform. The energy consumed (gallons of oil, /cubic foot of 706 natural gas, kilowatt hours of electricity used, etc.) will be summarized along with costs and 707 benchmarking to show changes. Building performance should be represented in terms of an energy 708 use index of millions of BTUs per square foot and energy star rating, over a 12-month period. 709 710 Leading Entity: Energy Coordinator & School Administration 711 Timeframe: Ongoing 712 713 3.3 Review the energy audits of municipal buildings that have already been performed for compliance 714 to those audits and review and implement actions that were recommended but not performed. 715 These actions shall be part of the capital budget. 716 717 Lead Entity: Energy Coordinator 718 Timeframe: Identify short-term, capital plan medium term 719 720 3.4 The town will work collaboratively with the utilities and energy vendors to develop a plan and 721 schedule to assess the efficiency levels of municipal thermal building envelopes, lighting, HVAC, and

722	other equipment and replace as necessary with renewable energy equipment that has an energy
723	star rating.
724	
725	Lead Entity: Energy Coordinator
726	Timeframe: Developing a plan & schedule short-term, capital plan medium term
727	
728	3.5 The Energy Coordinator will assist the Champlain Valley School District to work collaboratively with
729	the utilities and energy vendors to develop a plan and schedule to assess the efficiency levels of
730	municipal thermal building envelopes, lighting, HVAC, and other equipment and replace as
731	necessary with renewable energy equipment that has an energy star rating.
732	
733	Lead Entity: Energy Coordinator & School Administration
734	Timeframe: Developing a plan & schedule short-term, capital plan medium term
735	
736	3.6 Create a revolving-fund program to perform Energy Audits on municipal buildings that have not
737	been previously audited. Develop a program to weatherize these buildings and return a portion of
738	the energy savings for three years to the fund to support other municipal energy audits resulting in
739	100% of all municipal buildings weatherized by 2025.
740	
741	Lead Entity: Energy Coordinator
742	Timeframe: Identify short-term, capital plan medium term
743	
744	3.7 Work collaboratively with businesses, utilities and energy vendors to develop a plan and schedule to
745	assess the efficiency levels of the business' thermal building envelopes, lighting, HVAC and other
746	equipment and replace as necessary and feasible. This assessment should include an analysis of how
747	conversion to heat-pump or pellet wood heating sources would affect the building and what the
748	cost to replace or supplement current equipment to these sources would be.
749	
750	Lead Entity: Energy Coordinator & Energy Committee
751	Timeframe: Medium term
752	
753	3.8 Perform a survey of Town residences to determine which had an energy audit performed and have
754	been weatherized.
755	
756	Lead Entity: Energy Coordinator
757	Timeframe: Short term
758	
759	3.9 Create a funding mechanism to perform energy audits on town residences that have not been
760	previously audited and develop a program to weatherize these residences to put the town on track
761	to achieve the intended goal of having 90% of Williston's homes weatherized by 2050. Of the 3,825
762	homes in Williston, 2,674 houses were built before the Vermont Residential Building Code was
763	adopted in 1998. The intention is to weatherize these, where the energy savings will be greatest

764 first. The audit should include a life cycle cost analysis of various energy saving measures and 765 renewable energy options. 766 767 Lead Entity: Energy Coordinator 768 Timeframe: Short-term to develop program, yearly to identify and implement; yearly in capital 769 budget 770 771 3.10 Create a funding mechanism to incorporate air-source, cold-climate heats pumps or other fossil-fuel 772 free devices in at least 90% of residences by 2050, including a collaboration with utility companies. 773 774 775 Lead Entity: Energy Coordinator 776 Timeframe: Short term to develop program, offer annually 777 778 3.11 On an annual basis, monitor building system performance (building commissioning) of municipal 779 facilities to ensure controls and automation settings are working properly and to improve 780 performance This will take place alongside routine system maintenance. 781 782 Lead Entity: Town Administration 783 Timeframe: Ongoing 784 785 3.12 Work with the Champlain Valley School District to incorporate commissioning so school facilities can 786 improve performance by ensuring controls and automation settings are working properly on an 787 annual basis. This will take place alongside routine system maintenance. 788 789 Lead Entity: School Administration 790 Timeframe: Ongoing 791 792 3.13 Energy efficiency and conservation must be a part of the town's procurement process. The town will 793 buy Energy Star certified appliances, heating equipment, and office equipment. Items that go out to 794 bid will have an energy efficiency requirement for consideration if the technology exists for the 795 item. The purchase of recycled paper materials and environmentally friendly office products will be 796 utilized, being mindful to purchase products that will be effective in their role. The town will 797 transition to paperless system for internal proceedings and town services (permitting, taxes, billing, 798 etc.) 799 800 Lead Entity: Town Administration 801 Timeframe: Ongoing 802 803 3.14 Work with the Champlain Valley School District to establish a procurement process that prioritizes 804 energy efficiency and conservation. The schools will buy Energy Star rated appliances, heating 805 equipment, and office equipment. Items that go out to bid will have an energy efficiency

806 requirement for consideration, if the technology exists for the item and is cost effective. The 807 purchase of recycled paper materials and environmentally friendly office products will be utilized, 808 being mindful to purchase products that will be effective in their role. The school district will 809 transition to paperless systems. 810 811 Lead Entity: School Administration & Energy Coordinator 812 Timeframe: Ongoing 813 814 3.15 Business signage and parking, as well as municipal street lighting should be upgraded with the most 815 efficient lighting solutions (ex. LEDs) and lighting standards shall set stricter standards on overnight 816 sign lighting. 817 Lead Entity: Energy Coordinator 818 Timeframe: Ongoing

819

820 4. Building Energy Education

821 4.1 In collaboration with energy vendors and Efficiency Vermont, identify opportunities for consumer 822 outreach and education on topics such as weatherization, home energy, and heating efficiency such 823 as Do it Yourself, Button Up, and other similar energy efficiency efforts. 824 825 Lead Entity: Energy Committee 826 Timeframe: Short-term/ongoing 827 828 4.2 Participate in education campaigns to provide best practices on cordwood and wood pellet 829 selection, storage and combustion to promote the most efficient, clean, and cost-effective use of 830 wood heating technology while protecting human and environmental health. 831 832 Lead Entity: Energy Committee 833 Timeframe: Short-term/ongoing 834 835 4.3 Promote wood stove change-out programs that take older non-EPA certified stoves out of service 836 and replace them with more efficient and lower emitting cord and pellet stoves. 837 838 Lead Entity: Energy Committee 839 Timeframe: Short-term/ongoing 840 841 4.4 Facilitate a workshop and conduct building walk-throughs for owners and tenants of rental housing 842 to encourage implementation of energy efficiency measures. 843 844 Lead Entity: Energy Committee 845 Timeframe: Short-term/ongoing 846 847 4.5 Facilitate a workshop and conduct building walk-throughs for commercial and industrial businesses 848 to encourage implementation of energy efficiency measures. 849 850 Lead Entity: Energy Committee 851 Timeframe: Short-term/ongoing 852 853 4.6 The town will promote awareness of energy and climate change issues through education, 854 participation in town-wide challenges, and friendly regional competitions to bring down energy 855 consumption and renewable expansion 856 857 Lead Entity: Energy Committee 858 Timeframe: Short-term/ongoing 859

- 4.7 The Energy Committee shall review proposed bylaw amendments for compliance with the energyplan and draft proposed bylaw amendments as directed by the Planning Commission.
- 862863 Lead Entity: Energy Committee
- 864 Timeframe: Short-term/ongoing
- 4.8 Collaborate with local and regional partners, such as Go Vermont, Drive Electric Vermont and EAN
 (dashboard) to connect commuters and vehicle owner to education and resources about reducing
 vehicle trips.
- 869870 Lead Entity: Energy Committee
- 871 Timeframe: Short-term/ongoing

873 **5. Land Use**

874	Local Objectives				
875		1.	Require all new construction to verify that it meets defined energy efficiency standards.		
876		2.	Continue a land-use policy that embraces smart and sustainable growth		
877					
878	Pathv	vays			
879	5.1 Re	eview	and adopt the Vermont Building Energy Stretch Code or other comparable standard for all		
880	de	evelop	pment and renovations/additions in the Unified Development Bylaw.		
881					
882	Le	ad En	tity: Energy Committee to Recommend to Planning Commission		
883	Ti	mefra	ime: Short Term		
884					
885	5.2 Re	equire	all new development to undergo the verified building performance assessment adopted		
886	fro	om Pa	athway 1 to ensure the building meets the current adopted codes for the type of		
887	со	onstru	ction. At the time of the writing of this plan that document is the 2015 Vermont Stretch		
888	Co	ode, w	which includes a building envelope inspection. In order to receive a certificate of occupancy		
889	th	is cod	le must be met by providing the Zoning Administrator with a certificate of compliance from a		
890	lic	ensec	d third-party inspector.		
891					
892	Le	ad En	itity: Planning Commission / Zoning Administrator		
893	Ti	mefra	ime: Medium Term		
894					
895	5.3 Re	eview	the Unified Development Bylaws to ensure parking and sign regulations do not burden the		
896	in	stallat	tion of electric vehicle charging stations, including Level III charging stations, and prioritize		
897	ve	hicles	s that use non-carbon-based fuels.		
898					
899					
900	Le	ad En	itity: Planning Commission		
901	Ti	mefra	ime: Medium Term		
902	- 4 -				
903	5.4 In	all zo	ning districts, incentives for installing overhead parking lot solar energy arrays should be		
904	CO	onside	red, such as setback relief or other means.		
905					
906	Le	ead En	itity: Planning Commission		
907	11	merra			
909	5 5 Re	ovico t	the Williston Unified Development Bylaw to require any new development to provide a		
910		nifica	ant nercentage of renewable energy generation and/or on-site storage, while considering		
911	316 C C	nstra	ints such as tonography or neighboring structures. Sizing energy output and storage should		
912	he		and on the expected on-site consumption of electricity including heat number and electric		
012	ch	argin	a on the expected on-site consumption of electricity, including heat pumps and electric		
01/		argin	ק וטן מענטוווטאובי מווע נוענאי.		
314					

915 Lead Entity: Planning Commission

916 917		Timeframe: Medium Term
918	5.6	To encourage site planning for energy conservation and renewable energy generation, the town
919		requires an applicant to work with Efficiency Vermont and electric utility companies. Such standards
920		might include language to maximize southern exposure for living spaces and solar generation,
921		protecting solar access to south facing walls and roofs, and providing windbreaks. (Existing Town
922		Plan10.4.1)
923		
924		Lead Entity: Energy Committee
925		Timeframe: Medium Term
926		
927	5.7	Continue to analyze future land use plans in terms of emissions, energy use, and mobility to inform
928		local land use policy. Building, maintaining, and servicing infrastructure requires energy. Evaluate
929		land use standards throughout the town to ensure that energy expenditure on infrastructure is done
930		in manner that achieves energy plan goals and targets.
931		
932		Lead Entity: Planning Staff, Planning Commission, and consultant
933		Timeframe: Long Term
934		
935	5.8	Consider revisions to Chapter 11 Growth Management that further incentivizes any level of energy
936		efficiency beyond the base requirements of Efficiency Vermont or simple calculation on-site
937		generation/storage requirements and uses a non-fossil fuel source for heating/cooling buildings.
938		Lead Entity: Planning Commission
939 940		Timeframe: Medium Term
941		
942	5.9	Explore a requirement that all new development provide cold-climate heat pumps (CCHPs), or other
943		devices using renewable energy sources, as the primary source for building and domestic hot water
944		heating.
945		Load Entity: Planning Commission
947		Timeframe: Medium Term
948		
949		
950	5.10	Reevaluate allowable residential density in mixed use and village zoning districts. Provide housing
951		opportunities in attractive, efficient building forms that equitably serve existing and future residents
952		of Williston enables a lifestyle without the expense of owning and operating a personal vehicle and
953		reduces expenditures on building energy consumption.
954 055		
955		Lead Entity: Planning Commission
956 957		Imeirame: Medium Term
958	5.11	Reevaluate district boundaries and residential density in the Agricultural Rural District (ARZD) with
959		an understanding of the energy consumption of existing development standards.

- 960 Lead Entity: Planning Commission
- 961 Timeframe: Medium Term
- 962963 5.12 Reevaluate the district boundaries, residential density, and design standards of the Residential
- 964 Zoning District (RZD) with the goal to have more compact development and preserve open space,
- 965 reduce energy consumption from building and maintaining existing development patterns.
- 966
- 967 Lead Entity: Planning Commission
- 968 Timeframe: Medium Term 969
- 5.13 Create a Transferable Development Rights (TDR) bank to transfer residential unit development from
 the rural and residential zoning districts to the Growth Center to shift new growth to parts of town
 where sustainable transportation and reduced energy use is possible. The bank could be an element
 of the Environmental Reserve Fund (ERF).
- 974975 Lead Entity: Planning Commission
- 976 Timeframe: Medium Term
- 977
- 978
- 979

980 6. Renewable Energy

981	Local Objectives				
982	1.	Reduce total energy use per capita by 27%			
983	2.	Double the amount of renewable energy generation sited in Williston			
984					
985	Pathways				
986	6.1 Create	a program to incentivize residents and businesses to install solar arrays on their roofs, over			
987	parking	g lots, or as appropriate as free-standing structures.			
988					
989	Lead E	ntity: Energy Coordinator			
990	Timefr	ame: Short term to develop program, offer annually			
991					
992	6.2 The to	wn shall continue to lead the community by increasing its renewable energy production and			
993	battery	storage portfolio of municipal buildings.			
994	Lead E	ntity: Town Administration			
995	Timefr	ame: Long Term			
996					
997	6.3 The To	wn of Williston will not assess property taxes on renewable energy systems and structural			
998	suppor	t systems (such as reinforcements and canopies), as allowable under Vermont state law. 32			
999	V.S.A.	§ 3802 ²			
1000					
1001	Lead E	ntity: Town Administration			
1002	Timefr	ame: Short Term			
1003					
1004	6.4 The to	wn will seek opportunities to encourage Utility-Scale Renewable Energy Projects. Farm			
1005	metha	ne plants, solar orchards, wood-burning co-generation plants, and ridgeline wind farms are			
1006	examp	les of large-scale renewable energy projects that will likely have a significant impact on			
1007	region	al energy production in the years to come. The Town of Williston will support these utility-			
1008	scale to	echnologies as clean energy sources continue to develop. Permitting these projects should			
1009	consid	er the renewable energy benefits along with environmental and aesthetic impacts as			
1010	discuss	ed in the following section. (Town Plan11.2.5)			
1011					
1012	Lead E	ntity: Town Administration			
1013	Timefr	ame: Medium Term			
1014					
1015	6.5 The to	wn will seek opportunities to pair renewable energy generation with electrical energy storage			
1016	to ensu	are energy is utilized to the fullest potential, to increase resiliency/reliability of electrical			
1017	system	during outages and decrease tossil tuel usage during peak periods. Renewable energy			
1018	genera	tion projects that can accommodate energy storage are strongly encouraged.			

² Under Vermont law, a town can vote to exclude renewable energy systems from local property tax. This means that renewable energy improvements to the home will not increase the property assessment. By applying this policy, the Town of Williston will both promote and enable the use of renewable energy. (Town Plan 11.1.4)

1019	
1020	Lead Entity: Planning Commission
1021	Timeframe: Ongoing
1022	
1023	6.6 All energy generation, distribution and storage facilities should consider a decommissioning plan
1024	with its Section 248 application.
1025	
1026	Lead Entity: Planning Commission
1027	Timeframe: ongoing
1028	
1029	6.7 The town will participate in the Public Utility Commission's Section 248 process by utilizing the siting
1030	policies identified later in this plan to review whether an energy project meets the orderly
1031	development criterion [30 V.S.A. § 248(b)(1)]. The town will be given substantial deference in the
1032	Public Utilities Commission's permitting process for ground mounted solar projects greater than
1033	15kW and for facilities using other technologies (not including hydroelectric facilities) of 50 kW or
1034	more.
1035	
1036	Lead Entity: Department of Planning/Zoning
1037	Timeframe: Ongoing
1038	6.8 To the greatest extent possible, energy storage equipment should be coupled with renewable
1039	energy generation projects to add a resilient source of energy.
1040	
1041	Lead Entity: Department of Planning/Zoning
1042	Timetrame: Ongoing
1043	

1044 **7. Consumption and Recycling**

1045	Local Objective:		
1046	1. Reduce our waste stream by reducing consumption, expanding the sharing economy and fixer-		
1047	spaces, and recycling 100% of our materials thereby reducing energy needed to produce these		
1048	materials.		
1049	Pathways		
1050	7.1 Coordinate with the Chittenden Solid Waste District (CSWD) to educate the public on the proper		
1051	sorting and waste reduction techniques. Raise awareness about single-use versus long-lasting		
1052	quality products.		
1053			
1054	Lead Entity: Town Administration		
1055	Timeframe: Ongoing		
1056			
1057	7.2 All public school and municipal facilities must provide composting, returnable, recycling and trash		
1058	bins on site.		
1059			
1060	Responsible Entity: Town and School District Administration		
1061	Timeframe: Ongoing		
1062			
1063	7.3 Municipal events must provide compostable or reusable containers, plates, cups and cutlery. Work		
1064	with the school district to require compostable or reusable items at school events.		
1065			
1066	Responsible Entity: Town and School District Administration		
1067	Timeframe: Ongoing		
1068			
1069	7.4 The town should explore enforcement options in accordance with Act 69 (single use plastics ban).		
1070			
1071	Responsible entity: Town Administration		
1072	Timeframe: Law is in effect July 1, 2020		
1073			
1074	7.5 Designate a municipal employee to oversee the reducing/reusing/recycling/composting/returning of		
1075	municipal purchases to reduce the waste stream.		
1076			
1077	Responsible Entity: Town Administration		
1078	Timeframe: Ongoing		
1079			
1080	7.6 Establish a lending library of tools, household items, sports equipment, clothing exchanges, e-bikes,		
1081	collective ownership of big-ticket items, and strong public spaces (playgrounds, community kitchen,		
1082	meeting rooms, etc.) to reduce consumption of minimally used household items.		
1083			
1084	Lead Entity: Town Administration		
1085	Timeframe: Ongoing		

8. Agriculture

1087	Local Objective:		
1088	1. Increase the use of regenerative design principles in landscaping, agriculture and conservation		
1089	land management methods		
1090			
1091	Pathways		
1092	8.1 The town will establish a tree nursery on a suitable parcel of town land (for example the Catamount		
1093	Community Forest). The objective is to 1) provide a diverse and affordable supply of trees for the		
1094	replacement of street and park trees maintained by the town (Town Plan 4.7.5); and 2) Create a		
1095	yearly food tree (fruits and nuts) planting schedule to sequester a specific amount of carbon dioxide		
1096	and to provide more local food sources.		
1097			
1098	Lead entity: Town Administration / Tree Warden / Sustainable Williston		
1099	Timeframe: Medium term		
1100			
1101	8.2 Establish a policy for regenerative agricultural practices that must be adhered to own any Town		
1102	owned property that is subject to a land lease agreement, including a condition of utilizing cover		
1103	crops during non-production seasons to prevent erosion, build healthier soil and help sequester		
1104	carbon.		
1105			
1106	Lead entity: Town Administration		
1107	Timeframe: Short term		
1108			
1109	8.3 Create and expand community gardens on Town and School owned property near residential areas.		
1110	Benefits include providing food to supply the school kitchens, farm to school programs, community		
1111	food education, reducing food-energy miles, increasing food security and saving money.		
1112			
1113	Lead entity: Town and School District Administration		
1114	Timeframe: Short term		
1115			
1116	8.4 Prohibit the burning of trash, and discourage the burning of brush with an ordinance.		
1117			
1118	Lead entity: Selectboard		
1119	Timeframe: Medium term		
1120			
1121	8.5 Establish development standards for land clearing, including organic material removal, when it is a		
1122	component of site development		
1123			
1124	Lead Entity: Planning Commission		
1125	Timetrame: Long-term		
1126			

Renewable Energy Generation Siting Policies

- 1129 The siting policies identified in this section will provide structure and guidance for increased renewable 1130 energy generation capacity in Williston. Once the energy plan is adopted, the town will seek a 1131 "determination of energy compliance" from the Chittenden County Regional Planning Commission and 1132 will be given substantial deference from the Public Utilities Commission.
- 1133
- 1134 Municipalities can have input over the siting of renewable generation in two ways: by defining preferred
- sites, where they wish to strongly encourage renewable energy development, and by defining
- 1136 constraints, where they wish to place restrictions on development, including renewable energy.

1137 Preferred Sites

- 1138 Vermont's Net Metering Rules (Rule 5.100, effective 7/1/2017) defines preferred sites for renewable
- 1139 energy development (any renewable technology besides hydroelectric). Net metering on preferred sites
- 1140 can be larger (up to 500 kW instead of 150 kW) and being on a preferred site confers financial benefits
- 1141 in the net metering rates. See the latest Vermont Public Utility Commission (PUC) Rule Pertaining to
- 1142 Construction and Operation of Net-Metering Systems for details on the financial and scale benefits of
- 1143 preferred sites. Systems up to 15kW and rooftop solar systems up to 500kW go through a registration
- 1144 process rather than the full Public Utilities Commission process. However, all other preferred sites do
- 1145 not have an expedited review process and must meet the same requirements as any other system.
- 1146 Preferred sites as defined under the PUC rule include:
- On a pre-existing structure
- 1148 Parking lot canopies over permitted paved areas
- Previously developed land
- Brownfields
- 1151 Landfills
- Gravel pits
- 1153 Superfund sites
 - On the same parcel as a customer taking 50% or more of the output
 - Town-designated sites
- 1155 1156

1154

Town-designated preferred sites will be identified in a duly adopted municipal plan or through a joint
letter of support by the town planning commission, town legislative body and regional planning
commission.

1160

1161 State and Local Constraints

1162 Some areas are not appropriate for any type of development, including renewable energy generation

1163 facilities. The State of Vermont has defined certain resources as known and possible constraints, which

are protected by the ECOS Regional Plan and state agency review during the Public Utility Commission

- 1165 review process. The Town of Williston has added additional constraints based on local policy, as
- 1166 discussed in the siting policy section of this plan.
- 1167

1168	Known consti	raints are areas in which development, including renew	vable energy generation, is not
1169	appropriate. Kr	nown constraints are listed below and are shown on Ma	ıp 23:
1170			
1171	• State		
1172	0	Federal Emergency Management Agency (FEMA) Floor	dways
1173	0	Department of Environmental Conservation (DEC) Rive	er Corridors
1174	0	National Wilderness Areas	
1175	0	State-significant Natural Communities	
1176	0	Rare, Threatened, and Endangered Species	Ecoal Boints of Viewshods
1177	0	Vernal Pools (confirmed and unconfirmed)	Focal Follits of Viewsheus
1178	0	Class 1 and 2 wetlands (VSWI and advisory layers)	Brennan Fleid Martal Lill
1179	 Local 		
1180	0	Slopes 30% or greater	Southridge Fields
1181	0	Water Protection Buffers	Former Mahan Farm Fields
1182			LaCasse Fields
1183	Possible cons	traints are areas in which the effects of	Brownell Mountain
1184	development, i	ncluding renewable energy generation, may need to	 Former Lyons Fields
1185	be mitigated. P	ossible constraints are listed below and are shown	 Pastures along River
1186	on Maps 24a-c		Cover Road
1187			 Fields Southwest of the
1188	• State		Mountain View Rd and Old
1189	0	Agricultural Soils and Hydric Soils	Stage Rd intersection
1190	0	Act 250 Agricultural Soil Mitigation Areas	 Meadows south of
1191	0	FEMA Special Flood Hazard Areas	Governor Chittenden Road
1192	0	Vermont Conservation Design Highest Priority	Several Parcels along Oak
1193		Forest Blocks (Connectivity Blocks, Interior Blocks,	Hill
1194		Physical Landscape Diversity Blocks)	Richmond Ridge
1195	0	Highest Priority Wildlife Crossings	 Highlands above I-89
1196	0	Protected Lands (State fee lands and private	between South Brownell
1197		conservation lands)	and Oak Hill Rds.
1198	0	Deer Wintering Areas	Gamma Ridge
1199	 Local 		Ū
1200	0	Slopes 15-30%	
1201	0	Vermont Conservation Design Priority Forest Blocks (C	Connectivity Blocks, Interior Blocks,
1202		Surface water and Riparian Blocks)	
1203	0	Scenic Viewshed outside of the growth center	
1204	0	Conservation Areas (See Map 18 of the Comprehensiv	e Plan: Natural Communities,
1205		Wildlife Travel Corridor, Wildlife Core Habitat)	
1206			

1207		Siting Policies	
1208	The policies in this section are the land conservation measures to be applied in the Section 248 decision		
1209	making process with respect to the PUC's review of a petition for an electric generation facility.		
1210	1	Site development including operation and distribution (transmission facilities, to avoid	
1211	1.	state and legal known constraints and to minimize impacts to state and legal possible	
1212		state and local known constraints and to minimize impacts to state and local possible	
1213		constraints. In determining whether known of possible constraints are present, on-site held	
1214		verification should be conducted.	
1215	2		
1210	Ζ.	Large scale solar facilities and wind turbines should be located to preserve the scenic quality of	
1217		the viewsheds identified in Chapter 13 of the Comprehensive Plan. The Development Review	
1218		Board will review viewshed relevance to a proposed renewable energy generation project on a	
1219		case by case basis and will make a recommendation to the Planning Commission. Measures to	
1220		preserve the scenic quality include (but are not limited) selecting and siting equipment which	
1221		keeps the project from being the dominant feature of a viewshed. The project should be	
1222		positioned in such a way so that it blends into the site. This can be achieved by following state	
1223		setback requirements and using the natural topography to break the mass of the project.	
1224			
1225	3.	Development, including energy generation, distribution, storage, transmission facilities and	
1226		fencing, should be carefully located and designed to avoid habitat fragmentation and impacts	
1227		that would demonstrably reduce the ecological function on a parcel in conservation	
1228		areas/wildlife travel corridors/wildlife core habitat. Forest blocks should be preserved. If more	
1229		than 1 acre of forest is removed the project must demonstrate that the solar/wind generation	
1230		will have a net benefit, factoring in impacts from forest removal such as reduction of carbon	
1231		sequestration and increased surface runoff.	
1232			
1233	4.	Installation of an energy generation facility within a conservation area/ should result in	
1234		permanent conservation of the remainder of the conservation area (see Map 18) that is within	
1235		the same ownership (Source bylaw, 21.4.3.3).	
1236			
1237	5.	Development, including energy generation and distribution/transmission facilities, should be	
1238		directed away from slopes over 15% and development is prohibited on slopes of 30% or more.	
1239		(Bylaw 29.5.1)	
1240			
1241	6.	Watershed protection buffers will follow state regulations when solar or wind generation is	
1242		developed in the buffer and shall remain undeveloped with the exception of consolidating	
1243		existing utility infrastructure (See Table 1 in the 2016-2024 Comprehensive Plan for specific	
1244		buffer distances). (Bylaw 29.9.6.1)	
1245			
1246	7.	Locate energy generation proximate to existing distribution and transmission infrastructure with	
1247		adequate capacity and near areas with high electric load (See Green Mountain Power's Solar	
1248		Map). Larger projects that want to connect to constrained infrastructure or where there is a lack	
1249		of adequate infrastructure may be costlier and have a bigger impact on the town.	
1250			

- Locate small distributed wind energy system consisting of a single turbine producing up to 100
 kW outside the designed village center or designated growth center. Wind energy systems must
 be consistent with set back and noise rules in effect by the State of Vermont Public Utility
 Commission.
 - 9. Locate ground-mounted solar larger than 15 kW AC and wind turbines with a hub height larger than 30 meters (98 ft.) outside of the historic districts on the State or National Register.
- 1259 10. Locate utility lines serving new developments underground and site transmission lines,
 1260 substations, and similar support facilities within existing utility corridors and be placed
 1261 underground except where the presence of bedrock or other environmental constrains makes
 1262 underground installation prohibitively expensive. Careful siting and screening will be required
 1263 for above ground utility lines. Impacts to constraints identified in the constraints section should
 1264 be minimized according to applicable policies in this section and in the comprehensive plan.
- 1266 11. The Town of Willison will use these siting policies to determine support for designating a
 municipal preferred site and in the review of Section 248 applications.
- 12. Where feasible, pair renewable energy generation with electrical energy storage to ensure energy is utilized to the fullest potential, to increase resiliency/reliability of electricity during outages and decrease fossil fuel usage during peak periods. Renewable energy generation projects that can accommodate energy storage are strongly encouraged.
- 1274 13. Residential projects (subdivisions and PUDs) should be paired with renewable energy generation1275 in the residential zoning district.
- 1276

1273

1255 1256

1257

1258

1265

1268

Conclusion

1278 Future generations will look back at the actions or inactions that are taken in regard to this plan. The 1279 time for action is now.

1280	Maps
1281	Map 21 Preferred Sites
1282	 Map 22 Existing Generation
1283	 Map 23 Known Constraints
1284	 Map 24a State Possible Constraints
1285	 Map 24b Local Possible Constraints
1286	 Map 24c Forest Blocks Possible Constraints
1287	 Map 25 Solar Base & Prime Generation Areas
1288	 Map 26 Wind Base & Prime Generation Areas
1289	

Glossary of Terms

CEP

MWH

EVT

90x2050 goal.

Term	Description
BTU	British Thermal Unit. A common unit of energy. One BTU is the energy required to raise the temperature of one pound of water by 1-degree Fahrenheit.
kw	Kilowatt. A unit of power. (A kilowatt is 1,000 watts). One kilowatt is the equivalent of 0.746 horsepower.
kwh	Kilowatt-Hour. A unit of energy, most commonly referred to for electrical consumption. (1,000 watts of power for one hour). 33.7 kwh of energy is the equivalent of one gallon of gasoline.
Viewshed	Viewshed. The geographical area that is visible from a location. It includes all surrounding points that are in line-of-sight with that location and excludes points that are beyond the horizon or obstructed by terrain and other features (e.g., buildings, trees).
CCF	A volumetric measure of Natural Gas in hundreds of cubic feet (CCF). It represents the amount of gas contained in a space equal to one hundred cubic feet. One CCF of natural gas has the equivalent energy of 1.28 gallons of gasoline.
LEAP	Long Range Energy Alternatives Planning: An analysis completed by VEIC. The LEAP model is an accounting framework that shows one possible path for Chittenden County to meet the State Energy Goals.
VEIC	The Vermont Energy Investment Corporation. VEIC is a sustainable energy company with a mission to enhance the economic, environmental, and societal benefits of clean and efficient energy use for all people. VEIC operates three large-scale energy efficiency utilities which includes: Efficiency Vermont
CCRPC	The Chittenden County Regional Planning Commission. Also referred to as the Chittenden County RPC.
ECOS Plan	A comprehensive regional plan developed by the Chittenden County RPC. ECOS = Economy, Community, Opportunity, Sustainability. The plan can be found at www.ecosproject.com/plan
90x2050	The State of Vermont's Energy Goal: 90% of the state's total energy needs will be from renewable sources by 2050.

State of Vermont's Comprehensive Energy Plan. This includes the

Efficiency Vermont: A Vermont public utility with an objective to save

Megawatt-Hours. 1 megawatt-hour = 1,000 kilowatt-hours

energy through efficiency. EVT is part of the VEIC.

Brownfield	An area of land which has been contaminated and is not suitable for agriculture or human habitation but may be a viable site for an energy efficiency project such as a solar or wind power installation.
VT PUC	Vermont Public Utility Commission: The Vermont PUC is an independent, three-member, quasi-judicial commission that regulates the siting of electric and natural gas infrastructure and supervises the rates, quality of service, and overall financial management of Vermont's public utilities: electric, gas, energy efficiency, telecommunications, cable television (terms of service only, not rates), water and large wastewater companies
Policy	A policy is a guiding principle used to set direction in an organization.
Procedure	A procedure is a series of steps to be followed as a consistent and repetitive approach to accomplish an end result.
Regenerative design	Regenerative design is an approaching to landscaping, agriculture and conservation land management that integrates the needs of society with the integrity of nature. Benefits include topsoil regeneration, increasing biodiversity, enhancing ecosystem services, bio- sequestration of carbon, food system security, and an overall increased resilience to climate change
Renewable	A renewable resource is a natural resource which will replenish to either through natural cycles or other recurring processes in a finite amount of time in a human time scale.
Weatherize	Weatherize/weatherization. To make a house or other climate- controlled building resistant to cold, heat, temperature fluctuation, or stormy weather by adding insulation, storm windows, siding, weatherstripping, etc. and maintaining these components for optimal function
Microgrid	A microgrid is a group of interconnected loads and distributed energy resources within clearly defined electrical boundaries that acts as a single controllable entity with respect to the grid. Microgrids (paired with storage) are self-contained electric grids paired with storage that can operate as an "island" independent of the central power grid. This allows an entity to keep lights on in the event of an outage which provides resiliency and security.

Williston 2016-2024 Comprehensive Plan **Map 21 - Potential Preferred Sites**

See the Energy Plan for Additional Types of Preferred Sites



Williston 2016-2024 Comprehensive Plan Map 22 - Existing Renewable Energy Generation Sites



Williston 2016-2024 Comprehensive Plan Map 23 - State and Local Known Constraints



Document Path: D:\Projects20\Williston\Williston_KnownConstraints_20200310.mxd

Williston 2016-2024 Comprehensive Plan Map 24a - State Possible Constraints



Williston 2016-2024 Comprehensive Plan Map 24b - Local Possible Constraints



should not be used as "siting maps"

Williston 2016-2024 Comprehensive Plan Map 24c - Forest Blocks Possible Constraints



Williston 2016-2024 Comprehensive Plan Map 25 - Potential Solar Energy Resource Areas



Williston 2016-2024 Comprehensive Plan **Map 26 - Potential Wind Enery Resource Areas**


CHAPTER 1- 50 + YEARS OF CHANGE

Since the 1960's Williston has grown from a small New England village surrounded by working farms that defined its economy to a suburban hub containing a broad mix of residential, commercial, and industrial activity. This has resulted in a 21st century community that is one of the fastest growing towns in the state's faster growing region. Williston has become a growing and thriving community with a bustling and diverse economy. Throughout this transformation, the town has used its planning process to address the impacts that have resulted from population growth, economic transformation, and land use change, on the environment-and-character of the community, and the well--being of residents. while itIt has strived to provide the necessary public facilities and services needed as the town has changed and grown.

These planning efforts have resulted in ...

- substantial open space conservation, including the purchase of development rights on working farms and acquisition of the conservation lands described in Chapter 13 – Open Space and Working landscapes.
- significant investments in the infrastructure needed to support growth, including the early '80's construction of a sewerage system, improvements to town highways, an expanding system of pedestrian ways, the recent construction of new fire and police stations and public works facility, and the creation of Williston's first ambulance service;
- a growth management system that confines suburban infrastructure to approximately onequarter of the town's area, matches the pace of growth to infrastructure capabilities, and strives to protect the rural character of the rest of the community;
- a design review process that protects the historic character of Williston Village;
- a long-range plan to create a functional, pedestrian-friendly, mixed-use commercial center around Taft Corners including the approval by the State of Vermont as a designated Growth Center; and
- the adoption of an entirely new *Unified Development Bylaw* in 2009 and subsequently amended, that supports many of the goals and objectives presented here.

These efforts are a work in progress. Some have been more successful than others. Some have been controversial. Williston has been learning how to grow, and those lessons have been reflected in the previous five-year updates of the comprehensive plan that are required by Vermont law.

This 2016-2024 comprehensive plan is no exception. The plan now spans eight years instead of five because of recent state legislative changes, it continues many long-standing policies, but also features new or revised approaches to important issues. The fun begins in Chapter 2, which states the purpose of this plan and adopts a vision for continuing growth management in Williston. Before moving on, however, some housekeeping is in order. The remainder of this introductory chapter (Chapter 1) explains how this plan complies with Vermont law and describes the process leading to its adoption. In 2020 the Energy Plan (Chapter 11) is being amended while simultaneously bringing focus to bear on healthy community design and its impact on the wellbeing of our residents and visitors.

Authority

Vermont state law provides the statutory authority for municipalities to develop a comprehensive plan under V.S.A. 24 § 4381, 4382 and 4384(a) consistent with state established goals in V.S.A. 24 § 4302. That statute establishes the procedures Williston's planning commission followed in preparing a draft plan for consideration by the Selectboard. V.S.A. 24 § 4385 sets forth the process the Selectboard followed in adopting this plan.

Required Elements

Comprehensive plans developed by municipalities in Vermont are required to include a number of specific elements or sections in order to encourage the appropriate development of land. These elements are specified within V.S.A. 24 § 4382. Table 1.A shows which chapters of this document address which required elements.

Required Element, per 24 V.S.A. § 4382	Where Found in this Plan
(1) Objectives, Policies, and Programs	Objectives and policies appear in each chapter. Chapter 14 presents an implementation program.
(2) Land Use Plan	Land use is addressed in every chapter, but principally in Chapter 3.
(3) Transportation Plan	Chapter 6.
(4) Utility and Facility Plan	Most utilities and facilities are addressed in Chapter 8. Recreational facilities are in Chapter 9. The schools are in Chapter 10. Power generation and distribution are discussed in Chapter 11.
(5) Policies on the preservation of Natural Resources	Chapters 3, 4, 12 and 13.
(6) Educational Facilities Plan	Chapter 10. This chapter also addresses child care, as required by 24 V.S.A. § 4302(C)(13)
(7) Implementation Program	Chapter 14.
(8) Relationship of the plan to trends and plans of adjacent municipalities, and the region.	Williston's efforts to coordinate with other jurisdiction are described in Chapter 14.
(9) Energy Plan	Chapter 11.

Table 1.A -	Statutory	Plan	Elements i	n this	Plan
Tuble 121	Statutory	I Iull	Liements i	ii uiis	I Iull

(10) Housing Element	Residential land use is covered in Chapter 3. Housing policy, including incentives for affordable housing, is addressed in Chapter 5.				
(11) Economic Development Element	Chapter 7 Economic Development				
(12) Flood Resilience Plan	Chapter 12 Watershed Health				

Vermont Statutes – State laws are on-line at: <u>http://www.leg.state.vt.us/statutes/statutes2.htm</u>.

The Planning Process

Williston's 2016 plan update has taken approximately 18 months. It began in earnest during the fall of 2015, with staff's submission of a work program to the Planning Commission. The people of the town were invited to a "kickoff" meeting on May 7th and 9rd, 2015. The results of that event are summarized in Appendix A.

The Planning Commission also utilized the expertise and resources of its citizen volunteers, the people who sit on one of the various town boards and committees that help the town develop and shape the town's policies. These include the Development Review Board who provided help in understanding development and permitting issues, the Conservation Commission who commented about natural resource conservation and protection, the Historic and Architectural Advisory Committee who provide guidance with issues pertaining to the historic village and design review, and the Recreation Committee who commented on recreation facilities and programming, The heads of various town departments were also consulted for their guidance and recommendations on each of their own special needs.

The Planning Commission involved many other residents in finalizing its draft. The Conservation Commission reviewed and commented on open space, watershed, and energy elements. The ad-hoc Sustainable Williston Initiatives citizen group took a leading role in revising the energy chapter.

The town also solicited participation from the Chittenden County Regional Planning Commission, the Green Mountain Transit Agency, and other agencies, all of whom provided information that appears later in this plan. A chronology of the plan update effort appears in Table 1.B.

November and	Discuss outline of the plan update with the Planning commission and
December 2014	Selectboard
2015	
May 2015	Kickoff meetings, involving more than 40 Williston residents
September	CCRPC Completes Initial Technical Review of 2011-2016 Plan
October –	Planning commission meets work on chapters
December	
2016	

Table 1.B – Plan Update Chronology

January-September	Planning Commission reviews draft chapters, Planning staff meets with
	other town departments and other Community Boards
August 30, 2016	Selectboard Retreat – Joint Meeting with Planning Commission to Discuss
	the Plan
October 2016	Planning Commission Reviews Draft Document
October 12, 2016	CCRPC Planning Advisory Committee holds Public Hearing
November 15 2016	Planning Commission holds Public Hearings
December 6, 2016	
2017	
February 21, 2017	Planning Commission transmits draft plan to the Selectboard
April 11, 2017	Selectboard Public Hearing
July 17, 2017	Selectboard Reviews Draft, sends possible changes to the Planning
	Commission for consideration
August 1, 2017	Planning Commission Comments to Selectboard on Proposed Changes
August 22, 2017	Selectboard Public Hearing, Adopted by the Selectboard
2017	Approved by Chittenden County Regional Planning Commission

Kickoff Event Summary. Williston's plan update began with a "kickoff" event sponsored by the Planning Commission on May 7th and 9th, 2015. More than 40 residents came to talk about the future of their town and enjoy refreshments. The report from that event is reproduced in Appendix A. This sidebar provides a summary.

Staff from the planning office provided some information about the town, the town's planning history and focus, and an introduction and overview of the plan. After a brief introduction to the planning process, participants were divided into small groups and asked to discuss what they like or valued most in Williston, and what issues they would like to see addressed in the town plan. Each group prepared a list of their ideas, and these were summarized for each session. There was a high degree of similarity and overlap between the ideas from each of the groups at both sessions. These are listed in Appendix A.

As those lists show, there was virtually unanimous agreement on the major issues the town should tackle in its plan update, including maintaining open space; addressing the cost of housing; improving the transportation system, including bike and pedestrian ways and transit; addressing stormwater and other water quality issues; energy efficiency and conservation; and continuing to manage growth in a fair and practical way.

These top priorities, as well as the other issues and needs listed at the kickoff event were incorporated into this plan.

CHAPTER 2 – 50 + YEARS OF PLANNING: WILLISTON'S EVOLVING VISION

Your Town continues to grow at an ever-increasing rate. Although the growth is primarily in residential dwellings, there have been several small businesses started in Williston. There is a great amount of industrial and commercial potential here and it is urged that anyone who has an occasion to boost Williston for such purposes accept the opportunity to do so.

1964 Annual Report, Town of Williston

Williston adopted its first zoning bylaw in 1963, when the town had a population of less than 1,500 people. The first significant residential subdivisions were platted the following year, prompting the adoption of subdivision regulations in 1965. Growth slowed in the early 1970's, but controversy erupted in 1977 when a shopping mall was proposed on the present site of Maple Tree Place. Fifteen years later, a proposal to open a Wal-Mart in Williston led to Vermont (the whole state!) being declared "endangered" by the National Trust for Historic Preservation. By the year 2000, the town's population had grown more than four times since 1960, and Williston was absorbing nearly one-fifth of Chittenden County's growth.



The most recent data from the U.S. Census indicates that Williston's population continues to grow. As shown in Table 2.A, between 2000 and 2010, the town's population increased by more than 1,000 people. This was significantly less than the pace of growth observed during the 1980s and 1990s, however population growth in Williston outpaces the growth rates of Vermont as a whole and Chittenden County, which is the fastest growing county in Vermont between 2000 and 2010.

Table 2.A - Po	pulation and Po	pulation Growth	of Williston	Since 1960
I ubic ani I u	pulation and i o	pulation di on th	or winnscon	Since 1700

	1960	1970	1980	1990	2000	2010	1990- 2010
Williston	1,484	3,187	3,873	4,887	7,650	8,698	
10 year rate of ch	nange	115%	22%	26%	57%	13.7%	72%
Chittenden County	74,425	99,121	115,534	131,761	146,571	156,545	
10 year rate of ch	nange	33%	17%	14%	11%	6.8%	16%
Vermont	389,811	444,732	511,456	562,758	608,827	625,741	
10 year rate of ch	nange	14%	15%	10%	8%	2.8%	10%

As approved by the Williston Selectboard August 22, 2017 and amended November 5, 2018 P a g e 5 | Source: Bureau of the Census.

Population estimates between 2010 and 2015 show a continuation of this trend. The population of Williston increased by approximately 700 people in the first half of this decade (Figure 2.B).



Recent population projections prepared by the Vermont Department of Labor show Williston continuing to grow through 2030 to between 11,000 and 12,000 people depending on different growth rate scenarios, with the town containing to be one of the fastest growing communities in the state (Figure 2.B)



Figure 2.C - Williston Population Projection 1990 to 2030

Williston's emergence as a center of employment has been even more dramatic than the growth of its population. Table 2.c shows the change in covered employment since 1980. These data do not include business proprietors or the self-employed, but are the only employment data available at the town level.

Figure 2.D – Employment Growth, 1980-2015



An Aging Population

Managing the challenges of growth and development have been the primary themes in the town's planning efforts for the past 20 years. Keeping pace with providing the infrastructure and services necessary to meets the needs of an expanding community into the 21st century has been the task at hand. This has included basic infrastructure such as roads, water and sewer services, public safety such as police, fire and EMT services, and providing schools for the education of the town's children. Williston now, however, find itself with some different challenges as it prepares to meet the needs of an older and aging population (Figures 2.E and 2.F). The share of the town's population that is school aged is shrinking, while the portion of residents in or entering the retirement years is growing. At the same time, household size continues a long range decrease in size, currently averaging 2 ½ people per household (Figure 2.F). These changes in the make-up of the town's population will no doubt affect the way in which the town plans for its future.



Source: U.S. Census

Figure 2.F – Age Cohorts in Williston, 1970-2010



Source: U.S. Census

Figure 2.G - Average Household Size



Source: U.S. Census

And More to Come

Other indicators could be offered (see for example Table 3.A), but Table 2.A and Figures 2.A and 2.B effectively document Williston's long term growth picture. Population projections prepared by the State of Vermont suggest that Williston will continue to grow and grow faster than the rest of the state and perhaps the region as a whole. The potential for continuing change is explored in a build-out analysis conducted for the town by the Chittenden County Regional Planning Commission in 2005. That study is presented as Appendix B, but its results can be easily summarized. Given the current regulations and accounting for both the natural constraints on development and conserved lands:

• the number of housing units in Williston could double, growing from around 3,200 to almost 7,000, and

• the amount of commercial and industrial space could expand by roughly 25%, resulting in another 1.8 million square feet of development.

Appendix 7 explains the assumptions - which are tailored to Williston's actual experience - on which these figures are based. It also explains that build-out analysis has no time dimension. It does not say whether, or when, the potential for growth will be realized. Build-out analysis tells us what could happen - as market demand and infrastructure capacity allow - and challenges us to prepare for the future.

The data contained in Table 2.A and Figures 2.B and 2.C point out two important observations about the growth of the Town of Williston. First, the town has experienced prolonged periods of growth in population and employment extending across several decades. The influx of new homes and residents and the growth of the town's economy have transformed the town's size and economic make up. Williston is no longer a sleepy rural community; it has become an important part of a modern and multi-facetted metropolitan region. Secondly, the more recent pace of growth has moderated considerably to a pace that might be described as more incremental and manageable. The town has to some extent managed to "catch up" and has built many of the facilities it will need to provide the services necessary to serve this community. Predicting future trends against the backdrop of these two observations poses a challenge. Is the more recent, short range trend a picture of what lies ahead, or is the town experiencing a brief pause before another surge of renewed growth pressure?

Purpose of This Plan

This plan is the latest edition of the town's response to past and potential change. It informs us about growth, land use change, and the town's ability to accommodate development, but it is a statement of policy, not an encyclopedia. Most factual details will be found in other documents, many of which are referred to in the plan.

The purpose of this plan is to guide land use and public investment decisions, ensuring that each action contributes to the town's vision of a desirable future. The plan will be consulted in every major development review and in the creation of the capital budget. Any change in the town's bylaws must be consistent with the direction set here (24 V.S.A. § 4401 and 4411 require this), as must decisions about the use of Williston's Environmental Reserve Fund and the allocation of the town's limited sewage treatment plant capacity. This plan also calls for a number of studies that will inform those who prepare the next plan.

Williston has a vision to support active living, healthy eating, access to services and recreational opportunities within the town. Healthy community design is a way of planning and designing communities that improves well-being and makes it easier for people to live healthy lives. Three behaviors raise our risk for four diseases which cause the deaths of over half of Vermonters. Williston can help reduce disease rates by using healthy community design principles that help people be physical activity, prevent tobacco use, and eat a healthier diet.



Vermont Department of Health

People have a better opportunity to stay healthy when they live in communities that encourage biking and walking, conserve natural places, ensure access to healthy foods, and provide safe, affordable housing. Building a positive town culture also significantly reduces risky behaviors such as substance misuse. Williston recognizes the role of community planning to improve the health of residents where they live, work, learn, worship, and play.

This plan addresses community well-being in the following ways:

- Enhance concentrated mixed-use development and smart growth
- Create a bicycle and pedestrian friendly community
- Improve access to parks, recreation, and open spaces
- Increase access to fresh and healthy food
- Decrease use of tobacco, alcohol, and other drugs

Organization of This Plan

There are three layers of guidance for decision-makers in this plan, ranging from the general to the specific.

• Vision

The overall vision statement that appears in this chapter sets the stage for the more specific direction that follows.

• Broad Objectives

Each chapter contains objectives, which are broad statements about how the town will address a particular issue or need.

• Policies

Most objectives are accompanied by policies, which are more specific statements of how the town will achieve that objective.

Chapter 14 – Implementation provides a summary, including a suggested timeframe and, where known, an estimated cost for the implementation of each objective and policy.

Williston's Vision for the Future

Williston will strive to balance responsible, livable suburban growth with rural character and conservation. To do this, the town will ...

- concentrate and limit high intensity development to areas within the town's designated Growth Center in and around Taft Corners;
- permit the flexibility and intensity of use necessary to foster creation of a design-conscious, mixed use, pedestrian-friendly commercial center around Taft Corners;
- encourage and support the use of mass transit and non-motorized modes of transportation through mixed use development policies, <u>Complete Street applications</u> and transportation facilities planning;
- sustain rural landscapes by requiring an open space pattern usable, on-site open space for subdivisions, and other multi-family developments, conserving lands identified in Chapter 13 Open Space and Working Landscapes through acquisitions or easements; and finding ways to help the owners of working lands continue their stewardship;
- use design review and public investment to maintain the character of its historic village center;
- manage the timing of and pace of new development to ensure that necessary public facilities and services are available when development occurs;
- protect residential neighborhoods from incompatible uses and offer incentives for the provision of a diverse housing stock. <u>Housing will be constructed in a manner that supports</u> <u>the health and safety of the occupant. and</u>, <u>including include</u> homes that are affordable to working people and their families;
- attend to the details of site planning <u>and-with human-scale</u> architectural design, including outdoor lighting, signage, access, and landscaping that give development both market appeal and long-term community value;
- invest in new facilities, including utilities, roads, schools, parks, <u>community gardens</u>, and trails, as necessary, while managing the location and pace of development to ensure that growth does not outstrip the capacity of public facilities and services, including fire protection and law enforcement;
- conserve energy in its own operations through energy efficiency, and by incentivizing and encouraging builders to meet "green" building standards;
- use regulatory and non-regulatory tools, including funding for the acquisition of development rights or land, to protect water quality, wildlife habitat, scenic views, and other natural and cultural resources; and

- <u>consider a resolution to establish a food policy council, park and recreation agreements, and</u> <u>other local government policies supporting community gardens and a year-round farmers</u> <u>market.</u>
- engage all citizens who are interested and willing to participate in the town's planning process. Provide accessible opportunities for residents from all backgrounds, ages and abilities to participate in the town's planning process. (Note: this could mean varying the times of the engagement events, providing childcare, ensuring reasonable transit options to lower the attendance barriers as much as possible.)

CHAPTER 3 - LAND USE

The rapid growth of the town's population and housing stock is clearly reflected in the landscape we drive through every day. The question is: how do we deal with that change? How do we maintain the town's vision at it was stated in Chapter 2? How do we ensure that new uses will be compatible with the old? How do we protect environmental quality and the rural landscape that remains? <u>How do land-use decisions affect the well-being of our residents?</u> How do we meet the growing demand for public facilities? How do we <u>ensure that Healthy Community Design strategies are the default the way we build and design our community promotes optimal physical and mental health?-nurture good design?</u>

These questions are what planning is all about. The answers begin here, with land use, with how the town will guide and regulate the initial decision a landowner makes to change from one use to another. This chapter includes the following objectives.

3.1 – Taft Corners and Growth Center – Williston has emerged as a regional center of commerce, business, and employment. The town accounts for more retail sales than any other municipality in Vermont. This objective provides a basis for the town's continuing efforts to build a design-conscious, <u>bike/pedestrian-friendly</u>, mixed-use town center <u>that provides</u> convenience, leisure and social uses for employees and residents in the context of a thriving commercial center. in the area of Taft Corners.

3.2 – **Rural Williston** -- Dramatic changes have occurred in the rural part of Williston over the years. This objective reflects recent changes in the regulation of rural residential development and the town's efforts to preserve its rural <u>(agricultural?)</u> landscape.

3.3 - Industrial Lands –This objective also calls for changes in the standards applied to uses of industrial lands which are an essential part of the town's economic vitality.

3.4 – Residential Neighborhoods – Most of Williston's residents live in the Residential Zoning District.

3.5 – Open Space – This goal reflects the importance of protecting open space, from neighborhood parks to working farms, and it is among Williston's most important goals.

3.6 – **Williston Village** – "Williston Village" is broadly the area in the Village Land Use designation and the Village Zoning District (VZD). Contained within the VZD, there is a state-designated Village Center, which roughly contains both the Williston Village National Register Historic District and the "Additional Review Area." See Map 6. This objective continues the policy of maintaining the historic physical and cultural character of the village-

3.7 -- Explore the Creation, Definition, or Modification of other Land Use Areas - This objective identifies several parts of town where changes to land use rules, prevailing uses of land, and other physical realities need to be addressed.

3.8 – Compatibility with neighboring municipalities and the regional ECOS plan – This goal describes how Williston will continue to implement land use policies in a manner that is compatible with the land use patterns of its neighbors, Essex, Essex Junction, Hinesburg,

Jericho, Richmond and South Burlington and is consistent with the regional ECOC plan of the CCRPC.

3.1 – Taft Corners and Growth Center. The Town of Williston will encourage and support a design-conscious, pedestrian-friendly, mixed-use development and redevelopment pattern in the Taft Corners area. The town has worked toward this objective by successfully obtaining Growth Center Designation in 2008 and revising the *Unified Development Bylaw* in 2009. The town envisions the majority of new growth and development activity taking place in the Growth Center. The town will continue to support this objective by encouraging the construction of planned infrastructure in the Growth Center, concentrating new development in the Growth Center, and examining and monitoring the effectiveness of its bylaws

The appropriate extent of commercial development has been a subject of debate in Williston for nearly 30 years. What has emerged from the controversy is a regional commercial center that employs_almost 2,200 people in retail trade and nearly 2,600 in services. As Figure 3.A shows, Williston has by far the highest value of retail sales of any Vermont community. This generated almost \$400 million in taxable sales in 2015.



Figure 3.A - Retail Sales in Top 10 Vermont Municipalities, 2005-2015

Source: Vermont Department of Taxes Sales and Uses Statistics Report

The shopping opportunities, jobs, and tax base generated by Williston's commercial growth must be balanced against traffic congestion and the costs the town incurs in providing services to a large population of workers, commuters, and shoppers. But the policy question addressed in this plan is

not whether Williston should become a regional commercial center, the policy question is how best to guide new development in the town's Growth Center.

The question is how the Taft Corners area can be encouraged to evolve into a more cohesive, more diverse, more pedestrian friendly, and more functional commercial center that safely supports active transportation options for people of all ages and abilities through Complete Streets applications, human-scale design considerations and improved mobility management overall. A great deal of discussion has been devoted to this topic since the Pyramid Mall was proposed (on the site where Maple Tree Place now stands) in 1977. As a result, the Taft Corners area has more sidewalks and bike paths, more landscaping, and more restrained signs than most similar commercial districts. Maple Tree Place is an important joint effort to create a different model of suburban commercial development_—The completion of the Finney Crossing mixed-use development currently under construction and the mixed-use development of the former driving range property adjacent to Maple Tree Place (Cottonwood Crossing) will result in compact neighborhoods of commercial, residential, and open space uses.

Only two relatively large parcels remain to be developed in the Taft Corners area. They are zoned for mixed use, and their eventual use will be consistent with the town's goals. The challenge is how to encourage the appropriate infill and redevelopment of existing commercial spaces. The policies adopted here will make infill and redevelopment that is consistent with the town's vision possible.

3.1.1 Work with Developers to Build Grid Streets. Williston will support and encourage landowners to build the grid streets that have been planned for the Taft Corners area west of route 2A between Marshall Avenue and Williston Road. Williston should consider adding proposed grid streets to the list of approved projects in the Traffic Impact Fee Ordinance. These streets will provide the access needed for a more intense, bicycle and pedestrian-friendly development pattern. They should also help relieve congestion on Route 2A and Marshall Avenue. A study of the potential benefits of the grid streets was completed in 2006, and the grid street network was studied again and affirmed as part of the Williston Essex Network Transportation Study (WENTS) as part of the Circ. Highway Alternatives process completed by the Chittenden County Regional Planning Commission in 2014 (CCRPC).

3.1.2 Work with VTrans on Other Circulation Improvements. The long anticipated Circumferential Highway (Circ), which had been planned to link I-89 in Williston to VT-289 in Essex, has been abandoned by the state. The town completed a complex planning process with the Circ. affected communities

3.1.3 *Commercial Zoning Districts.* Williston currently has five districts that allow commercial uses, and these are shown on Map 3. Each of these districts serves a particular function.

• **Business Park** – The existing Business Park Zoning District consists of Blair Park, which is largely built-out, and six parcels south of Blair Park across U.S. Rt. 2, only one of which is vacant. This district will continue to be the town's tool to regulate the spacious, suburban commercial development pattern of Blair Park and adjoining parcels.

• **Gateway** – There are three Gateway Districts. One is located around Exit 12 of I-89, and replaced the former Interstate Commercial Zoning District. The second is located west of VT Rt. 2A between River Cove Road and the Winooski River and contains the mixed commercial-office-industrial area developed during the 1980s. Both of these areas look different from each other because they were developed at different times, but both are auto-oriented and have a mix of retail, office, and industrial uses that can appropriately be subject to the same regulations. The third Gateway District, Gateway West, was developed in 2015 along Williston road in the vicinity of Brownell Road in order to deal with the changing nature of this once rural part of town. The Gateway West District allows a range of office uses in addition to residential uses along this heavily traveled corridor.

Development Agreements and Zoning. Most development in Maple Tree Place and Taft Corners Park – which comprise most of the TCZD and Mixed Use Commercial Zoning District – is subject to agreements between the landowner and the town. These agreements will continue in force (as they have done through past changes in the town's bylaws).

- **Taft Corners** The Taft Corners Zoning District (TCZD) is the core of Williston's commercial area the place where the town's goal of creating a pedestrian-friendly, design conscious, mixed use commercial center can best be realized. Coupled with the construction of the grid streets, this will allow diverse, smaller-scale retail, office, and residential uses to be intermingled with the large retail stores and extensive parking areas that now dominate the area.
- **Mixed Use Residential** This district lies east of Maple Tree Place, and includes Taft Farm, the former driving range property south of Talcott Road, and adjoining parcels of land. It is intended to permit higher density residential development mixed with limited retail and office uses. The town's vision for its commercial center can only be realized if a substantial number of people live here, within walking distance of the theater, shops, cafes, and other businesses in the TCZD. Significant development and redevelopment in this and the Mixed Use Commercial zoning district could be reviewed according to the specific plan process in Chapter 9 of the *Unified Development Bylaw*.
- **Mixed Use Commercial** This zoning district lies between Williston's industrial and commercial areas, west of Harvest Lane. It is currently occupied by a mix of large retail stores and industrial uses, and four vacant lots. The revised bylaws will guide most retail uses into the TCZD, leaving this area available for development that supports the functions of the adjoining retail center, including lodging with conference space and offices housing educational, financial, management, personal, and professional services. Dwellings and a limited number of shops will be allowed in mixed-use buildings. New retail buildings will be permitted only for uses that generate very little traffic per square foot, and thus do not fit into the more intensive, or active, pattern of the TCZD.

Development in each of these districts will be guided by a checklist of performance standards that addresses both basics like access and stormwater management, and the site planning and architectural design considerations that implement the district's intent. Objectives 4.2 and 4.3 build on this policy with more specific direction for commercial and mixed use design review.

3.1.4 Review and Refine Development Standards in the Zoning Districts within the Town's Growth Center. In 2009, the town approved a set of sweeping revisions to the town's zoning and subdivision regulations contained in the Williston *Unified Development Bylaw*. The development standards for the zoning districts within the town's growth center provide developers with a number of options for how they can meet the town's development standards when developing their properties. These standards reflect a desire on the part of the town to see the Taft Corners area develop into a vibrant, mixed use downtown area with a strong pedestrian orientation. The town has begun to see these development regulations be implemented since then, and has made some minor improvements to the development regulations. The town should evaluate the effectiveness of these standards thus far based on current experience and consider refining these standards further if necessary.

3.1.5 Consider Developing and Adopting a Form Based Code. The town's development standards in the growth center already contain some form based elements which are a method of regulating development to achieve a specific physical form, with less focus on use categories and more emphasis on the relationship between buildings and the street, and the form and mass of buildings to one another. The town should consider making greater use of form based techniques in the Growth Center as a means of refining the town's current development standards. Drafting a form-based code is participatory and inclusive. It defaults to residents' priorities, concerns and aspirations. In this way, form-based zoning supports equity-driven public policies, while also driving walkable, human-scaled development that residents and businesses appreciate.

3.2 - Rural Williston - The Town of Williston will maintain a rural character outside the sewer service area, and protect open space resources, including productive agricultural lands, open meadows, ridgelines, riparian corridors and wetlands, view corridors, and wildlife habitat.

Preserving the rural landscape that still occupies some three-quarters of Williston is an important goal of this plan. In 2009, the town adopted the *Unified Development Bylaw*, which included a set of regulations designed to foster an open space development pattern on parcels of 10.5 acres or more.

3.2.1 Continue to Protect Rural Character and Open Space Resources by Requiring Open Space Development Patterns. Since the adoption of the September 2004 interim regulations set the standard for promoting open space in the ARZD, approximately 256 acres of open space have been protected by Williston's 75% open space requirement. An additional 358 acres of open space has been protected in all of the other zoning districts.

3.2.2 Continue to Permit Larger Open Space Developments in Highly Suitable Locations. There are numerous constraints on large-scale residential development in rural Williston. As Map 4 – Suitability for On-Site Sewage Disposal shows large areas are not well-suited for onsite sewage disposal. Rural residential development may also conflict with agricultural production on neighboring farms, scenic and wildlife values, and the limited infrastructure available in rural Williston. There are, however, a few sites with suitable soils and safe access, where development will have little or no visual impact, and will result in the permanent protection of open space resources identified in Chapter 13 - *Open Space and Working Landscapes*. The town has revised its bylaws to permit larger open space developments in these highly suitable locations.

3.2.3 Develop a more robust and refined Mechanism for Transferring Development Rights to help Preserve Williston's Rural Character and Important Open Space Areas. Transferring the development rights from one piece of land to another can be an effective tool for preserving important agricultural lands and other environmentally sensitive landscapes. The town has used this mechanism to a limited degree but the process for doing this has been defined only in outline form. The town should consider developing a more robust set of standards for transferring development rights from land areas that the town wishes to preserve, such as those stated in Policy 13.1.11, to those portions of town where the town wishes to encourage development, such as the Growth Center.

3.2.4 Continue to Encourage Adaptive Re-Use of Historic Barns. The permitted uses in the ARZD generally include only one and two family dwellings. An exception is permitted for historic barns that might be conserved by being reused for appropriate commercial and residential use. Historic Barns will generally be ones that were constructed prior to 1900 and/or appear on the state or national lists of historic places.

3.3 – Industrial Lands - The Town of Williston will continue in its role as an industrial center and the site of the proposed regional landfill. The policies adopted here facilitate continuing industrial use with bylaw amendments and permitting of the landfill.

Williston has a diversified industrial economy. In 2015, there were roughly 2,100 workers in retail trade, 1,200 employees working in construction, almost 1,300 in manufacturing, 1,800 in professional services, roughly 1,600 working in government, and roughly 1,000 in transportation and warehousing. This is an increase in the number of workers in Williston of 22% since 2010 and 33% since 2000. Overall, activities permitted primarily in the town's industrial zoning districts generated nearly 3,500 jobs (33% of the town's total) and contributed more than \$147.3 million in property value (12.7% of the town's total).

In the last ten years, the mix of uses in the industrial lands has changed and diversified. Buildings that were formerly used for manufacturing or warehousing have been converted to lighter industrial, office, and personal service uses. Particularly, space in large buildings along Industrial Avenue has changed. Offices, a gym, and several day care operations now exist along Industrial Avenue. These types of uses are allowed by zoning in this area, especially when existing buildings are converted.

For more information about CSWD and the proposed landfill, see Chapter 8 - Public Facilities or visit CSWD's web site <u>http://www.cswd.net/</u>.

3.3.1 Make Transportation Improvements that Support Industrial Activity, While Directing Truck Traffic Away from Taft Corners. A number of the improvements proposed in Chapter 6 are intended to provide better access for Williston's industrial areas. Those include intersection improvements at Rt. 2 and Industrial Avenue (Policy 6.4.6).

3.3.2. Consider revising the range of allowed uses and development standards in the Industrial Zoning District West (IZDW). The Town's industrial area lies within the IZDW, which is in the westernmost part of town and is served primarily by Industrial Avenue in its northern portion and Marshall Avenue to the south. Recent activity in these areas has seen a move away from heavy industrial uses toward uses better described as warehousing, distribution and office uses. The town should examine the existing development standards to

evaluate their appropriateness for meeting the needs of the uses now seeking to locate in this zoning district. The town should also consider refining the design standards for properties located in the town's Design Review District. These properties are those located along Industrial Avenue, S. Brownell Road, Marshall Avenue, and Williston Road; roads that are heavily travelled each day and form a large part of the town's developed visual landscape.

3.4 - Residential Neighborhoods – The Town of Williston will continue to protect the character of its residential neighborhoods. It will also <u>includeencourage better neighborhood designuse</u> <u>healthy community design elements</u> in the Residential Zoning District.

The Residential Zoning District provides a regulatory framework for residential development that is, in most cases, served by central water and sewerage. It encompasses some 2,391 acres and includes most of Williston's dwellings. The town's subdivision evaluation criteria were recently amended to favor site plans that protect open space resources, provide landscaped buffers, and promote walking and biking.

3.5 - Open Space – The Town of Williston will continue to protect open space resources, and provide outdoor recreation opportunities for its residents, as directed by Chapter 12 - Open Space and Working Landscapes.

Williston adopted its first Open Space Plan in 1989. In 2005 the Open Space Plan was broadened and became Appendix C to the 2006 Comprehensive Plan. Since it was decided that Williston's Open Space Plan is in no way ancillary to the way that Williston is managed, Appendix C and incorporated into the town Plan in 2011. It remains in this plan as two chapters, Chapter 9 - Parks & Recreation and Chapter 13 - Open Space & Working Landscapes, and incorporated into the main body of this Plan. Williston's open space rules have guided the town in development review and successful land conservation efforts for 27 years.

3.6 – Williston Village - The Town of Williston will continue to maintain and protect the historic character of its village center.

The Village Zoning District (VZD) encompasses one of the two focal points of Williston's settlement (the other was in North Williston, at the railroad). A portion of the VZD is included in the Williston Village Historic District, which is on the National Register of Historic Places (see Map 6). A larger portion of the VZD includes a mix of historic and more recent development. Development in both areas must comply with the *Williston Village Historic District Design Review Guide*, as incorporated into the town's zoning bylaw. For more on the design review process please see Chapter 4 – Community Design. Williston Village also contains a state-designated Village Center. In Williston, village center designation is particularly important because it impacts the designated growth center adjacent to it. Ongoing approval of the growth center depends on it incorporating a designated downtown, village center, or new town center. Village center designation can also potentially provide financial benefits to landowners and tenants, including tax credits for work on buildings, priority consideration for state facilities, grant opportunities, and flexibility in the use of special assessment district funds. These incentives can help maintain the historic character of the Village.

3.6.1 Develop and Adopt a Village Master Plan. The village planning process should aim to preserve the historic character and pedestrian friendliness of the village and consider the present town green, the possibility of connecting streets within the village to enhance <u>the</u>

<u>circulation of traffic-motor vehicles and those using active transport modes and pedestrian</u> <u>circulation, and The tow will also support</u> appropriate improvements at the intersection of North Williston, Oak Hill, and Rt. 2, as well as limitations on development imposed by the wetlands and streams that are found throughout the Village. As of June, 2016 the town has begun the process of creating a Village Master Plan.

3.6.2 Examine the Density Standards for Mixed-Use Development in the VZD. The existing development standards for the VZD allow properties to have a mix of residential and some non-residential uses on the same property. The current standards do not address how the maximum allowable residential density might be affected by the location of non-residential uses on the same property. The town should consider developing standards for mixed use developments in the VZD. The Village Master plan process will include recommendations for changes to the bylaws that will address the density and intensity of development within the VZD. See Chapter 4, Community Design, for more discussion of this.

3.7 -- Explore the Creation, Definition, or Modification of other Land Use Areas

3.7.1 -- Refine Watershed Protection Buffers to Address Nonconforming Development.

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.

3.7.2 -- Consider changes to allowed uses in the Industrial Zoning District West adjacent to the Business Park and Mixed use commercial Districts.

The town currently has some land zoned for industrial uses sandwiched between existing residential neighborhoods and the town's Business Park Zoning District, primarily in the area near Commerce Street and Williston Road. The town shall examine this area and consider making changes to the town's zoning map or development standards to minimize the existing conflicts between these disparate zoning districts.

3.8 – Implement Land Use Policies Compatible with Neighboring Municipalities and the Regional ECOS Plan – This goal describes how Williston will continue to implement land use policies in a manner that is compatible with the land use patterns of its neighbors, Essex, Essex Junction, Hinesburg, Jericho, Richmond St. George, and South Burlington; and is consistent with the regional ECOS plan of the CCRPC.

Williston is located in the heart of Chittenden County, and shares its borders with six different municipalities. Williston is mostly rural with very low density development near its boarders. This is especially so south of I-89 along the town's boarders with Hinesburg, Richmond, St. George and South Burlington. The Winooski River forms the town's boarder with Richmond, Essex and Essex Junction to the north and east of Jericho, and the land in Williston is dominated by larger farms and agricultural uses. Global Foundries (formerly IBM) has property on both sides of the Winooski River in Williston and Essex Junction. The town's western border with South Burlington is dominated by industrial and commercial uses in Williston, uses that are consistent with the adjacent Burlington International Airport to the west in South Burlington.

The Chittenden County Future Land Use Plan as depicted in Map 2 of the ECOS Plan is consistent with the Williston Land Use Plan, dominated by an urban center in the Taft Corners area, with a largely rural land use pattern throughout the town, with industrial (Enterprise) areas in the northwest part of Williston.

Williston will continue to implement land use policies consistent with the land use plan, and the town will work cooperatively and collaboratively with other municipalities in the region to address planning and development issues of regional importance.

CHAPTER 4 – COMMUNITY DESIGN

This element in the town's plan reflects the emphasis placed on design in Williston's vision for the future. That vision calls for the use of design review in the historic village and commercial areas, and careful attention to details like <u>pedestrian-scale buildings and street networks</u>, <u>outdoor lighting</u>, <u>safer street crossings</u>, <u>protected bicycle lanes</u>, <u>speed humps and street landscaping and wayfinding</u>. <u>landscaping</u>, <u>outdoor lighting</u>, and <u>signs throughout the town</u>. The objectives listed below explain how the town is working to implement this part of its vision.

4.1 – Village Design and Historic Preservation – Maintaining the historic character of Williston Village has long been a town goal. This objective continues and enhances design review in the Village Zoning District (VZD).

4.2 – **Commercial Design** – This objective provides a foundation for design review in the town's industrial and commercial zoning districts. It also calls for additional or improved performance standards for industrial and commercial development.

4.3 - Mixed Use Design – As pointed out in Policy 3.1.3, development in the Mixed Use Residential Zoning District is critical to the realization of the town's vision. This objective calls for the further refinement of the specific design standards for mixed use projects adopted as part of the town's *Unified Development Bylaw*.

4.4 – **Urban Parks** - include plazas, greens, and other spaces that provide shoppers and workers an opportunity to enjoy the out-of-doors in commercial areas. They are usually privately-owned and maintained. The town recognizes the social, environmental and aesthetic value of urban parks and will continue to incentivize their the creation of urban parks in the Growth Center and will refine the requirements for urban parks.

4.5 - Neighborhood Parks - are privately-owned parks that provide outdoor recreation in residential neighborhoods. They are usually privately-owned and maintained. The town will continue to require appropriately sized, <u>purposefully designed</u>, accessible to all ages and abilities, culturally relevant and <u>developed</u> neighborhood parks in new projects.

4.6 – **Signs and Outdoor Lighting** – This objective addresses two elements of design that have a major impact on traffic safety, neighboring properties, the town's appearance, and the night sky. In addition to the aesthetic impact of signage, the content may promote products and behaviors that have adverse affects on health. The town may consider a content neutral ordinance for signage to help prevent substance misuse among young people, and support community members in recovery from substance use disorder and to maintain aesthetic appeal.

4.7 – **Urban Forestry** – Trees are important assets in any park, neighborhood, or commercial development. These policies provide for their installation and maintenance.

4.8 - Williston-in-Bloom – This volunteer program, with some town support, provides landscaping of public spaces.

4.9 – **Gateways to Williston** - The town of will work to enhance its major gateway areas by adopting further design standards and encouraging enhancement projects in its Gateway Zones.

4.1 – Village Design and Historic Preservation - The Town of Williston will continue to use design review to protect the historic character of the VZD. The town will also consider ways to protect historic resources outside the VZD.

Williston adopted design review guidelines for the VZD in 1999. These guidelines are available as a separate document: *Williston Village Historic District Design Review Guide*. They are also referenced in the town's bylaws, which require review of all exterior changes in the VZD by the Historic and Architectural Advisory Committee (HAAC). The HAAC reviews applications at its regular meetings, and then submits recommendations to the Development Review Board (DRB), which issues Certificates of Appropriateness for changes that comply.

As of June, 2016 the town is working on the Village Master Plan. It is anticipated that one of the work plan items in the Master Plan will be a review and revision of the requirements of the *Williston Village Historic District Design Review Guide*.

4.1.1 Review the Design Review Guide. Revise as Necessary. The HAAC will review the design review guide, with the goal of using the experience gained in its administration to make it more specific and, thus, more useful. The HAAC may propose merging the requirements of the guide with the requirements within the WDB to make the historic review process less complicated. As a part of the Williston Village Master Plan, the HAAC will also be receiving public input about the performance of the current guide and *Unified Development Bylaw*, and may recommend revisions to better realize the public's vision for the Village.

4.1.2 Maintain the Character of Historic Properties Outside the VZD. Not all historic properties in Williston are in the VZD. The town will continue to consider the presence of historic sites in subdivision and site plan review. The HAAC will be tasked with discussing and preparing recommendations for the designation and protection of historic landmarks outside the VZD.

National and State Registers of Historic Places

Both Vermont and the United States maintain lists of notable historic sites. Information on the State Register may be obtained at <u>http://www.historicvermont.org/programs/basic.html</u>. The National Register of Historic Places is maintained by the National Park Service. Check <u>http://www.cr.nps.gov/nr/</u> for information.

4.2 – Commercial Design – The Town of Williston will continue to promote commercial site planning and architectural design that responds to the vision stated in Chapter 2. This will be accomplished via the existing design review process, with some additions and revisions.

Williston's development regulations currently require design review for most commercial and many industrial projects. The areas where design review applies are delineated on Map7 – Design Review Districts. Design review is conducted by the HAAC. The HAAC's work is based on a list of design guidelines adopted in the town's *Unified Development Bylaw*. This process has been effective, but should continue to be refined.

4.2.1 Continue to Require Landscaping. The town's design guidelines require that applicants provide appropriate landscaping along property boundaries and streets, within parking lots, and around buildings and signs.

The design guidelines require ample landscaping that functions to buffer adjoining uses and public ways, maintain air quality, shade paved surfaces, and enhance the appearance of the proposed development by screening mechanical equipment, sign bases, dumpsters, and similar features. Landscaping plans are coordinated with erosion control and stormwater management plans, as required by stormwater management and watershed protection regulations.

4.2.2 Encourage Use of Native Plants in Landscaping. Prohibit the Use of Invasive Plants. Williston will continue to promote the use of native species in landscaping for commercial, industrial, and residential premises. It will also call landowners' attention to the Vermont Agency of Agriculture's quarantine of certain invasive exotics, like purple loosestrife, Russian olive, European buckthorn, and Japanese honeysuckle as well as those invasive plant species identified in the town's Unified Development Bylaw.

4.2.3 *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.

4.2.4 *Continue to Minimize the Visual Impact of Parking.* Asphalt and automobiles should not dominate Williston streetscapes. The design guidelines will continue to require that parking be placed behind or beside buildings wherever the site permits. Landscaped buffers <u>around the perimeter for to obscure parking areas as well as landscaped island within parking areas</u> will also be required.

4.2.5 Avoid Dead Walls. Long walls without doors, windows, or other variations kill pedestrian spaces. The design guidelines will continue to require that any wall along which there is a sidewalk or that faces a parking area have functional ground floor windows, which may be used to admit light or for display.

4.3 - Mixed Use Design. The Town of Williston will continue to apply guidelines for mixed use projects to its commercial design review process.

The HAAC reviews industrial, commercial, and mixed use projects using a set of guidelines that are adopted in the *Unified Development Bylaw*. Some of the considerations in the bylaw include sound-proofing, the separation of commercial and residential entrances, and the need for resident parking. The town will also explore the development of standards to incentivize larger-scale, higher-density projects in the Growth Center.

4.4 - Urban Parks - The Town of Williston will strongly encourage the provision of urban parks in commercial and mixed use developments and seek to enliven existing urban parks.

Urban parks are small, intimate open spaces that allow for casual enjoyment of the out-of-doors by sitting on a park bench during a lunch hour, stretching out on the grass, or enjoying the flowers for a few minutes during an afternoon shopping trip. Urban Parks are usually privately-owned and maintained. Town-owned community and country parks, such as the Rossignol Park and Five Tree Hill Country Park, are described in Chapter 8 - Parks and Recreation. Urban Parks offer residents, workers, and shoppers' opportunities both for movement and peaceful contemplation. Their bB enefits to users include stress reduction, an opportunity to connect with the seasons, and be physically active. and Parks impart a sense of vitality in commercial and mixed-use centers. Properly designed urban parks function both as destinations and safe, pleasant pedestrian active transportation linkages within a development.

4.4.1 Work with Owners to Enliven Existing Urban Parks. The town will work with owners to encourage ways to enliven existing urban parks. The Town may consider creating a modest, competitive parkland enhancement fund that will encourage further development of existing urban parks that lack pizzazz.

4.4.2 Encourage Provision of Urban Parks in New Developments. The location and design of proposed urban parks must be included in the plans submitted for review by the town. Every situation is different, but some guidelines can be offered.

4.4.3 Refine the Requirements for Urban Parks. The town will examine the effectiveness of the current requirements for urban parks and will revise these requirements as necessary to achieve the following:

- Urban parks should be sized appropriately and in proportion to the size and intensity of the development they are a part of.
- Urban parks should be located so as to provide employees, shoppers, and residents with easy <u>bicycle and</u> pedestrian access to nature in the form of green grass, trees, and flowers. Water features may be appropriate.
- Urban parks should enliven and beautify commercial spaces, especially during the summer. There should be comfortable places to sit. Where possible, sun pockets should be created to lengthen the park's useful season.
- Urban parks should contribute to the public enjoyment of scenic vistas, including views of the Adirondacks or Green Mountains.
- <u>Urban parks may be designated to be substance-free and promote substance-free events to provide supportive environments for youth and people in recovery.</u>
- Urban parks may incorporate conservation features, such as streams or wetlands, and the required buffers. They may also incorporate stormwater management features.
- Urban parks should incorporate statuary, murals, or other forms of public art<u>that have</u> cultural relevance and aesthetic appeal.

4.4.4 Development and Maintenance of Urban Parks. Urban Parks are one of several design options in Williston's bylaw that may be required under the development standards for commercial areas. The maintenance of urban parks is the responsibility of the developer and future owners, including homeowners' associations where residences are included in mixed-use projects. Required maintenance will include mowing and landscape maintenance, including replanting as necessary, litter removal, and the regular upkeep and repair of facilities like benches and tables.

4.5 - Neighborhood Parks - The Town of Williston will encourage and, in some cases, require the provision of neighborhood parks in new residential developments. The town will also seek to provide neighborhood parks to existing neighborhoods where they are needed.

A neighborhood park provides a breath of fresh air, a place to pause along a trail and watch the sky change, a place for children to romp that is bigger than the backyard, or a place to shoot a few baskets on Sunday afternoon. A small park near peoples' homes also encourages outdoor socializing, provides a central gathering place for neighborhood activities, and builds a sense of community. Neighborhood Parks are usually privately-owned and maintained. The town will encourage owners of privately owned parks to declare the properties substance-free and promote substance-free events to provide supportive environments for youth and people in recovery. Town-owned community and country parks, such as the Rossignol Park and Five Tree Hill Country Park, are described in Chapter 9 - Parks & Recreation.

Neighborhood parks are intended primarily to serve the residents within the development in which the park is located. These parks are typically created during the design of a new neighborhood. Wherever possible they should be connected to larger open spaces via public paths or trails, ideally at multiple access points. Adequate, secure bicycle parking should also be available. It may be appropriate to provide a handful of parking spaces, but automobile access should not be emphasized.

4.5.1 Require Provision of Neighborhood Parks in New Developments Every distinct residential neighborhood should have at least one neighborhood park or reasonable pedestrian access to an existing park. Small subdivisions, in which the provision of a useful park is not feasible, and subdivisions that have good pedestrian access to an existing park could be required to pay a park development fee in-lieu of providing a neighborhood park. This fee will be in addition to the recreation impact fee, which supports facilities that serve the entire town. The location and design of proposed neighborhood parks must be included in the plans submitted for review by the town.

4.5.2 Refine the Requirements for Neighborhood Parks. The town will examine the effectiveness of the current requirements for neighborhood parks and will revise these requirements as necessary to achieve the following:

- Neighborhood parks should be sited on land suitable for development as parkland and reasonably central (preferably within ¹/₄ mile) of the majority of homes they serve.
- Neighborhood parks may range from a few thousand square feet up to six or seven acres. There is no ideal size, but neighborhood parks should be sized in a way that is roughly proportional to the proposed development they will be a part of. The park should be large enough to complement the neighborhood's character and natural features. Where many children are expected, a larger park with play structures and an informal, unlighted playing field might be appropriate. In a neighborhood for older folks, a smaller park with a flower garden, sitting benches, game tables, and horseshoe pits might be more useful. Where a subdivision includes a stream corridor, a small neighborhood park might adjoin a much larger, undeveloped open space.
- Neighborhood parks should be connected to the town's system of paths and trails where that is possible. They should always be served by sidewalks or paths connecting them with the homes they serve.
- Neighborhood parks should be developed for recreational activities that are consistent with the neighborhood's character and size, but at a minimum should include turf, shade trees, walks,

and basic recreational structures, such as swings or benches. Community gardens may be incorporated into a neighborhood park that serves a higher density development or homes whose yards are not suitable for gardening.

- The town will use the above criteria to refine the requirements for neighborhood parks as they are currently articulated in the WDB.
- <u>Neighborhood parks may choose to be substance-free and promote substance-free events to provide supportive environments for youth and people in recovery.</u>
- The town will explore the possibility of requiring a neighborhood park fee for projects where a neighborhood park is not proposed.

4.5.3 Development and Maintenance of Neighborhood Parks. Neighborhood parks will initially be provided by developers, but in the long run will be privately-owned and managed by neighborhood associations. Developers are responsible, at a minimum, to grade the park and establish vegetation. They may, in their own interest, install facilities ranging from benches to swimming pools or sports courts. Developers may be required to create a park development fund for later use by the homeowners. After the project is complete, further development and maintenance will be the responsibility of the homeowners.

4.5.4 *Town Role in Neighborhood Parks.* Neighborhood parks are privately owned and thus routine mowing and landscape maintenance, litter removal, and similar tasks should be the responsibility of the homeowners. Beyond that, the Selectboard may choose to provide limited assistance. Perhaps the best way to do this would be for the Selectboard to make a modest sum available for competitive, matching grants for the enhancement of neighborhood (and, possibly, urban) parks. Grant applications would be reviewed and prioritized by the Parks and Recreation Committee, with final decisions by the Selectboard.

• The town will explore the creation and administration of a fund for the development and enhancement of neighborhood parks. This may be coordinated with the fee-in-lieu discussed above.

4.6 - Signs and Outdoor Lighting – The Town of Williston will continue to require that on premise signs primarily identify uses. Off-premises advertising will continue to be prohibited. The town will also continue to regulate outdoor lighting to prevent traffic hazards and light trespass, and to protect the night sky.

Quality signs and outdoor lighting make important contributions to the appearance, safety, and market appeal of the developments where they are installed, and to the larger community. Williston's sign and outdoor lighting regulations have been reasonably effective. Some problems have arisen in the administration and enforcement of the sign regulations, however, and these are addressed by the objectives adopted here.

4.7 - Urban Forestry – The Town of Williston will continue to require installation of quality street trees in new developments and take responsibility for those trees when the road they line is accepted for town maintenance. The town will also continue to maintain trees in its parks and on the grounds of municipal buildings.

The trees in Williston's public spaces and along its roads are important community assets. Properly planted and maintained, they provide shade, beauty, and oxygen, and assist in traffic calming, energy conservation, and stormwater management. A partial inventory of the trees for which the town is responsible - street trees and those in parks and on other town lands - was completed in 2005. It showed that of the 1,121 trees surveyed, ninety-five percent of those trees are in good condition. The inventory has pinpointed the location of the five percent that need maintenance or replacement. The principal issue raised by the inventory is the lack of diversity in species being used as street trees, with nearly half being green ash. The town's streetscapes and parks are highly vulnerable to any pest or disease that affects a given species. Of particular concern is the impact of a potential infestation by the Emerald Ash Borer (EAB). The EAB was first discovered in the United States in Southeastern Michigan in 2002 and has since spread to 22 states and 2 provinces, killing 150-200 million ash trees in the process. Though not yet discovered in Vermont, EAB infestations have been confirmed North, South, East and West of Vermont; thus, it's only a matter of time before EAB reaches Vermont. In response to this threat, the Town of Williston has created an EAB Preparedness Plan, which calls for systematic and proactive removal of ash trees along the public streets right-of-way and preventative treatments for a few large trees on public property near the town library. The following management strategies should be implemented as part of a sound, sustainable urban forestry program.

4.7.1 Continue to Require and Maintain Street Trees. Require a Greater Diversity of Tree Species. Williston will continue to require the installation of street trees, and upon their acceptance, to maintain them. A 2009 bylaw revision required a greater diversity of street tree species and prohibited the use of ash trees in approved landscape plans. In 2010 the town updated and adopted the *Public Works Specifications*, which expanded the planting guidelines and defined tree protection strategies.

4.7.2 *Maintain the Tree Inventory.* The town will update the 2005 tree inventory as trees are accepted, and as public works crews or contractors maintain, remove, and replace trees.

4.7.3 *Implement the Urban Forestry Plan.* With the adoption of this plan, the Selectboard also adopted Williston's first Community Forestry Plan. A copy of that plan is provided in Appendix C.

4.7.4 *Implement the EAB Preparedness Plan.* In 2015, the Selectboard adopted the EAB Preparedness Plan. A copy of that plan is provided in Appendix D.

4.7.5 *Establish a Town Nursery.* In order to provide a diverse and affordable supply of trees for the replacement of street and park trees maintained by the town, Williston will consider establishing a nursery on a suitable parcel of town land.

4.8 - Williston-in-Bloom – The Town of Williston will continue to support the Williston-in-Bloom program.

Williston-in-Bloom is a local version of the America-in-Bloom program (for information see <u>http://www.americainbloom.org/what.asp</u>). It provides volunteer landscaping of public street corners, medians, and other spaces.

4.9 - Gateways to Williston – The Town of Williston will work to enhance its major gateway areas.

The town will integrate design elements that reinforce Williston's identity into public and private development projects near particular transitional gateways. These design elements will promote and

encourage a distinct and attractive identity in each of our gateways. Any new design elements should also support and coordinate a link to other adjacent and important Williston locations.

As approved by the Williston Selectboard August 22, 2017 and amended November 5, 2018 P a g e 30 |

CHAPTER 5 - HOUSING & GROWTH MANAGEMENT

Williston's population growth and change over the past 50+ years is documented in Chapter 2. As the town's population has grown, so too has the number of dwellings in Williston. Going back to 1960, the number of new dwellings in Williston has grown steadily each decade, increasing from 400 in 1960 to over 3,600 in 2010.

	1960	1970	1980	1990	2000	2010
Williston	400	908	1,284	1,874	3,036	3,652
- annual change		12.7%	4.1%	4.6%	6.2%	2.0%
- share of county housing	1.8%	3.0%	3.1%	3.6%	5.2%	5.5%
- share of county growth		6.2%	3.5%	5.5%	17.2%	9.0%
Chittenden County	22,467	30,668	41,339	52,095	58,864	65,722
- annual change		3.7%	3.5%	2.6%	1.3%	1.2%
Vermont	136,307	165,068	223,199	271,214	294,382	322,539
- annual change		2.1%	3.5%	2.2%	0.9%	1.0%

Table 5.A – Housing Units in Williston, Chittenden County and Vermont, 1960-2010

Source: Bureau of the Census Decennial Census, 1960-2010

The decade between 2000 and 2010 saw a continuation of strong growth in the number of new housing units built in Williston; with 616 new houses built during that time period. This resulted in an average annualized rate of growth of approximately 2% each year. In contrast, the housing supply in Chittenden County as a whole averaged 1.2% per year, and the State of Vermont had an average annual growth rate of just 1.0% per year. The additional housing units built in Williston accounted for approximately 9% of the county's growth, and Williston now accounts for approximately 5.5% of the housing units in Chittenden County, up from 3.6% in 1990. While housing growth remained strong, this was significantly less than the 1,162 houses built between 1990 and 2000. More recently, the town has added approximately 700 new dwellings over the last decade, an indicator or continued demand for new housing (see Figure 5.A).



Figure 5.A – Williston New Housing Construction, 1995-2015

Source: Town of Williston Planning and Zoning

The addition of almost 700 new housing units in Williston between 2005 and 2015 did not completely satisfy the demand for housing in Williston. The Census found that Williston had a vacancy rate of only 1.3% including camps and vacation homes, compared to 5.1% vacancy for Chittenden County which had the lowest county-wide vacancy rate in Vermont in 2014. In contrast, a healthy real estate market normally has a vacancy rate of four to five percent. It should also be noted that this low vacancy rate was measured during a recessionary period when vacancy rates might be expected to rise as people delayed the formation of new households during times of economic stress.

		Housing Units				
	Population	Total	Occupied	Vacant	% Vacant	
Williston	9,215	3,786	3,736	50	1.30%	
Chittenden County	160,531	66,482	63,086	3,396	5.10%	
Vermont	626,565	324,332	257,252	67,080	20.70%	

Table 5.B Housing Occupancy and Vacancy Rates, 2014.

Source: Bureau of the Census, American Community Survey

This element of the plan addresses the dilemma of a rapidly changing community.

- Growth has at times exceeded the town's ability to provide services, and managing the pace of growth continues to be a challenge for the town. Sewage treatment capacity has previously been in short supply and would have been exhausted without the recent treatment plant expansion, and available sewer treatment capacity while better is still limited. The town's schools currently have enough space for current enrollment levels, alleviating one significant limiting factor in the town's capacity to serve new growth. The town recently built two major public safety buildings, a new public works garage, is improving highways, and extending sidewalks, all in an effort to catch up with growth. Fiscal realities, as well as a desire to maintain the community values stated in this plan, have led Williston to adopt the residential growth management system described in this chapter.
- Williston must also plan for an older and aging population. As described in Chapter 2, the population of Williston and the region is aging, and people of retirement age and older are expected to grow significantly for the foreseeable future. <u>Older residents This older population</u> will require housing that is located close to services, a safe walkable, bikable infrastructure and easyily accessible to non-motorized transportation options and public transportation. New housing units will need to be designed to provide shelter for smaller households, with options for one-story living. <u>Consider requiring Universal Access Design (UAD) for certain buildings and/or as one of the incentive options for Planned Unit Development density bonuses. UAD helps make buildings/spaces that can be accessed and by all people regardless of their age, size, ability or disability.</u>

At the same time, the town recognizes that regulatory restraints on building contribute to the cost of housing. In 2004, the median household income in Chittenden County was approximately \$51,219, allowing the median household to reasonably purchase a home costing no more than about \$175,000, assuming a \$14,000 down payment. The median sale price of homes in Chittenden County in 2004 was approximately \$200,600. The small gap in housing affordability for the median family was rapidly magnified for those earning less. A household earning 80% of the median income can afford a home costing about \$182,000. The median price of a newly constructed home in Vermont was \$290,000 in 2010. A home buyer would

need an income of \$86,000 and down payment and closing costs of \$24,000 to afford this home. In addition, recent local surveys have reported that the rental market in the Burlington area is extremely tight, with a vacancy rate of roughly 2%, a number found in only the tightest of housing markets.

The tight housing market limits people's options in finding housing, and has been cited as a major limiting factor in businesses attracting workers. To help address this need, in June 2016, the Champlain Housing Trust, Housing Vermont, and the CCRPC are currently undergoing a coordinated campaign to increase the housing supply in Chittenden County. This campaign is called Building Homes Together, and it calls for the construction of 3,500 new homes in Chittenden County over the next 5 years. This is an ambitious goal and one that will not be met without the participation of one of the region's fastest growing communities and key employment locations – Williston.

The shortage of affordable and workforce housing in Williston is described in Objective 5.2.

Two objectives are adopted here. Each addresses one horn of the dilemma Williston faces in trying to limit the pace of growth while encouraging diverse and affordable housing stock.

Objective 5.1 - Residential Growth Management. This objective provides the policy basis for Williston's residential growth management system, as it was recently revised. It also calls for minor improvements in the subdivision evaluation criteria.

Objective 5.2 – **Expand Housing Opportunities.** This objective calls for the town, within the limitations of the residential growth management system, to promote a variety of types of housing, including dwellings that are affordable for a wide range of Williston's residents and its workforce.

5.1 - Residential Growth Management - The Town of Williston will limit and manage the rate of new residential development to a rate at which adequate public facilities and services can be provided. In setting its residential growth target, the town will also consider the impacts of housing development on the environment and on the character of the community and its neighborhoods, as well as encouraging and supporting the provision of housing affordable to people from a wide range of income groups.

Williston first established a residential growth management policy in 1990. The policies adopted here incorporate what has been learned in the administration of the current growth management system, which was adopted in 2015, as called for in the 2011-2016 Comprehensive Plan. This plan supports the continued implementation of the current system designed to be implemented through the end of FY 2025. The current growth management allocation system will further encourage the provision of affordable housing.

5.1.1 Link the Residential Growth Target with the Allocation of Capacity in the Sewage Treatment Plant. The DRB's power to approve dwelling units within the sewer service area (see Map 7 – Sewer Service Area) is now limited to the number of units for which capacity in the sewage treatment plant is available. 50,000 gallons per day were added to the plant's capacity from 2011-2015. This makes it possible to sustain the residential growth target set in 5.1.2 for the foreseeable future, while continuing to make wastewater treatment capacity available for future industrial and commercial development through the end of FY 2025

5.1.2. Set the Residential Growth Target at 80 Units Each Year. This plan continues the residential growth target of 80 new dwellings per year that was first established in 1998. Given the long term demographic trends and fiscal realities, the town's infrastructure, including the sewerage system,

emergency services, transportation infrastructure, and schools can realistically absorb only this number of new dwellings each year, along with some modest additional industrial development. Experience has shown when the number of new dwelling exceeds this range by very much, the town has had difficulty in providing the necessary public infrastructure and services in a timely fashion to keep up with the demands of growth.



Figure 5.B – New Dwelling Units Approved Under Growth Management, 2005-2015

Source: Town of Williston Planning and Zoning

5.1.3 Assign Portions of the Growth Target Consistent with Other Goals of this Plan. In order to ensure the realization of the goals of the town's Growth Center, 56 of the 80 dwelling units permitted each year are now assigned to the zoning districts in the town's Growth Center, MUCZD, MURZD, and TCZD. A dozen units are assigned to the remainder of the sewer service area which includes the Village Zoning District and the Residential Zoning District. The remaining twelve units are assigned to the Agriculture Rural/Residential Zoning District. There are three exceptions to these assignments. First, units that are not requested in one of the zoning districts outside of the Growth Center may be used in the zoning districts in the Growth Center. Second, as provided by Policy 3.6.2, proposed subdivisions in ARZD that meet certain criteria may compete for units that would ordinarily be assigned to the more intense zoning districts. The subdivision evaluation criteria have been revised to set separate criteria appropriate for each area.

5.1.4 Adopt More Specific Growth Management Criteria. Competition among subdivisions had been governed by six general criteria adopted into the subdivision regulations in 1998. More specific

criteria that are tailored to each area identified in Policy 5.1.3 were adopted in 2005, and these were amended in the town's current growth management system in 2015. They anticipate many objectives of this comprehensive plan, providing incentives for housing diversity and affordability, the provision of neighborhood parks, energy conservation, expanding the town's trail system, and open space conservation. Experience implementing these criteria has also suggested further review and refinement of these criteria is warranted. Reviewing and further refining these criteria should be a top priority for the planning commission following to adoption of the town plan.

5.1.5 *Provide for Small Residential Developments*. Smaller residential subdivisions cannot compete successfully with larger developments under the revised subdivision evaluation criteria. Rather than sacrificing implementation of the town's goals to protect small landowners, the revised regulations allow up to four dwelling units per year to be allocated to small subdivisions outside the competitive review.

5.1.6 Encourage Higher Density Residential Development in the Town's Approved Growth Center. Consistent with the land use objectives of this plan (see Policy 3.1), the residential growth management system promotes housing development as part of mixed use development in the town's Growth Center near Taft Corners. The remaining development potential in the town's Growth Center is on large parcels and requires substantial infrastructure to achieve the town's long term goals. They include:

- ensuring that there is a reasonable mix of single versus multiple family dwellings over time using the subdivision evaluation criteria rather than an arbitrary annual cap
- providing suitable housing opportunities for the town's aging population

5.1.7 Require Master Plans for Proposed Subdivisions. Because only a limited number of residential zoning permits are available every year, regardless of parcel size, Williston's residential growth target has created an inadvertent incentive for the piecemeal development of larger parcels. The town's development regulations promote access management, neighborhood connectivity, stormwater management, open space conservation, and other objectives of this plan by requiring that subdivision review begin with a pre-application for the owner's entire contiguous holdings.

5.1.8 Implement and Refine the Growth Management System. The Town developed a new growth management system designed to run from FY 2016 through FY 2025, replacing the previous 10 year allocation system. The current growth management system is based on continued availability of adequate sewer capacity to support additional housing development, the ability of the town to provide necessary infrastructure such as transportation facilities, police and fire protection, and sufficient classroom space, and a desire to direct the majority of new housing into the town's designated growth center as discussed in Chapter 3 Land Use. At the same time, the town recognizes that the current system is very complicated, and often times places major constraints on proposed housing developments. Many of the development ideas embedded within the incentives of the current growth management system are either already addressed or could be addressed more readily in the town's *Unified Development Bylaw Standards*. A top priority within this plan is a serious examination and re-assessment of the town's growth management system. This examination will consider how the town's existing development regulations might be modified to address the town's development goals more simply, with the aim of streamlining the approval process for new residential developments that address all of the town's goals.

5.2 - Housing Opportunities - The Town of Williston will use its residential growth management system to encourage the provision of a range of housing choices, including choices among different locations and densities of dwellings, and housing that is affordable for residents and the workforce. The town will also explore other means of promoting the provision of more diverse, more affordable housing.

A frequent topic of conversation over the past few years has been the high costs of housing in Williston and the difficulty in building new housing that can be considered affordable to people with incomes at or below the median income for households in the region. The 2000 Census found that more than 85% of Williston's housing stock consisted of detached and attached single-family dwellings, including mobile homes. Only about 10% of the town's dwellings had more than two units. Only 15% were rentals. The overall comparison – between a median income of \$60,473 and a median home costing \$252,000 appeared in the introduction to this chapter. The list of incomes by occupation appears in Appendix D, which provides basic data about housing in Williston.

The 2016-2024 *Town Plan* includes a number of objectives aimed at encouraging a wider range of housing types in Williston as well as incentives for increasing the number of housing units in new developments considered affordable by households with incomes at or below the regional income. This plan continues to support the development of a wide range of housing types in Williston, with incentives for building housing for households with low and moderate incomes.





Source: Chittenden County Regional Planning Commission

5.2.1 Use the Residential Growth Management System to Encourage Provision of Affordable Housing. Williston has offered an incentive for affordable housing as part of its residential growth management system for several years. The subdivision evaluation criteria now encourage perpetually affordable housing that is integrated into neighborhoods, rather than isolated in "projects" and couple the allocation of housing units and sewage treatment plant capacity. The sewer allocation ordinance has also been changed to allow the Selectboard to set aside plant capacity specifically for affordable housing in the Growth Center by including it as one of the design elements in the zoning districts in the Growth Center, and through the use of incentives. In addition, the current growth management system
reserves 25% of all of the potentially available allocation solely for new dwelling designated to be perpetually affordable to households with incomes at 100% of the regional median income or less. The town should also consider modifying the growth management system to either exempt perpetually affordable housing units, or offer additional incentives for the development of perpetually affordable housing. The planning commission will continue to monitor the building of workforce and affordable housing over the life of the town plan as part of the periodic reports on growth trends and developments in the town.

5.2.2 Consider Using Inclusionary Zoning to Guarantee Provision of Affordable Housing in Appropriate Locations. Past and present town policies encouraging the development of housing affordable to low and moderate income people have relied upon incentives to housing developers. Inclusionary zoning policies encourage the building of affordable housing units by requiring housing developers to build a minimum percentage of the housing units within a proposed development at a price point that is affordable to low or moderate income residents. There is still debate about whether the incentive for affordable housing described in Policy 5.2.1 will be effective or whether additional policy measures will be required to obtain additional affordable housing units in Williston. This policy provides a basis for the adoption of inclusionary zoning if it is determined that the incentive in the residential growth management system is not strong enough.

5.2.3 Continue to Encourage Housing Choice in the Residential Growth Management System. While permit records and recent project approvals indicate that the housing mix is shifting to include more multiple-family dwellings and more potential rentals, housing variety will continue to be a separate criterion in the subdivision review criteria proposed.

5.2.4 Lands Owned by the Town for Affordable Housing Potential. The town will evaluate lands it owns to determine which, if any, might be suitable sites for the development of affordable housing. The town may work with not-for-profit or for-profit developers to prepare specific plans for affordable housing projects.

5.2.5 Encourage Adaptive Reuse of Industrial and Commercial Buildings for Affordable Housing Use. A decline in the demand for land for traditional industrial uses in Williston resulted in a number of under-utilized properties that have access to existing town infrastructure and services such as transportation, and municipal water and sewer services. The town will consider adding provisions to its development regulations to allow for the conversion of existing industrial and commercial buildings into affordable housing where appropriate.

5.2.6 Explore Additional Affordable Housing Programs. The town will continue to explore a wide variety of additional affordable housing programs and be prepared to incorporate those that might prove effective into an updated plan, the bylaws, and the budget. The town will also cooperate, as appropriate, with not-for-profit groups seeking to create affordable housing in Williston.

5.2.7 Implement the Recommendation of the Affordable Housing Task Force. The Selectboard created a task force to discuss ways in which the town could support the development on additional affordable housing in Williston. The task force's report and recommendations are contained in Appendix D. Some of the recommendations of the task force have already been implemented, such as establishing housing targets of affordability. The town should continue to implement the recommendations of the task force and should explore the adoption of additional incentives to build additional affordable housing.

5.2.8 Create and Implement a Housing Trust Fund. A key recommendation of the Affordable Housing Task Force was the establishment of a Housing Trust Fund that could be used to provide financial support to affordable housing developments and programs. The town is currently studying how such a trust fund might work and how the town might be able to utilize it. The town should continue to pursue the creation of a housing trust fund and fully explore the creation and implementation of a trust fund.

As approved by the Williston Selectboard August 22, 2017 and amended November 5, 2018 P a g e 39 |

CHAPTER 6 - TRANSPORTATION

Transportation has been at the heart of Williston's history, shaping identity and pattern of the town from its earliest days. The Winooski River, later the railway lines, and more recently modern roads and highways with facilities for non-motorized travel and transit ridership have formed the major pathways and methods for moving into and through Williston over the years. This element of the plan establishes objectives and policies that address present and future transportation needs and goals of the town.

Objective 6.1 – Master Transportation Plan. The overall objective of the town is to develop a comprehensive approach to transportation that emphasizes the safe and efficient movement of people and goods utilizing a variety of transportation modes that includes transit, pedestrian and bicycle facilities, paths and trails, as well as roads and highways for the movement of cars and trucks. The town's transportation goals and objectives are intended to foster and support the utilization of "complete street" principles as recently enacted by the Vermont State Legislature under Act 34 of 2011. A complete and well-rounded transportation strategy will enable the town to facilitate the movement of people and goods, protect public safety, promote healthy lifestyles, and foster community building through the town. The town's transportation plan shall include four important elements and priorities:

- a) *Major Road Plan* The functional classification map adopted here serves as a factual basis for the implementation of transportation and land use policies.
- b) Sidewalks, Paths, and Trails A network of interconnected sidewalks, paths, and trails designed to serve the transportation and recreation needs of pedestrians and bicyclists of all ages and abilities.
- c) *Public Transportation Plan* Transit routes designed to provide bus service connecting the town's high intensity growth center in the Taft Corners area where employment and retail shopping opportunities are concentrated <u>linking to rural</u> Williston <u>and with</u> other communities in the region. This objective also calls for a transit center in the Taft Corners area.
- d) *Connectivity* Ensuring <u>good safe</u>, <u>efficient</u> vehicular, bicycle, and pedestrian circulation among neighborhoods is among the main themes of planning in Williston.

Objective 6.2 - Access Management. This objective provides a policy basis for existing and proposed regulations that control access to public roads.

Objective 6.3 - Transportation Improvements: State. This objective supports a number of transportation improvements on the state roads serving Williston.

Objective 6.4 – **Transportation Improvements: Town.** This objective provides a basis for the detailed planning, design, and capital budgeting of improvements that are needed to safely handle growing traffic volumes.

Objective 6.5 – Freight. This objective reflects Williston's role as a trucking terminus.

Objective 6.6 – **Transportation Funding** Impact fees are a source of funding for some of the improvements listed in Objectives 6.3 and 6.4, above. This objective provides a policy basis for the continuing collection of these fees, as well as for other efforts to fund transportation improvements.

Objective 6.7 – Regional Transportation Planning. This objective calls for Williston's continued participation in the Chittenden County Regional Planning Commission (CCRPC), hopefully with greater representation.

6.1 - Master Transportation Plan - The overall objective of the town is to develop a comprehensive approach to transportation that emphasizes the safe and efficient movement of people and goods utilizing a variety of transportation modes that includes transit, pedestrian and bicycle facilities, paths and trails, as well as roads and highways for the movement of cars and trucks.

6.1.1 Major Road Plan - The Town of Williston adopts the major road plan shown on Map8 to provide a basis for the land use and transportation policies of this plan, more detailed transportation planning, capital budgeting, and development review. In adopting this plan, the town points out that I-89 is a major regional arterial road, and U.S. Rt. 2 and VT Rt. 2A serve as both arterials (their official classification) and major collectors. This reality should be respected in transportation planning and improvements.

Map 9 – Major Road Plan shows the functional classification of existing and proposed roads in Williston. The legend for that map explains the functions the types of roads serve in the community. Functional classification helps decision makers set priorities for road maintenance and improvements. It also provides a basis for town bylaws and development review, including requirements for access management, as called for by Objective 6.2 – Access Management.

U.S. Route 2 and VT Rt. 2A are designated as arterials in the regional transportation plan. Route 2A, especially, does function as an arterial, linking Williston and points south with Essex Junction. U.S. Rt. 2 (Williston Road) functions as an arterial road through the Taft Corners area, but more as a collector road in the eastern portion of the town. Traffic on both roads is slowed by turning movements, however, and the number of curb cuts makes it clear that these roads also function as major collectors, serving residential neighborhoods and individual businesses. Route 2 also serves as the "main street" of Williston's historic village. Improvements to these highways should reflect their dual role, providing for bicycle and pedestrian safety, and reasonable access to adjoining properties. High speed traffic should be directed to I-89 and away from the town's more locally oriented streets (see Policy 6.3.1).

The town is committed to building "Complete Streets" whenever possible. Complete Streets are those that include design features for addressing the needs of all modes of transportation not just vehicles. New transportation facilities should incorporate complete street design principles to the maximum extent possible, and improvements to existing roadways should incorporate facilities for non-motorized transportation users whenever feasible.

6.1.2 *Sidewalks, Paths, and Trails* – Sidewalks, paths, and trails facilitating the movement of people by walking and bicycling is an essential element of the town's transportation plan. The Town of Williston will seek funding for improvements that are needed to provide <u>safe</u> pedestrian and bicycle <u>circulation infrastructure</u> throughout town, and to enhance cyclist and pedestrian safety.

Williston currently maintains more than 30 miles of sidewalks, paths, and trails. Sidewalks and paths are primarily used for transportation purposes. Sidewalks are for typically constructed as a part of neighborhoods and are designed for pedestrian uses such as walking, jogging, etc. Paths link neighborhoods and are designed to accommodate a broad range of non-motorized uses such as biking,

roller blading, etc. Williston's trails, often called primitive paths, are low-maintenance and primitive in nature and while they may serve a transportation function they are primarily used for recreation. Trails are described in more detail in Chapter 8 - Parks and Recreation.

Map 17 – Sidewalks, Paths, and Trails show Williston's primitive trail network in reference to the sidewalks and paths for the entire town. Map 11 – Sidewalks and Paths shows the existing and proposed sidewalks and paths north of the highway where most of these facilities exist.

The town's existing network of multi-use paths and primitive trails is highly valued in the community, and often mentioned as the type of facility the town's people would like to see more of. The people of the town have demonstrated their support for more bicycle and pedestrian circulation by approving a \$3.2 million bond issue for the construction of multi-use paths in 2003. These funds have been augmented through outside grants, developer construction, and transportation impact fees which have helped to accelerate the construction of facilities for non-motorized transportation, especially in filling in missing links in the network.

Improvements to the town's network of bicycle and multi-use paths should also include providing safe and effective links between Williston and neighboring communities such as South Burlington, Hinesburg, and Richmond.

6.1.2.1 Build the Paths Supported by the Bond Issue. The town has constructed paths along Route 2, from South Brownell to Helena Drive; along Mountain View Road, from Old Stage to North Williston Road; and along North Williston Road from Route 2 to Mountain View Road using bond funds. The town is currently working on right-of-way acquisition and engineering for the paths that will be constructed including Williston Road, and Rt. 2A, and filling gaps in the town's sidewalk network in the Taft Corners area among others. The bond also provides the local match needed to build paths along Route 2A. The town has been successful in obtaining roughly \$1 million in grants to help pay for the design and construction for the path along the northern portion of Rt. 2A in Williston. The town should periodically review the identified needs and gaps in the path system, and establish priorities in order to continue to vigorously pursue grant opportunities to supplement these funds and continue to build out the town's multi-use path network.

6.1.2.2 Build Other Sidewalks and Paths, as Needed. <u>It is the responsibility of the developer to</u> <u>provide</u> The provision of sidewalks, paths, and trails <u>withinin</u> new projects as well as connections to <u>existing sidewalks</u>, paths and trails adjacent to the new project. is the responsibility of the developer (see Policy 6.7.1 below), but the town may need to fills gaps in its bicycle and pedestrian circulation system. Paths that provide north-south and east-west transportation and recreation routes along or near heavily traveled roadways should be prioritized. Pedestrian and non-motorized facility priorities include:

- along Route 2A, south of Maple Tree Place and under I-89 to Hurricane Lane;
- the Village Bike Path north of the Southridge and Turtle Pond neighborhoods;
- an east-west connection along, or closely parallel to Route 2, from Williston Village to Taft Corners;
- wide shoulders along the side of Mt. View Road;
- a safe pedestrian crossing of Route 2 farther west in the village than the present crossings;

- a pedestrian crossing at the intersection of Williston and North Williston Roads, and;
- a crossing of the Muddy Brook to provide for a safe bike path along Route 2 between South Burlington and Williston. A CCRPC scoping study is reviewing alternatives for this crossing.

6.1.2.3 *Provide Wide Shoulders Where There Are No Bike Paths.* Where feasible, and where no other way is available, road improvements should include shoulders along the sides of public streets wide enough for bicyclists and pedestrians.

6.1.2.4 *Provide Amenities Along Paths and Trails.* Simple improvements can enhance the experience of walking or cycling in Williston. Benches should be provided, especially near elder housing projects. Bike racks should be provided near logical destinations for cyclists.

6.1.2.5 Link Recreation Paths and Trails to Sidewalk Network. The town's recreation paths and trails should be tied to paths and trails in the town and region designed primarily for transportation.

6.1.2.6 *Public Works Specifications.* The town's public works specifications will be revised to provide better guidance for multi-use paths and primitive trails. See also Policy 7.10.

6.1.2.7 Build Paths in New Developments. New development projects, especially those in the town's Growth Center, should continue to include requirements for pedestrian and non-motorized transportation facilities with these projects.

6.1.3 - Public Transportation - The Town will continue to support local public transportation agencies, including SSTA (Special Services Transportation Agency) and Green Mountain Transit (GMT), in providing service to Williston.

Williston currently has limited, fixed-route bus service provided by the GMT and on-demand special transportation services provided by the SSTA. Map 12 – Public Transportation shows the present bus route and stops. GMT now operates two different schedules of transit service to and from Williston. Regular bus service is currently available seven days each week connecting Williston with Burlington and Essex Junction at each end. A second commuter line was from Williston to Burlington was also started in June 2010. This second line offers service twice each morning and twice each afternoon during peak work travel times along with a mid-day run Monday through Friday to and from Williston Village and downtown Burlington.

As of September 2016 the upgraded Williston Road/US 2 corridor service has been operating for six years. GMT services along the corridor have been improved to include 15-minute weekday peak hour service, expanded operating hours, Sunday service to Williston (Taft Corners) and new weekday commuter service to Williston Village. These upgrades have provided better services to existing passengers and make GMT services more attractive to choice riders.

The current Williston (#1) route has averaged 1,266 daily weekday passenger boarding's, ranking second in system-wide ridership. The combined YTD ridership of the current Williston (#1), Williston-Essex (#1E) and South Burlington Circulator (#12) routes is 8.6% greater than the FY10 YTD ridership of the previous routes servicing the corridor. When including the YTD ridership of the Williston Village (#1V) route which has averaged nearly 11 boardings per

roundtrip the total corridor ridership has been increased by 10.8%. While ridership is expected to grow as the corridor service matures the current ridership levels are in-line with the ridership projections used in the CMAQ grant application.

GMT also provides on demand service for people eligible for special transportation services. In FY 2010 there were 4,383 ADA trips and 3,099 trips on E & D routes at one or both trip ends in Williston.

6.1.3.1 Continue to Support Both Fixed-Route and Special Transit. Williston has supported the Special Service Transportation Agency for many years and recently took a major step in continuing fixed-route bus service. The town agreed to provide partial local funding for GMT's existing route in FY06. Federal funding for this route expired at the end of the '05 fiscal year, and the town has continued to provide funding for GMT service in Williston, providing over \$224,000 in in funding FY 2017.

6.1.3.2 Continue to Promote Construction of Ride Sharing Facilities. The park-and-ride listed in 6.4.4 will help make public transportation a more viable alternative in Williston. When this facility is completed, the GMT should develop a plan for providing regular transit service to this facility so that users of this facility will have safe and convenient access to regional and local transit services. In an effort to accommodate those wishing to a more active commute, tThe town will provide secure, sheltered bicycle facilities to support hybrid-commutes and other trips that combine active transportation and bussing.

6.1.3.3 Build a Transit Center. Williston is currently served by two major bus routes, along with a more limited service commuter line to the Williston Village. The town is anticipating the completion of a regional park and ride facility near Exit 12 that should be served with both local bus service and by the regional Link service. The current place for transferring between these routes is at the Williston Walmart store on Harvest Lane. Williston requires a conveniently located, comprehensive, and central transfer station that would allow riders to easily connect between these various bus lines, provide options and facilities for riders from all transportation modes to access the center, and provide shelter for users during waiting periods. A comprehensive transit center such as this would best be located in the town's designated Growth Center in the Taft Corners area where high intensity development already exists and is anticipated in the future, and where the existing bus lines through Williston intersect.

6.1.3.4 Build Bus Pull Offs. There are many locations where there are inadequate places for bus passengers to get on and off busses along the major roads in Williston, especially Williston Road and Mt. View Road. The town shall work with GMT to identify and build appropriate locations for pull off locations for busses along these routes.

6.1.4 Connectivity - The Town of Williston will require multiple points of access to most developments. It will also strongly encourage safe, functional connections between neighborhoods, and within residential and commercial areas and public places.

Some benefits of insisting on safe, functional connections between neighborhoods via roads and sidewalks, paths, or trails include those listed here:

 Having multiple points of access to a neighborhood can be important during emergencies and major street or utility repairs

- Facilitating movement from one part of the community to another via local roads, sidewalks, paths, and trails can reduce congestion on arterial roads and major collectors. It also encourages walking and cycling
- Connecting neighborhoods promotes a sense of community throughout the town. Additionally, <u>t</u>There is a clear relationship between community design and mental health. <u>t</u>The relationship is complex and there <u>is no one way</u>are many ways to design a community that supports the mental health of all residents. The environment can contribute to an individual's sense of isolation. Accessible, well-designed, safe, multi-modal transportation is key to connecting people to where they wish to go and to each other.

6.1.4.1 Require Multiple Points of Access for Most Developments. Williston's bylaws impose two limits on the number of homes that may be served by a single point of access. Private driveways may serve five units, private or town roads may serve up to 50. The bylaw revisions that follow adoption of this plan will include standards that are based on both distance and density. Also, experience shows that the emergency access roads that have been permitted as a second point of access in the past have seldom been properly maintained. Where two points of access are required, they must be built to town standards and maintained.

6.1.4.2 Require Connectivity as a Condition of Development Approval. Commercial and residential developments must have safe, functional access for vehicles, pedestrians, and cyclists throughout the site. They should also have safe, functional connections with adjoining developments, ensuring contiguous infrastructure for all modes. If the new development does not adjoin any currently developed properties, the developer will provide infrastructure for all modes, connecting to the nearest existing network. Providing connections will ordinarily be the responsibility of the developer. The town may choose to invest in increasing connectivity where doing so will benefit the community. (For example, see for example Policies 6.4.1 and 6.4.5 below.)

6.2 - Access Management - The Town of Williston will adopt and enforce access management standards that protect public safety, access to existing and future uses, and the public investment in town and state roads.

Access management is the control of driveway and street connections to public roads. Effective access management has many benefits:

- It can reduce the need for additional public expenditures on road improvements by maintaining the capacity of existing highways
- It can improve traffic safety and limit the potential for conflict between vehicles, pedestrians, and cyclists
- It can reduce congestion and delays, while providing safe access to public roads from adjoining properties

Access to state highways is controlled by the Vermont Agency of Transportation. Access to town roads is controlled by the town. Both agencies require a permit for a new point of access, as authorized by state law (see 19 V.S.A. § 1111).

These access management policies are based on the functional classification of roads established in Objective 6.1.1 - Major Road Plan. Functional classification provides a sound basis for balancing landowners' needs for access with the community's need for mobility.

6.2.1. *Limit New Points of Access.* Access to arterial roads will be from local roads (public or privately maintained), not directly from adjoining properties. Access to collector roads must be via local roads or, where practical, shared driveways. The town may also require shared driveways for access to local roads. Objective 6.2.3 - Connections encourages linkages between neighborhoods as another means of limiting the need for access to arterials and major collectors.

6.2.2. *Limit Access Directly from Parking.* Parking areas must be designed so that vehicles do not back directly onto an arterial or collector road. Parking areas must not rely on adjoining roads as part of their internal circulation pattern. The siting, size, and design of parking lots are covered in Objective 4.2.

6.2.3. *Consolidate Existing Points of Access*. Existing points of access to arterial and collector roads must, where practical, be consolidated when the uses they serve are changed or expanded.

6.2.4. Locate Points of Access to Protect Public Safety and Minimize Congestion. Points of access to public roads, including both driveways and new streets, must be properly aligned and separated from each other, and from intersections. Specific alignment and spacing standards will be added to the town's bylaws or public works specifications.

6.2.5. Require Turning Lanes, Medians, and Other Access Management Improvements, as Needed. The town will require developers to provide acceleration, deceleration, and turning lanes; medians, and other access improvements, where needed. The need for these improvements may be established by a corridor study prepared by the town, the CCRPC, or VTrans, or by traffic studies required for proposed developments.

6.2.6. Design and Build Points of Access to Protect Public Safety and Minimize Congestion. Points of access, including both driveways and new streets, must comply with the town's design and construction standards. These standards, which are adopted either directly or by reference, into the town's bylaws or public works specifications, may include minimum sight distances, width, grade, curb radii, stacking or storage depth, and similar geometric requirements. They may also include signage and lighting.

6.2.7. Protect Pedestrians and Bicyclists. Access for pedestrians and bicyclists will be separated from access for vehicles where possible. Elsewhere, the potential for conflict between pedestrians, cyclists, and vehicles will be minimized by the use of pavement markings and texturing; signage; wider shoulders; and similar techniques.

6.3 - Transportation Improvements: State: The Town of Williston will support and encourage the Vermont Agency of Transportation (VTrans) to make improvements that are needed to enhance traffic safety and traffic flow, and to safely provide for bicycle and pedestrian circulation.

The Vermont Agency of Transportation plays a critical role in Williston. The town will work with VTrans to ensure the improvements listed here are made in a timely manner. See Map 9 – Proposed Transportation Improvements for the locations of these proposed improvements.

6.3.1 *Circ. Alternatives.* On May 20, 2011, Governor Shumlin announced that the State of Vermont would be abandoning its long anticipated plan to construct the Circumferential Highway. In its stead, the Governor directed the four communities anticipating the Circ., Williston Colchester, Essex and Essex Junction, to work with the state, the CCRPC, and other interest groups to come up with alternatives to the Circumferential Highway. The Circ. Alternatives Task Force met regularly for almost two years, and developed a list of transportation projects and demand management techniques that would be implemented over an approximately 20 year period. The projects identified for Williston include the re-building of Exit 12, improvements along VT 2A, the intersection of VT 2A and Mt. View Road, and additional grid streets in the Taft Corners area. The completion of these projects is a high priority for the town, and they collectively are an important part of the town's transportation and land use plans for the future.

6.3.2 Continue to support VTrans constructing a Williston Park-and-Ride. Williston residents and commuters from surrounding communities need a park-and-ride facility near Exit 12 on I-89. VTrans reopened the scoping process for this facility in 2006. This regionally important facility has received local permitting and state (Act 250) approval in 2015 and 2016, and construction is anticipated in 2017. This park-and-ride proposed near the south side of Exit 12 on I-89 should support Williston's goal of creating a pedestrian and transit friendly commercial center in the Taft Corners area. The town continues to support the completion of this facility and supports the park and ride being served by local and regional GMT service, with bike and pedestrian connections under I-89 to the Taft Corners area.

6.3.3 Improve the Intersection of Rt. 2 and Industrial Avenue. This VTrans project will improve safety and circulation, especially for trucks, at this heavily traveled and often confusing intersection. The construction of the planned improvements is awaiting state funding, and may rise in priority if it is selected as a priority improvement in lieu of the construction of the Circ.

6.3.4 Consider Improvements to the Intersection of Route 2 and North Williston Road. This intersection is currently congested only at peak hours, but a roundabout or signal will soon be needed. A CCRPC scoping study for this intersection recommended construction of a roundabout. The Williston Planning Commission supports transportation improvements in Williston Village, including the improvement of the intersection of Route 2 and North Williston and Oak Hill Roads, as long as the following elements of any project are considered:

- Pedestrian safety is improved, including safety for pedestrians who may need extra time or may require vehicles to be completely stopped to cross vehicle lanes.
- The safety of cyclists is addressed for any proposed alternatives.
- Recent evidence, particularly accident data, which consider any new improvements (such as the flashing red light at the North Williston/ Route 2 Intersection).
- The compatibility of the improvement with the Williston Historic Village is considered in consultation with the Williston Historic and Architectural Advisory Committee.
- Intersection improvements that involve structural elements (large metal masts and beams, for example) that are incompatible with Williston Village will not be supported.

6.3.5 Calm Traffic Throughout Williston Village. The visual separation created by the hill west of Williston Village results in high speeds as vehicles come over the crest approaching the village. The passing lane exacerbates this problem, and is no longer relevant, as Route 2 carries little farm traffic

and should be carrying only local truck traffic. Replacing the passing lane with a narrower road section or a boulevard would slow traffic entering the village and improve the quality of life for existing and future homes along this stretch of road. Consideration should be given to providing onstreet parking in the village to slow traffic and provide a buffer to pedestrians using the sidewalks. The CCRC completed a scoping study of this section of highway, exploring the feasibility of eliminating this passing lane and building a pedestrian or multi-use path. This facility for non-motorized travel is a high priority for the town.

6.4 - Transportation Improvements: Town - The Town of Williston will seek funding for and make improvements that are needed to enhance traffic safety and vehicular circulation.

The road improvements and studies listed here are assigned to either higher or lower priority. Higher priority projects should be included in the town's capital budget, meaning that they should be initiated within six years. Lower priority improvements may be added to the capital budget if the need becomes more urgent before this plan is updated or if funding becomes available.

Higher Priority Improvements. See Map 9 – Proposed Transportation Improvements for the locations of these proposed improvements.

6.4.1 Connect Marshall Avenue and Williston Road (Trader Lane). Extend Wright Avenue West to Harvest Lane. Working with landowners to build these grid streets in the Taft Corners area (see Map 3 – Taft Corners Grid Streets) will provide better access and relieve congestion. It may also alleviate the need for improvements at the intersection of Route 2A and Marshall Avenue. Planning and design studies for this and other grid streets have been completed in 2010.

6.4.2 Study the Need for Transportation Improvements at Mountain View and North Williston Road. Changing traffic patterns through Williston at peak travel times have resulted in periods of congestion at this intersection. The town will examine the potential need for improvements at this intersection.

6.4.3 Install a Traffic Signal and Geometric Improvements at James Brown Drive. The improvements at this intersection were identified by the town as the highest priority project during the Circ. Alternative Task Force process. This portion of Rt. 2A is highly congested, and completing turning movements is often very difficult, especially during peak periods of travel. The Williston Police Department also lists this intersection as a safety concern due to the potential for high-speed collisions. This signal and accompanying improvements are also needed to protect traffic, improve the overall functioning of the travel corridor, and provide facilities for pedestrians; A study of this intersection was completed by the CCRPC in 2008, which called for signalization of this intersection along with the construction of turn lanes on Rt. 2A. This project is under construction and partially completed.

6.4.4 Build a Williston Park-and-Ride. VTrans has planned to construct a regional park and ride facility on the south side of I-89 at Exit 12. The town continues to support the completion of this regional facility. In addition, the town should consider working with interested developers to create a locally oriented park-and-ride facility designed to support ride sharing and <u>all</u> transit <u>modes</u> oriented towards Williston residents. Possible locations for this facility could include the Williston village or within the Taft Corners area.

6.4.5 Build a Road Connection between the Home Depot/Wal-Mart Area and Rt. 2A. The town commissioned a study of this proposed roadway in 2006, and results have been shared with AOT and the CCRPC. This roadway would most likely be built in conjunction with a private development proposal, and the design interaction with the existing state highways in Taft Corners would have to be evaluated in conjunction with state transportation requirements.

Lower Priority Improvements. See Map 9 – Proposed Transportation Improvements for the locations of these proposed improvements.

6.4.6 Build Other Taft Corners Grid Streets. Extending Wright Avenue west toward Trader Lane (proposed) and connecting it to Marshall Avenue is a high priority (see Policy 6.5.1). Extending the grid from Harvest Lane, near the Home Depot (see Policy 6.4.5), to Route 2A may also be a priority depending on future development proposals in this area. Other grid streets in the Taft Corners area, including those linking the properties to the east to Maple Tree Place should be constructed as development proceeds.

6.4.7 Study the Need for Improvements on North Williston Road. Traffic on North Williston Road is growing as this narrow, winding, rural highway begins to serve part of the function originally projected for the Circumferential Highway: namely linking traffic from Route 15 and the existing portion of the Circ. (VT 289) in Essex to I-89 to the south. The state and the CCRPC should conduct a corridor study that projects traffic volumes and identifies the need for possible improvements along this roadway in light of recent discussions by the state to not construct a bridge over the Winooski River as part of the Circ. Highway in the foreseeable future. This study should also address the need for traffic calming along the more densely settled stretches of this road, and should address the needs of local users of this roadway including pedestrians and cyclists.

6.4.8 Study the Need for Improvements on Oak Hill Road. Like North Williston Road, Oak Hill Road is beginning to function as an arterial, carrying traffic from Hinesburg and other points south into rural residential areas. The town should fund a study that will project future traffic volumes, evaluate the need for improvements, evaluate how traffic calming on Oak Hill could be used to divert drivers to Route 2A, and should address the needs of local users of this roadway including pedestrians and cyclists.

6.5 - Freight - The Town of Williston will consider freight movement in its planning, public investment, and development review decisions.

As noted in the introduction to this element, Williston is a center of trucking and warehousing services. The New England Central Railroad passes through Williston, along the Winooski River, but provides little service to businesses located in the town.

6.5.1 Designate Truck Routes. Truck routes are designated on Map 9 – Major Road Plan. This designation supplements the functional classification map as a basis for planning transportation improvements and land use decisions.

6.5.2 *Promote Investment in Rail Services.* Williston supports the adoption and implementation of a state rail plan that would provide better freight service in Vermont. For information on state rail planning, see <u>http://www.aot.state.vt.us/Rail/SRP.htm</u>.

6.6 - Transportation Funding - The responsibility for the provision of local streets and bicycle and pedestrian ways will continue to be the developer's. The Town of Williston will continue to collect transportation impact fees to help fund the improvements that benefit the entire community.

The roads serving Williston represent a major public investment. The town currently spends somewhat more than \$1,000,000 per year to maintain its roads.

6.6.1 Continue to Require Developers to Provide Local Streets and Bicycle and Pedestrian Ways. Williston will continue to require developers to provide local streets, sidewalks or multi-use paths, and primitive trails that serve their projects. Developers may also be required to make improvements to existing town, state, and federal highways, as provided by Objective 6.2 – Access Management, and to provide rights-of-way for the path and trail system shown in the *Open Space Plan*. Where the development itself will generate or attract bicycle and pedestrian traffic, the developer will be required to build the paths and trails. Developers may also be required to provide bike racks.

6.6.2 Monitor and Evaluate the Transportation Impact Fee. 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.

6.6.3 *Pursue Additional Funding for Transportation Improvements.* The town has been successful in obtaining grants of roughly \$1 million in the past two years for the design and construction of paths and sidewalks that have helped the town to leverage its own funds. Town staff will continue to pursue grants and other funding sources for transportation improvements.

6.7 - Regional Transportation Planning - The Town of Williston will continue to participate in the regional planning transportation program of the Chittenden County Regional Planning Commission, including the commission's Transportation Advisory Committee (TAC) and Planning Advisory Committee (PAC). It will also pursue increased representation on the CCRPC board.

Williston is a member of the CCRPC, the regional planning and transportation planning agency. CCRPC prepares a regional transportation plan and a schedule of improvements that will be built with state and federal funds which is approved by the CCRPC board. Representation on the CCRPC board is presently based on the population of the participating jurisdictions. Williston will advocate a new formula that reflects traffic volumes, employment, or other indicators that better reflect jurisdictions' relative needs for transportation improvements.

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CHAPTER 7 - ECONOMIC DEVELOPMENT

Williston's vibrant and strong local economy has long been one of the defining characteristics of the town, and Williston today is a regionally important employment and commercial area. The town's central location in Chittenden County, close proximity to the Burlington International Airport, and ready access to I-89 which runs through the heart of the town, have created a number of important location advantages for Williston for supporting varied economic activity. Previous town plans have discussed the town's economic development goals primarily within its land use and transportation chapters. This marks the first time economic development has been discussed separately

After decades of employment and business growth, Williston has become an essential part of the regional economy in Chittenden County. Over the past 25 years, the number of people employed in Williston has tripled, increasing from approximately 4,000 jobs in 1990 to over 12,000 jobs in 2015 (Figure 7.A). The town has a diverse economy composed of a mix of large and small businesses, non-profits and government agency offices; ranging from manufacturing, retail sales, to government services. The town is well known as a retail commercial hub, with Walmart and the collective stores of Maple Tree Place located in the Taft Corners area. However, retail sales employment has declined somewhat in recent years, and employment levels in this sector have yet to revisit levels seen prior to the recent recession in the late 2000s. In contrast, business and government services have become more and more prevalent in recent years (Table 7.A).

Williston is home to some of the largest and most well-known businesses in the state and region including Global Foundries (formerly IBM), Keurig Green Mountain Coffee, Walmart, S. D. Ireland, and Maple Tree Place. In addition, the town has a wide range of other businesses large and small. Williston continues to be one of the most important centers of retail trade in the region and state accounting for more taxable retail sales than any other community in the state.



Figure 7.A – Long Term Employment Trend in Williston

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Figure 7.D – Employment by Sector, 2000 - 2015



Source: Vermont Department of Labor, Economic and Labor Market Information

	Establishments			Employment				
	2000	2010	2015	% Change	2000	2010	2015	% Change
Natural Resources and Mining	3	5	4	33.3%	17	22	23	35.3%
Construction	75	86	88	17.3%	1,178	984	1,182	0.3%
Manufacturing	30	32	31	3.3%	1,115	576	1,273	14.2%
Wholesale Trade	67	88	82	22.4%	852	758	704	-17.4%
Retail Trade	96	106	102	6.3%	1,596	2,299	2,147	34.5%
Transportation and Warehousing*	25	33	34	36.0%	594	914	1,070	80.1%
Information	15	20	22	46.7%	479	296	302	-37.0%
Financial Activities	42	53	55	31.0%	488	515	795	62.9%
Professional and Business Services	117	160	206	76.1%	1,319	1,286	1,819	37.9%
Education and Health Services	53	50	56	5.7%	834	756	822	-1.4%
Leisure and Hospitality	23	40	46	100.0%	310	862	886	185.8%
Other	64	54	54	-15.6%	479	273	378	-21.1%
Government	20	20	26	30.0%	463	1,098	1,604	246.4%
TOTAL	630	747	806	27.9%	9,724	10,639	13,005	33.7%

Table 7.A –	Employmen	nt by Sector	2000-2015
		•	

* Between 10-20 positions in this category were kept confidential in 2000

Figure 7.E – Top Ten State Sales Tax Receipt Towns, 2005-2015



Commuting Patterns

Williston, like the county as a whole, imports a large portion of its labor force. According to the U.S. Census, there were over 11,500 people commuting into Williston on a regular basis for employment in 2013, while only 850 of the town's workface lived in Williston. This illustrates the importance supporting vigorous efforts to increase the supply of housing in Williston, especially workforce housing. Because of this influx of workers into town, Williston's daytime population is almost twice the size of its resident population (Figure 7.B)



Figure 7.G – Flow of Workers to and from Williston

Table 7.B - Williston Estimate	d Daytime Population, 2013
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Resident Population	9,014
Workers Commuting to Williston	+ 11,687
Williston Residents Commuting to Other Locals	-3,533
Net Daytime Population	17,168
Net Daytime Population	17,168

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Educational Attainment

A strong economy relies upon many factors, including having an educated and trained workforce available to fill the needs of area employers. Williston's population boasts a very highly level of educational attainment by almost any standards, in a highly educated region. Recent estimates indicate that over 95% of Williston's population over age 25 has graduated from high school, and over 50% have a college degree or greater, levels well above the national and state-wide averages (Figure 7.H).



Figure 7. H - Educational Attainment

Source: American Community Survey (2014)

Objectives

7.1 – Implement the Town's Land Use Plan – Chapter 3 Land Use identifies several land use objectives aimed at supporting the town's economic development. These include:

3.1 Taft Corners and Growth Center. Williston has emerged as a regional center of commerce, business, and employment. The town accounts for more retail sales than any other municipality in Vermont. This objective provides a basis for the town's continuing efforts to build a design-conscious, pedestrian-friendly, mixed-use town center in the area of Taft Corners.

3.3 *Industrial Lands*. This objective maintaining the supply of industrially zoned land also calls for changes and refinement in the standards applied to uses of industrial lands to address the needs of an evolving economy.

7.2 – **Implement the Town's Transportation Plan** – Chapter 6 Transportation discusses the important role that the transportation network and services in Williston play in supporting the town's local and regional economy

6.2.1 *Public Transportation.* Most of the town's centers of economic activity have some access to public transportation, especially in the Taft Corners area, along Williston Road and Industrial Avenue. The town continues to support the provision and expansion of public transportation services in Williston, especially in those parts of town with high employment levels.

6.2.2 Transportation Improvements: state. This goal details a range of state provided transportation improvements to the town's arterial roads including I-89 (Exit 12), Williston Road and VT 2A. The town will continue to work diligently with VTrans to see these improvements get implemented.

6.2.3 *Transportation Improvements: Town.* Included in this goal is the expansion of the town's grid street network in the Taft Corners area, and

6.2.4 *Freight:* The Town of Williston will continue to consider freight movement in its planning, public investment, and development review decisions.

7.3 – **Continue to Maintain Available Wastewater Treatment Capacity.** Chapter 8 discusses a range of local government services supplied by the town, including some forms of essential public infrastructure. This includes municipal water and sewerage service. Historically, having a supply of additional wastewater treatment capacity for new or expanding businesses in Williston has been a challenge. This has been less so recently as the town has added capacity, but it remains an important ingredient in supporting a healthy local economy.

7.4 – Support Additional Affordable Housing. Objective 5.2 Housing Opportunities calls for the town to use its residential growth management system to encourage the provision of a range of housing choices, including choices among different locations and densities of dwellings, and housing that is affordable for residents and the workforce. The town will also explore other means of promoting the provision of more diverse, more affordable housing.

7.5 – **Support the Development of VTC.** Vermont Technical College in Williston is an important resource for training and educating a technologically sophisticated workforce. Objective 10.3 calls for supporting the efforts by VTC to expand and evolve their Williston Campus.

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CHAPTER 8- PUBLIC FACILITIES AND SERVICES

As Williston has grown over the years keeping pace with the ever present demand for affordable public services for Williston's ever increasing number of residents, workers, commuters, and shoppers has been a challenge. While the town has made significant strides in addressing the demands for these services by investing in new facilities, the process of meeting the needs of the town is an ever evolving one. This chapter assesses the current capacity of each town service to continue to provide <u>accessible</u>, high quality municipal services to the town's residents and businesses, and to plan for the future growth of the town and provides policy direction for how capacity should, where necessary, be expanded.

8.1 - Administration – This objective assesses the buildings and facilities that house town government. Now that the modern public safety buildings completed in 2007, and the public works garage completed in 2015 are in place, all existing town buildings are anticipated to meet the town's needs for many years to come.

8.2 - Cemeteries – Williston has four cemeteries. Three are nearly full, but the new Deer View Cemetery on North Williston Road will have available plots for many years into the future.

8.3 - Fire and Rescue – Williston's Fire Department is now housed in a modern, state-of-the-art fire station at the former Mahan Farm property on Williston Road. The Fire Department's challenges moving forward will be maintaining the staffing levels necessary to meet the demands of the expanding number of calls for service.

8.4 - Law Enforcement – The Williston Police Department moved into new, modern quarters in 2007, designed to meet the facilities needs of the department well into the future. As with the Fire Department, the Police Department's attention has shifted to providing the needed personnel to meet the growing demands for police service in the town.

8.5 - Library – Williston residents are served by the Dorothy Alling Memorial Library, which is anticipated will meet the community's needs for the foreseeable future.

8.6 - Sewerage – Installation of central sewerage completed in 1985, combined with Williston's central location in the region set the stage for the rapid growth of the 1990's and 2000's. Even after an expansion of the plant's treatment capacity in 2005 and the purchase of addition plant capacity for Williston's use, the sewage treatment plant Williston shares with Essex and Essex Junction has a limited amount of capacity available for Williston to accommodate modest growth for the foreseeable future.

8.7 - Solid Waste – This is not a municipal service - solid waste collection is provided by private haulers, and disposal and composting by the Chittenden Solid Waste District. The CSWD property is also the proposed location of a future regional landfill.

8.8 - Water – The town provides municipal water service in those areas of Williston designated for moderate and higher intensity development. Rural areas rely on private wells for their water supply. The town's water system will, with planned improvements, be adequate for the next 10-15 years.

8.9 - Capital Budget – Facilities' needs must be matched with financial resources. Williston accomplishes this through its capital budgeting process utilizing a five year Capital Improvement Plan as part of its annual budgeting process.

8.10 - Public Works Specifications – The town's public works specifications provide guidance and standards to engineers and contractors working for the town and to developers building public infrastructure.

Public Facilities and Services Described in Other Chapters:

- **Transportation** is discussed in Chapter 6 Transportation. Numerous highway improvements needed to carry growing traffic volumes and complete the buildout of the town's local transportation network. That chapter also addresses needs for sidewalks and paved paths that enable more active forms of transportation and mobility, and as an alternative to vehicular travel.
- **Recreation** is discussed in Chapter 9 Parks and Recreation. Williston's town-owned country parks, community parks, and primitive trail system are described in this chapter. This chapter also addresses the town's recreation programs and the need for additional public recreation facilities.
- Schools are discussed in Chapter 10 Education and Child Care. Current demographic and development trends suggest that the town's existing school facilities will be sufficient for the next eight years and perhaps longer, but the town should monitor demographic and enrollment trends and be preparing plans for potential expansion in light of ongoing growth in the number of households and population.
- **Stormwater Management** is discussed on Chapter 12 Watershed Health. Williston now finds itself with major stormwater management responsibilities as it prepares to maintain numerous residential stormwater facilities, and continues to meet the requirements of the federal MS4 stormwater management requirements

8.1 - Administration - The Town of Williston will strive to maintain adequate space and modern facilities for the administration of municipal services.

Williston maintains seven principal buildings. The town's administrative services are largely concentrated in Williston's historic village center. Two exceptions are the fire station and the public works garage. These are shown on Map 13 – Public Facilities.

- The Thomas Chittenden Town Hall houses the Selectboard meeting room, which is also used for meetings of other town boards, and the town's main administrative offices including those of the Town Manager and Town Clerk
- The Town Hall Annex houses the public works office, recreation and parks department, and the planning and zoning office. This building was remodeled after the police department moved into their new facility in 2007. It now includes a conference room in addition to the public offices
- The new fire station was completed in 2007 near the intersection of Talcott Road and Williston Road, providing a modern base for the town's fire and rescue vehicles and personnel. The building also includes a room for training and public and community meetings

- The new police station and headquarters completed in 2007 replaced the cramped and inadequate space occupied by the police department in the Town Hall Annex. The new facility also includes a public meeting room
- The Old Brick Church, which is across Route 2 from the town hall is also a town owned building. This building is leased for events like weddings
- The Dorothy Alling Memorial Library, which is also located on the north side of Route 2 in the village center
- The recently completed new public works shop and garage, is located in northwestern Williston, off Avenue A

With the completion of the new police and fire department buildings in 2007, the remodeling of the Town Hall Annex, and the completion of the public works garage in 2015, these buildings will enable the town to meet its facilities needs through the 2016-2024 planning period and into the future. The completion of the new police and fire department facilities and public works garage have prepared the town for addressing its emergency service facilities needs for decades to come.

8.1.1 Renovate the older town facilities for energy efficiency and conservation. A series of energy audits of the Town Hall, Town Hall Annex, the Old Brick Church, and the Dorothy Alling Memorial Library were completed in 2009 and 2010. These audits recommended a number of measures for weatherizing and improving the energy efficiency of these older town buildings. The town should implement these recommendations in order to lower the town's energy costs and energy fuel consumption. These measures will not only result in savings to the town in future years, but will also set an example of good stewardship for town residents and businesses in meeting the state's energy efficiency goals and addressing climate change.

8.2 – Cemeteries - The Cemetery Commission will continue to maintain the town's burial grounds. The Historic Architectural Advisory Committee will assist the Cemetery Commission in seeking funds to restore historic gravestones.

Williston has four cemeteries, which are maintained by the Cemetery Commission using what remains of its endowment funds which are now supplemented by town funds. Three of the cemeteries – East, Morse, and Thomas Chittenden have historic grave sites and markers. They are nearly full. The fourth, Deer View Cemetery, was established in 2001. It adds the potential of approximately 4,000 lots. At this time, only 432 lots have been marked, and 177 of these have been sold.

8.2.1 Enhance the appearance of the Deer View Cemetery. The Deer View Cemetery, while providing much needed space for the future, currently lacks much definition and is plain in appearance. The Cemetery Commission should consider developing a beautification plan to enhance the appearance of the cemetery through landscaping and other design modifications.

8.3 – Fire and Emergency Medical Services - The Town of Williston will strive to continue to provide a high quality level of Fire and Emergency Medical Services (EMS) services. Keeping pace with the town's growth may require additional investments in personnel during the 2016-2024 planning period as the demands for fire protection and EMS changes as the result of increased population and changing demographics. The Williston Fire Department responded to 1,801 total calls for service; 870 call for EMS and 931 fire calls in FY2014. In contrast, the Fire Department responded to only 1,566 calls for service during FY 2009. Williston currently ranks third in Chittenden County for responses to calls, and as reported by the Vermont Department of Fire Safety in 2013, eighth in fire and fifth in EMS responses across the state. The need for the equipment and trained personnel necessary to respond to calls for fire protection and/or emergency medical services has grown as Williston has grown. The Fire Department moved into a new, modern facility in 2007 at the intersection of Williston Road and Talcott Road. The new fire station has provided the Fire Department with sufficient space to house all of their vehicles and equipment in one place. In addition, the new fire station has meeting space for training and community meetings and events, as well as a dormitory that enables the Fire Department to have staff at the facility 24 hours a day. The Fire Department operates with three people on duty at all times, and these people are aided by staff who responds to calls for service as needed. In 2010 the Fire Department began offering ambulance service for the first time, thereby filling out what had been a weak area of service response capacity. A list of the Fire Department's apparatus is provided in Table 8.A below.

Table 8.A Fire and Rescue Apparatus

IDENTIFIE	YEAR			
R	BODY/ENGINE MAKE	MODEL	TYPE	
Engine 1	1997 Spartan/Smeal	1250/1000	Engine	
Engine 2	2009 KME/KME	1500/750	Engine	
Engine 3	2003 KME/KME	1250/1000	Engine	
Tower 1	2001 KME/KME	2000/9000/95	Tower/Ladde r	
Brush 1	1999 Dodge/Greenwoo d	250/250	Forestry	
Car 1	2008 GMC Yukon	SUV	Chief's Car	
Car 2	2010 GMC Yukon	SUV	Duty Car	
Utility 1	2011 GMC 2500	Pick-Up	Utility/Duty	
Rescue 1	2010 Ford Osage	Туре І	Ambulance	
Rescue 2	2014 Ford Osage	Туре І	Ambulance	
Utility 2	2014 Polaris Ranger 800	Utility Vehicle	Search/Rescu e	
Tech Rescue	2014 Bravo Trailer	Tandem Trailer	Search/Rescu e	
Tech Rescue 2	2006 Pace Cargo Trailer	Utility Trailer	Search/Rescu e	

Williston Fire / EMS Apparatus:

The completion of the fire station and the addition of several new pieces of fire suppression trucks and the two ambulances in 2010 have addressed the department's immediate needs for facilities and equipment. Moving forward, the needs and priorities of the Fire Department will shift from providing facilities to providing the people necessary to respond to calls and deliver fire safety and emergency services.

8.3.1 Level of Service: Firefighters/EMTs. The Williston Fire Department is authorized to have 50 Firefighters and EMTs. Some of these are certified as Firefighter only (FF), some EMS only (EMT), and some are dual certified (FF/EMT). There are currently 42 staff members on the roster. Eleven of these are full-time employees comprised of Fire Chief, Training Captain, 8 career FF/EMT shift personnel, and an administrative assistant. The remaining 31 staff members are paid call staff positions. The Fire Department operates with an average of 44 members on the roster. Meeting the personnel needs of the department is compounded by the frequent turnover in call staff as well as the challenges of serving an expanding resident population. The Fire Department is also anticipating the retirement of many of its upper management staff including both the chief and deputy chief. The town should continue to monitor the staffing needs of the Fire Department and look for ways of fully staffing the department and prepare for an anticipated transition of many of its key department management staff.

8.3.2 Adopt and Enforce National Fire Codes. The Vermont Division of Fire Safety enforces building codes for commercial construction throughout the state. Local adoption of the National Fire Codes would provide Williston's fire and planning departments with independent authority to address basic life safety issues as development and redevelopment occur. Fire codes protect both the occupants of a building and the firefighters who may be called there. They also facilitate "preplanning," in which the department decides in advance how it will deal with a call at a particular location.

For information on the Vermont Division of Fire Safety go to <u>www.dps.state.vt.us/fire/</u>. Information about the National Fire Codes may be obtained from the National Fire Protection Association <u>http://www.nfpa.org/index.asp</u>.

8.3.3 Cooperate with the Williston Police Department in Studying Ways to Improve Dispatch. The Williston Fire Department is currently dispatched by the Shelburne Fire Department. Previously, fire and EMS dispatch had been provided by the Essex Police Department and St. Michael's College. See 7.4.2 for more on this issue. The town should consider the feasibility of providing its own coordinated emergency response dispatch for both police and fire department delivered services.

8.3.4 Implement the Regional All Hazards Mitigation Plan. The Chittenden County Regional Planning Commission has developed an All Hazards Mitigation Plan. Hazard Mitigation is a sustained effort to permanently reduce or eliminate long-term risks to people and property from the effects of reasonably predictable hazards. The purposes of this updated Local All-Hazards Mitigation Plan are to:

- Identify specific natural, technological and societal hazards that impact the Town of Williston
- Prioritize hazards for mitigation planning
- Recommend town-level goals and strategies to reduce losses from those hazards

• Establish a coordinated process to implement the plan, taking advantage of a wide range of resources

This plan is a local annex to the Chittenden County Multi-Jurisdictional All-Hazards Mitigation Plan. In order to become eligible to receive various forms of Federal hazard mitigation grants, a Chittenden County municipality must formally adopt its Local All-Hazards Mitigation Plan along with the Chittenden County Multi-Jurisdictional All-Hazards Mitigation Plan, or develop and adopt an independent, stand-alone Local All-Hazards Mitigation Plan.

The CCRPC has been actively engaged in hazard mitigation planning since 2003 and worked with its municipalities to craft the region's first hazard mitigation plan, the Chittenden County Vermont Multi-Jurisdictional All-Hazards Mitigation Plan approved by FEMA Region I in August 2005. The Plan includes as annexes, the official Local All-Hazards Mitigation Plans for all 19 of the municipalities in the County. The CCRPC recently completed an update to this plan which was approved by FEMA Region I on March 6, 2017, and the Williston Selectboard approved the town specific portion on May 2, 2017.

8.4 - Law Enforcement - The Town of Williston will continue to provide law enforcement protection and services at a level that keeps pace with the town's growth and demand for services. This will require attention to staffing levels and how call dispatch is administered during the 2016-2021 planning period.

The Williston Police Department managed a total of 10,156 calls for service and traffic contacts and made 534 criminal arrests in FY 2010. In FY 2015, the Police Department had a combined response to calls for service and traffic contacts totaling 10,356 (up 2%) and made arrests for 520 offenses. In 2007, the town completed the construction of a new, modern police station on Williston Road next to the Williston Town Hall. The new police station contains office space, a call dispatch area, holding areas, and interview rooms for police business, and has provided the town with sufficient space to accommodate the needs of the department for years to come. In addition the police station also has a meeting room for public meetings.

In the future, the primary needs of the police department will be in providing the necessary number of trained personnel to provide police protection.

- The Williston Police Department has been budgeted to have 17 sworn officers in FY 2017 including the chief and four sergeants, up from 15 officers in the fiscal year 2013. Because of vacancies, training, and job-related injuries, however, the number of officers available for patrol is often below that number. This results in increased workloads and overtime hours for many officers, and contributes to a reduction in services to the community.
- The Williston Police Department currently provides its own dispatch with two employees from 7:00 A.M. through 7:00 P.M., daily. Dispatch at other times is handled by the Vermont State Police, which services all state officers in Addison, Chittenden, and Lamoille Counties, as well as several police departments. The dispatch workload often affects traffic enforcement activities and can magnify officer safety concerns.

The town's capital budget provides for replacement of the department's five marked and three unmarked cars, but not until they have approximately 80-100,000 miles on them.

8.4.1 Level of Service: Officers. Williston should have a police force that is proportional to its effective workload and officer availability. The latest workload analysis conducted in 2012 determined that this agency should have a total of 17 uniformed police officers to respond to department calls for service and address Williston traffic safety issues. The town currently budgets for 17 total officers in the agency, of which 13 are assigned to a uniformed assignment.

8.4.2 Level of Service: Dispatch. The dispatching of emergency response services in Williston in an efficient and coordinated fashion remains a challenge for the town. Fire and EMS dispatch is handled separately from police, and police dispatch is provided during night and evening hours through the Vermont State Police. The Town of Williston does not realize the entire cost for dispatch services since we are not charged by the Vermont State Police and to properly address our challenges, it would entail budgeting for the needed services. Transitioning to a single dispatch resource is a critical need at this point and would require the financial support to hire additional staff or assume the full expense for another entity to provide dispatch services to the police department.

• In FY 2016, Williston Police began dispatching for the Chittenden County Sheriff's Department in exchange for using the Sheriff's equipment, which addresses shortcomings of communications equipment belonging to Williston.

8.5 Library – The Town of Williston will continue to provide exemplary library services for its residents. The Library Board will prepare an updated facilities plan.

The Dorothy Alling Memorial Library (DAML) is located in Williston's historic village. The 9,507 square foot building consists of the original structure donated to the town in 1959 and two additions, one made in 1986 and one in 1998. DAML holds more than 41,000 items, including books, magazines, videos, and audio recordings. The library also provides access to downloadable audio, eBooks, and several databases. It also houses the collection of the Williston Historical Society. Circulation in 2014-2015 was 121,651, with 60,944 visits and 4,451 cardholders from Williston and St. George. In addition, the DAML is a member of the HomeCard System which provides reciprocal borrowing privileges to residents of participating towns. The library also offers nine computers for public use, video conferencing equipment, and a Wi-Fi hotspot. The staff consists of three full-time, five part-time, four student assistants, and numerous volunteers. The library has a meeting room, and held 408 programs in 2014-2015, with a total attendance of 9,436 people. These included literacy programs for preschoolers and school age children, a monthly teen group, lectures, author visits, films, and other programs for youth and adults. The library also offers extensive outreach services including the operation of a bookmobile to neighborhoods in the summer months, pre-schools during the school year, and senior communities year-round. Library staff also makes deliveries of library materials to homebound individuals.

In 2012-2013, a number of repairs and modifications were completed at the DAML to improve the energy efficiency, lighting and the overall comfort of the library's patrons. The library's immediate facilities plans are focused on improving the layout of the building to make areas for library study separate from areas for casual visiting, and to create a teen space. Expansion of the existing facility will need to be considered at some point as the population of the town and the demand for services increases. Library staff will continue to monitor new development and trends in technology and information services and incorporate them into the library's current offerings as appropriate.

8.6 - Sewerage Service – The Town of Williston will continue to provide municipal sewerage service, but only within the defined sewer service area, and within the limits imposed by treatment plant

capacity. The town will continue seeking additional sewerage capacity in order to meet the town's long term growth needs.

Williston provides sewerage in the service area shown on Map 8. The town's sewer service area is an expression of the town's land use plan to minimize sprawl and concentrate growth within its designated growth center. Sewage is collected through some 70 miles of mains and nine pump stations; it is then pumped under the Winooski River to a treatment plant in Essex Junction. The plant is jointly owned and operated by the Village of Essex Junction, the Town of Essex, and the Town of Williston. There are also some additional areas currently served by municipal sewer service and these are also identified on Map 8. Properties in these locations were allowed to connect to the town's system either under the Pollution Abatement Provision of the town's *Sewer Service Ordinance*, or they pre-date the town's current policy.

Williston had less than 100 gallons per day of unallocated sewage treatment capacity remaining when a 200,000 gallon per day expansion came on line in 2005. The town recently completed the purchase of an additional 50,000 gallons per day of capacity in 2016. Those expansions will allow the town to meet the residential growth target set in Chapter 5 Housing and Growth Management, and permit additional industrial and commercial development through the end of FY 2025.

8.6.1 Continue to Confine Central Sewerage to the Sewer Service Area. This plan proposes no changes in the sewer service area shown on Map 7. Municipal sewer service will not be extended outside the defined sewer service area except in response to public health emergencies, as defined in the sewer allocation ordinance.

8.6.2 Allocate Sewage Treatment Plant Capacity in Accord with This Plan. Williston has linked the allocation of limited waste water treatment plant capacity and its planning goals for many years. Recent revisions to the sewer allocation ordinance and development regulations described in Chapter 5 of this plan have confirmed this policy. The projected 20-year allocation which runs through the end of FY 2037 is shown in Table 8.C. In addition, the town should also consider developing a longer range planning horizon for allocating sewer capacity

8.6.3 *Purchase additional sewer capacity.* Williston has recently completed the purchase of an additional 50,000 gallons per day of sewer capacity from the Village of Essex Junction from the remaining uncommitted sewer treatment capacity from Essex Junction. The town is aware that the wastewater treatment capacity of the Essex Junction plant is limited and future treatment capacity is unlikely. The town should consider purchasing additional sewer treatment capacity soon in order to meet the town's anticipated future needs.

8.6.4 Implement the Facilities Plan for Sewerage. The town completed a study of its wastewater facilities in 2008. This study examined the condition of the town's existing sewerage collection system, including pump stations and force mains, and resulted in a number of recommendations and a schedule of anticipated system improvements with estimated costs. This plan should be used as a guide in making future capital expenditure decisions for improvements to the existing system to ensure its ongoing viability and safe operation.

8.6.5 *Implement a 20 year Plan for Sewer Service*. The town currently plans for and allocates sewer treatment capacity one decade at a time, consistent with the time horizon of the residential growth management allocation process. Given the town's limited available capacity at the Essex Junction treatment plant, the town should consider developing a 20 year plan for allocation sewer capacity to help insure the town has ample capacity to address the town's long term growth needs through 2036.

8.6.6 Make Better Use of Existing Capacity. The town allocated capacity in the sewage treatment plant to private landowners in 1990 and 1999. These individuals currently hold almost 95,000 gallons per day of unused plant capacity. Given the time required to add capacity, the town will continue efforts to reacquire it from landowners who are not expected to use it. The town will also permit transfers of privately-held capacity (the capacity committed to landowners was linked to specific parcels) that facilitate development without using new capacity.

8.6.7 Continue to Assess Sewer Connection Fees. Update the Fees Upon Completion of the Current Studies. The town will continue to collect fees for connection to the sewerage system. These fees should result in each new user making a fair, proportional contribution to the costs of expanding the system. They should be updated on a regular basis.

Fiscal Year	5.2.1/5.2.2 new commercial and industrial	5.2.3/5.2.4 new residential	5.2.5 residential additions/mi nor subdivisions	5.2.6 affordable housing	5.2.7 planned public facilities	5.4 pollution abatement	5.2.9 encouraging specific development	TOTAL NEW ALLOCATION S
2018	2,000	7,500	1,000	500	500	500	4,000	16,000
2019	2,000	7,500	1,000	500	500	500	4,000	16,000
2020	2,000	7,500	1,000	500	500	500	4,000	16,000
2021	2,000	7,500	1,000	500	500	500	4,000	16,000
2022	2,000	7,500	1,000	500	500	500	4,000	16,000
2023	2,000	7,500	1,000	500	500	500	4,000	16,000
2024	2,000	7,500	1,000	500	500	500	4,000	16,000
2025	2,000	7,500	1,000	500	500	500	4,000	16,000
2026	2,000	7,500	1,000	500	500	500	4,000	16,000
2027	2,000	7,500	1,000	500	500	500	4,000	16,000
2028	2,000	7,500	1,000	500	500	500	4,000	16,000
2029	2,000	7,500	1,000	500	500	500	4,000	16,000
2030	2,000	7,500	1,000	500	500	500	4,000	16,000
2031	2,000	7,500	1,000	500	500	500	4,000	16,000
2032	2,000	7,500	1,000	500	500	500	4,000	16,000
2033	2,000	7,500	1,000	500	500	500	4,000	16,000
2034	2,000	7,500	1,000	500	500	500	4,000	16,000
2035	2,000	7,500	1,000	500	500	500	4,000	16,000
2036	2,000	7,500	1,000	500	500	500	4,000	16,000
2037	2,000	7,500	1,000	500	500	500	4,000	16,000
Total	40,000	150,000	20,000	10,000	10,000	10,000	80,000	320,000

Table 8.C

Calculations show average annual allocation each fiscal year for 20 years. Average annual allocation based on observed allocation sold to applicants over the past 10 years.

Sewage Math? How much sewage treatment capacity is needed for typical uses? A one-bedroom apartment uses an average of 75 gallons per day, a two-bedroom condominiums use an average of 135 gallons per day. A three-bedroom single-family home averages about 230 gallons per day (gpd). A busy restaurant can use more than 5,000 gpd.

8.7 - Solid Waste – The Town of Williston will collaborate with the Chittenden Solid Waste District in providing solid waste disposal, recycling, and composting for Williston and for the Chittenden County Region.

The Town of Williston does not provide solid waste collection or disposal. Rather, these services are provided by private haulers and the Chittenden Solid Waste District (CSWD). Williston is, however, the host community for a potential proposed regional landfill and a composting facility to be relocated from the Intervale in Burlington. The site, which includes a former town landfill that is now monitored by CSWD, also includes CSWD's headquarters, a solid waste and recycling drop-off center, and a regional composting facility is shown on Map 13 – Public Facilities. Construction of the regional landfill will go through a rigorous regulatory process that is not described here. More information may be obtained from CSWD. The potential future landfill does have transportation and land use implications that must be addressed.

For more on solid waste collection, including recycling and a list of private haulers, visit the CSWD website at: <u>http://www.cswd.net/</u>.

8.7 *Make Necessary Transportation Improvements with any Additional Solid Waste Facilities.* The CSDW property has been discussed as a possible location for a future landfill. It is not clear at this time if this facility is likely to be built anytime soon. However, a potential landfill facility is likely to have implications for the town's transportation network. Currently haulers all find their way to one of the two private transfer stations in Williston. Waste is then trucked from those facilities to landfills in other counties. In the event that CSWD decides to pursue the location of a regional solid waste facility off Redmond Road, the town should only support such a proposal if there are transportation facilities necessary to support the levels of truck traffic generated by the facility. In the event that a landfill is proposed for the CSWD property on Redmond Road, the town should make sure that the necessary transportation facilities needed to support this facility are provided.

8.7.2 Require Host Town Agreements for the Operation of All Solid Waste Disposal Facilities. CSWD is authorized to operate its solid waste facilities under the provisions of 10 V.S.A § 6604, also known as Act 78. Solid waste facilities operators are considered to be quasi-independent local government entities regulated by the State of Vermont. CSWD has operated its facilities under a Host Town Agreement that defines the nature and extent of CSWD operations and provides a mechanism for CSWD to make appropriate payments in lieu of taxes to pay its fair share for the costs of using town services and infrastructure. The town will continue to require CSWD or any other solid waste facilities operator to enter into a Host Town Agreement prior to locating or operating any new or expanded solid waste facilities in Williston, and ensure that that agreement is included as a condition of any solid waste certification. A Host Town Agreement shall define the maximum extent of the solid waste facility's operation, and include a payment schedule to the town for the use of town services, pursuant to Section 20 of the Williston Town Charter.

8.7.3 Explore Recycling Requirements. The town will work with CSWD to explore the feasibility of requiring recycling by commercial uses and of requiring the use of recycled materials in

construction projects. This task may be made part of the municipal energy planning effort called for by Objective 11.7. The town should also explore developing standards into its development regulations for meeting the state's future requirements for removing food waste from <u>the</u> refuse stream through composting.

8.8 - Water – The Town of Williston will continue to provide a safe and reliable supply of potable water.

Williston buys water wholesale from the Champlain Water District (CWD), which relies on surface water from the LaPlatte Watershed. The town distributes treated water through a system of storage reservoirs and mains that is divided into two pressure zones. The "high zone" is served by storage tanks in the village and just east of Route 2A, south of I-89. It lies mostly east of Route 2A. Water users along Route 2A and to the west are in the "low" pressure zone served by a tank at Maple Tree Place. The water system is one of the few town facilities that is adequate through the current planning period.

8.8.1 *Protect the Town's Water Source.* Williston includes a small part of the LaPlatte River Watershed. See the source water protection objective adopted at 12.5.

For more information on Williston's water supply visit the Champlain Water District's home page at <u>http://www.cwd-h2o.org/</u>. Additional information on Shelburne Bay is also available at <u>http://www.shelburnebay.org/home/homeindex.html</u>. Williston includes a small portion of the LaPlatte Watershed, the CWD's source water area. See Chapter 12 – Watershed Health for more on source water protection.

8.8.2 Level of Service: Storage. Maintaining one day's consumption in storage is a typical level of service standard for public water systems. Williston currently has 1.1 million gallons of storage distributed among tanks on Tower Lane in the village, at Maple Tree Place, and just east of Route 2A, south of I-89. Given current peak demands of 700,000-800,000 gallons per day, water storage will be sufficient through the current planning period. The town is planning to construct a new 600,000 gpd storage tank near Mt. View Road and Old Stage Road during FY 2017-18. This will provide the town with sufficient water storage capacity throughout the planning period and beyond.

8.8.3 Level of Service: Eliminate Dead-Ends. No use should be served by a dead-end water main, which may not support adequate water pressure or fire flows, and raises water quality concerns. Rather, new connections to the town's water lines will be made by a looping system. The town has been working to eliminate any existing dead-ends in its water system. The extension of a water main along Old Stage Road was completed in FY 2013 eliminating one of two major dead-ends in the water line system. The second is located along Rt. 2A near James Brown Drive. The town will be considering options for closing this dead-end in the system during the next eight years.

8.8.4 *Continue to Collect Water Connection Fees.* The town will continue to collect water system connection fees. These fees should result in each new user making a fair, proportional contribution to the costs of expanding the system. Connection fees should be updated on a regular basis.

8.9 – Capital Budget – The Town of Williston will continue to use its capital budgeting process to help staff and decision-makers understand the need for, and costs of, additional or improved facilities. The fall 2011revision of the capital budget will incorporate the general priorities and proposed improvements established by this plan.

The amount and pace of spending on the capital improvements recommended in this plan will be guided by the town's capital budget. That budget covers the first year of a five-year plan, and is updated every fall for adoption by the Selectboard in the following January. The capital budget may be found on-line at http://town.williston.vt.us/mgr/budget.htm. The current year's capital budget is summarized each year in the town's annual report.

8.10 - Public Works Specifications – The Town of Williston will implement its recently adopted public works specifications and monitor their effectiveness in addressing the town's infrastructure needs. The town adopted a revised set of specifications for public infrastructure such as roads and other street standards in 2009. The town's public works department will monitor these new standards for their effectiveness and will recommend revisions as necessary. The town's public works specifications should include standards for the development of complete streets that provide facilities for all transportation modes including active transportation modes such as walking and bicycling.
CHAPTER 9 – RECREATION AND PARK RESOURCES

The Town of Williston provides a variety of recreational opportunities that range from a diverse program offering to active and passive recreational facilities. Williston's park network includes both public and private facilities that are managed and maintained according to ownership. This section includes the five-year plan for recreation programming and town-owned facilities.

Recreation Programming

- Recreation programming is fundamental to the quality of life for the community. The mission statement of the Recreation and Parks Department reflects this: "To enhance the lives of our citizens and visitors, by providing a variety of leisure opportunities that are safe and enjoyable, and in maintaining the parks so they are safe and physically attractive, while preserving and enhancing the natural resources".
- The current offering of recreation programs range in age from pre-school to seniors. Currently over 150 programs are offered annually, in the areas of preschool, youth and teen programs, family programs, adult programs, senior programs, camps and special events.
- In addition, the town works with area community groups, nonprofits, businesses, and the school district to enhance the program offerings.

Recreational Facilities

- **Publicly-owned Recreational Facilities** include; **Community Parks**; Brennan Park, Rossignol Park, Williston Community Park and Allen Brook Park; **Country Parks**; Five Tree Hill, Mud Pond and Sucker Brook Hollow, and finally Williston's **Primitive Trail Network**; Allen Brook Nature Trail and Oak View Hill Trail. While not entirely owned by the Town of Williston, the **Lake Iroquois Recreation District** also provides an important recreational opportunity for residents and therefore is included in this section.
- Conservation Areas, such as Brownell Mountain and the Mud Pond Conservation Area, are
 publicly-owned open space landscapes that are used recreationally, but are primarily managed to
 conserve the natural ecosystem. Information about Williston's Conservation Areas is found in
 Chapter 13 Open Space and Working Landscapes. Recreation areas and natural space in
 communities are linked to a greater sense of well-being and social interconnectedness of residents.
- Neighborhood and Urban Parks are privately-owned parks. Urban Parks include plazas, greens, and other spaces that provide shoppers and workers an opportunity to enjoy the outdoors in commercial areas. Neighborhood Parks are privately-owned parks that provide outdoor recreation in residential neighborhoods. Access to green space helps people manage depression, anxiety and stress better. The town encourages and, in some cases, requires the provision of urban parks and neighborhood parks in new residential, commercial, and mixed-use developments. Information about Williston's privately-owned urban parks and neighborhood parks is found in Chapter 4 Community Design.

• Sidewalks and Paths <u>-</u> are used recreationally but are primarily designed for transportation purposes. People are more likely to walk or bike when communities have well-maintained networks of sidewalks and bike lanes. Though sidewalks and paths are used recreationally they are primarily designed for transportation purposes. Sidewalks are typically constructed as part of neighborhoods and are designed for pedestrian uses such as walking and jogging. Paths link neighborhoods and are designed to accommodate a broad range of non-motorized uses such as walking, jogging and biking. Information about Williston's sidewalks and paths is found in Chapter 6 – Transportation.

Objectives:

This plan identifies six objectives to provide a policy basis for the management and maintenance of Williston's recreation and parks resources.

9.1 – **Recreation Programming** - This objective supports and plans for recreation programming to serve the community needs.

9.2 – Recreational Facilities – This objective supports the maintenance and improvements of current recreational facilities and identifies the need for future indoor and outdoor recreation facilities.

9.3- Community Parks – This objective supports the maintenance and improvement of the current community parks and identifies future needs. These town-owned public parks provide active and passive recreation opportunities for the community.

9.4 - Country Parks – These town-owned public parks offer access to the rural landscape. Recreational activities in the country parks include hiking and cross-country skiing.

9.5 – **Trails** – This low-maintenance primitive trail network provides hiking, skiing, and where appropriate, mountain biking opportunities in Williston's rural landscape.

9.6 - Lake Iroquois Natural Area – This objective supports Williston's role as a stakeholder in the Lake Iroquois Recreation District.

Objective 9.1 – Recreation Programming - The town will continue to support and plan for recreation programs that benefit the community.

The Recreation and Parks Department strives to offer a diverse offering of programs, to include; sports, fitness, the arts, camps and educational programs. In 2015 more than 150 programs were offered to the community of Williston and surrounding towns.

The Recreation Committee works with the department to identify new recreation programs and indoor and outdoor recreational needs.

9.1.1 Develop a Process to Bring Stakeholders Together to Identify, Prioritize, and Implement Recreational Needs. While the Recreation Committee sets priorities for recreation programs and facilities in Williston, a process should be developed where Williston's other stakeholders, such as teens and the elderly community, are involved in the ongoing planning process. The outcome of this process should inform discussions of future recreation programs.

9.1.2 Foster Volunteer Opportunities. The town will continue to recruit and maintain volunteer networks to assist with the various recreation programs and special events.

Objective - 9.2 - Recreational Facilities – The town will continue to support and plan for indoor and outdoor recreational facilities that benefit the community

While the town now has a variety of outdoor recreational facilities including, ball fields and sports courts, there remains a need for additional playing fields. The increase of youth and adult leagues has placed a huge demand on field spaces. In addition, many are used for multi-sports events, not allowing for proper maintenance and rehabilitation time.

The town currently does not own any indoor recreation facilities. The department is largely dependent on the availability of space within the schools. It receives second priority for use, next to school activities. While this partnership is successful, there is the lack of availability, control in scheduling, and the time of a regular school day, prohibits providing programs for preschoolers and seniors, both significant needs that currently exist. Indoor space to provide these types of programs and others is essential.

A taskforce was appointed by the Selectboard in 2007 to study the need for a community center. That taskforce reported in October of 2007 that there would definitely be a need for an indoor recreation facility within 5-10 years. Beyond accommodating recreation activities for senior citizens, teens, and preschoolers the taskforce found that a facility was needed for other indoor structured recreation programs and cultural events. The taskforce report can be found in Appendix G.

9.2.1 Identify Recreation Facility Needs. A process should be developed to assess the current recreational facilities and identify future needs and target those areas where the town is falling short. The process should be developed to reflect the National Recreation and Parks Association Level of Service Standards (LOS), and create sufficient active recreation fields to enable restoration and maintenance.

9.2.2 *Meet the Need for Indoor Recreation Facilities.* Plans for accomplishing the taskforce's recommendations regarding indoor recreation space and a potential community center should be developed. All strategies to provide indoor recreation space for Williston residents should be considered, including but not limited to acquiring or building a community center, partnering with private entities, and working to include an indoor community space in new development proposals. The town should consider completing a feasibility study for a potential community center, analyzing estimated costs and possible funding mechanisms.

Objective 9.3 - Community Parks - The town will continue to maintain and enhance the existing community parks. The town will also seek land and funding for additional community park development.

Community parks are public open spaces. They are developed for intensive recreational uses that serve the entire town. They include: playgrounds, tennis and basketball courts, soccer/multi-use fields, baseball/softball diamonds, sand volleyball courts and skating rink/skate park. Support facilities may include benches, picnic tables, water fountains, emergency phones, outdoor lighting, equipment storage, picnic shelters, public restrooms, and paved parking lots.

Williston's existing community parks are described in Table 9.A and shown on Map 17. The parks are managed and maintained by the Recreation & Parks Department. With exception, as described in section

9.6, the Lake Iroquois Beach is managed by the Lake Iroquois Recreational District, which includes representatives of the Towns of Williston, Richmond, Hinesburg, and St. George.

Park Name	Location	Acres	Recreational Uses/Facilities	Pedestrian Access
Rossignol Park	Industrial Ave and North Brownell Rd	9	2 tennis courts, 1 little league baseball field, basketball court, playground	5' sidewalk
Brennan Park	Brennan Woods Dr. off Mt. View Rd	5	3 little league baseball/softball fields, toddler playground, community gardens	5' sidewalk
Williston Community Park	Williston Road, in the Village, behind Williston Central School	21	2 full-size multi-use fields, 3 small soccer fields, 1 full-size baseball field, 1 little league baseball field, 1 softball field, basketball court, 2 tennis courts, 4 volleyball courts, a multi-use skating rink/skate park, 12-hole disc golf course, multi-age and toddler playground, public bathrooms w/concession area and warming hut. Allen Brook Nature Trail (0.5 mi), Village Bike Path (1.3 mi)	10' bike path, 2' primitive nature trail, 5'concrete sidewalk on Rte. 2
Allen Brook Park	Talcott Drive off Rte. 2	2	2 full size irrigated multi-use fields	10'asphalt bike path, 5' concrete sidewalks
Lake Iroquois Recreational District	Beebe Lane off Oak Hill Rd	1	playground, beach, swimming, snack bar and changing building, primitive hiking loop (1.5 mi)	none

Table 9.A: Existing Community Parks

9.3.1 Maintain Existing Community Parks. The Town of Williston will continue to maintain and improve on the existing recreational facilities in the community parks to provide safe and enjoyable play spaces for all ages.

9.3.2 Meet the Need for Additional Park Development. Williston's community parks include approximately 38 acres that are developed for recreational use (see Table 9.A above). To meet

Level of Service Standards, the town will need to pursue an additional 25-30 acres of parkland to fully accommodate the current need and future population growth. The National Recreation & Parks Association LOS Standards for developed recreation land is 7.5 acres per 1,000 persons.

9.3.3 Consider the Distribution of Park Space. Map 3 shows the approximate service areas of Williston's existing community parks. The town should explore ways to add community parks that are easily accessible for all residents. Possible locations for new community parks include:

- The Chittenden Solid Waste District landfill on Redmond Road, when reclaimed. A portion
 of landfill tipping fees should be earmarked for the development and maintenance of a park.
 This future park has been proposed to be named the "Timothy Bradish Memorial Recreation
 Center," in memory of a local ski jumper and the historic ski jump at this location.
- 2. The town should seek other sites in the northwestern part of town, and other underserved areas, such as the residential community along Old Creamery Road. In addition, the town is anticipating a significant amount of growth in Williston's designated growth center where few recreational facilities exist today.

Objective 9.4 – Country Parks - The Town of Williston, under the Conservation Commission, will continue to maintain its existing country parks, as directed by management plans that establish appropriate levels of development. The town will add country parks both by developing suitable properties it already owns and, if resources permit, acquisition.

Country parks provide public access to natural areas. They offer Williston residents opportunities for a hike in the woods, a quiet snowshoe walk, or a few minutes enjoying a scenic view. There are currently about 256 acres of designated country park land. Access to bodies of water such as ponds and streams (aka blue space) and green space has positive effects on health and perception of health. As indicated in Section 9.4.2, the town also owns a 107-acre parcel that is planned for a future country park.

9.4.1 Maintain Existing Country Parks. Williston's developed country parks are described in Table 8.A and shown in Map 18. The Conservation Commission has developed management plans that establish the levels of recreational use and development appropriate for the Sucker Brook Hollow, Five Tree Hill and Mud Pond Country Parks.

9.4.2 Develop Additional Country Parks. Williston acquired 20 acres of the former Hill property, located east of Route 2A along the Sucker Brook, in 2004. In 2013 the town completed a parking area at the site of the former farmhouse, a pedestrian bridge across the Sucker Brook and a primitive trail to the Five Tree Hill lookout. The town also acquired 42 acres from the former Pine Ridge School property as part of the specific plan for the New England Theological Seminary (NETS) in 2016.

The town owns the summit and north side of Brownell Mountain. A natural resource inventory of this property was completed in 1995. This property currently functions as a conservation area, with some informal trails. The Conservation Commission is currently drafting a management plan and taking steps to develop this area as a country park, with a small parking area for automobiles and bicycles on South Brownell Road and a formal trail to the summit. Selective clearing near the summit is being considered to create a west-facing scenic overlook with a sitting bench. The town is also in the process of considering acquiring a significant portion of the Catamount Family Outdoor Center property for possible use as a community forest.

In addition to town-owned sites, Williston holds a temporary easement for a public boat access and parking area adjacent to the North Williston Road Bridge over the Winooski River. Other potential country parks might include: Indian Lookout, a scenic east-facing overlook located on Governor Chittenden Road; Knoll Overlook off Coyote Run; Goose Hill; the slope behind Martell Hill; Square Woods; the park by the landfill; and a corridor along the Winooski River that might include boat access areas off River Cove and Governor Chittenden Roads.

9.4.3 *Prepare Management Plans for Country Parks.* The Conservation Commission will continue to develop and update management plans for the country parks. The goal of these plans will be to strike a balance between recreational use and conservation values.

- Forests should be managed to promote healthy stands and wildlife habitat, including diverse vertical structure. Selective logging may be appropriate in some places. Mowing may be required where a country park includes an open scenic vista.
- Wherever possible, country parks should be linked into the town's system of paths and trails (see Map 17). Trails should be sited, designed, and built to minimize erosion. Trail networks should also minimize conflict among users and with adjoining properties. Permitted activities hiking, cross-country skiing, snowshoeing, horseback riding, mountain biking, snowmobiling will vary with the terrain and surrounding land uses. Separate trails may be needed for different uses. Trails may be closed seasonally to prevent erosion, avoid flooding, or prevent user conflict with wildlife.
- Small gravel parking areas <u>with accommodation for automobiles and bicycles</u> and informational kiosks may be provided at country park trailheads. At scenic overlooks, the installation of benches and picnic tables, and limited selective clearing may be acceptable. All facilities should be sited and designed to visually blend into the natural environment.
- A country park, or greenway, along the Winooski River would have to be sited so as to minimize conflict with farming operations and accommodate seasonal flooding. Boat access should minimize disturbance to the river bank, floodplain forests, wetlands, and other wildlife habitat.

9.4.4 Consider Country Parks in Development Review. Williston's Open Space regulations require that subdivisions including more than 10 acres maintain 75% of the original parcel in open space. This gives developers whose land adjoins country parks an incentive to dedicate a portion of their open space to the town, expanding park acreage. For more on this approach see Policy 3.2.1 of the Comprehensive Plan.

Objective 9.5 – Trails - The Town of Williston will continue to maintain and expand its network of trails.

The town currently maintains over twelve miles of unpaved primitive trails. These trails are used primarily for recreational activities such as hiking, cross-country skiing, and snowshoeing, and in some cases,

mountain biking or horseback riding. Over sixteen additional primitive trail easements exist through private properties in Williston, but have yet to be built. Information about Williston's sidewalks and paths, which are designed primarily for transportation purposes, is found in Chapter 6 – Transportation.

9.5.1 Maintain Existing Trails. With the help of the Winooski Valley Park District, the Fellowship of the Wheel, and other volunteers, Williston Conservation Commission staff spends the summer months maintaining the existing trail system. As shown on Map 17, the town currently maintains about twelve miles of primitive trails, including:

- the Allen Brook Nature Trail, located behind the Williston Central School on Route 2 in the Village Center;
- a trail between the Five Tree Hill and Mud Pond Country Parks;
- trails within existing country parks, including Five Tree Hill, Mud Pond, and the Lake Iroquois Uplands;
- a primitive trail loop at the Isham Farm, located on Oak Hill Road north of Lake Iroquois; and
- the trail through the Sucker Brook Hollow country park to the Five Tree Hill lookout.

9.5.2 Expand the Trail System. Existing and proposed trails are shown on Map 17. The town currently holds public trail easements on the following parcels identified as priorities for primitive trail development: those in and around the Village; along the Allen Brook paralleling South Road; along the ridgeline between Route 2A and Bradley Lane; and on the town property on Brownell Mountain. The exact location of these trails and permitted uses will be determined by the terrain, proximity to water features, and surrounding land uses. The impact on natural resources and adjoining land uses, particularly agriculture, should be minimized. The town should adopt the Greenway Acquisition Policy, which was revised by the Conservation Commission in 2009, or a similar tool to consistently obtain these links from private landowners.

9.5.3 Require Dedication and Construction of Proposed Trails in New Developments. Where development will benefit from access to trails, dedication of the necessary rights-of-way will be required. The town may also require construction of the portion of a proposed trail that serves a project, depending on how much demand for trails that development will generate. The town will develop standards and guidelines to help determine project-specific requirements for trail easement dedication and trail construction. Where proposed trails pass through developed areas or through rural lands, the town will work with landowners, including homeowner's associations, to encourage the voluntary donation of easements for proposed paths and trails. Developers who include the dedication of trails in their proposals will receive incentive points through the town's growth management system.

Objective 9.6 - Lake Iroquois Natural Area

Lake Iroquois (formerly known as Hinesburg Pond) is a small lake located in the Towns of Williston, St. George, Richmond, and Hinesburg. These four towns jointly manage the beach, trail system, and recreation facilities as the Lake Iroquois Recreation District (LIRD). The State of Vermont owns the public fishing

access on the northwest shore of the lake. Volunteers and paid staff managed by the Lake Iroquois Association act as greeters at the access. The town will continue to play an active role in the management of recreational facilities along the lake. See Chapter 12 for more information about Lake Iroquois.

Continue to Encourage Volunteer Involvement in Enhancing and Maintaining Recreational Facilities. The town should continue to encourage volunteer involvement in park (country parks, and conservation areas) and trail development and maintenance through an Adopt-A-Park or Adopt-A-Trail program. Potential volunteer groups would include local churches, schools, scouts, service clubs, and recreational organizations such as the Fellowship of the Wheel (a regional mountain bike group), the Winooski Valley Park District, and the Williston Hill Hawks (the local chapter of the Vermont Association of Snow Travelers).

CHAPTER 10 – EDUCATION AND CHILD CARE

Schools are among the most important public facilities in Williston. They are focal points of activity for children and adults, a role that is reinforced by the location of school buildings and playgrounds in close proximity to the town's public parks and recreation facilities, as well as to the town library. For many people, the town's schools are one of the primary reasons for living in Williston. The funding of public schools accounts for roughly 75% of all local government expenditures, thus careful planning for the future needs of the school system are essential to sound fiscal management.

The schools serving Williston children are not operated by the town government. Rather, the Williston schools are governed by the Champlain Valley School District, which oversees all of the public schools in the towns of Charlotte, Hinesburg, Shelburne, St. George, and Williston. This unified school district was approved by voters in these towns on, June 7, 2016. In Williston, K-8 grade education takes place at the Allen Brook School and the Williston Central School. For the location of these buildings see Map 13 – Public Facilities. Williston high school students attend Champlain Valley Union High School in Hinesburg, which is a regional school serving children from the towns of Williston, Charlotte, Hinesburg, Shelburne, and St. George.

This plan element explains how the town will consider the needs of the schools when making land use and infrastructure decisions. It also covers child care.

Objective 10.1 – Schools – This objective and its supporting policies call for the town to manage growth in a way that is consistent with the capacity of the schools.

Objective 10.2 - Child Care - Vermont law was recently amended to require towns to address child care in comprehensive plans.

Objective 10.3 – Higher Education – The Vermont Technical College's (VTC) Chittenden County campus is Williston's only institution of higher education at this time. The town will facilitate VTC's expansion and welcome other institutions of learning.

10.1 Schools - The town will continue to consider the capacity and needs of the schools serving Williston as it makes land use and capital budget decisions.

At the dawn of the 21st century, there was great concern about rising school enrollment levels and the ability of the town to ensure that school facilities could keep pace with the needs of the projected student population. The 2000 plan projected that the local schools would begin to exceed the capacity of the school system's facilities in the 2006-07 school year, and modular classroom facilities were installed at the Allen Brook School. The last decade, however has seen a slow but steady drop in school enrollment numbers. These declining enrollment numbers allowed the Williston School System to remove the modular classroom buildings from the Allen Brook School campus in 2010 after a reorganization of programming at the town's two elementary schools. An analysis of changing enrollments by grade and the number of births to Williston residents suggests that this pattern of small but steady declining enrollment levels before stabilizing will continue through the 2016-2024 time frame of this plan. The school board's is not currently proposing a new or expanded facility at this time, but will likely look to expand the Allen Brook School should school enrollment patterns change course and point to the need for additional classroom space. In November 2016, Williston voters approved a \$19.85 million bond to pay for extensive renovations and improvements to the Williston Central School which will be completed in 2017. These renovations will remove a number of existing deficiencies in the school facilities, and enable the school to continue to serve Williston children for decades to come.

The renovated and expanded Champlain Valley Union High School (CVU) has a capacity of approximately 1,460 students. The October 1 SY 2015-2016 enrollment was 1268 students, or 87% of the high school's capacity. Enrollment levels at CVU have varied slightly in recent years, having reached its highest level of 1,418 during the 2009-2010 school. However, moving forward, the school system is projecting the student population at CVU to decline during the planning period, and thus staying well within the design capacity of the existing school building. Over the time frame of this plan, no new or expanded facilities are contemplated at this time at CVU.



10.1.1 Continue to Charge a School Impact Fee. The town currently collects a school impact fee for every new dwelling. These fees change each year, reflecting their use in paying debt service on the Allen Brook School and the improvements at CVU. The school impact fees were assessed and

revised in 2013. The impact fees used to pay for the bonds financing the construction of the Allen Brook School were discontinued at the end of June 2015. The impact fees used to help finance improvements at CVU were updated as part of the 2013 revision, and these fees will continue to be collected through the end of FY 2025.

Private Schools. Private schools play a significant role in educating Williston residents. The 2000 Census found that roughly 18% of the town's elementary and middle school students and some 30% of its high school students attended private schools.

10.1.2 Prepare a Facilities Plan. To the extent that Williston's growth management decisions - which include both the annual cap on residential construction and the collection of impact fees – are based on the capacity of the schools, the school boards must be willing to provide the town with the facts it needs to defend those decisions. A facilities plan must be prepared by, or for, the school boards. That plan should include enrollment projections, a clear explanation of the capacity of the school buildings and bus routes, and action steps for providing any new facilities that increasing enrollments may require.

10.1.3 Meet Regularly to Discuss School Needs. The Selectboard, school boards, and the planning commission should meet at least once a year.

10.2 Child Care – The Town of Williston recognizes the importance of child care in community life, and will ensure that its planning and development review process do not place unreasonable limitations on child care facilities.

The private sector provides child care services in Williston. In 2016 there were 11 licensed child care centers and 8 registered child care homes in Williston, offering 614 slots for infants, toddlers, and preschoolers. There were also 281 slots for after-school child care for school-age children. There were a few vacancies in each category, with only three total vacancies for infants and six for toddlers, town-wide.

10.2.1 Permit Child Care Centers Wherever Schools are Permitted. Williston brought its bylaws into compliance with the state law (24 V.S.A. § 4412(5)) allowing home child care in residential zoning districts in September 2005. In 2008 the town's bylaws were amended to allow child care centers in all zoning districts where elementary schools are permitted uses.

10.2.2 Permit Child Care Centers in Employment Generating Zoning Districts. Child care centers are currently allowed in many of the zoning districts allowing employment generating uses. This enables parents to access child care services in areas close to their jobs. The town shall continue to allow child care centers in employment generating zoning districts as appropriate.

10.2.2<u>3</u> Permit Child Care Centers as Accessory Uses. The bylaws have also been revised to make it clear that child care is a permitted accessory uses for educational institutions, churches, and places of employment.

10.3 Higher Education – The Town of Williston will encourage and facilitate the location and expansion of institutions of higher education within the town. Specifically, the town will facilitate the expansion of Vermont Technical College at its new location in Blair Park.

Williston residents have access to many opportunities for higher education. The University of Vermont and several private colleges are nearby in the greater Burlington region. The Vermont Technical College (VTC) is the only college located in Williston, and offers a number of engineering and technical degree programs,

as well as an array of other vocational and technical training programs. Based in Randolph, VTC has been expanding its presence in Chittenden County with the acquisition of a building in Blair Park (see Map 13 – Public Facilities). Enrollment has grown from roughly 350 students in SY 2004-05 to approximately 660 students in 2015. Enrollment growth at VTC has slowed in recent years, however, VTC continues to have a long range goal of expanding its operations in Williston. VTC has also started housing a limited number of students on campus, and currently offers dormitory space for roughly 45 students. The town will continue to work with Vermont Tech to ensure that adequate infrastructure is available for its expansion, and that the change from commercial space to an educational institution complies with relevant bylaws. You can learn more about VTC at http://www.vtc.vsc.edu/.

CHAPTER 11 – ENERGY EFFICIENCY AND CONSERVATION

The availability and cost of energy, especially electricity, is an important element in maintaining the health and vigor of the town's local economy. High energy costs can restrict business activity and development. Energy imported into the region from distant places depletes the local and state economies of capital that would otherwise remain in circulation within the local economy. Energy costs also affect the ongoing, operating expenses of housing for Williston residents.

While the cost of electricity and petroleum are limiting factors to Williston's operations, these costs can be mitigated by conserving and optimizing existing energy resources, and by harvesting energy from local renewable sources. This may increase the pressure to increase electric rates. In light of the global crisis of climate change, new sources of power will be needed that do not increase the carbon footprint of Vermont. Renewable energy and energy efficiency will be critical elements of the new power mix. Williston will need to adapt its energy use and renewable energy utilization to minimize these impacts.

The State of Vermont recently completed a Comprehensive Energy Plan in 2016 for the state. This plan established goals of reducing total energy consumption by 15% by 2025, and by more than one third by 2050. The plan also established goals of the state obtaining 25% of its energy needs from renewable energy sources by 2025, 40% by 2035, and 90% by 2050. Taken together, the goals of the state's energy plan will require concerted and sustained efforts by the town, its residents and businesses in order to help reach or exceed these goals.

Information on energy consumption and costs in Vermont can be found in the plans and reports prepared by the Vermont Department of Public Service. These documents are available on-line at http://publicservice.vermont.gov/pub/pub.html.

https://outside.vermont.gov/sov/webservices/Shared%20Documents/2016CEP_Final.pdf

The Town of Williston will take a leadership role in promoting energy efficiency and conservation by implementing the objectives adopted here.

11.1 – **Renewable Energy** - The local development and use of renewable energy resources will support state-level efforts for electric energy resource diversification. This objective encourages the development and use of these resources.

11.2 – **Future Utility Siting** - Williston anticipates the siting of more utility lines and associated facilities. This objective provides a basis for the town's response to the siting of these facilities, which is generally regulated by the State. This objective also addresses the siting of telecommunications facilities.

11.3 – **Municipal Energy Efficiency and Conservation** - Williston will work to implement energy efficiency and conservation measures in existing and new municipal buildings, the purchasing of new and replacement vehicles, and in day-to-day operations of the town.

11.4 – Energy Conservation and Efficiency Through Land Use - Incorporating energy efficiency and conservation measures into new development will reduce energy consumption, decrease greenhouse gas emissions, and yield financial savings. This objective provides a policy basis for incentives and regulations that promote energy efficiency and conservation in new and existing

residences and businesses, decreasing the number of motor vehicle miles traveled, and increasing the use of more active transportation modes such as walking and biking, and the use of transit services.

11.5 - Municipal Energy Plan – This objective calls for the development of a municipal energy plan.

11.6 - Sustainable Foods Systems - The development of local and sustainable food systems and support for the distribution of local products within the town will reduce energy expenditures while supporting the local economy and working landscape.

11.7 - Waste Reduction, Recycling, and Composting - Careful management of organic and nonorganic resources reduces energy requirements for extraction, manufacturing, packaging, and transportation of goods. Diverting organic substances out of the waste stream reduces greenhouse gasses emitted by landfills.

Energy Definitions - Energy Conservation means using less energy. A simple example is turning off the lights in a room that is not being used, or turning down the thermostat when you leave home for work. Energy Efficiency involves reducing the amount of energy used for a given service or activity while producing the same end-use service or activity. Improvements in energy efficiency are most often achieved by adopting a more efficient technology or production process. An example would be installing a fuel-efficient furnace to provide the same amount of heat with less fuel. Efficiency and conservation can both result in savings to consumers. They can also reduce the demand for energy and the environmental impacts that accompany its production and distribution.

11.1 – Renewable Energy Resources - The Town of Williston will encourage the development of renewable energy resources to support the diversification of Vermont's electric resources portfolio, as well as local and regional energy stability and independence.

According to the Vermont Department of Public Service, almost 40% of Vermont's electric power is supplied by renewable resources, including hydroelectric plants, the Searsburg wind facility, Hydro Québec, and the wood-fired McNeil Station, as of 2010. Additionally, there are a number of independent power producers supplying renewable energy from small hydroelectric plants, biomass generating plants, landfill gas recovery, and methane conversion from farm waste. Renewable energy resources provide insurance against fuel and electricity price shocks as well as the closing of outdated generation sources (i.e. Vermont Yankee). They can also reduce air emissions, greenhouse gas emissions, and other impacts of energy generation and distribution.

11.1.1 Explore Green-Pricing Programs. The town should explore the use of renewable energy resources by participating in green-pricing programs, such as Green Mountain Power's "Choose 2B Green" program, which supports various renewable energy sources with the premium paid by consumers. Conceptually, the consumer pays a premium to demonstrate support for renewables. Other utilities serving Williston, such as the Vermont Electric Co-op, are considering similar programs.

11.1.2. Encourage Renewable Energy Generation. Williston's Unified Development Bylaw will be reviewed and revised, as necessary, to encourage the use of solar, wind, biomass, and hydropower while carefully weighing the benefits of such installations against their impacts on water, wildlife, scenic, forest, and historic resources. The town shall develop criteria for identifying preferred locations for large scale renewal energy generating projects, as well as those areas to be avoided by industrial scale energy generating developments. Support for installations of renewable energy technologies at the neighborhood scale (solar access, shading, height restrictions, etc.) plus larger scale renewable energy

projects such as 'solar farms', community-scale wind turbines, and district heating biomass plants should be taken into account when considering bylaw revisions. Large scale solar facilities and wind turbines should not be located in primary viewshed areas identified in Map 20 Visual Assessment and discussed in section 13.2.2 of this plan. This task will be part of the municipal energy planning effort called for in section 11.5. Also, the use of renewables will be added, in combination with energy conservation, to the incentives offered in the town's residential growth management system. Bylaw revisions shall include revised standards for energy efficiency and renewable energy generation.

11.1.3 Demonstrate Renewable Energy Projects. The town can take the lead and install renewable energy systems to town buildings and operations. Examples might include a biomass fueled district heating system for the village offices and school, methane recovery from the sewage treatment plant operated in Essex Junction, and photovoltaic panels for the school or town offices. When price of natural gas exceeds \$2/ccf (hundred cubic feet) then the town should initiate planning for long-term improvement measures including major building renovations, solar installations, shared pellet boiler, etc. When the price of natural gas exceeds \$3/ccf then the town should consider those measures because at that point the cost to make those large scale improvements will be comparable to the cost of natural gas based on a cost benefit analysis.

11.1.4 Prohibit Residential Property Assessment Increases for Renewable Energy Equipment. Under Vermont law, a town can vote to exclude certain renewable energy systems from local property tax. This means that renewable energy improvements to the home will not increase the property assessment. By applying this policy, the Town of Williston will both promote and enable the use of renewable energy.

11.1.5 *Provide Electric Vehicle (E.V.) Charging Stations.* The town shall develop standards for allowing and encouraging E.V. charging stations is both newly proposed and existing development. E.V. charging stations should be incorporated into the town's parking standards, and E.V. charging stations should be added to existing development whenever feasible.

11.1.6 Update Energy Efficiency Incentives in the town's Residential Growth Management System. The town's residential growth management allocation system has incentives for developments incorporating energy efficiency design. The current incentives are outdated and need to be updated. The town should consider adopting the "stretch codes" developed by Efficiency Vermont in order to reward those developments providing the highest level of energy efficiency.

11.2 – Future Utilities Siting - The Town of Williston will continue to require that utility lines serving new developments be underground, will continue to regulate the siting of telecommunication facilities, and will urge the Vermont Public Service Board to ensure that new regional transmission lines, substations, and similar support facilities are located within existing utility corridors, minimizing impacts to natural, scenic, and historic resources.

The Vermont Public Service Board has jurisdiction over the permitting of major utility installations. Towns may regulate telecommunications facilities, but local control is limited by federal law. Renewable energy projects that are tied to the electric grid will be regulated under the net metering provisions of the Vermont Public Service Board.

11.2.1 Place Local Utilities Underground. Utilities serving new developments, including natural gas, power, telephone, and cable television lines, etc. must ordinarily be placed underground. Installation above ground will be considered only where the presence of bedrock or other environmental constraints

makes underground installation prohibitively expensive. Careful siting and screening will be required for above ground utility lines.

11.2.2 Place Regional Transmission Lines in Existing Corridors. The Public Service Board should confine new transmission lines and associated facilities to existing utility corridors, and require that they be placed underground where feasible. Utility line and pole placements, and substation siting or expansion should minimize disturbance to wetlands, streams, wildlife habitat, the viewshed, and other natural and historic resources.

11.2.3 Limit the Impact of Telecommunication Installations. The town will continue to regulate telecommunication facilities, including cell, radio, and microwave towers, as provided by the current town bylaws. Such installations should be co-located or creatively hidden in existing structures where possible. Abandoned facilities must be removed immediately.

11.2.4 Encourage Utility Scale Cogeneration Projects. The town should seek opportunities to facilitate the use of cogeneration projects to better utilize the heat and electrical energy generation from fuels. Cogeneration projects capture waste energy and convert this energy into clean power and processed heat. For example, an on-site combined heat and power (CHP) plant provides electricity and heat to industrial facilities and other large institutions. These plants typically run on natural gas, biomass, or other fuels. As they produce electricity, the plants recycle excess heat emitted in the process, generating power twice as efficiently as large, centralized plants. Institutions that use CHP generally pay substantially less for energy.

11.2.5 Encourage Utility-Scale Renewable Energy Projects. Farm methane plants, solar orchards, and ridgeline wind farms are examples of large-scale renewable energy projects that will likely have a significant impact on regional energy production in the years to come. The Town of Williston should support these utility-scale technologies as clean energy sources continue to develop. Permitting these projects should consider the renewable energy benefits along with environmental and aesthetic impacts.

11.3 – Municipal Energy Efficiency - Town government and local schools will lead by example, incorporating cost-effective energy efficiency and conservation measures into existing facilities and operations, as well as into plans for new buildings, additions, and renovations.

At the 2003 town meeting, Williston voters agreed to join the 10% Challenge, an effort to reduce emissions of greenhouse gases. The following policies are derived from this support.

11.3.1 Review and Improve the Energy Performance of Existing Buildings and other Town Operations. The town completed energy audits on its existing municipal buildings in 2010 and 2011. As a result of these audits, a number of energy efficiency upgrades were undertaken at the Town Hall, the Town Hall Annex, and the Dorothy Alling Library. The town should continue to monitor energy usage in all town facilities and utilize additional energy conservation strategies whenever feasible

11.3.2 Use "Green Building" Technology, as Feasible. The town and schools should consider "green building" technology for new buildings, additions, and renovations. town and school administrations should work with architects, engineers, and contractors to document the long-term savings gained by adhering to "green building" standards like those established by Leadership on Energy and Environmental Design (LEED).

11.3.3 Consider Energy Consumption When Purchasing. Energy efficiency and conservation should be considered in decisions to purchase everything from traffic signals (which should continue to have energy-efficient LED indicators) to copiers (which should have a double-sided printing feature). The town and schools should buy Energy Star rated appliances, heating equipment, and office equipment. The purchase of recycled paper materials and environmentally-friendly office products should be considered.

11.3.4 Use Fuel-Efficient Low or Zero -Emission Vehicles. The town and schools should work to improve the fuel efficiency of their vehicles. Minimum fuel efficiency standards should be established for new vehicles, including police cars, light trucks, and buses (fire engines and heavy machinery would be excluded). A program for the early retirement of the least efficient vehicles should be implemented. The feasibility of using alternative vehicles and fuels, including hybrids, should also be explored. Regular maintenance will promote fuel economy and reduce emissions. When evaluating for new purchases, the town should consider vehicles with zero or low emissions (electric, hybrid, etc.), and should evaluate the vehicle's energy efficiency against other possible alternatives by consulting informational resources such as <u>www.fuelefficiency.gov</u>.

11.3.5 Encourage Walking, Cycling, Ride-Sharing and the Use of Public Transportation. The town encourages people to walk, cycle, or rides the bus. See Element 6 - Transportation of this plan for more information on Williston's efforts to provide the infrastructure needed to support pedestrians, cyclists, and public transportation. Planning objectives should support grid streets and pedestrian friendly developments. The permitting and construction of a 'Park and Ride' lot in Williston should continue to be a priority.

11.3.6. Prepare Annual Energy Reports. The town should publish a summary of energy used by town and school buildings and vehicles in their respective annual reports, as well as the estimated or calculated impact of efficiency measures already taken. The report should describe the progress the town is making towards the goals of the state's Comprehensive Energy Plan of 2016. The energy consumed (gallons of oil, kilowatt hours of electricity used, etc.) can be easily summarized along with costs. Taxpayers should be informed of possible energy savings to enable them to support measures to reduce energy consumption and see progress in energy savings.

11.3.7 Designate a Town Energy Coordinator. The State legislature has enabled Vermont towns to appoint someone to monitor energy use and help coordinate long range planning that saves the town energy and money. The Town of Williston should designate an Energy Coordinator to monitor energy use and coordinate long range planning that helps the town conserve energy and saves money, and helps the town implement the goals of the state's Comprehensive Energy Plan meeting 90% of its energy needs from renewable sources. This individual should possess the expertise necessary to assist department heads in managing their energy use and should prepare a plan to achieve that goal for the town's government, businesses, and residents

11.4 – Energy Conservation and Efficiency through Land Use - The Town of Williston will continue to pursue a land use and transportation strategy centered on mixed-use, compact development in the town's Growth Center.

The town's land use policies and development regulations provide a powerful mechanism for promoting the development and use of land in ways to ensure that energy resources are used wisely and efficiently. To this end, the town will continue to support the development of high-intensity land uses within the town's designated Growth Center to result in a compact development pattern that supports and encourages driving

fewer miles, the use of transit, ride-sharing walking, more active modes of transportation, and other nonmotorized modes of transportation. The town can also encourage energy conservation and efficiency through development regulations. Williston recently revised its subdivision regulations to make 5-Star or LEED certification a factor in the competitive evaluation of residential subdivisions. The town also encourages and requires, in some instances, the clustering of homes. Developments in the Agriculture/Rural Zoning District must leave 75% of the parcel in open space and the evaluation criteria for residential subdivisions provide an incentive for clustering in the Residential and Village zoning districts. This high density development pattern should help reduce energy consumption by reducing the energy cost of building roads and utility lines. The need for automobile travel may also be diminished.

State Energy Codes - The Vermont Residential Building Energy Standard was upgraded by the Vermont Energy Act of 2009 and passed by the State legislature in May 2010. The new code adopts the International Energy Conservation Code of 2009 as the State code effective January 2011. The State does not have a commercial building energy code, but has published the 2001 Vermont Guidelines for Energy Efficient Commercial Construction. These guidelines are based on the 2000 International Energy Conservation Code, with amendments to suit Vermont's climate. The Vermont Department of Public Service also reviews and comments on energy efficiency in proposed developments that are subject to Act 250.

Williston does not currently enforce a building code that sets standards for energy efficiency and conservation in new construction projects. The State of Vermont does have an updated energy code for residential buildings, and is developing one for commercial buildings.

11.4.1 Include Energy Efficiency and Conservation in Development Review Criteria. Beyond the existing measures described above, the town will explore additional incentives for "green building" and performance standards that would encourage site planning for energy conservation. Such standards might include maximizing southern glazing, protecting solar access to south facing walls and roofs, and providing windbreaks.

11.4.2 Direct Residents to Energy Efficiency and Conservation Programs. Williston will expand the information about energy use that is available on its website. New links will direct residents and businesses to programs that offer professional advice, tax and financial incentives for energy efficiency and conservation, including Efficiency Vermont, the Vermont Gas Energy Extenders Program, the Vermont Energy Investment Corporation, and the Champlain Valley Weatherization Service.

11.4.3 Pursue a Property Assessed Clean Energy (PACE) Financing Program. The State legislature passed a law allowing Vermont towns to create PACE programs. PACE enables local governments to finance renewable energy and energy efficiency projects on private property, including residential, commercial, and industrial properties through the issuance of bonds. The bonds give homeowners the opportunity to obtain low interest loans to purchase renewable energy and energy efficient technologies, such as solar panels and high efficiency furnaces. The homeowner pays back the loan through property tax bills over 15 to 20 years. The model eliminates the chief barrier to clean energy installations: the large upfront cost. When the mechanics of these programs are worked out and a working system is available for study, Williston should consider its adoption.

11.4.4 Require Electric Vehicle (E.V.) Charging Facilities in New Developments. The town should update its development regulations to require E.V. charging stations in new developments, such as shopping centers, mixed use developments, and higher density multi-family residential developments. E.V. charging stations should also be allowed within existing developments and projects as part of the required vehicle parking for the development.

11.5 – Municipal Energy Plan - The Town of Williston will appoint a task force to prepare a municipal energy plan as a supplement to this comprehensive plan.

The Williston Planning Commission will convene an *ad hoc* task force that includes interested citizens of Williston and representatives of local energy providers to develop a town energy plan. This effort will provide more information about energy resources and consumption, assess progress toward implementation of the objectives and policies adopted in this plan, and update these objectives and policies for the 2016 comprehensive plan. The town Energy Coordinator, as described in 11.3.7, should oversee this effort.

11.6 - Sustainable Foods Systems – The Town of Williston will support the production and sales of locally-produced foods and value-added products.

The current US food system requires intense energy inputs in the forms of fuel (on-farm), fertilizer, pesticide and herbicide application, transportation, and storage. Organic and local production and preservation of food reduces energy requirements at all levels.

11.6.1 Home Gardens, Small Animal Husbandry, and Home Food Preservation. Home production and preservation of food reduces many of the energy inputs required for food production, transportation and storage. Gardening and small animal husbandry, specifically chickens and bees, is on the rise among non-farming homesteads due to increased desire for self-sufficiency and concerns about the economy, nutrition and food safety. The town's regulations currently allow livestock on parcels greater than one acre in all zoning districts. The town should consider revising this regulation to allow for greater flexibility in the keeping of livestock, such as keeping small flocks of chickens and bees, in the Residential, Village, and Mixed Use zoning districts.

11.6.2 Support Farmers' Markets, Local Farms, and CSAs. Direct sales from local farms to consumers though farmers markets, farm stands, and community supported agriculture (CSA) greatly reduces the miles that food must travel from farm to plate, thus lowering the energy required for transportation. Direct farm sales supports local farms and keeps food dollars in our community. The town should investigate options for a municipally-supported "Current Use" program for small acreage in high active production and promote local products through mapping of farm stands, CSAs, and farmers markets on the town website. The town should also foster partnerships and opportunities for local gardeners and farms to provide food to Williston schools.

11.6.3 Support Community Gardens. Many Williston residents do not have space to garden unless community gardens are provided. Installation of garden plots in developments and on municipal land provides residents with the opportunity to garden while conserving energy and increasing food security. The town should require the inclusion of community gardens into development proposals, provide incentives for community gardens in the town's growth management system, make town land available for community gardens that support both perennial (e.g., asparagus) and annual (e.g. tomato) food producing plants, and encourage and support gardens within the school system.

11.7 - Waste Reduction, Recycling, and Composting. Waste Reduction and recycling reduce the energy requirement needed for materials extraction, manufacturing of goods and packaging, and transportation. Diverting organics from landfill to composting reduces greenhouse gasses, typically reduces transportation distances, and results in a useful and valuable product, which can be used to support plant growth and reduce synthetic fertilizer requirements.

11.7.1 Manage Our Resources to Reduce the Amount of Waste Generated by the Williston Community. The extraction, transportation, and manufacturing of new raw materials is an energy-intensive process. Energy savings can be made when communities reduce their use of materials, reuse existing materials, and recycle unwanted materials. The town should explore development of a recycling ordinance to promote recycling by business operators. The town will continue to implement recycling, composting, and solid waste reduction strategies, including the recycling requirements proposed for study in Policy 8.7.3. The town will also continue to pursue environmentally-friendly purchasing policies and adopt environmentally-friendly purchasing guidelines that encourage the use of products such as paper containing post-consumer recycled content.

11.7.2 *Maximize the Recovery of Recyclable Materials.* Valuable resources, including food scraps, aluminum cans, and paper products, are discarded into the trash and sent to the landfill every day. Diverting resources that can be recycled or composted reduces energy inputs needed for transportation of these materials to the landfill. Organic materials produce less greenhouse gasses when composted than when placed in a landfill. Compost can be used as an energy source in growing food and can replace energy-intensive synthetic fertilizers. To maximize the recovery of recyclable materials the town will; 1) develop a mechanism to ensure that demolition, construction, or renovation projects adhere to a waste management plan that addresses recyclables; 2) require special event applicants to include a waste management and recycling plan prior to permit approval; 3) require that all municipal parks and public spaces have recycling bins next to waste receptacles; and 4) support a commercial scale composting facility in the community.

CHAPTER 12 – WATERSHED HEALTH

Williston lies within the 8,249 square mile Lake Champlain watershed. This watershed includes portions of Vermont, Quebec, and New York. Runoff from the town eventually finds its way into Lake Champlain by one of several paths, which are shown on Map 14 - Williston Watersheds. Williston's watersheds are summarized below:

- The **Muddy Brook** runs along Williston's western border forming the boundary to South Burlington. This 20.8 square mile watershed includes the **Sucker Brook** tributary and occupies approximately 6,300 acres in Williston. The Muddy Brook watershed includes the retail centers in Taft Corners and Maple Tree Place and a portion of the industrial/commercial facilities in the northwest corner of the town. The Muddy Brook fails State water quality standards for toxics, nutrients, and temperature for the last seven miles of the tributary.
- The Allen Brook originates above Mud Pond and flows northwest to join the Muddy Brook just before the confluence with the Winooski River. The Allen Brook watershed falls entirely within the town and is Williston's largest watershed, encompassing roughly 6,900 acres. The Allen Brook watershed includes agricultural and forested lands, residential development and a portion of the industrial/commercial facilities near the confluence with Muddy Brook. This tributary currently fails State water quality standards for stormwater and E. *coli* from the headwaters down to Industrial Avenue.
- Several small tributaries flow directly into the **Winooski River**, draining approximately 5,400 acres in total.
- Lake Iroquois and the surrounding lands are part of the LaPlatte River watershed, ultimately draining into Shelburne Bay. Lake Iroquois drains into Patrick Brook, which joins the LaPlatte River in Hinesburg. This watershed includes about 1,100 acres in Williston.
- Finally, less than one hundred acres each of the **Johnnie Brook** and **Shelburne Pond** watersheds are within the town.

Vermont Agency of Natural Resources Watershed Management Division approaches watershed-specific management planning through a Tactical Planning Process. Basin planning is required by both federal and state law. Section 303(e) of the federal Clean Water Act (Public Law 92-500) requires that states engage in water quality planning. 40 CFR 130, in part, directs state agencies to prepare basin plans, to focus on priority issues and geographic areas, to identify priority point and nonpoint water quality problems, consider alternatives and recommend control solutions and funding sources. 10 V.S.A. §1253(d) provides that basin plans must be developed on a five year rotational basis. The Winooski Basin Plan, which includes Williston's surface waters, was last updated in 2012. For more information on Basin Planning, visit the Watershed Management Division website at http://www.watershedmanagement.vt.gov/planning/htm/pl_basins.htm.

Land development has well-documented impacts on the volume, velocity, and quality of surface runoff. Changes in these parameters have a direct impact on the stability of a stream's channel; the health of the aquatic, wetland, and riparian communities associated with the stream; and the land uses along it. These impacts, along with State and Federal mandates, have propelled Williston into a major role in watershed management. This plan element adopts seven objectives to provide a policy basis for the town's efforts to maintain and restore the health of its watersheds:

12.1 - Stormwater Management – This objective provides a basis in the comprehensive plan for Williston's stormwater management plan.

12.2 - Stream Restoration – The town has completed major restoration efforts on the Sucker Brook and the Allen Brook, and is working to expand restoration efforts to Muddy Brook.

12.3 - Water Quality Monitoring - The town will continue to gather baseline water quality data for the Allen Brook and work to expand this effort to other streams in Williston as funding allows

12.4 - Lake Iroquois – This objective calls for Williston to develop partnerships with other organizations to identify and alleviate problem areas affecting the quality of the lake.

12.5 - Source Water Protection – This objective calls for Williston to work with water suppliers to protect public drinking water sources.

12.6 - **Groundwater** – This objective calls for Williston to work with the State to ensure that development does not result in groundwater supply deficiencies, or in groundwater contamination.

12.7 – Stewardship - The town will take an active leadership role in land stewardship efforts.

12.8 - Flood Resilience – The town will continue to develop and implement strategies to build flood resilience. This includes identifying areas vulnerable to flooding or fluvial erosion; designating those areas to be protected to mitigate risks to public safety, critical infrastructure, historic structures, and municipal investments; and encouraging flood emergency preparedness and response planning.

12.1 - Stormwater Management - The Town of Williston will continue to operate as a Municipal Small Separate Stormwater System (MS4) within the framework established by the Clean Water Act, under the General Permit for MS4s issued by the State of Vermont, and the State's stormwater legislation.

12.1.1 Implement the Stormwater Management Plan. Williston updated the Stormwater Management Plan in 2013. That plan reflects the requirements of General Permit 3-9014 by explaining how the town will implement six minimum control measures: 1) Public Education and Outreach, 2) Public Participation, 3) Illicit Discharge Detection and Elimination, 4) Construction Site Runoff Control, 5) Post Construction Runoff Control, and 6) Pollution Prevention/Good Housekeeping. The Stormwater Management Plan and subsequent annual reports on its implementation can be found on the town's website. The policies adopted here support Williston's stormwater management efforts.

12.1.2 Continue to Participate Regionally to meet Minimum Control Measures 1 and 2. As of July 1st, 2016 The Regional Stormwater Education Program (RSEP) and Chittenden County Stream Team (CCST) have been consolidated into the Clean Water Advisory Committee (CWAC). The CWAC, formed under requirements put forth in the Vermont Water Quality Act (Act 64), is a collaborative effort of Williston, other Chittenden County municipalities, the Burlington International Airport, the Vermont Agency of Transportation, and the University of Vermont. The Chittenden County Regional Planning Commission coordinates the CWAC, which promotes public awareness of stormwater issues through an annual media campaign and educational programs.

The Clean Water Advisory Committee's web site is <u>www.smartwaterways.org</u>. You may also link to this site from the town's web page. A good general source of information on the hydrologic impacts of land development and stormwater management is the Center for Watershed Protection <u>www.cwp.org</u>.

12.1.3 Enforce and Strengthen Regulations that Limit the Impact of Land Development on Water Quality. Williston revised and strengthened stormwater and watershed protection regulations in 2009. These regulations strengthened requirements for vegetated buffers between development activity and streams, lakes, and wetlands. They also set performance standards for runoff and erosion control during the construction and occupancy of developments. The town should continue to monitor and evaluate the effectiveness of these standards and consider utilizing new technologies and stormwater management strategies as they are developed. The town should continue to modify and develop standards to further minimize impervious cover limitations. Developing and codifying low impact development standards and ranking criteria can strengthen regulations and improve the development review process. The town should also develop a mechanism to enforce regulations and conditions of approval, such as by withholding the Certificate of Occupancy until compliance is reached.

12.1.4 Implement a Town-Administered Management Plan for Existing Residential Stormwater *Facilities.* In 2015, the town began implementing a stormwater utility program for managing stormwater across the entire town as part of the MS 4 Permit (see below). This new program calls for the town to work with the land owners of existing expired residential stormwater facilities to bring those facilities into compliance with the state's current regulations. Once these facilities have been upgraded to the new standards, the town will take over the ongoing maintenance of these facilities. Only those facilities meeting the *Expired Permit Eligibility Requirements* as put forth in the Residential Expired Stormwater Permit Policy adopted by the Selectboard on May 18th, 2015 are eligible to be taken over by the town.

12.1.4.1 Implement the Allen Brook Flow Restoration Plan. As a Municipally Separate Storm Sewer (MS4) Community containing a stormwater impaired waterbody the Town of Williston is required to implement a flow restoration plan (FRP). The ultimate goal of a FRP is to identify stormwater treatment practices (including retrofits to existing systems) which when implemented will work towards removing an impaired waterbody from the States List of Impaired Waters.

To incentivize compliance with the FRP, the Town of Williston has offered to assume control of the expired residential stormwater permits in the Allen Brook Watershed as put forth in the Residential Expired Permit Policy (adopted 5/18/2015).

12.1.5 Plan and Implement Stormwater Improvements using Stormwater Program Funding. The Town of Williston adopted the Ordinance Regulating the Use of Public and Private Stormwater Systems on 4/21/2015 officially creating the town's Stormwater Program. The fee based Program was formed to facilitate the ongoing maintenance and upkeep of the town-wide stormwater drainage network, address increasingly stringent state and federal permitting requirements and to support local water quality initiatives.

The town has opted to generate the money needed to provide these services through the stormwater fee. The stormwater fee is based on the amount of a property's impervious surfaces as the stormwater runoff generated from these surfaces flows through the public stormwater system, and therefore "places a demand" on the system. A property with a high amount of impervious surface generates more stormwater runoff, and therefore places a relatively high demand on the public stormwater system. So, a property that has a large amount of impervious area will have a higher stormwater fee than a property with less impervious surface. These fees, which contribute to a dedicated Stormwater Program budget, will be used to maintain and improve town-wide stormwater related infrastructure.

12.1.6 Regularly Update the Stormwater Management Plan. The Stormwater Management Plan was updated in 2013 to reflect Williston's new watershed health regulations. Given the town's active role in stream restoration, this update should be made part of an overall watershed health plan appended to the comprehensive plan.

12.1.7 Snow Management. The town should develop a regulation that subjects snow, including plowed snow, stored snow, and snow melt, to the same standards as stormwater. Landscaping plans and stormwater management plans for proposed development projects should continue to illustrate how snow will be managed on-site.

12.1.8 Address Stormwater Issues in Older Developments. Most development in Williston includes a State-permitted stormwater management system. A few older developments, including Williston Hills, Lamplite Acres, Oneida Acres, and Meadow Brook do not. Untreated stormwater from these subdivisions reaches receiving water bodies and accelerated runoff is causing erosion where it crosses steep slopes. To address these issues, in 2008, the town worked with affected landowners, the Winooski Natural Resources Conservation District, the Agency of Natural Resources, and other partners to successfully arrest the erosion of three major gullies in the Williston Hills development. In 2009, Public Works constructed a stormwater pond to detain stormwater runoff from the Meadow Brook development, generating offset credits in the process. In 2014 the town installed an infiltration trench and a series of check dams in the Oneida Acres neighborhood. In 2015 the town installed a bio-retention system off of Palmer Court and an infiltration trench with complimentary sub-surface storage in the Lamplite Acres neighborhood. The monitoring and maintenance of these sites should remain ongoing as well as efforts to address stormwater runoff problems in the other neighborhoods. Solving these issues through offset should always be explored.

12.1.9 Encourage Residents to Disconnect Roof Runoff. A relatively easy way to reduce the amount of stormwater that reaches our streams is to educate homeowners on the harmful effect of roof runoff. In 2015, through a partnership with RSEP and the Winooski River Natural Resources Conservation District, Williston was the host of the third annual Connecting the Drops (CTD). CTD raised awareness in Williston and Chittenden County on the importance of capturing and reusing roof top runoff through the use of rain barrels. Through CTD residents were able to attend rain barrel building workshops and a raffle for professionally painted rain barrels. Williston should consider developing a volunteer program to redirect rooftop downspouts in residential developments from pavement to lawn and continue to participate in programs that encourage the installation of rain barrels and rain gardens.

12.2 - Stream Restoration - The Town of Williston will continue to monitor the effects of the Sucker Brook restoration project, continue efforts to remove the Allen Brook from Vermont's list of impaired waters, and begin efforts to restore the Muddy Brook.

The Allen Brook and the Muddy Brook both appear on the State 303(d) list of impaired waters. It is therefore Williston's responsibility to restore these streams to their attainment levels. A large-scale restoration project was successfully completed along the Sucker Brook in 2008 and the Allen Brook in 2012. Planning efforts have just begun to address the toxics, nutrients, and temperature impairment on the Muddy Brook.

12.2.1 Monitor Ongoing or Completed Restoration Projects on the Sucker Brook. The Sucker Brook – a tributary to the Muddy Brook - changed course as a result of a storm approximately 20 years ago. The Sucker Brook abandoned a 30-foot waterfall to travel over easily-eroded glacial till. This erosion carved a large, unstable canyon, sending an estimated 30,000 cubic yards of sediment and 40,000 pounds

of phosphorus downstream. From 2001 - 2008 the town successfully stabilized the Sucker Brook and monitoring of the restoration site will remain ongoing.

Data on the Sucker Brook can be found in:

Evan Fitzgerald, Fitzgerald Environmental Associates. Sucker Brook Phase 1 and 2 Stream Geomorphic Assessment Summary. October 11, 2007.

12.2.2 Continue Corridor Protection and Restoration Efforts on the Allen Brook. The Allen Brook appears on Vermont's 303(d) list for stormwater. The stormwater impairment is due to an overabundance of sediment, which is caused by accelerated surface runoff, flash flooding, and channel erosion associated with the urbanization and increased acreage of impervious surfaces within the watershed. To address this issue, Williston has developed a strategy of acquiring and reforesting portions of the riparian corridor along the Allen Brook and its tributaries. Wide, forested buffers will intercept, detain, and treat sheet flow to the Brook and its tributaries. Tributaries can also overflow into these buffers, attenuating peak flows into the Allen Brook without causing property damage. . From 2004 - 2012 a substantial restoration project was completed on the Allen Brook. A comprehensive decision matrix was developed to assess 158 parcels along the Allen Brook and its tributaries to identify properties where restoration efforts were expected to have the greatest impact. Acquisitions or conservation easements on high priority parcels permanently protected 37 acres of land along the Allen Brook and its tributaries, and 18 acres within stream buffers were planted with native trees and shrubs. Steep and highly erosive stream banks were strategically cut back and gradually sloped in many locations, resulting in the removal of 228 cubic yards of sediment. The town will continue to expand this corridor protection strategy along additional privately owned and town owned parcels within the Allen Brook watershed. Monitoring the restoration sites will continue.

Data on the Allen Brook can be found in:

Vermont Department of Environmental Conservation, Water Quality Division. *Biological and Aquatic Life use Attainment Assessment of Allen Brook*. February 11, 2004.

Lori Barg, Kari Dolan, Cully Hession, Chris Cianfrani, and Bob Kort. Watershed Improvement Plan and Recommendations for a Total Maximum Daily Load (TMDL) for Sediment: Allen Brook, Williston, Vermont. Vermont Department of Environmental Conservation, Water Quality Division March 30, 2003.

Evan Fitzgerald. Allen Brook Watershed Departure Analysis and Project Identification Summary. April 11, 2008

Vermont Department of Environmental Conservation, Water Quality Division. Total Maximum Daily Load to Address Biological Impairment in Allen Brook (VT08-02), Chittenden County, Vermont. September 2008.

12.2.3 Begin Efforts to Restore the Muddy Brook. The Muddy Brook also appears on the 303(d) list of impaired waters for toxics, nutrients, and temperature. The town has just begun efforts to identify specific problem areas in the watershed, such as the head-cut near Harvest Lane. The town should initiate dialog with South Burlington to plan for and fund targeted restoration projects.

Data on the Muddy Brook can be found in:

Evan Fitzgerald and Samuel Parker, Fitzgerald Environmental Associates. *Muddy Brook Phase* 1 and 2 Stream Geomorphic Assessment Summary. February 2, 2009.

12.3 - Water Quality Monitoring – The Town of Williston will continue to monitor the water quality of Williston's streams and use the data to inform mitigation efforts.

In 2007, the Planning Office was awarded a Vermont DEC LaRosa Partnership grant for the first time to begin baseline water quality monitoring along the Allen Brook. The monitoring parameters originally included nitrogen, phosphorous, and E. coli. Chloride and turbidity were added to this list in 2010.

12.3.1 Continue to Collect and Process Data. Water quality monitoring data currently exists for 2007 -2015 (except for 2009, because the Larosa grant program was not available) for eight sites along the Allen Brook. The town will continue to collect data along the Allen Brook and should consider expanding the monitoring effort to include the Muddy Brook. These data will provide a valuable benchmark as restoration projects are completed and development pressure continues to increase in these impaired watersheds.

12.3.2 Analyze Existing Monitoring Data to Prioritize Implementation Efforts. The town should utilize assistance from University students and other partners to analyze the existing water quality monitoring data. The data analysis should identify specific problem areas, recommend remediation strategies, and fine-tune the location of the collection sites to optimize the sampling effort to the goals of the monitoring program.

12.3.3 Explore Technologies and Methods Available to Identify Sources of E. coli along the Allen Brook. Based on three years of monitoring data, the levels of E. coli in the Allen Brook have failed to meet both State and Federal standards at all eleven sampling sites. The town should begin to explore technologies and methods available to identify sources of E. coli to allow the Town to target and mitigate these pollution sources prior to the release of the Total Maximum Daily Load (TMDL) guidance for the Brook.

12.4 Lake Iroquois – The town will participate in partnerships to improve the Lake Iroquois ecosystem.

The Vermont Agency of Natural Resources has classified Lake Iroquois as eutrophic, meaning that the Lake's waters are rich in nutrients (i.e. phosphorous, nitrogen) that promote the proliferation of plant life, especially algae, which in turn reduces the dissolved oxygen content that fish and other aquatic species rely on for survival. Furthermore, the elevated nutrient levels in the Lake have contributed to the spread of the invasive aquatic plant, Eurasian Watermilfoil (*Myriophyllum spicatum*). Studies done on the Lake by lay monitors (volunteers) and by the State since 1979 indicate that Lake Iroquois has one of the highest average levels of phosphorus of all the lakes in the State. In a survey conducted during the summer of 2010 by volunteers of the Lake Iroquois Association and staff of the State Department of Environmental Conservation, ten areas of concern were identified along the lakeshore as potential input points for nutrients and stormwater.

A second concern is pollution. The Public Works Department monitors E. *coli* at the designated swimming area at the northern end of the lake and results to-date has been below the State and federal limits; however lakeside residents are concerned that the aging septic systems surrounding the lake will lead to E. *coli* and nutrient problems in the future. The expense of new alternative septic systems on shore land property,

particularly for seasonal residents, is exorbitant. Incentives and assistance should be considered to promote acceptable solutions.

Lake Iroquois is surrounded by over 90 camps, many of which were within the former 150-foot shoreline buffer. Most of the camps are seasonal but a few have been converted to year-round residences. To better address the issue of non-conforming structures on the Lake Iroquois shoreline and to attain consistency with the recently passed state Shoreland Protection Act, in 2014 Williston developed and incorporated a Lake Iroquois Shoreland Protection Area (LISPA) into the Bylaw. LISPA includes all lands within 250 feet of the mean high water level of the lake, and establishes standards for land clearings, amount of impervious surface, and location of buildings consistent with newly adopted state standards. Applications for town permits are now required to provide documentation of compliance with Vermont Shoreland Protection requirements in 10 V.S.A. § 1441-1545

12.4.1 Support the Efforts of the Lake Iroquois Association. While the Lake Iroquois Recreation District (LIRD) primarily manages the recreational uses surrounding the lake, the Lake Iroquois Association (LIA) has become the advocate for habitat rehabilitation and water quality improvement. The LIA is a 501(c)(3) non-profit corporation whose sole purpose is to maintain and enhance the Lake Iroquois ecosystem. The LIA aims to encourage and guide appropriate public uses of the lake and its watershed for the purpose of protecting and preserving the lake's overall well-being. These goals are achieved through monitoring, preventive and management initiatives, research, education, advocacy and other actions, involving the cooperative efforts of property owners, Town, State and Federal officials, and other interested parties. The LIA is a non-regulatory group with a vested interest in the lake's health. The town should support the efforts of the LIA in any way possible, through direct funding and in-kind contributions, to help them achieve their mission to restore the lake.

What is the Lake Iroquois Recreation District? The 157-acres that make-up the northern portion of Lake Iroquois is not owned by the town but is rather owned and operated by the Lake Iroquois Recreation District (LIRD). The LIRD is a Union Municipal District made up of 4 towns: Richmond, Williston, Hinesburg and St. George. Each community appoints a representative to serve on the Board of Commissioners for varied terms. The District primarily manages seasonal permits for recreational use (non-motorized boating, swimming, parking, etc.). The Board usually meets once per month and the Williston's Director of Public Works serves as the staff person for the Board.

The town should also establish a cooperative link with the other three towns within the lake's watershed to consider establishing plans, objectives and actions that complement each other.

12.5 Source Water Protection - The Town of Williston will help protect both water quality and quantity in drinking water Source Protection Areas by referring development proposals to any applicable water suppliers.

Williston residents and businesses receive their drinking water from one of three sources: a private well, which is managed by the landowner; the Lake Iroquois Source Protection Area, which is supplied by the Champlain Water District (CWD); or the Porterwood Source Protection Area, which is supplied by the Williston Fire District #1 (FD1). Williston's two Source Protection Areas (SPAs) are shown on Map 14. Water suppliers who manage SPAs are responsible for developing and updating Source Protection Plans (SPPs), which are designed to maintain the integrity of the SPA. These Plans must comply with State and Federal Rules governing water supply protection. This section of the plan calls for Williston to ensure that all development activities within the designated SPAs are consistent with the SPPs; therefore development proposals within SPAs will be referred to their water suppliers for comment prior to the issuance of a permit.

12.5.1 Refer Development Proposals Within the Lake Iroquois Source Protection Area to the Champlain Water District. Since 1995, the Champlain Water District (CWD) has implemented a Source Protection Plan (SPP) to protect the Source Protection Area (SPA) for Lake Champlain's Shelburne Bay, which provides drinking water to approximately 68,000 people in Chittenden County, including parts of Williston. The SPA includes Shelburne Bay and the LaPlatte River watershed, which feeds the bay. Since Lake Iroquois is located at the headwaters of the LaPlatte River, this waterbody is included in the SPA and therefore development in and around the lake falls within the purview of the CWD.

As stated in the SPP, the town will forward any significant development projects, such as those that disturb one acre or greater within the Lake Iroquois watershed and especially those within the lake's 250-foot buffer, to the CWD for comment prior to issuing any permits. However, as stated in Chapter 29 of Williston's *Unified Development Bylaw*, CWD review may be sought at the discretion of the planning Administrator regardless of project size.

To learn more about the LaPlatte Watershed as a source water area see: Highland Geographic, Inc. *Shelburne Bay Subwatersheds Source Assessment Delineation Mapping: Summary Report.* Champlain Water District. 2004. The Champlain Water District's web site is <u>http://www.cwd-h2o.org/</u>.

12.5.2 Refer Development Proposals Within the Porterwood Source Protection Area to Williston Fire District #1. Williston Fire District #1 (FD1) supplies drinking water to the Porterwood neighborhood, which serves over 70 homes. FD1 protects and maintains the water quality and quantity of the Porterwood Source Protection Area (SPA) by implementing a Source Protection Plan (SPP) and updating that Plan every three years.

The town will forward development projects within the Porterwood SPA to FD1 for comment prior to issuing any permits. The town should coordinate with FD1 to better define what type of development projects are appropriate or exempt from FD1 review.

12.6 Groundwater – The Town of Williston will work with the State to help protect both groundwater quality and quantity.

Groundwater in Williston is protected under the jurisdiction of the Vermont Department of Environmental Conservation Drinking Water and Groundwater Protection Division. The Regional Office Program issues water/wastewater permits (WW Permits) for soil based wastewater systems with flows of less than 6500 gallons per day, for potable water supplies (water supplies that are not public water supplies), and for municipal water and sewer connections.

The Vermont Wastewater System and Potable Water Supply Rules (adopted June 30, 2007) supersede existing municipal ordinances and zoning bylaws that regulate potable water supplies and wastewater systems. Municipalities may continue to have ordinances and/or bylaws that:

(1) only regulate the use and/or operation of municipally owned water and/or sewage treatment plants;

(2) require submission of copies of plans and documents used to obtain a state permit under these Rules to the municipality;

(3) require a certificate of occupancy that is based on full compliance with a state permit issued under these Rules;

(4) require notice of, and have the option to observe, any soil testing such as the digging of test pits; and

(5) require time of sale inspections.

Similar to the objectives outlined under **12.5 Source Water Protection**, but in light of its limited authority to regulate water supplies and wastewater systems, Williston will work with the Vermont Department of Environmental Conservation to further the goals of protecting groundwater quality and quantity.

12.6.1 Continue to Refer to Hydrogeologic Studies. The Vermont Geological Survey (VGS) conducted a basic hydrogeologic study of selected areas in 2005. The results include well-yield data and cross-sections showing the depth and yield of wells in relation to the depth of surficial materials and known geologic features. The VGS also completed an in-depth study of groundwater resources throughout the entire town in 2008. A poster presentation titled *Groundwater Resources in the Town of Williston;* Northeast Vermont contains valuable information regarding bedrock and surficial geology, well yield and depth information, and an evaluation of bedrock aquifer recharge potential. Williston will continue to work with VGS to make effective use of this information.

12.6.2 Develop and Adopt a Protocol for Measuring Adequate Water Supply. The town will use the extensive data compiled by the VGS to help provide sound information regarding specific instances of proposed development. The town will advocate for the Water Supply Division of the Vermont Department of Environmental Conservation to develop and adopt a protocol for measuring adequate water supply where nearby well-log data and VGS research indicate historical low yields. A protocol for benchmark testing of existing wells should also be developed as a tool for monitoring water quantity impacts before and after development.

12.6.3 Require compliance with State Wastewater System and Potable Water Supply Rules. Williston currently requires applicants for new development to submit plans for an on-site wastewater disposal system and a copy of their Wastewater and Water Supply (WW) Permit to the town prior to obtaining a Zoning Permit. To ensure that a wastewater system has been installed as designed, as-built plans must be filed with the Zoning Administrator prior to issuance of a certificate of compliance. The town should maintain this requirement.

12.7 Stewardship – While State and Federal government entities are ultimately responsible for protecting our local waterways, the Town of Williston will strive to keep those waterways free and clear of contamination.

Quality of life is linked to a healthy environment. In recognizing this mainstay, the town will strive to become a sustainable community of citizens and businesses motivated to conserve and enhance natural resources through policies, programs, and outreach activities. The town's stewardship objective is intended to create long-term environmental benefits and to conserve natural resources.

12.7.1 Develop and Adopt a Protocol for Addressing Potentially Hazardous Land Use Activities. The goal of this policy is to address potentially hazardous land use activities that are currently exempted from the Town's zoning regulations. Where an existing land use contributes to watershed contamination and poses a potential risk or potential of becoming a public nuisance, the town should develop a strategy to identify that risk and encourage the landowner or operator to develop, implement, and monitor best management practices to assure good stewardship and reduce risk of contamination.

12.7.2 Develop Appropriate Land Use Regulations Where Contamination is Present. The Commerce Street plume is a documented Superfund site where groundwater has been contaminated with volatile organic compounds (VOCs) including tetrachloroethylene (or perchloroethylene, PCE) and trichloroethylene (TCE). Cadmium and chromium have also been detected in the groundwater plume. The town should continue to work with the Environmental Protection Agency (EPA) to understand the evolution of the plume, and in this case or others where significant contamination is present, the town should consider land use regulations that address the existing conditions to provide flexibility in determining appropriate uses for these parcels. In the case of the Commerce Street Plume, this is addressed by land use Policy 3.7.3.

12.7.3 *Provide Incentives and Increase Education for Water Conservation.* The town should take a proactive role in demonstrating to homeowners, the business community, and developers that water conservation strategies can save money and protect this limited resource. This could be achieved by developing a means to incentivize and enforce the use of water saving technologies in development and redevelopment projects. Since Williston does not have a building or plumbing code, compliance to an incentives program would likely best be measured prior to the issuance of a Certificate of Compliance. The town should also develop education and outreach materials that address water conservation and provide them to the public in hard copy or on the town website.

12.7.4 Continue to Omit Wetlands, Rivers, and Buffers from Density Calculations. In 2008, the Conservation Commission, Planning Commission, and Selectboard supported and adopted a policy to omit wetlands, rivers, and watershed protection buffers from density calculations for new development projects. As a result, developable landscapes are no longer subject to proposals that inherently overburden the landscape's natural capacity to overcome stormwater and pollution loading. This practice is a true demonstration of stewardship and should continue to guide development projects in Williston.

12.7.5 Discourage the Use of Phosphorous Fertilizer. Phosphorous pollution is the number one threat to the health and stability of Lake Champlain. The primary sources of phosphorous are from fecal matter, fertilizers and soil erosion. For many years now the town has committed to using phosphorous-free fertilizers on town-owned land in an effort to minimize the amount of phosphorous that enters our waterways. In 2012, Vermont banned the use of phosphorus fertilizer on lawns. The town should at minimum expand upon this stewardship role and develop an educational program that deters the indiscriminant use of phosphorous fertilizers and educates homeowners on alternative lawn and yard care practices.

12.8 Flood Resilience – The Town of Williston has developed strategies to build flood resilience. This includes identifying areas vulnerable to flooding or fluvial erosion; designating those areas to be protected to mitigate risks to public safety, critical infrastructure, historic structures, and municipal investments; locating new development in safer areas; using sound stormwater management techniques to reduce flooding; conserving floodplains and upland forested areas that attenuate flooding; and encouraging flood emergency preparedness and response planning. The town will continue to implement these strategies.

12.8.1: Avoid development and protect land in particularly vulnerable areas such as floodplains and river corridors. Williston's regulations include "watershed protection buffers" for all streams, ponds, lakes and for certain wetlands. These include:

- A shoreline buffer of at least 150 feet for all ponds and lakes exceeding an area of a half-acre;
- A shoreline buffer of 250 feet for Lake Iroquois;

- A buffer of at least 150 feet for the Allen Brook, Muddy Brook, Sucker Brook and Winooski River;
- A 50-foot buffer for all unnamed streams;
- A 50-foot buffer around all Class 2 Wetlands and certain Class 3 Wetlands, and
- Special Flood Hazard Areas

Table 1 and Figure 1 at the end of this chapter further clarify town and state designated protection buffers. The town's regulations stipulate that land within these buffers shall remain undeveloped and in native vegetation. In total, the watershed protection areas generally provide greater protection than the statewide river corridors recently published by Vermont Agency of Natural Resources, and very little land area is within the river corridors that are not already under the town's watershed protection buffers (see Map 14 – Watershed Protection Buffers). Nonetheless, to assure consistency with State statute and with surrounding towns, the town should consider incorporating the ANR river corridors into the flood hazard protection standards in the Bylaw. Similar to the Special Flood Hazard Areas discussed in WDB Chapter 28, the River Corridors could become part of the watershed protection buffers.

12.8.2 New development shall be planned for and encouraged in areas that are less vulnerable to future flooding events. Williston Development Bylaws Chapter 28 regulates development in Special Flood Hazard Areas (SFHA). All new development, with minor exceptions, is prohibited in the SFHA. The town should consider the incorporation of river corridors into WDB Chapter 28, in order to assure consistency with State statute and with surrounding towns, and to insure that the town retains the maximum level of Emergency Relief Assistance Funding.

12.8.3 Where development already exists in vulnerable areas, measures shall be taken to protect people, buildings and facilities to reduce future flooding risk. Under the standards of Williston Development Bylaws Chapter 28, any permitted development including nonconforming uses and structures currently located in the SFHA must be reasonably safe from flooding and designed to prevent floatation, collapse or lateral movement during the occurrence of the base flood. This includes, using materials resistant to flood damage and using construction practices that minimize flood damage; protecting utilities from flood damage, flood proofing basements, and protecting water supply and wastewater systems. These standards could be strengthened by adopting river corridors into the Bylaw's flood protection areas.

12.8.4 Stormwater management techniques shall be used to slow spread and sink floodwater. Williston has an aggressive and detailed stormwater management program, outlined in Section 12.1 of this chapter. It should be noted that stormwater treatment standards required under Vermont law are designed to capture 90% of the annual storm events and to safely "pass" a 100-year storm event, meaning that even well-designed stormwater infrastructure won't prevent flooding in an extreme event.

12.8.5 The protection and restoration of floodplains and upland forested areas that attenuate and moderate flooding and fluvial erosion should be encouraged. As outlined in Section 12.2 of this chapter, Williston has completed several major restoration projects on the Sucker Brook and the Allen Brook. The town will continue to monitor these projects and begin efforts to restore the Muddy Brook. The town has implemented a comprehensive strategy, using regulatory and non-regulatory tools, to conserve natural resource assets across all areas of town. Using its Environmental Reserve Fund and leveraging other funding, the town has conserved over 1791 acres, including many forested upland areas.

12.8.6 Support flood emergency preparedness and response planning. Williston has adopted and regularly updates a Local Emergency Response Plan to support emergency operations during disasters. To further prepare for emergencies, Williston works with the Local Emergency Planning Committee to conduct and participate in trainings and exercises. Williston has also adopted an All-Hazards Mitigation Plan that identifies flooding as a significant hazard. As part of the development of the plan, a risk and vulnerability assessment was conducted that discusses the level of risk and identifies particular areas or facilities in town that are most vulnerable. The heart of the plan is the development of specific mitigation strategies to reduce the loss of life and property damages from flooding.

Category	Name	Definition/Purpose	Distance (ft.)	Jurisdiction
Watershed Protection Area	Lake Iroquois Shoreland Protection Area	All land located within 250 feet of the mean water level of Lake Iroquois, all development must comply with the Vermont Lake Shoreland Protection Standards.	250	Town/State
	Lakes and Ponds	Buffer of at least 150 feet above the ordinary high water mark of all lakes and ponds with an area greater than half-acre (except for Lake Iroquois), must remain undeveloped.	150	Town
	Named Streams	Buffer of at least 150 feet above the ordinary high water mark of the Allen Brook, Muddy Brook, Sucker Brook, and the Winooski River, which must remain undeveloped.	150	Town
	Other Streams	Buffer of at least 50 feet above the ordinary high water mark of all perennial or intermittent unnamed streams, which must remain undeveloped.	50	Town
	Class 2 Wetlands	Buffer of at least 50 feet above the delineated boundary of any Class 2 wetland. Class 2 wetlands are protected by Town Bylaw, State Law and Federal Law.	50	State/Town/F ederal - Army Corps of Engineers (ACOE)

Table 1: Watershed and Flood Protection Areas

Class 3	The DRB may, upon	varies	Town/Federal
Wetlands	recommendation of the		(ACOE)
	Conservation Commission, require		
	a buffer above Class 3 wetlands that		
	have important functional values.		
	Class 3 wetlands are generally not		
	protected by State Law, but are		
	regulated by the Army Corps of		
	Engineers.		

* Refer to illustrations below.

Category	Name	Definition/Purpose	Distance (ft.)	Jurisdiction
Flood Protection	Special Flood Hazard Area	All lands identified as Special Flood Hazard Areas (SFHA) on the most current flood insurance maps and studies published by the Federal Emergency Management Agency (FEMA). SFHAs include area of floodplain subject to a one percent (1%) chance of flooding in any given year.	varies	Federal (FEMA)
	Fluvial Erosion Hazard Area*	Fluvial Erosion Hazard Areas (FEH) have been delineated for some communities based on studies of particular stream and river reaches. An FEH, otherwise referred to as River Corridor Protection Area (RCPA), delineates the extent of the meander belt.	varies	State
	River Corridor*	A River Corridor includes the meander belt and the area to maintain a riparian buffer. The Statewide River Corridor (SRC) includes rivers and streams with watersheds over two square miles. For small streams, with watersheds less than two square miles, the extent of the River Corridor is measured on the ground as fifty (50) feet from the top of the stream bank. The SRC was developed using map-based data on watershed catchments, stream gradient, reference channel width, meander belt widths, valley walls, and major transportation features.	varies	State



Figure 1: Comparing a buffer setback to a river corridor. Source: Adapted from Ohio DNR, Rainwater and Land Development Manual, 2006.

CHAPTER 13 – NATURAL AND CULTURAL RESOURCES

Maintaining significant natural and cultural resources, including open space and scenic, working landscapes are among Williston's most important goals for the future. The vision statement presented in Chapter 2 states that the town will:

- sustain rural landscapes by requiring an open space pattern for subdivisions, conserving lands identified as high priority through acquisitions or easements, and supporting continued stewardship of working lands ; and
- use regulatory and non-regulatory tools, including funding for the acquisition of development rights or land to protect water quality, wildlife habitat including forest blocks and habitat connectors, scenic views, and other natural and cultural resources.

This chapter expands on the vision statement in Chapter 2 by presenting a long-range strategy for preserving and protecting Williston's conservation areas, scenic viewsheds, working landscapes, and cultural resources:

13.1 Conservation Areas protect important natural resources, including wetlands, streams, and wildlife habitat, from incompatible development. Public access is limited.

13.2 Scenic Viewsheds are identified through a detailed visual assessment. They include open fields and meadows, and wooded slopes and ridgelines.

13.3 Working Landscapes include farms and other lands that are managed for the production of agricultural, forest, and earth products. They also include lands used for outdoor recreation, such as golf courses or fee-based trail systems. In some cases public access is not necessary, and may be undesirable.

13.4 Cultural Resources include historic and archaeological sites that document the town's human history. This section focuses on archaeological resources, while historic resources are addressed in Chapters 3 and 4.

The goals and objectives provided in this chapter account for the changes in land use and development patterns that have taken place since Williston adopted its first Open Space Plan in 1989. In 2005, the Open Space Plan was broadened and became Appendix C to the *2006 Comprehensive Plan*. In 2010, the town decided that Williston's Open Space Plan is in no way ancillary to the way that Williston is managed, Appendix C was divided into two chapters in this plan: Chapter 8 - Recreation & Parks and Chapter 13 - Natural and Cultural Resources, and incorporated into the main body of this Plan.

From Foothills to the Valley Floor: Williston's Landscape

From east to west Williston touches the foothills of the Green Mountains and includes the lowlands that surround Lake Champlain (Map 1). Encompassing over 30 square miles along the southern banks of the Winooski River, the town of Williston has a unique physical setting whose roots trace back over millennia to ancient river deltas in Glacial Lake Vermont and to the great tectonic forces of geology that uplifted the Green Mountains and shaped the very bedrock the town stands on.

Such ancient stories shape the lives of animals, plants and humans to create the patterns we see on the landscape today. From moist floodplain forests and wetlands to dry craggy ridgelines, Williston hosts

diverse plant communities that include rare species and telling signs of past human land use. While not always noticed, Williston is home to abundant wildlife including such dramatic creatures as bobcats, fishers, black bears and moose as well as a rich springtime chorus of amphibians.

Humans have been part of the Williston landscape for over 10,000 years leaving a rich archeological heritage with much yet to be discovered on the land. As the more than 9,000 residents of Williston look to the future they can celebrate their ongoing part in the rich and exciting landscape of stories around them. Geological events of millennia past, which explain everything from why there is sand mining in north Williston to why it is difficult to locate a good site for wastewater disposal south of I-89, set the stage for the town's development and this plan.

Although forests cover 74% of the state today, Vermont wasn't always the "Green Mountain" state. At the time of European settlement, forests covered almost all of Vermont. During the 18th century, Vermont's and Williston's landscape changed dramatically. The forests were rapidly cleared for agriculture. Clearing reached its peak in the mid to late 1800s and reduced forest cover to about 35% of the state. Over the last century, westward expansion, the decline of the sheep industry, and reduced timber harvesting have contributed to the steady regrowth of Vermont's forests. Today's forests are the result of a major reforestation.

Forests provide Vermonters with enormous benefits and a range of critical goods and services. A thriving forest economy, functioning natural systems, and Vermont's quality of life rely on maintaining healthy forests across our landscape. Forest benefits include water supply and water quality protection, flood control and protection, wildlife habitat and biodiversity, clean air, carbon sequestration, outdoor recreation, and scenic beauty. Forests also provide cultural, spiritual, and intellectual enrichment benefits. All of these benefits are known as ecosystem services because of the value they provide. Without forests, these services would need to be replaced and at a great expense.

At present, reforestation is slowing as commercial and residential development increases. For the first time in a century, Vermont is experiencing an overall loss of forest cover. While it is hard to pin down the exact amount of acreage, a US Forest Service report indicates Vermont may have lost up to 69,000 acres of forest land from 2010 to 2015.

The main cause of this loss is scattered, incremental residential development. Forest fragmentation results when development physically breaks up continuous forest and often happens during low-density, uncoordinated residential development. This pattern of development compromises many of the ecological and economic benefits of forests, including native fish and wildlife habitat, forest health, water quality, outdoor recreation, and forest management. Much of this type of development never triggers Act 250 review.

In recent times, Williston's landscape has experienced rapid, dramatic change. Residential, commercial and industrial development has not only resulted in forest fragmentation and loss of forest cover; Williston has also lost a sizeable area of productive farmland to development. Map 16 shows the overall extent of productive agricultural soils in Williston and the farms that were evaluated for long term agricultural viability using the town's Land Evaluation, Site Assessment (LESA) system in 1988. At that time (when some farmland had already been lost to development), there were about 9,700 acres of active or potential farmland in Williston. Roughly 2,600 more acres of farmland have been developed or taken out of production since 1988. Most of the remaining active farmland is located along the Winooski River in the Floodplain and Agricultural Residential zoning districts.
The remainder of this chapter outlines long-range strategies for preserving and protecting Williston's conservation areas, scenic viewsheds, working landscapes, and cultural resources.

13.1 - Conservation Areas - The Town of Williston will protect conservation areas that provide significant benefits for soil conservation, water quality, groundwater recharge, and biological diversity. And the well-being of residents.

There are seven distinct types of Conservation Areas in Williston:

- 1) significant wildlife habitat areas, including large meadows, forest blocks and habitat connectors;
- 2) areas containing uncommon, rare, threatened, or endangered species;
- 3) unique natural communities;
- 4) farmlands of local importance;
- 5) scenic viewsheds;
- 6) special flood hazard areas; and
- 7) streams, wetlands, lakes and ponds.

The Williston Development Bylaw Chapter 27 Conservation Areas defines these areas in detail.

Incompatible development would impair the ecological functions of these areas and reduce the benefits they naturally provide to humans and wildlife. For example, wetlands and vegetated stream buffers protect water quality and healthy aquatic habitat by filtering stormwater runoff and slowing downstream flooding. Conservation of forested uplands will reduce soil erosion, attenuate flooding and fluvial erosion, and provide valuable wildlife habitat. Limited recreation (hiking, cross-country skiing, birding), environmental education, and scientific research are acceptable in conservation areas as long as they are compatible with the goal of protecting the physical features, ecological functions, and biodiversity they provide.

13.1.1 Maintain Existing Conservation Areas. Williston has protected conservation areas through a mix of land acquisition, the purchase of development rights (PDR), the transfer of development rights (TDR), the designation of open space within planned developments, and its land use bylaws. Map 18 shows the location of the existing protected areas. Conservation properties that are owned by the town or the Lake Iroquois Recreational District include:

- Mud Pond and a majority of the surrounding bog and wetlands within the upper reach of Allen Brook (158 acres):
- approximately half of the headwater wetlands north of Lake Iroquois (about 53 acres), which are also part of the Champlain Water District's source water protection area (see Section 11.5 of this plan);
- approximately half of the forested slopes of Brownell Mountain (107 acres), which will also function as a country park, as described in Chapter 9 Recreation and Parks;
- the former Hill property, located along the Sucker Brook off Route 2A (20 acres), which also functions as a country park, as described in Chapter 9 Recreation and Parks;
- the 14-acre red maple/blueberry swamp on Marshall Avenue that the town acquired when it extended Marshall Avenue, along with adjoining areas of the O'Brien Brothers development on which use is restricted due to the presence of wetlands;
- the forested slopes of the former Burnett property south of I-89 (91 acres); and
- the former Senecal property located between the Chatham Woods development and the townowned Allen Brook Nature Trail property (14 acres).

Conservation areas that have been protected by the purchase of development rights include 70 acres on the northern part of Gramma Ridge, which is located southwest of the Five Tree Hill overlook and portions of the conserved farms and woodlots listed in section 12.3 below. Numerous acres of streams and wetland buffers have been protected as a result of the town's development review process.

13.1.2 Continue to Protect Conservation Areas in Development Review. Development of conservation areas is subject to the town's bylaws, including the stormwater management and watershed health regulations that apply throughout Williston and the specific requirements of the zoning districts. Depending on their location and scale, projects that include conservation areas may be asked to set at least some portion of those areas aside as open space. This is required for most developments in the ARZD (see Policy 3.2.1) and encouraged in the RZD (see Policies 3.5 and 5.1.4).

Subdivision name	Zoning District	Open Space (acres)
Brownell	ARZD	15
Gardner	ARZD	91
Tangalos	ARZD	16
Hayes	ARZD	24
Reardon, Beers and Connelly	ARZD	34
Goldman	ARZD	10
Miller	ARZD	32
Brownell	ARZD	10
New England Theological Seminary	ARZD	42
River Hill Farm	ARZD	111
TOTAL ARZD		384
Wood Lily	RZD	14
Brennan Woods	RZD	101
Bittersweet Village	RZD	14
Pinecrest Village	RZD	36
Pleasant Acres	RZD	10
Old Stage Estates	RZD	46
Southridge	RZD	79
Coyote Run	RZD	14
Chelsea Commons	TCZD	2
Finney Crossing	TCZD	66
The Commons	VZD	44
TOTAL OTHER ZONING DISTRICTS		433
TOTAL OPEN SPACE		818

Table 13.1: Residential Developments with Designated Open Space

Approximately 818 acres of open space have been protected through Williston's development review requirements. As summarized in Table 13.1 above, 384 acres of open space has been protected by Williston's 75% open space requirement in the Agriculture/Rural Zoning District (ARZD) and an additional 433 acres of open space has been protected in all other zoning districts.

13.1.3 Develop Conservation Area Management Plans. The Conservation Commission should continue to develop and update management plans for the conservation areas owned by the town, as it does for the country parks. The commission should also work with the landowners and the Vermont Land Trust in developing management plans for the conservation areas that are under easement. These plans should emphasize the maintenance of water quality, biodiversity, and other conservation values. Currently there are management plans for Mud Pond, Five Tree Hill and Sucker Brook Hollow Country Parks, and for the former Lyon property The Conservation Commission is currently developing a management plan for Brownell Mountain and updating the Mud Pond Country Park management plan.

13.1.4 Protect Significant Wetland and Riparian Conservation Areas. The town has identified several important wetland and riparian conservation areas including:

- the Griswold Farm and adjacent wetlands and riparian forests, located off River Cove Road at the confluence of the Muddy Brook, Allen Brook, and Winooski River;
- the floodplain forests, tributary confluences, and wetlands along the Winooski River;
- several wetlands south of I-89, including the glacial spillway, located south of Old Creamery Road; the remainder of the wetlands north of Lake Iroquois; and the remainder of the wetlands and forested uplands surrounding Mud Pond;
- the Allen Brook tributaries, wetlands, and riparian areas;
- the remaining hemlock woodlands and wetlands, located south of Mountain View Road;
- the remaining wetlands in the Industrial Zoning District, specifically including those along Marshall Avenue and south of the intersection of Industrial Avenue and Rt. 2; and
- Johnson Falls off Governor Chittenden Road.

Wetlands and riparian corridors are partially protected from incompatible development by the town's stormwater management and watershed health regulations, the Special Flood Hazard Area (in some cases), and other state and federal regulations. As part of a multi-year streambank restoration project, the town acquired six conservation easements totaling 26 acres along the Allen Brook. Permanent protection via conservation easements or acquisitions should continue to be pursued as funding opportunities allow.

The Benefits of Protecting River Corridors. Vegetated buffers along the banks of rivers, streams, lakes, ponds, and wetlands help prevent water pollution, attenuate floods, protect development from stream bank erosion, and provide important wildlife habitat. Williston's Watershed Protection regulations require a 150-foot buffer adjacent to major streams (Allen Brook, Sucker Brook, Muddy Brook), the Winooski River, and major ponds and wetlands, and a 50-foot buffer along tributary streams. More information on river corridors is available in some of the publications available on-line at http://www.anr.state.vt.us/dec/waterq/cfm/ref/Ref_Rivers.cfm.

13.1.5 Protect Significant Upland Conservation Areas. Upland conservation areas are partially protected from incompatible development by the town's regulations; nonetheless uplands are more likely to be developed than wetlands or riparian corridors and should have priority in Williston's land conservation efforts. Upland conservation areas include:

- the remaining undeveloped lands on Brownell Mountain, where conservation and trail easements or strategic acquisitions would complement the town's existing conservation area/country park;
- the unprotected portion of Gramma Ridge, north of Butternut Road, where the town has already obtained one easement; and
- the remainder of the Bur Oaks knoll (the town already owns the water tank) east of Maple Tree Place. This conservation area was set aside to protect the only regional stand of bur oaks.

This list may be expanded as the town's conservation and planning commissions identify other parcels that have significant conservation value.

13.1.6 Protect Significant Wildlife Habitat Conservation Areas. Despite past development patterns that have fragmented wildlife habitats in Williston and surrounding communities, significant areas of habitat remain that are essential for a variety of plant and animal species, that contribute to local biological diversity and ecological integrity, and that support traditional activities such as hunting and fishing. Maintaining connectivity through the protection of wildlife habitat and travel corridors is critical to the long-term survival of several wildlife species.

Utilizing a Lake Champlain Basin Grant, several objectives stated in the 2011-2016 Williston Comprehensive Plan were accomplished, including 1) Identification of significant wildlife habitat and travel corridors, 2) Development of a mechanism to protect significant wildlife habitat, and 3) Development of standards to protect significant wildlife habitat in development review. As the first step, several areas characterized as significant habitat were identified in *An Assessment of Wildlife Habitat in Williston, VT, 2005.* This University of Vermont study, copies of which are available from Williston Planning, identifies seven wildlife habitat "units" – blocks of land characterized by relatively low development densities - that comprise functional habitat for many identified wildlife species.

A follow-up study, *An Assessment of Wildlife Habitat in Williston: Expanded Land Cover Mapping and Corridor Modeling*, was completed in 2011. This assessment completed the land-cover mapping of the entire town; revised the potential habitat maps for the previously-used set of representative species; and 3) identified possible wildlife migration corridors or landscape connections between important habitat blocks.

A clear and unambiguous definition of significant wildlife habitat was developed based on the data from the studies. The definition of significant wildlife habitat and associated map was incorporated in the town's *Unified Development Bylaw* together with appropriate habitat protection standards as an overlay district. These standards facilitate the protection of areas characterized as significant wildlife habitat (i.e., located within one of the defined wildlife areas, or encompassing an identified wildlife travel corridor or other identifiable significant habitat feature).

The town should continue to implement these standards. For these areas to retain their ecological functions for wildlife, it is important that future development be carefully located and designed to avoid habitat fragmentation and adverse impacts (i.e., impacts that would demonstrably reduce the ecological function of habitat on a particular parcel).

13.1.7 Monitor and Assess the Significant Wildlife Habitat Area Modeled Data for its Continued *Relevance*. The town will periodically review the modeled data on which the significant wildlife habitat area is based. This can be accomplished through field surveys by town staff, hired consultants and/or

trained citizen science volunteers. The resulting data will be used to further refine the significant wildlife habitat area maps.

Now that the habitat protection standards have been in place for a few years, there is an opportunity to evaluate their effectiveness and incorporate information from the Habitat Disturbance Assessments (HDA) conducted under the new standards. Since 2014, 27 development applications have been reviewed for impacts to the Significant Wildlife Habitat Area (SWHA), including 17 residential developments, 5 commercial developments, 2 Boundary Line Adjustments, 2 conservation subdivisions, and 1 municipal project. Fifteen of these projects were required to submit an HDA in order to demonstrate a finding of no adverse impact to the SWHA. None of the HDAs submitted to date have resulted in the denial of a permit or major alterations to a project. Often, however, an HDA's recommendations have been incorporated into the conditions of approval, such as retaining hedgerows and soft edges between fields and forests, or following a mowing schedule for open fields that supports nesting grassland birds. The Town should continue to document the HDA findings and resulting effects on habitat protection, and if necessary, modify the standards in the Williston Development Bylaw Chapter 27 to more effectively achieve its intended goals.

13.1.8 Further refine the Significant Wildlife Habitat Area (SHWA) by identifying significant forest blocks and habitat connectors; develop regulatory and non-regulatory mechanisms to reduce forest fragmentation, enhance forest health, and support essential ecological functions. When the SWHA was developed in 2010/2011, the town utilized an all-inclusive and non-discriminatory approach, which modeled habitat for several species and aggregated all the different habitat types together in a single layer without discrimination, in a well-intentioned attempt to protect as much habitat as possible. Since then, regional and statewide research has highlighted the importance of a subset of natural resources – forests – to the maintenance of overall ecological health and function; and has also documented the increasing threat to forests from incremental development and the lack of protections under state law. Forests and wildlife ranges extend beyond parcel and political boundaries, so planners must consider how state, regional, and local actions and decisions affect these important resources and promote their longevity and productivity.

In recognition of these facts, in January 2018 Vermont adopted Act 171, which encourages and allows municipalities to address protection of forest blocks and habitat connectors. Vermont Agency of Natural Resources (ANR) has developed guidance for municipalities looking to implement Act 171. The Town should utilize this guidance to identify and prioritize significant forest blocks and habitat connectors within the SWHA, and to develop regulatory and non-regulatory mechanisms to reduce forest fragmentation, enhance forest health, and support essential ecological functions.

13.1.9 Utilize Environmental Reserve Funds and Other Non-Regulatory Strategies to Protect Conservation Areas. Because conservation areas are especially sensitive to impacts from not only development but also land management techniques (e.g., clearing) that are not easily covered by development regulations, the town should employ appropriate non-regulatory strategies in addition to regulatory standards to protect significant wildlife habitat and other conservation areas. In 2013 the Town used Geographic Information Systems (GIS) technology and scoring criteria to develop a prioritization matrix to identify and prioritize key areas for long-term protection through the use of the town's Environmental Reserve Fund. Total parcel scores were used to classify parcels as high, medium or low priority. This prioritization matrix serves as an important tool to guide decisions about funding future conservation easements or land acquisitions, and should be updated periodically. Other non-

regulatory strategies should be promoted, such as encouraging landowner involvement in the wetlands reserve program, habitat improvement programs, and conservation easements and/or current use if applicable. The town will continue to fund its Purchase of Development Rights (PDR) program, and to work with other organizations including the Vermont Land Trust and the Vermont Housing and Conservation Board to leverage funds. While many landowners are uncomfortable with permanent restrictions on their rights, the town should always be ready to assist those who are willing to commit to conservation.

13.1.10 Promote Private Stewardship of Conservation Areas. Listing private lands as a conservation area will not affect their continued use for farming, forest management, or fee-based recreation. In fact, the town supports private stewardship and encourages sound land management practices (for example, maintaining a forest structure – including snags, downed trees, and understory vegetation – that supports diverse wildlife). The town is also proactive in educating landowners about the current regulations designed to protect conservation areas, such as watershed protection buffer requirements, and encourages them to take steps that bring them closer to compliance with all applicable laws.

13.1.11 Ensure Compliance With Conditions of Approval. In many cases, conditions of approval for new developments include required actions that are designed to protect Williston's natural resources. For example, as a condition of approval, a Class III wetland may require a 25-foot buffer and permanent demarcation on the ground, such as a fence or a tree line, to memorialize its location. The town will work to ensure ongoing compliance with conditions of approval. Compliance with pre-existing conditions of approval is required prior to issuing any new permits. When a property changes ownership, the buyer usually requests verification that no outstanding zoning violations exist on the seller's property.

13.1.12 Improve the Transfer of Development Rights (TDR) Program to Better Protect Open Space Resources. Transferring the development rights from one piece of land to another can be an effective tool for preserving important agricultural lands and other environmentally sensitive landscapes. The town has used this mechanism to a limited degree but the process for doing this has been defined only in outline form. The town should consider developing a more robust set of standards for transferring development rights from land areas that the town wishes to preserve to those portions of town where the town wishes to encourage development, such as the Growth Center. Such standards might include the establishment of a "Land Bank," where the town purchases development rights, "banks" those rights and then later sells them to developers who wish to increase the density of their projects.

13.2 - Scenic Viewsheds - The town will protect and maintain the visual character that defines Williston, including open fields and meadows, wooded slopes and ridgelines, and scenic viewpoints.

When driving, bicycling, or hiking through Williston - especially the rural areas - one enjoys views of rolling fields framed by a background of wooded slopes, nearby ridgelines, and distant mountains. These views are central to the sense of place the residents of Williston treasure. To help maintain that sense of place, the town undertook a detailed assessment that systematically evaluated the visual character and quality of the local landscape in 1989. The results of that analysis are provided on Map 19. The accompanying report is available from the town planning office. Briefly, Williston's visual character is created by open fields and meadows, wooded hillsides, and ridgelines. These features, and the contrast between them, create a visually satisfying mosaic that is especially appealing where it includes long views to dramatic landforms, such as Camel's Hump or Mt. Mansfield.

Some of the most important visual resources illustrated on Map 19 are listed below. This list does not include scenic farmlands, which are listed separately in section 13.3 below. Note the substantial overlap with other open space types. Scenic viewsheds that are at least partially protected from incompatible development include:

- the Brennan field, south of Mountain View Road, part of which was designated as open space when the Brennan Woods Subdivision was approved;
- the Martel Hill, located north of Mountain View Road, a portion of which was set aside as open space when a residential subdivision was approved;
- the Southridge fields which were designated as open space in the development review process that provide an open view up to the homes of the Southridge Subdivision, north of Rt. 2;
- the former Mahan Farm fields, south of Route 2, which the town has committed to conserve as mitigation for the approval of Maple Tree Place;
- the LaCasse fields along South Brownell Road, a portion of which were designated as open space when a residential subdivision was approved;
- Brownell Mountain, the northern slopes of which are a future country park and conservation area; and
- the former Lyons fields south of Town Hall, which are town property.

Some viewsheds have recently been subdivided, or are now in the development review process, including the former Swift property along Oak Hill Road, the former Brown fields west of South Road, the former Foxwood Farm north of Maple Tree Place, and a portion of the ridge that forms (roughly) the boundary between Williston and Richmond. Some open space will be protected in each of these developments. Scenic properties that currently have no formal protection from incompatible uses include:

- open fields and meadows, including the pastures along River Cove Road; the fields southwest of the intersection of Mountain View and Old Stage roads; meadows south of Governor Chittenden Road; and portions of several parcels along Oak Hill; and
- prominent ridgelines, including much of the Richmond Ridge; the hills that lie above the Winooski River; the highlands above I-89 between South Brownell and Oak Hill roads; and the north-south ridge, including Gramma Ridge that runs through the central portion of Williston south of Old Creamery Road.

13.2.1 Update the Visual Resource Assessment. Williston's landscape has changed since the visual resource assessment was done in 1989. Development has filled some views, formerly open fields are no longer mowed, and the number of public viewpoints has grown as roads and trails are extended. A new visual resources analysis should be conducted using a combination of public participation and geographic information systems technology.

13.2.2 Continue to Consider Visual Resources in Development Review. Visual impacts will continue to be considered in the review of any proposed development project in a scenic viewshed identified on Map 19 or its successor (as called for by Policy 13.2.1, above), including Administrative Permit

proposals to construct new homes and other buildings that were not part of a subdivision process where building envelopes were identified. The bylaw should be updated to clarify this permit review criteria.

The town originally implemented this policy through two overlay zoning districts: the Ridgelines/Wooded Hillside and Special Features. In 2008, the Ridgelines/Wooded Hillside and Special Features Overlays were replaced with specific performance standards, including standards designed to minimize the impact of development on important viewsheds. These standards address the siting of structures (outside the viewshed if possible, or where they will have the least impact if it is not) and building design, including height, color, scale, area of glass surface, outdoor lighting, and signs. The standards also limit clearing and thinning of wooded landscapes on ridgelines and steep slopes.

13.2.3 Explore New Methods and Technologies That Will Better Illustrate the Impact of Proposed Development On the Landscape. The town currently relies on the Visual Resource Overlay to guide development projects in Williston. To avoid being subjective, the town should explore new visual assessment methods and technologies that developers can use to better illustrate how the proposed development will impact the landscape.

13.2.4 Promote Private Stewardship of Scenic Viewsheds. Like conservation areas, scenic viewsheds are best protected by continuing private use for agriculture, wood lots, and recreation. The town will implement the same tools listed in Policy 13.1.8 to help landowners maintain scenic viewsheds.

13.3 - Working Landscapes - The Town of Williston will encourage landowners to actively manage their resources for the production of food, forest, and earth products; wildlife, scenic views; and outdoor recreation. This support will include continued funding for the purchase of development rights; zoning for a reasonable range of income-generating activities in the ARZD; and encouraging landowners to take advantage of Current Use and other working lands incentive programs.

Working landscapes are lands actively used for the production of food, fiber, earth products, and outdoor recreation. They include cropland, dairies, woodlots, orchards, sugarbushes, pastures, plant nurseries, sand mines, and fee-based recreation areas. Working landscapes do not include meadows or fields that are only periodically hayed for aesthetic purposes. These lands may fall into types of open space, but the intent here is to include only lands from which the owners derive at least a part of their livelihood.

Working landscapes are what many residents and visitors see as the classic image of Vermont. The persistence of these traditional land uses in rapidly changing Williston is a credit to the perseverance and hard work of dedicated private landowners. The policies adopted here seek to support their continued stewardship.

13.3.1 Support and Encourage Enrollment in the Current Use Program. Rapidly increasing property taxes are one of the factors contributing to the loss of working landscapes and other open spaces. Current Use helps farm and forest landowners keep their land productive by assessing it for property tax purposes based on its use value, not its development value. This lowers the owners' property tax burden. In exchange for the use value assessment, owners keep their land in productive management and pledge not to develop it while they are enrolled in the program. While the state's Current Use Program has been effective at protecting large parcels of working lands, the minimum size requirement and the program's complexity has been an obstacle for many landowners who wish to keep active farms or woodlots. Several years ago, a legislative Current Use Task Force helped to develop strategies for improving the Program. Citizen groups such as the Working Lands Enterprise Board and the Current Use Tax Coalition continue to advocate for Current Use and strategize improvements to the program. Williston should

participate in discussions of Current Use and how to improve it, and should periodically sponsor outreach efforts to encourage eligible landowners to participate in the program.

Current Use Program. The Use Value Appraisal program provides an incentive for private landowners to keep farmland or forestland productive and undeveloped. The program assesses agricultural or forestland at its use value rather than fair market value, which lowers the property tax assessment for landowners who enroll. There are many misperceptions about the tax implications of enrolling land in the Use Value Appraisal program. For example, the State of Vermont reimburses communities for all of the tax revenue that is lost due to enrollment of land under the program. More information on Vermont's Current Use tax program may be obtained from the Department of Taxes at http://www.state.vt.us/tax/pvr.shtml.

13.3.2 Continue to Protect Important Agricultural Lands. As noted earlier in this plan, Williston has lost a sizeable area of productive farmland to development. Agriculture is still an important part of the local landscape, however, and the town will continue to work with landowners to sustain it. The town developed the LESA (Land Evaluation, Site Assessment) system on which Map 16 is based to help identify important farms in the late 1980s. The top five farms identified by that system are all still in production. These include the Clark (Riverhill), Conant, Fontaine, and Landvater properties along the Winooski River, and the Imajica farm. None of these farms are protected from conversion to other uses by a conservation easement or other restriction. Working farms the town has helped conserve through the purchase of development rights include the Lacasse Farm on South Brownell Rd, the Johnson Farm and Woodlot at the east edge of the Village, the Siple Farm on South Rd, the Isham Farm and Bruce Farm on Oak Hill Rd, and the Burnett Farm on Route 2 west of the Village. With the local foods movement, there are many small farm operations cropping up in Williston. The town should encourage and support these small farms wherever possible.

Defining Farmlands. The State of Vermont uses a definition of agricultural lands that is based solely in the important farmlands definitions adopted by the Natural Resources Conservation Service (see 10 V.SA. § 6001(15)). Those definitions, which include "prime farmland" and "farmlands of statewide importance," reflect the inherent characteristics and management of a parcel, but ignore its context. Their use in Williston and other suburban areas has been counterproductive, making it more difficult to promote a compact pattern of development because the state is "protecting" isolated parcels of productive soils that are surrounded by development and urban infrastructure. Williston follows the experience of numerous jurisdictions throughout the nation in focusing its farmland protection efforts on working farms (which may include soils that are not so productive) rather than on soil bodies.

13.3.3 Protect Other Working Landscapes. Other working landscapes include tree farms, commercial wood lots, nurseries, sand and gravel mines, and fee-based outdoor recreation. Some local examples include the Comeau sugarbush at the end of Bradley Lane, the sand and gravel operations in North Williston, the Boomhower wood lot and the former O'Brien property wood lot, located on Gramma Ridge south of Five Tree Hill, which the town has helped conserve through PDR. Outdoor recreation facilities include two golf courses (Williston and Catamount), the North Country Sportsman Club located off Old Creamery Road; and the Catamount Family Center on Governor Chittenden Road.

13.3.4 Ensure that the Town Bylaws Permit a Reasonable Range of Uses in Working Landscapes. The town will periodically review its bylaws to ensure promotion of the development of diverse, innovative agricultural activities, including farm stands; cottage industries like cheese making or other value-added enterprises; farm waste recovery for energy generation; and fee-based recreation, hospitality, and educational activities.

13.3.5 Promote Community Gardens in Designated Open Space. The town should encourage developers to designate community garden space into their development plans whether inside or outside of the designated open space.

13.3.6 Consider Land Use Conflicts when Investing in Parks or Trails. The town should carefully consider the potential conflict between public access and farm and woodlot operations before investing in country parks or trails.

13.4 Cultural Resources – The town will strive to protect and maintain significant archaeological and historic resources.

This section primarily addresses the protection of archaeological resources. The protection of historic resources is addressed in Chapter 3 - Land Use and Chapter 4 - Community Design.

Williston has a long and rich history of human settlement far predating the last several centuries of European influence. Though the clues are not so easily found and interpreted as those of European settlement, the Williston landscape abounds with evidence of its prehistoric past. To date, almost 100 archeological sites have been documented in Williston spanning the time period from about 9500BC-1600AD.

In Williston, as in every town, locating archaeological sites is a basic and necessary activity if these resources are to be preserved, interpreted and considered in town planning. In 1990 the Town of Williston began the process of identifying, inventorying and planning for the preservation of the Town's cultural resources, when it received a Certified Local Government (CLG) grant from the Vermont Division for Historic Preservation (VDHP). The CLG grant allowed the town to develop a preliminary overview of archaeological resources in town, consisting of the mapping of known sites and the development of an archaeological sensitivity map based on environmental parameters. Through this grant, 65 Native American, 92 European American and 5 unspecified archaeological sites were documented. The archaeological sensitivity map provided a predictive model of areas in Williston expected to contain more Native American sites. As more information has been gathered from around the region and through the development of more sophisticated modeling tools, this now statewide model continues to be updated and refined by the VDHP.

This map is used to provide notice to a developer that certain areas may contain archaeological sites, and may require further investigation. Areas mapped as highly sensitive have typically been established as not-to-be-disturbed buffer zones or required to conduct archaeological surveys under Act 250 regulations. The Town of Williston is currently working on strategies to incorporate protection of these cultural resources into the Town Bylaws, in much the same way we have addressed protection of other resources such as wetlands, wildlife habitat, open space and agricultural lands.

Identifying and recording archaeological sites is a lengthy and ongoing process. Since 1990, many additional sites have been identified in Williston. The concentration of known Native American sites north of Interstate 89 is primarily the result of archaeological investigations conducted as part of federal and state environmental review required for development activities. There is an abundance of identified sites in areas where surveys have been done, and an absence of sites in areas where surveys have been lacking. Therefore, the absence of sites is likely a result of not having looked in those areas, rather than an actual lack of sites.

Many of the prehistoric sites are clustered near the Allen Brook, for it not only provided water for drinking, but the rich floodplain soils also harbored prolific edible plants such as butternuts, ostrich ferns (fiddleheads), and wild leeks. The Allen Brook would have been used for transportation both on foot and by boat as well. Southern-facing rises on the landscape were particularly attractive for settlements, as these provided good views and a drier, slightly warmer microclimate. The Mahan site is one example. It is one of the largest Paleoindian sites in the Northeast, dating to about 10,500 years ago, and containing over 5,000 stone artifacts including projectile points, scrapers, knives, a drill, and many stone flakes (Thomas 2001). This site is interpreted as a summertime base camp occupied for an extended period by 25-40 people, perhaps representing a staging area for the early explorations that populated the region.

The Mahan site gives us a glimpse of the earliest cultures in Williston, but prehistoric cultures changed over the millennia as their environment continued to change and as new technologies, such as the bow and arrow, pottery and agriculture, were developed. The archeological sites in Williston document these changing technologies and cultures and suggest a nearly continuous human occupation from the earliest inhabitants of Vermont to the time of European settlement.

To ensure the protection of these and other significant sites, the following policies have been adopted.

13.4.1 All development/planning projects should be evaluated to determine the potential for impacting archaeological resources and whether there is a need for preservation action prior to site development. All development projects under Act 250 Jurisdiction are reviewed by the Vermont Division of Historic Preservation (VDHP) for potential impacts to archaeological resources, and are required to avoid or mitigate any impacts. For development not covered by Act 250, the town should consider the inclusion of archaeological resources as an additional Conservation Area for which impacts are considered during site plan review. The town should also consider including the following standards in the bylaw:

- New construction should be designed to avoid known archaeological sites or at least to minimize impacts on them.
- Limit soil disturbance to the minimum necessary on sites where testing for potential archaeological sites has not been done.
- Preserve known archaeological sites by capping with clean fill and sealing with asphalt or turf.

13.4.2 Utilize the assistance of the Vermont Division for Historic Preservation in evaluating potential impacts to archaeological resources. The VDHP can assist in examining maps and other documents, as well as viewing the site itself, to decide if a project could have an impact on visible ruins or buried deposits important to Williston's and Vermont's history. An archaeological consultant may need to be hired to conduct research, survey, and excavation.

13.4.3 Consider the appointment of an archaeologist to the Conservation Commission to assist in developing appropriate standards of protection and in the review of a proposed development's impacts on archaeological resources.

13.4.4 Leverage outside funding sources to conduct archaeological surveys or to protect archaeological resources. Williston is a Certified Local Government (CLG) and as such is eligible for grant funding to conduct historic research and documentation related to buildings and archaeology. Williston should use this funding where appropriate.

13.4.5 Use the archaeological sensitivity map as a focus for future archaeological surveys, through grants or donations, especially in under surveyed areas of town.

As approved by the Williston Selectboard August 22, 2017 and amended November 5, 2018 P a g e 120 |

CHAPTER 14 – IMPLEMENTATION: REALIZING WILLISTON'S VISION

Every policy in this plan was developed with action in mind. Many will be implemented through the continuing enforcement and revision of the town's bylaws. Others will require public investment, as the town budgets money for everything from planning studies to major infrastructure improvements. Most of all, making this plan work requires a continuing community conversation, in which the people of Williston educate themselves about growth-related issues and volunteer to serve on town boards and task forces.

Williston Needs You! The successful implementation and realization of the town's goals expressed in this plan depends upon the work of its citizen volunteers who sit on all of the town's boards. If you would like to serve on one of the citizen boards charged with the administration of this plan, you will find notices of vacancies and application forms posted on the town's web page or at the Town Manager's office. The boards and their roles are listed below.

The **Planning Commission** is responsible for policy discussions and recommendations to the town's elected officials, the Selectboard. It prepared this document and will prepare the bylaw revisions it recommends.

The **Development Review Board** (DRB) makes sure that development proposals comply with the town's bylaws.

The **Conservation Commission** reviews development proposals that impact open space and makes recommendations to the DRB. Its main mission, however, is to identify lands that should be conserved, work with landowners, and acquire conservation lands or development rights to those lands. This board also seeks trail easements and provides direction for the management of the town's country parks, conservation lands, and primitive trails.

The **Historic and Architectural Advisory Committee (HAAC)** conducts design review in the Village Zoning District and makes recommendations to the DRB. It promotes an awareness of historic resources by seeking grants to fund workshops and informational literature. The HAAC also reviews most commercial and many industrial development proposals following a set of design guidelines that are adopted in the town's bylaws. Based on its review, the HAAC provides recommendations to the DRB.

The objectives adopted below constitute a general basis for the implementation of this plan. To provide details, Table 13.A lists the 130 some objectives and policies adopted here and shows which departments of town government are principally responsible for each. That table also proposes a schedule and, where possible, offers a rough estimate of the costs of implementation. It should be clearly understood that the schedule and costs given here are estimates intended to help decision-makers and citizens understand the challenges the town faces. Timeframes and costs will be refined in planning and engineering studies and the annual budget process.

14.1 Bylaws - The Town of Williston will revise its bylaws to be consistent with the policies adopted in this plan. These revisions will take the form of a unified development bylaw.

Williston has regulated land use since the early 1960's. There have been numerous amendments of the bylaws as the town learned from experience and new ideas emerged. The result is a set of bylaws that incorporate hundreds of incremental changes. While each of those changes was a good idea (at least at the time), the resulting documents are bulky and difficult to administer. There are internal contradictions, or at

least sections that work at cross-purposes. Many sections could be made more specific and, thus, more defensible. The time has come to reflect what the town has learned in an easier-to-use form by adopting a unified development bylaw that is consistent with the objectives and policies of this plan.

24 V.S.A. §§ 4402 and 4419 authorize adoption of unified development bylaws, which consolidate all procedures – subdivision, site plan, conditional use, special use, etc. – that apply to a development proposal into a single set of procedures. This will streamline development review (projects in Williston are frequently subject to two-three separate sets of procedures) and make it easier to incorporate many of the regulatory policies adopted here.

14.2 Budgets - The Town of Williston will incorporate the objectives and policies of this plan into its capital and operating budgets. The town will also continue to pursue grants.

As noted in Chapter 7, Williston has a strong capital budget process. The infrastructure improvements (and studies leading up to them) called for by this plan will be included in the capital budget as resources allow. Tax funding will be supplemented with impact fees and grants. Planning studies will generally be funded from the operating budget, as feasible, or by grants.

14.3 Costs of Growth - The Town of Williston will continue to monitor the costs of growth and use the results of its analysis as a basis for setting fees, seeking grants, and documenting the continuing need for a municipal sales tax.

A "Costs of Growth" element was included in the town's 2001 plan. An update will be completed and added to this document by 2016.

14.4 Economic Development – The Town of Williston has now added an economic development element to this plan. This was identified as a goal in the town's 2011-2016 plan, and it is now a requirement of state statute.

The local economy is currently healthy, but the continued vibrancy of Williston<u>'s</u> economy will require continued attention to the town's land use and transportation policies as the nature of business and commerce continue to change and evolve. The need for the town to continue to provide housing affordable to a broad range of workers will continue to be an important goal for both the region and the town, and an important goal within this plan.

14.5 Maps - The Town of Williston will develop more accurate and useful maps to support the implementation of this plan, as necessary. The town will also begin to develop its own Geographic Information Systems capability.

Experience has demonstrated a need for revisions in some of the maps used in administering Williston's bylaws. The town will work with the Chittenden County Regional Planning Commission (CCRPC) to produce improved mapping of ridgelines and other scenic assets, stream and wetland buffers, and other features. The town will also begin to build its own mapping capabilities.

14.6 Coordination - The Town of Williston will continue to work with other agencies and organizations to implement this plan.

Williston's vision of a desirable future cannot be realized without the cooperation and support of state and federal agencies, regional planning organizations, and other municipalities. This reality is reflected in the many policies that call for the town to work with specific agencies.

14.7 Growth Center - The Town of Williston was the first community in Vermont to have a designated Growth Center under Vermont's planning statutes in 2007 (24 V.S.A. § 4302 and 24 V.S.A. §§2791, 2792 and 2793(c). The town will monitor and participate in any future discussions to changes in this legislation while evaluating the effectiveness of the Growth Center designation for Williston. See also Objective 3.1.

Growth Centers. There is a great deal of discussion of growth centers on the web. A starting point that gives some history of the idea is provided by the Vermont Planner's Association at <u>http://www.vermontplanners.org/documents/GrowthCentersReport.pdf</u>.

A Return to the Vision

Williston's vision statement fits easily on a single page. Setting a clear, reasonably specific direction for how that vision will be realized has taken quite a few more.

This plan ends with a reminder that while Williston's vision keeps evolving, the core of that vision has been consistent for many years. It is also important to remember that the town has made substantial progress in attaining its vision. Your planning commission members expect that progress to continue, guided by this latest edition of the town's plan. We also thank everyone who contributed to the 2016-2024planning effort!

Table 14.A	Table 14.A – 2016-2024 Williston Town Plan – Objectives and Policies – Implementation Table									
Chapter – Objective		Policy	Responsibility	Timeframe	Cost	Proposed Source				
	Chapter 3- Land Use									
Objective 3.1 – Taft Corners and Growth Center	3.1.1	Work with Developers to Build Grid Streets	Planning, Public Works	2016-2024, as develop - ment occurs	~\$2.5 million	developers and impact fees				
	3.1.2	Work with VTrans on Circulation Improvements	Planning, Public Works, VTrans	2016-2024	no additional	n/a				
	3.1.3	Commercial Zoning Districts	Planning	ongoing	no additional	n/a				
	3.1.4	Refine Development Standards in the Growth Center	Planning	2017-2019	no additional	n/a				
	3.1.5	Consider Form Based Code	Planning	2017-2020	TBD	TBD				
Objective 3.2 – Rural Williston	3.2.1	Protect Rural Character and Open Space	Planning	ongoing	no additional	n/a				
	3.2.2	Permit Larger Developments in Highly Suitable Locations	Planning	ongoing	no additional	n/a				
	3.2.3	Develop a Transfer of Development Rights Program	Planning	2020-2021	no additional	n/a				
	3.2.4	Encourage the Adaptive Reuse of Historic Barns	Planning	ongoing	no additional	n/a				
Objective 3.3 – Industrial Lands	3.3.1	Transportation Improvements to Support Industrial Activity, Direct Truck Traffic away from Taft Corner	Planning,	2020-2024	no additional	n/a				
	3.3.2	Consider Revising Allowed uses in IZDW	Planning	2018	no additional	n/a				
Objective 3.4 – Residential Neighborhoods	3.4	Protect Residential Character	Planning	ongoing	no additional	n/a				
Objective 3.5 – Open Space	3.5	Protect Open Space- See Chapter 13	Planning	ongoing	no additional	n/a				
Objective 3.6 – Williston Village	3.6.1	Develop a Village Master Plan	Planning	2017-2018	no additional	n/a				

Table 14.A – 2016-2024 Williston Town Plan – Objectives and Policies – Implementation Table						
Chapter – Objective		Policy	Responsibility	Timeframe	Cost	Proposed Source
	3.6.2	Examine Density Standards in the VZD	Planning	2017-2018	no additional	n/a
Objective 3.7 – Other Land Use Areas	3.7.1	Refine Watershed Protection Buffers	Planning	2018-2019	no additional	n/a
	3.7.2	Consider Changes to Uses in IZDW	Planning	2018-2019	no additional	n/a
Objective 3.8 – Neighboring Municipalities	3.8	Land Use and Neighboring Municipalities	Planning	ongoing	no additional	n/a
		Chapter 4	– Community Design	l		
Objective 4.1 – Village Design and Historic Preservation	4.1.1	Review and Revise the Village Design Guide	Planning	2018-2019	no additional	n/a
	4.1.2	Maintain Character of Historic Properties Outside the VZD	Planning	ongoing	no additional	n/a
Objective 4.2 – Commercial Design	4.2.1	Require Landscaping	Planning	ongoing	no additional	n/a
	4.2.2	Use of native plants	Planning	ongoing	no additional	n/a
	4.2.3	Minimize Parking	Planning	ongoing	no additional	n/a
	4.2.4	Minimize Visual Impact of parking	Planning	ongoing	no additional	n/a
	4.2.5	Avoid Dead Walls	Planning	ongoing	no additional	n/a
Objective 4.3 – Mixed Use Design	4.3	Apply Design Guidelines to Mixed- Use Projects	Planning	ongoing	no additional	n/a
Objective 4.4 – Urban Parks	4.4.1	Enliven Existing Urban Parks	Planning	ongoing	no additional	n/a
	4.4.2	Encourage New Urban Parks	Planning	ongoing	no additional	n/a
	4.4.3	Refine Urban Park Requirements	Planning	ongoing	no additional	n/a
	4.4.4	Develop and Maintain Urban Parks	Developers and HOA's	ongoing	no additional	private
Objective 4.5 – Neighborhood Parks	4.5.1	Require Neighborhood Parks in New Developments	Planning	ongoing	no additional	n/a

Table 14.A	Table 14.A – 2016-2024 Williston Town Plan – Objectives and Policies – Implementation Table						
Chapter – Objective		Policy	Responsibility	Timeframe	Cost	Proposed Source	
	4.5.2	Refine Neighborhood Park Requirements	Planning	ongoing	no additional	n/a	
	4.5.3	Maintain Existing Neighborhood parks	Developers, HOA's	ongoing	no additional	n/a	
	4.5.4	Town Role in Neighborhood Parks	HOAs	ongoing	no additional	n/a	
Objective 4.6 – Signs and Outdoor Lighting	4.6.1	Revise and Clarify Sign Regulations	Planning	2017-2019	no additional	n/a	
Objective 4.7- Urban Forestry	4.7.1	Continue to Require and Maintain Street Trees	Planning/Public Works	ongoing	no additional	n/a	
	4.7.2	Maintain the Tree Inventory	Planning/ Public Works	ongoing	no additional	n/a	
	4.7.3	Implement the Urban Forestry Plan	Planning/Public Works	ongoing	no additional	n/a	
	4.7.4	Implement the EAB Preparedness Plan	Planning/Public Works	ongoing	TBD	Grants	
	4.7.5	Establish a Town Tree Nursery	Planning/ Public Works	TBD	Unknown	Grants	
Objective 4.8- Williston in Bloom		Continue to Support Williston in Bloom	Public Works	ongoing	no additional	n/a	
Objective 4.9- Gateways to Williston		Work to Enhance Major Gateway Areas	Planning	TBD	TBD	Grants	
		Chapter 5 – Hous	ing and Growth Man	agement			
Objective 5.1- Residential Growth Management	5.1.1	Link Residential Growth Target with Sewer Allocation	Planning	ongoing	no additional	n/a	
	5.1.2	Set Residential Target to 80 Dwelling Units per Year	Planning	ongoing	no additional	n/a	
	5.1.3	Assign Growth Management Consistent with Plan	Planning	ongoing	no additional	n/a	

Planning/ Selectboard

no additional

n/a

ongoing

Goals

Criteria

Adopt More

Specific Growth Management

5.1.4

Table 14.A – 2016-2024 Williston Town Plan – Objectives and Policies – Implementation Table						
Chapter – Objective		Policy	Responsibility	Timeframe	Cost	Proposed Source
	5.1.5	Provide for Small Residential Development	Planning	ongoing	no additional	n/a
	5.1.6	Encourage High- Density Residential in Growth Center	Planning	ongoing	no additional	n/a
	5.1.7	Require Master Plans for Subdivisions	Planning	ongoing	no additional	n/a
	5.1.8	Implement and Refine the Growth Management System	Planning, Planning Commission, DRB Planning	2017-2018	no additional	n/a
Objective 5.2- Housing Opportunities	5.2.1	Use Growth Management to Encourage Affordable Housing	Planning	ongoing	no additional	n/a
	5.2.2	Consider Using Inclusionary Zoning	Planning	2017-2018	no additional	n/a
	5.2.3	Encourage Housing Choice	Planning	ongoing	no additional	n/a
	5.2.4	Evaluate Town Lands for Affordable housing Potential	Planning	ongoing	no additional	n/a
	5.2.5	Encourage Adaptive Reuse of Industrial and Commercial Buildings for Affordable Housing	Planning	ongoing	no additional	n/a
	5.2.6	Explore Additional Affordable Housing Programs	Planning	2018-2020	no additional	n/a
	5.2.7	Implement Recommendations of Affordable Housing Task Force	Planning	2018-2019	no additional	n/a
	5.2.8	Create Housing Trust Fund	Selectboard	TBD	TBD	TBD
		Chapte	r 6- Transportation			
Objective 6.1- Master Transportation Plan	6.1.1	Implement Major Road Plan	Planning	ongoing	no additional	n/a
	6.1.2	Build Sidewalks, Paths and Trails	Planning	ongoing	no additional	n/a

Table 14.A – 2016-2024 Williston Town Plan – Objectives and Policies – Implementation Table						
Chapter – Objective		Policy	Responsibility	Timeframe	Cost	Proposed Source
	6.1.2.1	Build Sidewalks, Paths and Trails supported by the Bond Issue	Planning/ Public Works	ongoing	no additional	Bond and Impact Fees
	6.1.2.2	Build Other Sidewalks, Paths and Trails	Planning/ Public Works	As Needed	TBD	Impact Fees
	6.1.2.3	Provide Wide Shoulders	Planning/ Public Works	ongoing	no additional	n/a
	6.1.2.4	Provide Amenities	Planning/ Public Works	ongoing	no additional	n/a
	6.1.2.5	Evaluate Linking Recreation Paths to Sidewalk Network	Planning/ Public Works	ongoing	no additional	n/a
	6.1.2.6	Public Works Specifications	Planning/ Public Works	ongoing	no additional	n/a
	6.1.2.7	Require Paths in New Development	Planning, Developers	ongoing	TBD	Developers
	6.1.3.1	Support Public Transportation	Planning	ongoing	no additional	n/a
	6.1.3.2	Promote Construction of Ride Sharing Facility	Planning/ Selectboard/ Public Works/VTRANS	ongoing	no additional	n/a
	6.1.3.3	Build a Transit Center	Town/GMT	TBD	Unknown	Unknown
	6.1.3.4	Build Bus Pull Offs	GMT/VTRANS	TBD	TBD	TBD
	6.1.4.1	Require Multiple Points of Access	Planning	ongoing	no additional	n/a
	6.1.4.2	Require Connectivity	Planning	ongoing	no additional	n/a
Objective 6.2- Access Management	6.2.1	Limit New Points of Access	Planning, Public Works	ongoing	no additional	n/a
	6.2.2	Limit Access directly from parking	Planning	ongoing	no additional	n/a
	6.2.3	Consolidate Existing Points of Access	Planning	ongoing	no additional	n/a
	6.2.4	Locate Points of Access to Protect Public Safety	Planning	ongoing	no additional	n/a
	6.2.5	Require Turning Lanes and Access Management	Planning	ongoing	no additional	n/a
	6.2.6	Design Access Points for Safety	Planning	ongoing	no additional	n/a

Table 14.A	Table 14.A – 2016-2024 Williston Town Plan – Objectives and Policies – Implementation Table							
Chapter – Objective		Policy	Responsibility	Timeframe	Cost	Proposed Source		
	6.2.7	Protect Pedestrians and Bicyclists	Planning	ongoing	no additional	n/a		
Objective 6.3 – Transportation	6.3.1	Build Circ. Alternatives Projects	VTrans	2017-2024	TBD	State		
Improvements- State	6.3.2	Construct a Williston Park-and- Ride	VTrans	2017-2018	\$2.500,000	State		
	6.3.3	Improve the Intersection of Route 2 and Industrial Avenue	VTrans	2020-2024	\$3,000,000	State		
	6.3.4	Consider Improvements to the Intersection of Route 2 and North Williston Road	Planning, Selectboard, Public Works	TBD	TBD	Federal and State		
	6.3.5	Calm Traffic in Williston Village	Planning, Public Works, VTrans	2017-2020	TBD	Town, Grants		
Objective 6.4 – Transportation	6.4.1	Construct Trader Lane	Public Works, Planning	2017-2018	\$1.5 million	Impact Fees / VTRANS		
Improvements Town – High Priority	6.4.2	Study Improvements at Mountain View Road and North Williston Road	Public Works	2016-2018	TBD	CCRPC		
	6.4.3	Complete Improvements at James Brown Drive	VTrans/ Public Works	2018-2020	\$2.6 million	Federal, State, Developers		
	6.4.4	Build a Williston Town Park-and-Ride	Planning, Developers	TBD	TBD	TBD		
	6.4.5	Construct Road Connection Between Home Depot and Route 2A (Depot Street)	Planning, Public Works	2018-2024	TBD	Developers		
Objective 6.4 – Transportation	6.4.6	Build other Taft Corners Grid Streets	Public Works	2022-2024	TBD	Developers		
Improvements- Town – Lower Priority	6.4.7	Study North Williston Road Improvements	Public Works / CCRPC	2017-2018	TBD	TBD		
	6.4.8	Study Oak Hill Road Improvements	Planning, Public Works	TBD	TBD	Impact Fees / CCRPC		
Objective 6.5 - Freight	6.5.1	Designate Truck Routes	Public Works	ongoing	no additional	n/a		
	6.5.2	Support Rail Services	Selectboard	ongoing	no additional	n/a		

Table 14.A	Table 14.A – 2016-2024 Williston Town Plan – Objectives and Policies – Implementation Table						
Chapter – Objective		Policy	Responsibility	Timeframe	Cost	Proposed Source	
Objective 6.6 – Transportation Funding	6.6.1	Require Developers to Provide Local Streets and Facilities	Developers	ongoing	no additional	n/a	
	6.6.2	Update the Transportation Impact Fee	Planning/ Selectboard	2017-2018, ongoing	TBD	n/a	
	6.6.3	Pursue Additional Funding for Transportation	Planning/ Public Works	ongoing	TBD	Grants	
Objective 6.7 – Regional Transportation Planning	6.7	Continue to participate in the CCRPC	Planning	ongoing	no additional	n/a	
		Chapter 7 –	- Economic Developme	nt			
Objective 7.1 – Implement the Land	3.1	Taft Corners and Growth Center	Planning	ongoing	no additional	n/a	
Use Plan to Support Economic Development Objective 7.2 – Implement the	3.3	Industrial Lands	Planning	ongoing	no additional	n/a	
	6.1.3	Public Transportation	Selectboard	ongoing	TBD	General Fund	
Transportation Plan to Support Economic	6.3	State Transportation Improvements	VTrans	2016-2024	TBD	State	
Development	6.4	Town Transportation Improvements	Selectboard/Public Works/Developers	TBD	TBD	Impact Fees/Grants	
	6.5	Freight	Selectboard	ongoing	no additional	n/a	
Support Economic Development Objective 7.3 –Maintain Available Wastewater Treatment Capacity	7.3	Purchase additional sewer capacity as identified in Chapter 8.	Selectboard	\$10/gallon	\$500,000	General Fund	
Objective 7.4 – Affordable Housing	5.2	Housing Opportunities calls for the town to incentivize building additional affordable and workforce housing.	Planning	ongoing	no additional	n/a	
Objective 7.5 Support VTC Development	10.3	Support VTC Expansion Goals through land use regulations.	Planning	ongoing	no additional	n/a	
		Chapter 8 – Pi	ublic Facilities and Ser	vices			

Table 14.A	Table 14.A – 2016-2024 Williston Town Plan – Objectives and Policies – Implementation Table							
Chantan Objective		Dolion	Dognongihility	Timofuomo	Cost	Proposed		
Objective 8.1 – Administration	8.1.1	Renovate Older Town Hall Facilities for Energy Efficiency	Planning/ Public Works	ongoing	no additional	n/a		
Objective 8.2 – Cemeteries	8.2.1	Enhance the Appearance of the Deer View Cemetery	Public Works	TBD	TBD	TBD		
Objective 8.3 – Fire and Rescue	8.3.1	Continue Adding Professional Firefighters	Fire	ongoing	TBD	General Fund		
	8.3.2	Adopt and Enforce National Fire Codes	Fire	2018-2020	no additional	n/a		
	8.3.3	Cooperate with the Williston Police Department to Improve Dispatch	Fire/ Police	2020-2022	TBD	TBD		
	8.3.4	Adopt the Regional All Hazards mitigation Plan	Fire/Police	2017	no additional	N/A		
Objective 8.4 Law Enforcement	8.4.1	Raise the Level of Service to 17 Officers	Police	TBD	TBD	General Fund		
	8.4.2	Raise the Level of Service by Coordinating Dispatch	Police/ Fire/ Rescue	2015-2016	TBD	General Fund		
Objective 8.5 - Library	8.5	Continue to Provide Exemplary Library Services	Library	ongoing	no additional	n/a		
Objective 8.6 – Sewerage	8.6.1	Confine Sewer to the Sewer Service Area	Selectboard/ Planning/Public Works	ongoing	no additional	n/a		
	8.6.2	Allocate Treatment Capacity in Accordance with This Town Plan	Selectboard	2016-2024	no additional	n/a		
	8.6.3	Purchase Additional Sewer Capacity	Selectboard	2018-2022	\$10/Gallon /day	General Fund		
	8.6.4	Implement the Sewerage Facilities Plan	Public Works	ongoing	TBD	TBD		
	8.6.5	Develop a 20 year Plan for Sewer Service.	Planning	2017-2018	no additional	n/a		

Table 14.A – 2016-2024 Williston Town Plan – Objectives and Policies – Implementation Table						ble
Chapter – Objective		Policy	Responsibility	Timeframe	Cost	Proposed Source
	8.6.6	Make Better Use of and Reacquire Existing Capacity	Selectboard, Planning, Public Works	2017-2020	no additional	n/a
	8.6.7	Continue to Assess Sewer Connection Fees	Public Works	ongoing	no additional	n/a
Objective 8.7 – Solid Waste	8.7.1	Make Road Improvements to Support the Landfill	Public Works	TBD	TBD	CSWD
	8.7.2	Require Host Town Agreements	Selectboard	ongoing	no additional	n/a
	8.7.3	Explore Requiring Recycling by Commercial Users	Selectboard, Planning	2018-2020	no additional	n/a
Objective 8.8 - Water	8.8.1	Protect the Town's Water Source	See Objective 12.5	ongoing	no additional	n/a
	8.8.2	Improve Water Storage	Public Works	2017-2018	TBD	Bond
	8.8.3	Eliminate Dead - Ends	Public works	ongoing	TBD	General Fund
	8.8.4	Collect water connection Fees	Public Works	ongoing	no additional	n/a
Objective 8.9 – Capital Budget	8.9	Continue to use the Capital Budgeting Process	Selectboard	ongoing	no additional	n/a
Objective 8.10 – Public Works Specifications	8.10	Implement the Public Works Specifications in Project Review	Planning/ Public Works	ongoing	no additional	n/a
	Chapter 9 – Recreation and Parks					
Objective 9.1 – Recreation	9.1.1	Process to Determine Needs	Recreation	ongoing	no additional	n/a
	9.1.2	Foster Volunteer Opportunities	Recreation	ongoing	no additional	n/a

	9.2.2	Meet the Need for Indoor Recreation Facilities	Recreation, Selectboard	2018-2020	TBD	TBD	
Objective 9.3 – Community Parks	9.3.1	Maintain Existing Community Parks	Public Works	ongoing	no additional	n/a	
As approved by the Williston Selectboard August 22, 2017 and amended November 5, 2018							

Recreation

Identify Recreation Facility Needs

9.2.1

Objective 9.2 – Indoor Recreation Facilities no additional

n/a

2017-2019

Table 14.A – 2016-2024 Williston Town Plan – Objectives and Policies – Implementation Table						ble
Chapter – Objective		Policy	Responsibility	Timeframe	Cost	Proposed Source
Objective 9.3 – Community Parks Objective 9.4 – Country	9.3.2	Meet the Need for Additional Park Development	Recreation, Public Works	ongoing	TBD	TBD
Parks	9.3.3	Consider the Distribution of Park Space	Recreation	ongoing	no additional	n/a
Objective 9.4 – Country Parks	9.4.1	Maintain Existing Country Parks	Planning	ongoing	TBD	TBD
	9.4.2	Develop Additional Country Parks	Planning	ongoing	TBD	TBD
	9.4.3	Prepare Management Plans for Country Parks	Planning	ongoing	no additional	n/a
	9.4.4	Consider Country Parks in Development Review	Planning	ongoing	no additional	n/a
Objective 9.5 – Trails	9.5.1	Maintain Existing Trails	Planning	ongoing	\$10,000 / yr.	General Fund
	9.5.2	Expand the trail System	Planning	ongoing	TBD	TBD
	9.5.3	Require Trails in New Developments	Planning / Developers	ongoing	no additional	n/a
Objective 9.6 – Lake Iroquois	9.6	Continue to Cooperate with Other Towns to Manage Recreational Facilities	Planning Recreation	ongoing	no additional	n/a
		Chapter 10 –	Education and Child C	are		
Objective 10.1 – Schools	10.1.1	Assess School Impact Fee	Planning	ongoing	no additional	n/a/
	10.1.2	Prepare a Facilities Plan	School District	TBD	no additional	School District
	10.1.3	Meet regularly to Discuss School Needs	School District/ Selectboard	annually	no additional	n/a
Objective 10.2 – Child Care	10.2.1	Permit Child Care Centers Wherever Schools are Permitted	Planning	ongoing	no additional	n/a

Table 14.A – 2016-2024 Williston Town Plan – Objectives and Policies – Implementation Table							
Chapter – Objective		Policy	Responsibility	Timeframe	Cost	Proposed Source	
Objective 10.2 – Child Care	10.2.2	Permit Child Care Centers in Employment Generating Zoning Districts	Planning	ongoing	no additional	n/a	
	10.2.3	Continue to Permit Child Care Centers as accessory use	Planning	ongoing	no additional	n/a	
Objective 10.3 – Higher education	10.3	Encourage and Facilitate the Expansion of Vermont Technical College in Blair Park	Planning, Selectboard	ongoing	no additional	n/a	
	Chapter 11 – Energy Efficiency and Conservation						
Objective 11.1 – Renewable Energy	11.1.21	Explore Green Pricing Programs	Manager	TBD	TBD	n/a	
Resources	11.1.2	Encourage Renewable Energy Generation	Planning / CCRPC	2017-2018	no additional	n/a	
	11.1.3	Demonstrate Renewable Energy Projects	TBD	TBD	TBD	TBD	
	11.1.4	Prohibit Residential Property Assessment Increases for Renewable Energy Equipment	Selectboard	TBD	TBD	TBD	
	11.1.5	Provide E.V. Charging Stations	Planning	2017-2018	no additional	n/a	
	11.1.6	Update Energy Efficiency Incentives in Growth Management	Planning	2017-2018	no additional	n/a	
Objective 11.2 – Future Utilities Siting	11.2.1	Place Local Utilities Underground	Planning/ Public Works	ongoing	no additional	n/a	
	11.2.2	Place Regional Transmission lines in Existing Corridors	Public Service Board	ongoing	no additional	n/a	
	11.2.3	Limit the Impact of Telecommunication Installations	Planning	ongoing	no additional	n/a	

Table 14.A – 2016-2024 Williston Town Plan – Objectives and Policies – Implementation Table						
Chapter – Objective		Policy	Responsibility	Timeframe	Cost	Proposed Source
	11.2.4	Encourage Utility Scale Co-Generation Energy Projects	Planning	ongoing	no additional	n/a
	11.2.5	Encourage Utility- Scale Renewable Energy Projects	Planning	ongoing	no additional	n/a
Objective 11.3 – Municipal Energy Efficiency	11.3.1	Review and Improve Performance of Existing Town Buildings and Operations	Planning Public Works	ongoing	no additional	n/a
	11.3.2	Use "Green Building" Technology as Feasible	Manager/ Town Departments	ongoing	TBD	General Fund/Bond
	11.3.3	Consider Energy Consumption when Purchasing	Manager/ Town Departments	ongoing	TBD	General Fund/Bond
	11.3.4	Use Fuel-Efficient Low or Zero - Emission Vehicles	Fire/Police/Public Works	TBD	TBD	TBD
	11.3.5	Encourage Walking, Cycling, Ride- Sharing and the Use of Public Transportation	Planning	ongoing	no additional	n/a
	11.3.6	Prepare Annual Energy Reports	Manager	2016-2024	no additional	n/a
	11.3.7	Designate a Town Energy Coordinator	Selectboard	2018	no additional	n/a
Objective 11.4 – Energy Conservation and Efficiency through Land Use	11.4.1	Include Energy Efficiency and Conservation in Development Review	Planning	TBD	TBD	TBD
Objective 11.4 – Energy Conservation and Efficiency through Land Use	11.4.2	Direct Residents to Energy Efficiency and Conservation Programs	TBD	TBD	TBD	TBD
	11.4.3	Pursue a PACE Financing Program	TBD	TBD	TBD	TBD
	11.4.4	Require E.V. Charging Facilities in New Developments	Planning, Selectboard	2016-2024	no additional	n/a

Table 14.A – 2016-2024 Williston Town Plan – Objectives and Policies – Implementation Table						
Chapter – Objective		Policy	Responsibility	Timeframe	Cost	Proposed Source
Objective 11.5 – Municipal Energy Plan	11.5	Prepare a Municipal Energy Plan as a Supplement to this Town Plan	Planning	2016-2024	TBD	n/a
Objective 11.6 – Sustainable food Systems	11.6.1	Encourage Home Gardens, Food Preservation, and Small Animal Husbandry	Planning	Ongoing	no additional	n/a
	11.6.2	Support Farmer's Markets and CSA's	Planning, Schools	Ongoing	no additional	n/a
	11.6.3	Support Community Gardens	Planning	Ongoing	no additional	n/a
Objective 11.7 – Waste Reduction	11.7.1	Reduce Waste Generated by the Williston Community	Planning, CSWD	2016-2024	TBD	TBD
	11.7.2	Maximize the Recovery of Recyclable Materials	Planning	2016-2024	TBD	TBD
		Chapter 1	2 – Watershed Health	L		
Objective 12.1 – Stormwater Management	12.1.1	Implement Storm Water Management Plan	Public Works	ongoing		Storm Water Fees
	12.1.2	Regional Stormwater Education	Planning	ongoing	no additional	n/a
	12.1.3	Strengthen Regulations Related to Water Quality	Planning	ongoing	no additional	n/a
	12.1.4	Manage Residential Stormwater Facilities	Selectboard Public Works	ongoing	no additional	n/a
	12.1.5	Plan and Implement Stormwater Improvements	Selectboard Public Works	Ongoing	no additional	n/a
	12.1.6	Regularly Update the Stormwater Management Plan	Planning	As Needed	no additional	n/a
	12.1.7	Develop a Snow Management Regulation	Planning	2020-2022	no additional	n/a

Table 14.A – 2016-2024 Williston Town Plan – Objectives and Policies – Implementation Table						
Chapter – Objective		Policy	Responsibility	Timeframe	Cost	Proposed Source
	12.1.8	Stormwater Issues in Older Developments	Planning	ongoing	no additional	n/a
	12.1.9	Encourage Roof Disconnects for Runoff	Planning	ongoing	no additional	n/a
Objective 12.2 – Stream Restoration	12.2.1	Monitor Completed and Ongoing Restoration Projects	Planning	ongoing	no additional	n/a
	12.2.2	Restore the Allen Brook with Corridor Protection	Planning	ongoing	TBD	TBD
	12.2.3	Begin to Restore Muddy Brook	Planning	2020-2022	no additional	n/a
Objective 12.3 – Water Quality Monitoring	12.3.1	Continue to Collect and Process Data	Planning	ongoing	no additional	n/a
	12.3.2	Use Data to Prioritize Implementation	Planning	ongoing	no additional	n/a
	12.3.3	Explore how to Identify Sources of E.coli	Planning	TBD	no additional	n/a
Objective 12.4 – Lake Iroquois	12.4.1	Support the Lake Iroquois Association	Planning	ongoing	no additional	n/a
Objective 12.5 – Source Water Protection	12.5.1	Coordinate Development Review in Source Water Protection Areas for Lake Iroquois with Champlain Water District.	Planning	ongoing	no additional	n/a
	12.5.2	Coordinate Development Review in Source Water protection Areas for Porterwood with Williston Fire District #1.	Planning	ongoing	no additional	n/a
Objective 12.6 – Groundwater	12.6.1	Refer to Hydrogeological Studies	Planning	ongoing	no additional	n/a
	12.6.2	Support developing a Protocol to Measure Adequate Water Supply	Planning	TBD	no additional	n/a

Table 14.A – 2016-2024 Williston Town Plan – Objectives and Policies – Implementation Table						
Chapter – Objective		Policy	Responsibility	Timeframe	Cost	Proposed Source
	12.6.3	Compliance with State Rules	Planning	ongoing	no additional	n/a
Objective 12.7 – Stewardship	12.7.1	Develop Protocol for Addressing Hazardous Land Use Activities	Planning	TBD	no additional	n/a
	12.7.2	Develop Regulations Where Contamination is Present	Planning	TBD	no additional	n/a
	12.7.3	Provide Incentives to Encourage Water Conservation	Planning	TBD	no additional	n/a
	12.7.4	Continue to Omit Wetlands, Rivers, and Buffers from Residential Density Calculations	Planning	ongoing	no additional	n/a
	12.7.5	Discourage Phosphorous Fertilizer	Planning	ongoing	no additional	n/a
Objective 12.8 – Flood Resilience	12.8.1	Avoid development in floodplains and river corridors	Planning	ongoing	no additional	n/a
	12.8.2	Allow new development in less flood prone areas	Planning	ongoing	no additional	n/a
	12.8.3	Where development already exists in vulnerable areas, take measures to protect people, buildings and facilities.	Planning	ongoing	no additional	n/a
	12.8.4	Use stormwater management techniques to slow, spread and sink floodwater.	Planning	ongoing	no additional	n/a
	12.8.5	Protect and restore floodplains and upland forested areas that attenuate and moderate flooding and fluvial erosion.	Planning	ongoing	no additional	n/a

Table 14.A – 2016-2024 Williston Town Plan – Objectives and Policies – Implementation Table						
Chapter – Objective		Policy	Responsibility	Timeframe	Cost	Proposed Source
	12.8.6	Support flood emergency preparedness and response planning	Planning/Public Works	ongoing	no additional	n/a
		Chapter 13 – Open	Space and Working L	andscapes		
Objective 13.1 – Conservation Areas	13.1.1	Maintain Existing Conservation Areas	Planning	ongoing	no additional	n/a
	13.1.2	Protect Conservation Areas in Development Review	Planning	ongoing	no additional	n/a
	13.1.3	Develop Conservation Area Management Plans	Planning	2017-2020	TBD	Grants
	13.1.4	Protect Wetland and Riparian Conservation Areas	Planning	ongoing	no additional	n/a
	13.1.5	Protect Upland Conservation Areas	Planning	ongoing	no additional	n/a
	13.1.6	Protect Significant Wildlife Habitat Conservation Areas	Planning	ongoing	no additional	n/a
	13.1.7	Assess Significant Wildlife Habitat Data for Continued Relevance	Planning	ongoing	no additional	n/a
	13.1.8	Utilize ERF Funds to Protect Conservation Areas	Planning	ongoing	TBD	ERF
	13.1.9	Promote Private Stewardship of Conservation Areas	Planning	ongoing	no additional	n/a

Table 14.A – 2016-2024 Williston Town Plan – Objectives and Policies – Implementation Table						
Chapter – Objective		Policy	Responsibility	Timeframe	Cost	Proposed Source
	13.1.10	Ensure Compliance with Conditions of Approval	Planning	ongoing	no additional	n/a
	13.1.11	Improve the TDR program to better Protect Open Space Resources	Planning	ongoing	no additional	n/a
Objective 13.2 – Scenic Viewsheds	13.2.1	Update the Visual Resource Assessment	Planning	2020-2022	TBD	Grant
	13.2.2	Continue to Consider Visual Resources in Development Review	Planning	ongoing	no additional	n/a
	13.2.3	Explore new Methods to illustrate the Visual Impact of Development	Planning	2020-2022	no additional	n/a
	13.2.4	Promote Private Stewardship of Scenic Viewsheds	Planning	ongoing	no additional	n/a
13.3 – Working Landscapes	13.3.1	Encourage Enrollment in the Current Use Program	Planning	ongoing	no additional	n/a
	13.3.2	Protect Important Agricultural Lands	Planning	ongoing	TBD	Environmental Reserve Fund
	13.3.3	Protect Other Working Landscapes	Planning	ongoing	TBD	Environmental Reserve Fund
	13.3.4	Permit Reasonable Uses in Working Landscapes	Planning	ongoing	no additional	n/a
	13.3.5	Promote Community Gardens in Open Space	Planning	ongoing	no additional	n/a
	13.3.6	Consider Land Use Conflicts When Investing in Parks and Trails	Planning	ongoing	no additional	n/a

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VERMONT

Memorandum

TO:	Vermont Department of Housing and Community Development
	Chittenden County Regional Planning Commission
	City of South Burlington Planning Commission
	Town of Essex Planning Commission
	Town of Hinesburg Planning Commission
	Town of Jericho 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 Emily Heymann, Planner

DATE: March 19, 2020

SUBJECT: Town of Williston Town Plan Amendment – Proposed Amendments to the 2016-2024 Comprehensive Plan – Energy Plan and Public Health

The Williston Planning Commission will hold a public hearing to consider a proposal to amend the *2016-2024 Williston Comprehensive Plan*. The public hearing will take place on April 21, 2020 at 7:00 PM via Zoom Webinar (ID 171-648-672) and in the Town Hall Meeting Room, 7900 Williston Road Williston, Vermont 05495. Any interested members of the public are welcome to participate for free via Zoom on a smartphone, computer, or by telephone (1-646-558-8656 or <u>https://zoom.us/j/171648672</u>). Due to COVID-19, in-person attendance should be used as last resort to all other participation options. Planning Commission members will join remotely via Zoom. Only one staff-person will be present in the meeting room. If social distancing protocol cannot be maintained, the hearing will be continued.

Attached to this memo is a copy of Planning Commission Report on the Proposed Comprehensive Plan Amendment, as well as a copy of the proposed amendments to Chapters 1-13 of the 2016-2024 Williston Comprehensive Plan and the *Williston Energy Plan*, proposed to be adopted as an appendix to the Comprehensive Plan.

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

Attachments:

- 1. Hearing Draft: Williston Energy Plan with Maps
- 2. Hearing Draft: 2016-2024 Williston Comprehensive Plan proposed changes to Chapters 1-13

Town of Williston Vermont

Planning and Zoning

Williston Vermont Planning Commission Proposed Amendment to the *Comprehensive Plan*

Public Hearing Scheduled for April 21, 2020

The Planning Commission of the Town of Williston has scheduled a public hearing the purpose of considering a proposed amendment to the town's *2016-2024 Comprehensive Plan*. The public hearing will take place on April 21, 2020 at 7:00 PM via Zoom Webinar (ID 171-648-672) and in the Town Hall Meeting Room, 7900 Williston Road Williston, Vermont 05495. Any interested members of the public are welcome to participate for free via Zoom on a smartphone, computer, or by telephone (1-646-558-8656 or https://zoom.us/j/171648672). Due to COVID-19, in-person attendance should be used as last resort to all other participation options. Planning Commission members will join remotely via Zoom. Only one staffperson will be present in the meeting room. If social distancing protocol cannot be maintained, the hearing will be continued.

The amended plan is entitled 2016-2024 Williston Comprehensive Plan, with changes proposed to Chapter 13 of the Plan, currently named Open Space, and the addition of the 2018 Williston Village Master Plan as an appendix to the Comprehensive Plan.

In accordance with 24 V.S.A.§4384(c), which states:

"When considering an amendment to a plan, the planning commission shall prepare a written report on the proposal. The report shall address the extent to which the plan, as amended, is consistent with the goals established in section 4302 of this title.

The Williston Vermont Planning Commission has prepared the following report regarding the proposed amendments to the town's Comprehensive Plan:

1) Adopt the Williston Energy Plan as an Appendix

The 2016-2024 Williston Comprehensive Plan calls for the development and adoption of an Energy Plan in compliance with Act 174. The Energy Plan expands upon Chapter 11 of the existing Town Plan, provides a framework for town actions aimed at encouraging energy conservation and efficiency, and guides the development of renewable energy resources in Williston.

2) Adopt Changes to Chapters 1-13 to address Public Health

Add and amend language throughout the Town Plan to reflect the important connection between public health and good community design.

The goals of the Comprehensive Plan are excerpted from Page 11 of the Town Plan:

Williston will strive to balance responsible, livable suburban growth with rural character and conservation. To do this, the town will ...

• concentrate and limit high intensity development to areas within the town's designated Growth Center in and around Taft Corners;

- permit the flexibility and intensity of use necessary to foster creation of a design-conscious, mixed use, pedestrian-friendly commercial center around Taft Corners;
- encourage and support the use of mass transit and non-motorized modes of transportation through mixed use development policies and transportation facilities planning;
- sustain rural landscapes by requiring an open space pattern for subdivisions, conserving lands identified in Chapter 12 Open Space and Working Landscapes through acquisitions or easements; and finding ways to help the owners of working lands continue their stewardship;
- use design review and public investment to maintain the character of its historic village center;
- manage the timing of and pace of new development to ensure that necessary public facilities and services are available when development occurs;
- protect residential neighborhoods from incompatible uses and offer incentives for the provision of a diverse housing stock, including homes that are affordable to working people and their families;
- attend to the details of site planning and architectural design, including outdoor lighting, signage, access, and landscaping that give development both market appeal and long-term community value;
- invest in new facilities, including utilities, roads, schools, parks, and trails, as necessary, while managing the location and pace of development to ensure that growth does not outstrip the capacity of public facilities and services, including fire protection and law enforcement;
- conserve energy in its own operations through energy efficiency, and by incentivizing and encouraging builders to meet "green" building standards;
- use regulatory and non-regulatory tools, including funding for the acquisition of development rights or land, to protect water quality, wildlife habitat, scenic views, and other natural and cultural resources; and
- engage all citizens who are interested and willing to participate in the town's planning process.

Should you wish to comment on any aspect of the proposed Williston Comprehensive Plan, including concerns or accessibility issues with Zoom Webinar, please contact Matt Boulanger, Planning Director and Zoning Administrator, Williston Planning Office at (802) 878-6704, by email to mboulanger@willistonvt.org, or by letter: Town of Williston, c/o Planning Commission, 7900 Williston Road, Williston VT 05495.

Certification of Service

Vermont Department of Housing and Community Development 1 National Life Drive National Life Building, 6th Floor Montpelier, VT 05620-0501

Chittenden County Regional Planning Commission 110 West Canal Street Suite 202 Winooski, VT 05404-2109

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 VT 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 Shelburne, VT 05482

Town of St. George Planning Commission 21 Barber Road St. George, VT 05495

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