City of Barre, VT Regular Meeting of the

Barre City Planning Commission – Regular Meeting Thursday, December 12, 2024 AT 5:30 PM

Participation: In-Person and Hybrid

Join Zoom Meeting

https://us06web.zoom.us/j/83132944524?pwd=OY7bpA4Xp6W6PoMaXOCjgyinPLafJx.1

Meeting ID: 831 3294 4524 Passcode: 381609 AGENDA

Page No.	Agenda Item#	Description						
	1	Call to Order						
	2	Adjustments to the Agenda						
	3	Public comment (for something not on the agenda)						
2	4	Approval of Minutes: for the November 14, 2024 meeting						
	5	Old Business						
		Encore Renewable Energy Battery Storage Discussion and possible action						
	6	Downtown Planning Area Grant: outreach strategy and March 2025 upcoming charette with TPUDC: update						
	7	New Business						
4		Unified Development Ordinance Revisions: Downtown Housing on first floor						
28		Breaking Housing Matters Discussion (<u>Breaking Housing Matters</u> - <u>Official Page - Breaking Housing Matters</u>)						
30		Municipal Plan: Review Section 2 Transportation						
	8	Confirmation of next meeting date of January 9, 2024						
	9	Staff updates – as needed						
	10	Roundtable						
	11	Adjourn						

Barre City Planning Commission

November 14, 2024 Meeting Minutes

Present:, Becky Wigg (Vice Chair), Joe Reil (Secretary),

Rosemary Averill, Raylene Meunier

Absent: David Sichel (Chair), Caitlin Corkins

Staff: Janet Shatney (Director of Planning, Permitting & Assessing)

Visitors: Reuben MacMartin and Niki Sabado from the Central Vermont Regional Planning Commission (CVRPC)

1. Call to Order.

5:30pm.

2. Adjustments to the Agenda.

None.

- 3. Approval of Minutes.
 - a. October 10, 2024.

Edit to correct a spelling error (Chitten to Chittenden on first page) was suggested.

Ducey moves to approve with edit, Averill seconds, unanimous in favor.

4. Public comment (for something not on the agenda).

None.

- Old Business.
 - a. Encore Renewable Energy Battery Storage Discussion and possible actions

There was some discussion and questions about whether we had submitted letters of support before and whether we should in this case. Consensus was to hold off until City Council has seen the presentation and weighed in and we have more members present.

b. Downtown Planning Area Grant: outreach strategy and designated roles for the upcoming charette with TPUDC

Reuben MacMartin provided an update to previous discussion at the September meeting of the Planning Commission. The contract is out for consultant and there are no definite dates yet. He will be pulling parcel ownership data (from April 2023) for review. Potential sites for the public review meetings (Opening and Closing meetings) were discussed, including the Barre Auditorium, Old Labor Hall, Alumni Hall (second floor), or Downstreet Housings Kitchen Meeting Area. Shatney suggested Alumni Hall as the best option. A smaller site that would be needed for an Open Studio Workshop was also discussed, candidates include the Barre Social Club, Raylene's Studio, or The Elks Club.

Outreach (Social and traditional media), Facebook (Barre City Page or local Community Pages), Front Porch Forum, Newspaper Ads as well as possible stakeholders, local businesses and other organizations/boards (Capstone, Downstreet, Housing Taskforce) were also discussed.

- 6. New Business.
 - a. Municipal Plan: Review Section 2 Transportation

Consensus to hold discussion on this until more members are present.

- 7. Confirm Date of Next Meeting.
 - a. December 12, 2024.
- 8. Staff Updates.

None.

9. Round Table.

None.

10. Adjourn.

6:25pm, Reil moves to adjourn, Ducey seconds, unanimous in favor.

210 BASE ZONING DISTRICTS

2101 Urban Center 1 (UC-1)

- 2101.A Intent. The Urban Center 1 district provides concentrated downtown retail, service, office, upper floor housing and other compatible mixed uses in Barre City's central business district. Urban design standards are required in order to maintain neighborhood commercial scale, pedestrian activity, architectural character and the traditional built pattern. The purpose of this district is to:
 - (1) Promote the long-term economic and social vitality of Barre City's central business district;
 - (2) Provide for the daily needs and services of the community;
 - (3) Provide economic development opportunities through clean industry, office and commercial uses;
 - (4) Provide housing opportunities within walking distance of employment, service and retail opportunities;
 - (5) Encourage investment that increases the value of downtown buildings and property;
 - (6) Ensure that new buildings are compatible with the historic architectural framework of Barre City's downtown and preserve a human scale;
 - (7) Promote a quality, urban streetscape and pedestrian-friendly environment; and
 - (8) Accommodate a broad range of high-density housing options.
- 2101.B **Allowed Uses.** Section 2115 establishes the uses allowed in this district. In addition:
 - (1) Residential uses are prohibited on any portion of the ground floor within 100 feet from the front property line. Ground floor residential uses more than 100 feet from the front property line may be allowed as a conditional use upon the applicant demonstrating that the dwelling unit(s) will not adversely impact the use of the remaining ground floor space for non-residential purposes and that the provisions of <u>Subsection 3201.G</u> will be met.
 - (2) Food service drive-throughs are prohibited. All other drive-through service may only be located at the rear of the building and will require conditional use approval.
 - (3) Wholesale trade and information service uses are not permitted to occupy the ground floor, street frontage portion of a building.
- 2101.C **Dimensional Standards.** Section 2116 establishes the dimensional standards for this district. In addition:
 - (1) New principal buildings must be a minimum of 2 stories (this will be interpreted to

2115 Use Table

USE & DEFINITION	(UC-1)	UC-2	UC-3	MU-1	MU-2	MU-3	R-16	R-12	R-8	R-4	GB	IN	CIV	CON
RESIDENTIAL														
Single-family dwelling Use of a structure for habitation by one household that provides complete independent living facilities including permanent provisions for living, sleeping, eating, cooking and sanitation.	X	X	P ¹	Р	Р	Р	Р	Р	Р	Р	X	X	X	X
Two-family dwelling Use of a structure for habitation by two households each in a unit that provides complete independent living facilities including permanent provisions for living, sleeping, eating, cooking and sanitation, and with each unit having a separate entrance from the outside or through a common vestibule.	X	Х	P1	Р	Р	Р	Р	Р	Р	Р	X	Χ	Х	Х
Three- or four-family dwelling Use of a structure for habitation by 3 or 4 households each in a unit that provides complete independent living facilities including permanent provisions for living, sleeping, eating, cooking and sanitation, and with each unit having a separate entrance from the outside or through a common vestibule.	X	Р	Р	Р	Р	Х	Р	Р	Р	Р	Х	Х	Х	Х
Multi-family dwelling (5+ units) Use of a structure or part of a structure for habitation by five or more households each in a unit that provides complete independent living facilities including permanent provisions for living, sleeping, eating, cooking and sanitation, or any dwelling unit in a mixed-use building. See Section 3201.	P	Р	Р	Р	С	Х	Р	С	С	С	С	Χ	Х	Х
Accessory dwelling Accessory use of single-family residential property for a second dwelling unit that provides complete independent living facilities including permanent provisions for living, sleeping, eating, cooking and sanitation. See Section 3202 .	Χ	Х	P1	Р	Р	Р	Р	Р	Р	Р	X	X	X	X
Home occupation Accessory use of single-family residential property for a small business that does not alter the residential character of the property. See Section 3203.	Х	Χ	P1	Р	Р	Р	Р	Р	Р	Р	X	Χ	X	Χ
Home business Accessory use of single-family residential property for a small business that may alter the residential character of the property. See <u>Section 3204</u> .	X	Р	Р	Р	Р	Р	С	С	С	С	X	Χ	Χ	X
Family childcare home Accessory use of single-family residential property for a small daycare business that operates under state license or registration. See Section 3205.	Х	Р	Р	Р	Р	Р	Р	Р	Р	Р	Х	Х	Х	Х
Senior housing Use of one or more structures to primarily house people age 55 or older that: (a) Contains multiple dwelling units each intended for habitation by one household and providing complete independent living facilities including permanent provisions for living, sleeping, eating, cooking and sanitation; and (b) May offer minimum convenience services to residents as an accessory use.	Р	Р	С	Р	X	С	Р	Р	Р	Р	X	X	X	X
Assisted living Use of one or more structures to provide housing, board and care to residents who need assistance with daily activities such as dressing, grooming, bathing, etc. and that operates under state license. Includes residential care homes.	С	С	С	Р	X	С	Р	С	С	С	С	X	X	X
Skilled nursing service Use of one or more structures to provide housing and 24-hour skilled nursing care to residents and that operates under state license. This includes nursing or convalescent homes, and hospice or respite care facilities.	Х	С	С	Р	X	С	С	С	С	С	С	Χ	X	X
Group home Use of single-family residential property to provide housing to people with a handicap or disability that operates under state license or registration. See Section 1105 and Section 3206.	Х	Х	P1	Р	Р	Р	Р	Р	Р	Р	Х	X	Х	Х
Single-room occupancy Use of a structure or part of a structure to provide housing to single individuals each in a single-room dwelling unit that is not required to include food preparation or sanitary facilities. See Section 3207 .	С	С	С	С	X	X	С	X	X	X	X	X	X	X
Emergency housing Use of structure or part of a structure to provide food, shelter, and other support services on a temporary basis to people who are homeless or to victims of disaster.	С	С	С	С	Х	Х	С	Х	Х	Х	Х	Х	Х	Х

P = Permitted Use | C = Conditional Use | X = Prohibited Use | All uses other than single- and two-family dwellings, require site plan review in accordance with <u>Section 4305</u>. | ¹ Additional use standards apply (see zoning district section)

- (4) The Development Review Board may reduce or waive this requirement for existing buildings and buildings undergoing rehabilitation only.
- 3201.D **Structured Parking.** New multi-unit buildings or multi-building developments that will include 20 or more units must provide at least one structured parking space (ex. underbuilding parking, private garage, etc.) for each dwelling unit that meets the requirements below. The Development Review Board may reduce or waive this requirement upon the applicant demonstrating that: (1) some or all of the parking requirement will be provided off-site in accordance with <u>Subsection 3104.D</u>; (2) minimum parking requirements will be reduced or eliminated in accordance with Paragraph 3104.C(4); and/or (3) the units meet the definition of affordable housing in Paragraph 5003.A(2).
 - (1) Under-building parking must be screened so that it will not be visible from the street with walls and landscaping that are compatible with the architectural character and exterior materials of the building and that enhance the streetscape.
 - (2) Under-building parking must be accessed from the side or rear of the building. The Development Review Board may waive this requirement upon the applicant demonstrating that access from the side or rear is not feasible due to site specific physical conditions (ex. the natural grade of the lot).
 - (5) Private garages that face the street must be set back at least 4 feet behind the building frontline.
 - (6) Private garages that face the street and that are set back less than 8 feet behind the building frontline must use single-wide garage doors that are not more than 10 feet wide.
- 3201.E **Bicycle Parking.** Multi-unit residential buildings must provide residents with at least one, conveniently accessible, secure and covered bicycle parking or storage space per unit. Applicants may demonstrate that this requirement will be met by providing bulk storage or structured parking that is adequately sized and configured to accommodate a bicycle.
 - (1) The Development Review Board may waive this requirement if the applicant can prove that the occupants of the development do not need that amount of bicycle parking.
- 3201.F **Pedestrian Access.** Multi-unit residential buildings must be designed with pedestrian access in accordance with from:
 - (1) The public sidewalk or street to any street-facing ground-level residential entrances;
 - (2) Parking areas to residential entrances; and
 - (3) Residential entrances to service areas (ex. trash or recycling areas) and common open space areas.
- 3201.G Mixed-Use Buildings. Multi-unit, mixed-use buildings must be designed so that the:

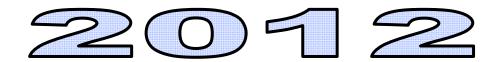
- (1) Non-residential space will not be located above residential space;
- (2) Walls and/or floors that separate residential and non-residential portions of the building will be sound-proofed;
- (3) Private entrance(s) to the dwelling units will be separated from the public and service entrance(s) to the non-residential portions of the building;
- (4) Impact of service and waste collection areas (noise, light, odors, etc.) on building residents will be minimized; and
- (5) Common open space, as required above, will be separated and screened from areas of the property accessible to the general public and from service areas.

3202 Accessory Dwelling

- 3202.A An accessory dwelling unit (ADU) must:
 - (1) Be located within or appurtenant to a single-family dwelling on an owner-occupied lot;
 - (2) Be clearly subordinate to the primary dwelling;
 - (3) Have provisions for independent living, including sleeping, food preparation and sanitation in accordance with <u>Section 3012</u>;
 - (4) Not exceed 900 square feet or 30% of the habitable floor area of the primary dwelling (prior to the creation of the ADU), whichever is greater;
 - (5) Shall be exempt from the minimum parking requirements for residential uses of Section 3104;
 - (6) Meet the applicable dimensional standards of the zoning district; and
 - (7) Meet the water supply and wastewater disposal standards of Section 3024.
- 3202.B A lot must not have more than one accessory dwelling unit.
- 3202.C The landowner must reside on the property, but may live in either the primary or accessory dwelling unit.
- 3202.D An accessory dwelling unit will be considered an accessory use of residential property and will not require site plan approval.
- 3202.E An accessory dwelling unit will not be included in the calculation of residential density.

3203 Home Occupation

3203.A A home occupation must:



VERMONT ACCESS RULES

and

Adaptable & Visitable Standards for Dwellings







Vermont Access Board and the Vermont Department of Public Safety Division of Fire Safety

> Effective: April 1, 2012 Amended: November 15, 2013

Vermont Access Rules -2012-

To provide access to public buildings for people with disabilities

VERMONT ACCESS BOARD and the VERMONT DEPARTMENT of PUBLIC SAFETY

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[To assist people in finding information in these rules the titles, definitions or phrases that appear in bold type are included in the Index by Topic & Use located on page 18]

A. Introduction

Since May 4, 1977 Vermont law has required that construction work in public buildings be accessible to people with disabilities. The accessibility codes were originally based on the American National Standards Institute (ANSI) 117.1 entitled "providing accessibility and usability for physically handicapped people". The law initially covered publicly funded new construction, then all new construction, with requirements for all new construction and major renovations established in 1987.

In 1990, the United States Congress passed the Americans with Disabilities Act (ADA). ADA recognized, that for people with disabilities, building accessibility was a civil right. ADA contained some provisions that pre-empted Vermont law while some provisions required less accessibility than Vermont law. In 1996, the Vermont legislature passed Act 187 that was intended to eliminate portions of Vermont law that did not meet or exceed the requirements of ADA. Portions of Vermont law that already exceeded ADA were retained. Religious buildings and private clubs, exempt under ADA, are covered under these rules. In addition, there are requirements for vertical access in smaller buildings and other requirements including adaptability in multifamily dwellings that exceed ADA and the Federal Fair Housing Act requirements. In 1998 the Vermont Access Board and the Department of Labor and Industry adopted the "rules for new construction and for alterations to existing buildings" that included the Americans with Disabilities Accessibility Guidelines (ADAAG) as printed July 26, 1991. Since that time the U.S. Access Board has developed several significant changes for the ADAAG regarding children's elements, recreation facilities, correctional facilities and courthouses, but only minor changes have

been adopted by the U. S. Department of Transportation and the U. S. Department of Justice. Those adopted changes are included in these rules. In 2000 the Vermont legislature extended certain adaptability requirements, called "visitable" [Act 88] requirements, to all new construction of dwelling units. It is the intent of these rules to incorporate the changes that have occurred at both the federal and state level.

B. Organization

These rules are divided into 13 Chapters to coincide with the 2010 ADA Standards and the Americans with Disabilities Act Accessibility Guidelines (2004 ADAAG).

Chapter 1 – 5 Contain Application & Administration, Scoping Requirements, Building Blocks, Accessible Routes and General Site and Building Elements:

Chapter 6 – 10 Plumbing Elements and Facilities, Communication Elements and Features, Special rooms, Spaces and elements, Built-in Elements and Recreation Facilities:

Chapter 11 Sets out the specific technical and design guidelines for housing. It is the intent of these rules that the requirements for dwelling units identified as "adaptable" are consistent with and meet or exceed the requirements of the Federal Fair Housing Act. It is the intent of these rules that the requirements for dwelling identified as "visitable" [Act 88], that are not covered by the Federal Fair Housing Act, are consistent with the requirements as established under 20 V.S.A. 2903(c) and 2907.

Chapter 12 Establishes the standards and process for a variance, exemption or abatement from specific requirements of these rules.

Chapter 13 Sets the effective date and severability clause for this rule.

C. Adoption of the 2010 Americans with Disabilities Act Standards for Accessible Design

These rules are adopted under 20 V.S.A. Chapter 174. These rules apply to all public buildings as defined in 20 V.S.A. section 2900(8). (See Public Building Definition Page 5)

Under these rules chapter 10 of the 2010 ADA Standards for Accessible Design only applies to those recreation facilities that are incorporated into a public building project. (i.e. building, stadium or tent structure as defined by the State Building Code) Exempt from these rules are Amusement Rides, 206.2.9, 216.12, 234; Recreational Boating Facilities, 206.2.10 & 235, Fishing Piers and Platforms, 206.2.14 & 237; Golf Facilities, 206.2.15 & 238; Miniature Golf Facilities 206.2.16 & 239; Play Areas 206.2.17 & 240; Swimming Pools, Wading Pools and Spas 242; Shooting Ranges 243; as Defined by Chapter 2: Scoping Requirements. Deletion of Chapter 10 for non-public building recreation facilities from the Vermont Rules does not relieve or obviate the owner from complying with the Department of Justice 2010 ADA Standards for Accessible Design.

These rules do not apply to existing buildings that are not altered. Division of Fire Safety is not involved in barrier removals unless a building is new construction or a renovation. These rules do not address the requirements for a building that is classified as a "place of public accommodation" and where owners must comply with federal accessibility requirements for removal of barriers, or requirements for existing municipal or state owned buildings. [Reports of discrimination regarding public accommodations can be referred to the Human Rights Commission at (802) 828-2480]

To meet the individual needs of Vermont, the 2010 ADA Standards for Accessible Design are adopted as amended in the following chapters:

CHAPTER 1. Application and Administration Amendments

-add- section 106.6 Definitions

<u>Abatement</u> - Relief from one or more requirements of these rules for a period of time specified by the Board.

<u>Adaptable</u> - A combination of adaptable elements for multi-family dwelling units including:

- 1. At least one building entrance on an accessible route.
- 2. The public and common use areas are readily accessible to and usable by people with disabilities.
- 3. Usable doors that are at least 34" wide providing a clear opening of at least 32", and a threshold not greater than ½", to allow passage into and within all dwelling units.
- 4. A route into and through single story dwelling units, or through the primary level of multistory dwellings units, 36" wide, with 32" clear doorways and lacking abrupt changes in floor surface or elevation, so that residents and guests with disabilities can safely use all rooms and spaces except a basement and garage and either a raised or sunken area. The route shall be continuous throughout the dwelling unit and not be interrupted by the raised or sunken area. No part of a kitchen or bathroom may be located in a raised or sunken area unless an accessible route is provided for that area. The primary level of multi-story dwelling units shall contain a usable bathroom or powder room.
- Light switches, electrical outlets and environmental controls including thermostats for heating, air-conditioning and ventilation systems located within 15" to 48" off the floor.
- Reinforcements in bathroom walls to allow later installation of grab bars around the toilet, tub, shower stall and shower seat, where such facilities are provided.
- 7. Useable kitchens and bathrooms, designed such that an individual in a wheelchair can maneuver about the space, in accordance with the mandatory provisions of the Fair

Housing Act Design Manual Chapter 7. [Annex II contains additional information regarding the Fair Housing Act Design Manual, Chapter 7]

Board – The Vermont Access Board established under 20 V.S.A. Section 2901.

<u>Commissioner</u> – The Commissioner of the Vermont Department of Public Safety or a designee.

Covered Multi-family Dwellings – A residential unit for sale or rent in a public building consisting of four or more residential units if the building has one or more elevators; and a ground floor residential unit for sale or rent in a public building consisting of four or more residential units, if the building has no elevator.

Exemption – Relief from strict adherence to the standards set forth in these rules as determined by statute or by the Board.

Ground Floor Residential Unit – A single story residential dwelling unit in a multi-family dwelling with an entrance within one story of the predominant exterior finish grade of the building. A building may have more than one ground floor.

<u>Historic Building</u> – Any structure that is listed in or eligible for listing in the National Register of Historic Places or included in the state register of historic places.

Public Building — A state, county, or municipal building, airport terminal, bus or railroad station, school building or school, or society hall, hotel as defined in section 9202 of Title 32, restaurant, apartment, church or other house of worship, factory, mill, office building, or in other building in which persons are employed, store or other space wherein goods are offered for sale at wholesale or retail, nursery, convalescent home, home of the aged or day care facility; provided that the term "public building" does not include a family residence registered as a day care home under subchapter 1 of chapter 35 of Title 33.

A registered day care facility that provides care on a regular basis in the caregiver's own residence for not more than ten children at any one time.] Of this number up to six children may be provided care on a full time basis and the remainder on a part-time basis. Care of a child on a part- time basis shall mean care of a school-age child for not more than four hours a day. These limits shall not include children who reside in the residence of the care giver.] "Public building" also means a tent or outdoor structure, place of amusement, barn, shed or workshop, if normally open to the public for the purpose of offering goods for sale at wholesale or retail. public assembly or viewing, entertainment, or education. For the purpose of these rules, "public building" includes, in addition to the definition in this subsection, a cooperative or condominium if the building otherwise meets the definition of "covered multifamily dwelling". "Public building" shall not include a working farm or farms, as that term is defined by 20 V.S.A Section 2730. However, for purposes of these rules "public building" shall not include existing housing on a working farm provided to farm employees or a farm building which is open for public tours and for which no fee is charged for those tours. [The definition of a public building under these rules differs in some respects from the definition of a public building that applies to the Vermont Fire & Building Safety Code under 20 V.S.A. 2730.]

<u>Variance</u> – An acceptable alternative to a specific technical requirement and/or application of a standard set forth in these rules, as determined by the Board.

Visitable [Act 88] — A combination of accessible and adaptable elements for all dwelling units established under Act 88, signed in to law April 27, 2000, including:

- 1. At least one first floor exterior door that is at least 36 inches wide.
- First floor interior doors between rooms that are at least 34 inches wide or open doorways that are at least 32 inches wide with thresholds that are level, ramped or beveled.
- 3. Interior hallways that are level and at least 36 inches wide.

- 4. Environmental and utility controls and outlets are located at heights that are within 15" to 48" off the floor.
- Bathroom walls that are reinforced to permit attachment of grab bars around the toilet, tub, shower stall and shower seat, where such facilities are provided.

CHAPTER 2. Scoping Requirements - Amendments-

-add- section 201.1(a) Application for a Construction Permit: The owner, or a designated representative, of a building or premise shall obtain a construction permit in accordance with the "Vermont Fire & Building Safety Code" before beginning any construction, addition, alteration, demolition or installation of fixed building equipment at the building site unless specifically waived by the authority having jurisdiction (AHJ). [For most construction projects the review of accessibility features required under these rules will take place at the same time as the review of fire and structural safety features and a separate construction permit will not be required. A separate construction permit is required when the only work being done is to provide accessible features and the work is not covered under another permit. Portions of the Vermont Fire & Building Safety Code regarding the application for a construction permit are included in Annex IV.]

-delete & replace- 206.2.3. Exception 1, and §36.401(d) (page 20) Elevator, New Construction: In public buildings, (except shopping centers, shopping malls, health care provider, or a terminal, depot or other public transportation terminal) an accessible route by elevator or platform lift is not required for:

- (a) Unless required by federal law, multifamily dwelling units in buildings which consist of three stories or less (§ 2903(b).
- (b) A two-story retail establishment with a total of 15,000 square feet or less.
- (c) A three-story retail establishment less than 3,000 square feet per story.

- (d) A story/floor less than 1,000 square feet in area, unless a healthcare provider as required by federal law. Storage, stairwell, elevator or vertical lift shaft & mechanical spaces are exempt from the 1,000 square foot calculation.
- (e) A mezzanine in a one-story building.
- (f) Story/floor used for storage that is accessed only on an infrequent basis, or is not occupiable. [See Annex III]

In new construction required to provide vertical access, a LULA or platform lift may be used in lieu of an elevator only by obtaining a variance, or when cost of elevator is disproportionate (exceeds 20%) to construction cost.

Platform lifts shall comply with the current edition of the ASME A18.1 adopted by the Vermont Elevator Board. Platform lifts controls shall be provided inside the car and shall be independently operable.

-delete- 206.2.3 Exception 2, 4, 5 & 7.

-add- 206.6.2 **Existing Buildings**: In existing buildings where no alterations/renovations are provided, a platform lift or LULA may be installed.

-delete & replace- 206.7 **Platform Lifts**: Platform lifts shall comply with 410 and as modified by 410.3 (36"X60"). Platform lifts shall be permitted as a component of an accessible route in accordance with 206.7. Platform lifts may be installed without a variance when maximum elevation change is less than 6' (72 inches), unless lift location does not comply with 410.1 (80 inch vertical clearance).

-delete & replace- 206.7.5 **Existing Exterior Site Constraints**: Platform lifts may be used only by obtaining a variance per chapter 12, where existing exterior site constraints make use of a ramp or elevator infeasible, or where elevator cost are disproportionate to project costs.

-delete & replace- 206.7.6 Guest Rooms and Residential Dwelling Units: Where vertical access is required platform lifts shall be permitted only by obtaining a variance per chapter 12, to connect levels within transient lodging guest rooms required to provide mobility features complying with 806.2 or residential dwelling units required to provide mobility features complying with 809.2 through 809.4.

-delete & replace- §36.404.(page 25) Elevator, Alterations to Existing Buildings: In public buildings, (except shopping centers, shopping malls, health care provider, or a terminal, depot or other public transportation terminal) an accessible route by elevator or platform lift is not required for:

- (a) Unless required by federal law, multifamily dwelling units in buildings which consist of three stories or less (§ 2903(b).
- (b) A two-story retail establishment with a total of 15,000 square feet or less.
- (c) A three-story retail establishment less than 3,000 square feet per story.
- (d) A story/floor less than 3,000 square feet in area, unless a healthcare provider as required by federal law.
- (e) A mezzanine in a one-story building.
- (f) Story/floor used for storage that is accessed only on an infrequent basis, or is not occupiable. [See Annex III]

In alterations/renovations of an existing building requiring vertical access, a LULA or platform lift may be used in lieu of an elevator only by obtaining a variance, or when cost of elevator is disproportionate (exceeds 20%) to the overall alteration/renovation cost. There is no requirement for vertical access when LULA or platform lift clearly exceeds 20% of alteration/renovation cost.

-add- section 35.151(a)(1)(2) **New Construction and Alterations**: An owner of any public building shall maintain in operable working condition any features and equipment required by these rules, or previous editions of these rules, except for isolated or temporary

interruptions in service or access due to maintenance or repairs.

Parking Spaces: Any parking facility on the premise of a public building shall contain at least one (1) parking space per 2010 standards. (Sec. 2. 20 V.S.A. § 2904) (For additional parking space requirements refer to Table 208.2.)

Chapter 3. Building Blocks -no amendments-

Chapter 4. Accessible Routes - amendments -

-add- New elevator: section 407.4.1.1 as currently required by the Vermont Fire and Building Safety Code; Required Locations: An elevator car of such a size and arrangement to accommodate an ambulance stretcher (24" X 84") as specified in section 3002.4 (International Building Code) shall be provided where a passenger elevator is newly installed in a building three or more stories in height. This section shall not apply to the installation of a (LULA) Limited-Use / Limited-Application elevator approved by the Vermont Access Board.

-delete & replace- 410.1 **Platform Lifts**: In an existing building where no renovations are provided, new (first time) platform lifts shall comply with section 410.3 and the current edition of the ASME A18.1 adopted by the Vermont Elevator Board. Platform lifts shall not be attendant-operated and shall provide unassisted entry and exit from the lift. Where an existing lift is being <u>replaced</u> and no alterations are occurring in affected area, replacement lift may be the same size as previous lift.

-delete & replace- Advisory 410.1: **Inclined stairway chairlifts** may be used in residential occupancies for purposes of providing access to a second floor unit or within a townhouse style unit, where vertical access is not a requirement, or where vertical access is not required by federal or Vermont law, such as existing religious buildings and private clubs where no renovations or alterations are proposed. Inclined chairlift shall be installed to meet requirements of Elevator Board and Vermont Fire and Building Safety Code for egress requirements.

-delete & replace- 410.3 **Clear Floor Space**: Clear floor space for vertical platform lifts shall be 36" X 60" minimum. Size of lift may be smaller in existing space when space limits installation. Review by plan reviewer and Board chair required.

Chapter 5. General Site and Building Elements
-no amendments-

Chapter 6. Plumbing Elements and Facilities -*no amendments*-

Chapter 7. Communication Elements -no amendments-

Chapter 8. Special Rooms, Spaces and Elements - amendments -

Advisory: Section 804.3 applies to all occupancy type kitchenettes based on section 804 (kitchens and kitchenettes).

Chapter 9. Built-in Elements -no amendments-

Chapter 10. Recreation Facilities - amendments-

Chapter 10 of the 2010 ADA Design Manual only applies to those recreation facilities that are incorporated into a public building project. (i.e. building, stadium or tent structure as defined by the State Building Code) (refer to page 4)

Chapter 11. Housing, Adaptable and Visitable [*Act 88*] Dwelling Units

-add-Chapter 11 Housing, Adaptable and Visitable [Act 88] Dwelling Units: (21V.S.A. 286(b) Effective July 1, 2001)

11.1 **Application:** This section establishes minimum requirements for new construction, or alterations to existing buildings, for buildings with dwelling units. It is the intent of these rules that the requirements for dwelling units identified as "adaptable" are consistent with and meet or exceed the requirements of the Federal Fair Housing Act. It is the intent of these rules that the requirements for dwelling identified as "visitable" [Act 88], that are not covered by the Federal Fair Housing Act, are consistent with the requirements as established under 20 V.S.A. 2903 (c) and 2907. [Section 233 contains the requirements for all residential dwelling units whether identified as apartments, townhouses, cooperatives, condominiums or other name. Section 224 contains the requirements for transient lodging, including time shares. dormitories, and town homes] (see transient lodging definition page 48)

11.2 Common Areas in Multi-family

Dwellings: All public use and common areas in buildings with four or more dwelling units shall comply with these rules as required for a public building.

11.3 Portions of a Dwelling Unit Used as a Public Building: The portion of a dwelling unit used exclusively for a dwelling unit shall be subject to this section. The portion of a dwelling unit used as a public building shall be subject to these rules as required for a public building.

11.4 New Construction of Dwelling Units:

- (a) In buildings containing four or more dwelling units, with one or more elevators, all dwelling units shall be "adaptable" as that term is defined in Chapter 1.
- (b) In buildings containing four or more dwelling units, with no elevators, all ground floor dwelling units shall be "adaptable" as that term is defined in Chapter 1.
- (c) In buildings containing four or more dwelling units, with units that contain more than one story per unit, 5% or at least one of the dwelling units, whichever is greater, shall have an accessible entrance to the primary level of the dwelling unit(s), and all dwelling units shall be "visitable" [Act 88] as that term is defined in Chapter 1. Buildings configured with ground floor units and townhouse style units shall also comply with A or B above.
- (d) All dwelling units in public buildings, including multi-family dwellings, not required to be adaptable under subsections (a), (b), or (c) of this section shall be "visitable" [Act 88] as that term is defined in Chapter 1.
- (e) Section 11.4(c) and (d) shall not apply to the assembly or placement of residential construction that is prefabricated or manufactured out of state.

[Annex V contains a table outlining requirements for Adaptable and Visitable Dwelling Units]

11.5 Alterations of Dwelling Units:

- (a) Any altered elements, spaces or features, in dwelling units required to be <u>adaptable</u> under section11.4 (a) or (b), shall be altered to be "adaptable" as that term is defined in Chapter 11.5. A 34" wide door shall not be required for alterations into and within any dwelling unit in a historic building where a clear opening of 32" is otherwise provided.
- (b) Chapter 3 shall not apply to privately funded and operated dwelling units with more than one story within the dwelling unit. (Refer to Act 88)

11.6 Consumer and Construction

Information: The building owner or manager shall permanently mount directions for the installation of grab bars, or any other adaptable feature provided, in every dwelling unit made to be "adaptable" or "visitable" [Act 88]. The directions shall include the type of construction used, the location of reinforced areas and the most effective method for installing grab bars.

[New construction or alteration to existing multifamily dwellings may be subject to accessibility requirements in addition to these rules depending on the source of project financing. An owner, builder or developer should consult with the organization or agency providing funding for the project to determine if there are any additional requirements. Reports of discrimination regarding housing can be referred to the Human Rights Commission at (802) 828-2480].

Chapter 12. Variances, Exemptions or Abatements

- 12.1 Variance, Exemption or Abatement: The Access Board may grant a variance, exemption or abatement for compliance with these rules if the Board determines that compliance is not required by federal law for new construction or alteration and compliance with the rules:
- (a) would be prohibitively costly in relation to the normal cost of the total project; or
- (b) would threaten or destroy the historic significance of an historic building or historic project; or
- (c) would be technically infeasible, or structurally impracticable; or
- (d) would be impractical because of the terrain or unusual characteristics of the building site; or
- (e) would provide access to adjoining levels of the building by a LULA elevator, private residence elevator, vertical platform lift, inclined platform lift, or would provide substantially equivalent or greater access to and usability of a facility under the 2010 ADA Standards for Accessibility Guide, Chapter 1, Section 103 (Equivalent Facilitation)

- 12.2 Process for Obtaining a Variance, Exemption or Abatement: Any request for a variance, exemption or abatement may be reviewed under any category at the discretion of the board. All requests for a variance, exemption or abatement shall be submitted to the Vermont Access Board, Division of Fire Safety, 1311 US Route 302 Berlin, Suite 600, Barre, VT 05641-2351, at least 15 days prior to a board meeting, with sufficient data and information so the board can make an informed decision on the request; including the following information:
- (a) A written statement of the specific request from the applicant.
- (b) Whether the applicant or a representative of the applicant will appear before the board to present information on the request.
- (c) Whether the request is covered by federal law.
- (d) A summary of the request indicating why a variance, exemption or abatement should be granted by the board and what alternative provisions are being made to provide access and or use by people with disabilities.
- (e) Documentation that the building is a historic building and the historic features, elements or spaces important to the understanding of the request.
- (f) Documentation on the overall costs of the building project including the cost of accessible features provided, costs of full compliance with these rules and the costs for any alternative proposed by the applicant. Estimates of construction cost shall be based upon fair market value. (See page 8 – 2010 ADA Standards for Accessibility Guide for additional information regarding "Disproportionality")
- 12.3 **Participation in Board Proceeding:** Any person who can demonstrate a substantial interest in a request under consideration by the board may request permission to participate in the proceeding before the Board. The request to participate shall be made to the Division at least two working days before the meeting of the Board.

The Board may limit repetitive or irrelevant discussion.

15.4 Reconsideration or Appeal:

- (a) When there has been a denial of a request for a variance, exemption or abatement, the person affected by the decision may request reconsideration of that decision by providing additional information, or other grounds for the reconsideration, to the Board at the address of the Division of Fire Safety, Central Office, within 60 days of the written denial by the Board.
- (b) After reconsideration, an appeal of the decision of the Board is to the Superior Court, pursuant to the provisions of Vermont Rules of Civil Procedure, Rule 75. An appeal shall be filed within 60 days of the written denial by the Board of the request for reconsideration.

Chapter 13. Effective Date and Severability

16.1 Effective Dates:

- (a) These amended rules shall take effect November 15, 2013 and shall be known as the Vermont Access Rules – 2012.
- 16.2 **Severability:** In the event any part or provision of these rules is held to be illegal, this shall not have the effect of making void or illegal any of the other parts or provisions of these rules.

Annex I. Excerpts from Vermont Law Pertaining to the Vermont Access Rules:

20 V.S.A. § 2900. Definitions

[The definitions established in 20 V.S.A. 2900 is included in section 3 of these rules.]

§ 2901. Access board

- (a) An access board is created consisting of ten members. The members of the board shall be the commissioner of public safety, or designee; the chair of the house committee on institutions, or designee; the chair of the senate committee on institutions, or designee; the commissioner of buildings and general services, or designee; the state historic preservation officer, or designee; and five members appointed by the governor, including an independent architect, a builder or contractor, and three individuals with disabilities representing organizations for persons with disabilities in this state, appointed by the governor. The governor shall also appoint one additional individual with a disability to act as an alternate for the three members with disabilities in the event one of those members is unable to attend a board meeting. The alternate may attend all meetings and shall be paid a per diem for those meetings attended. The alternate shall vote only in the absence of an appointed member with a disability. Members and the alternate appointed by the governor shall serve for a term of six years.
- (b) The commissioner of public safety, or designee, shall be the chair of the access board and shall convene the board whenever an application is made for a variance. Five members of the board shall constitute a quorum. A decision of the board based upon a majority vote of members present shall be binding. Members of the board who are not state employees shall receive a per diem of \$50.00 for each day devoted to official duties and reimbursement for actual and necessary expenses. These expenses shall be reimbursed from the appropriation to the department of public safety.
- (c) The access board may adopt, amend, and repeal rules under chapter 25 of Title 3 to carry out the provisions of this chapter.

§ 2902. Construction standards; variance

- (a) A person shall not construct, alter, or permit construction or alteration of a public building or allow the change in use of a nonpublic building to become a public building unless the specifications at the time work commences meet or exceed the accessibility standards for new construction and alterations incorporated in 28 C.F.R. § § 35 and 36, the Americans with Disabilities Act Accessibility Guidelines (ADAAG), as amended by this chapter and the access board.
- (b) Alterations of a public building and changes in use of a nonpublic building to become a public building shall comply with the standards specified in subsection (a) of this section and the rules of the access board. All altered elements and spaces shall be made accessible to the maximum extent feasible. Each existing element, space, or common area that is altered shall comply with the standards of this chapter. If compliance with accessibility standards is technically infeasible, the alteration shall provide accessibility to the maximum extent feasible. Any elements or features of the building or facility that are being altered and can be made accessible shall be made accessible within the scope of the alteration.
- (c) If an alteration affects or could affect the usability of or access to an area of a facility that contains a primary function, the path of travel to the altered area and the restrooms, telephones, and drinking fountains serving the altered area shall be made accessible to individuals who use wheelchairs to the maximum extent feasible. Compliance with this subsection is required only to the extent that the cost of making the additional elements and spaces accessible does not exceed 20 percent of the total cost of the overall alteration.
- (d) Full compliance with the standards in this section is not required in the rare circumstance in which an entity can demonstrate that it is structurally impracticable to meet the standards. If full compliance with the standards would be structurally impracticable, compliance is required to the extent that it is structurally practicable. In that case, any portion of the facility that can be made accessible shall be made accessible to the extent that it is structurally practicable. If provision of accessibility to individuals with certain disabilities in compliance with the standards would be structurally impracticable, accessibility shall nonetheless be provided to persons with other types of disabilities. Full compliance will be considered structurally impracticable only when the unique characteristics of terrain prevent the incorporation of accessibility features. The burden of proving the impracticability is on the person who designed or constructed the public building.
- (e) The access board may exempt a public building from compliance with any of the standards established by this chapter if the board determines that compliance with the standards is not required by federal law and:

- (1) would be prohibitively costly in relation to the normal cost of the total project; or
- (2) would threaten or destroy the historic significance of an historic building or an historic project.
- (f) The exemption provided in subdivision (e)(1) of this section shall not apply to newly constructed buildings consisting of covered multifamily dwellings built for first occupancy after January 1, 1990, unless it is impracticable to design and construct at least one building entrance on an accessible route, as defined by the appropriate requirements of ADAAG because of the terrain or unusual characteristics of the site. The burden of proving the impracticability shall be on the person who designed or constructed the covered multifamily dwelling.
- (g) The access board shall adopt rules regarding compliance, variances, or abatements to a specified date, exemptions, and appeals.
- (h) A public building or unit constructed or altered in accordance with the requirements of this section shall not be rendered inaccessible as a result of subsequent renovations, alterations, or additions to that building or unit.

§ 2903. Exemptions

- (a) The following are exempt from the provisions of this chapter, unless compliance with access standards is required by federal law:
 - (1) alterations to privately funded and operated dwelling units consisting of two or more stories within a single dwelling unit. This exemption shall not apply to alterations of dwelling units which are operated by state or local government or units that receive federal financial assistance to alter the unit or to provide rental assistance to an altered unit;
 - (2) apartments or rooming houses, cooperatives, condominiums, and other residential buildings consisting of three living units or less:
 - (3) alterations to the dwelling unit in a public building in which the owner of the public building resides.
- (b) Unless required by federal law, dwelling units which consist of three stories or less and two- or three-story retail establishments with a total of 15,000 square feet or less shall be exempt from any requirements pertaining to the installation of elevators. All other multistory buildings shall be provided with vertical access unless the building is exempted from this requirement pursuant to a rule of the access board.
- (c) Unless required by federal law, any single dwelling unit of two or more stories within a building consisting of four or more dwelling units is not required to have a vertical access within the dwelling unit provided that five percent of the dwelling units or one unit, whichever is greater, has an accessible entrance, and all the dwelling units meet or exceed the minimum standards required in section 2907 of this title.

§ 2904. Parking spaces

Any parking facility on the premises of a public building shall contain at least the number of parking spaces required by ADAAG standards, <u>and in any event at least one parking space</u>, as free designated parking for individuals with ambulatory disabilities or blind individuals patronizing the building. The space or spaces shall be accessibly and proximately located to the building. Consideration shall be given to the distribution of spaces in accordance with the frequency and persistence of parking needs. Such spaces shall be designated by the international symbol of access and, where appropriate, the words "van accessible" and shall be in accordance with the standards established under section 2902 of this title.

§ 2905. Accessibility; markings

All public buildings which comply with the standards adopted under this chapter may be marked with the international symbol of access.

§ 2906. Administration and enforcement

- (a) The department of public safety shall enforce the provisions of this chapter relating to facilities for persons with disabilities and shall adopt rules which are necessary for the performance of its duties under this chapter.
- (b) Any person may file a complaint with the commissioner of public safety alleging that a public building or unit is out of compliance with the provisions of this chapter. The commissioner shall investigate the complaint, and if substantiated, shall order that the public building or unit be brought into compliance with the provisions of this chapter within a reasonable period of time. Notwithstanding the foregoing, the commissioner may establish a priority system for the investigation and enforcement of this chapter.
- (c) Any person who fails to carry out an order or condition attached to an approval shall be fined not more than \$200.00 per day, not to exceed a maximum of \$10,000.00, until compliance is affected.
- (d) On application by the commissioner, the superior court for the county in which a violation of any rule adopted or any order issued under this chapter occurs shall have jurisdiction to enjoin or restrain the violation. An election by the commissioner to proceed under this subsection shall not limit or restrict the commissioner's authority under this or other subchapters.
- (e) The commissioner may assess penalties under section 2734 of this title against a person who violates this chapter or any rule adopted under this chapter.

§ 2907. Accessibility standards; residential construction

- (a) For the purposes of this chapter, "residential construction" means new construction of one family or multifamily dwellings. "Residential construction" shall not include a single family dwelling built by the owner for the personal occupancy of the owner and the owner's family, or the assembly or placement of residential construction that is prefabricated or manufactured out of state.
- (b) Any residential construction shall be built to comply with all the following standards:
 - (1) At least one first floor exterior door that is at least 36 inches wide.
 - (2) First floor interior doors between rooms that are at least 34 inches wide or open doorways that are at least 32 inches wide with thresholds that are level, ramped, or beveled.
 - (3) Interior hallways that are level and at least 36 inches wide.
 - (4) Environmental and utility controls and outlets that are located at heights that are in compliance with standards adopted by the Vermont access board.
 - (5) Bathroom walls that are reinforced to permit attachment of grab bars.
- (c) A violation of this section shall neither affect marketability nor create a defect in title of the residential construction.

Annex II. Federal Fair Housing Design Manual:

The Fair Housing Act Design Manual, a manual to assist designers and builders in meeting the requirements of the Fair Housing Act, provides clear and helpful guidance about ways to design and build housing that meets the Fair Housing Act. A link to the manual is provided from the division website to http://www.huduser.org/Publications/PDF/FAIRHOUSING/fairfull.pdf. The Fair Housing Act Design Manual offers numerous design solutions to provide usable space in kitchens and bathrooms for people with disabilities.

The Fair Housing Act Design Manual specifies in Chapter 7, Part A, for usable space in kitchens:

- 1) a minimum 30" x 48" clear floor space for each appliance or fixture centered on the appliance or fixture,
- 2) a minimum clearance of 40" between all opposing cabinets, countertops, appliances and walls,

3) and additional specifications for "U" shaped kitchens

Wheelchair turning spaces, that are described in accessibility standards, are not required in kitchens that meet the *Fair Housing Act Design Manual*, except in some "U" shaped kitchens. It is anticipated that in any conventional kitchen plan, the overlapping of the minimum 36" wide accessible route with the clear floor spaces at all fixtures and appliances will provide the necessary maneuvering space to make it possible for a person using a mobility aid to approach, and then position himself or herself close enough to use the fixture safely. The clear floor space must be positioned either parallel or perpendicular to and centered on the appliance or fixture. Unless knee space is provided, space to execute a parallel approach must be provided at ranges, cooktops and sinks. The clear floor space in this parallel orientation allows the wheelchair user to make a close side approach permitting safer and easier reach to controls and cooking surfaces. A parallel approach also must be provided at sinks so a seated user can reach down into the bowl.

Additional requirements for "U" shaped kitchens include a 60" turning circle in a "U" shaped kitchen that has a sink, range or cooktop at the base of the "U", unless the sink or cooktop has removable base cabinets under the cooktop or sink. The floor, walls and cabinet faces of knee space must be finished during initial construction so no other work is necessary when the base cabinet is removed.

The Fair Housing Act Design Manual contains information on the requirements for both usable space in bathrooms and powder rooms in Chapter 7, Part B. Usable bathrooms and powder rooms, although not fully accessible, provide a person who uses a wheelchair or scooter, or who may use a walker or other mobility aid, with a bathroom or powder room that has enough maneuvering space to allow the person to enter, close the door, use the fixtures, and exit. In some cases a resident with a disability will find it necessary to make additional modifications to meet his or her specific needs. The primary entry level of a multi-story dwelling must contain either a usable bathroom or powder room. If there is both a bathroom and a powder room on the primary entry level the bathroom is required to be usable and the powder room is required to meet requirements 3 (usable doors), 4 (accessible route) and 5 (controls), of the adaptable requirements.

A 30" by 48" clear floor space is required for bathrooms located outside of the swing of the door as it is closed. Additional maneuvering and clear floor space is required for fixtures depending on whether "Specification A" or "Specification B" floor plans are selected by the builder, owner or developer. The primary difference between "Specification A" and "Specification B" is that a clear floor space must be provided adjacent to the foot of the bathtub under "Specification B" to increase access to the bathtub and bathtub controls. If "Specification A" is selected than all bathrooms in the dwelling unit must meet the criteria for "Specification A". If "Specification B" is selected then only that bathroom needs to meet the maneuvering and clear floor space requirements. Examples of "Specification A" and "Specification B" bathrooms are found on pages 7.36 and 7.37 of the Fair Housing Act Design Manual.

The maneuvering space necessary for usable bathrooms is made up of the combination of the designated clear floor spaces at the fixtures and the clear floor space outside the swing of the door. Clear floor spaces may overlap each other and the maneuvering space also may include knee or toe space under lavatories or toilet bowls. One of three clear floor space designs must be provided at toilets to allow people using wheelchairs and walkers to maneuver, approach, and make a safe transfer onto the toilet. [specifications for the three designs are on page 7.43 of the *Fair Housing Act Design Manual*] A 30" by 48" clear floor space is required at a lavatory so a person who uses a wheelchair or scooter can get close enough to the basin and controls to use the fixture. The lavatory type and width, plus the available maneuvering space in the room, determines whether or not a vanity cabinet must be removable. [for additional specifications see the *Fair Housing Act Design Manual* page 7.47] There are also three clear floor space options to meet the clear floor space requirement at bathtubs, or combination bathtub and shower, so people who use wheelchairs or scooters can get close enough to execute transfers into and out of bathtubs. [for additional specifications see the *Fair Housing Act Design Manual* page 7.53] For showers, a 30" by 48" clear floor space must be provided at shower stalls, parallel to the fixture and flush with the wall that has the shower controls. [for additional specifications see the *Fair Housing Act Design Manual* page 7.56] Chapter 7 of the *Fair Housing Act Design Manual* contains designs for numerous bathroom floor plans that comply with the requirements.

The Vermont Access Rules require **reinforcement in bathroom walls for grab bars** to allow later installation of the grab bars in both adaptable dwelling units and in dwelling units designed to meet "Act 88" or so-called "visitable units". The reinforcement is required around the toilet, tub, shower stall and shower seat, where such facilities are provided. The minimum size for a reinforced area is 24" long by 6" wide, located between 32" and 38" above the floor. However, a larger reinforced area is actually needed to provide adequate reinforced area to attach standard size mounting brackets and flanges for grab bars. A longer reinforced area is also needed so that each end of the reinforced area is supported at wall studs. A 2" x 8" x 32" let into wall studs is a common solution. Another common solution is to provide plywood for reinforcement over a larger area. A larger reinforced area provides greater flexibility in placement of grab bars, easier installation of grab bars and the plywood may also act as the base for ceramic tile or other finish material. For details on the exact location of reinforced areas for different types of fixtures use Chapter 6 of the *Fair Housing Act Design Manual*.

Annex III. Technical Assistance:

<u>Clearance on Stairs for Inclined Stairway Chairlifts and Platform Lifts</u> – Where a platform or chair lift is installed on a stair the clearance to pass by the lift, when it is in the down position, must be at least the exit width required for the stair by the Vermont Fire & Building Safety Code. When the stair only serves a small number of people the clearance to pass by the lift can be reduced to 22" where the stair serves fewer than 50 people or to 18" where the stair serves fewer than 10 people. [section NFPA 101:7.1.10.1.1 as amended]

<u>Construction Permit</u>: For most construction projects the review of accessibility features required under these rules will take place at the same time as the review of fire and structural safety features and a separate construction permit will not be not required. A separate construction permit is required when the only work being done is to provide accessible features and the work is not covered under another permit

Vermont Fire & Building Safety Code

- (b) To obtain a construction permit the applicant shall:
 - (1) Complete a Construction Permit Application form and submit it along with the required construction permit fee to the Division of Fire Safety regional office.
 - (2) Provide construction documents relating to the construction work and equipment under consideration unless specifically waived by the AHJ based on the size, use, occupancy or complexity of the work.
 - (3) For buildings where the applicant is requesting special consideration for a historic building, documentation shall be included on the historic designation of the building, including identification and evaluation of historic adjacent structures and site elements such as sheds, walkways, and fencing; historic construction features such as sheathing, facade or roofing materials, chimneys, skylights, cornices or molding, windows or doors, wainscoting, cabinets and finishes; and historic spaces such as archways, lobbies or rooms which are important to the understanding and application of the building.
- (d) Plans required under this *Code* shall be drawn to scale, using customary inch-pound units and English language, and shall be sufficiently clear, comprehensive, detailed and legible when submitted to the AHJ so that, together with any accompanying specifications and data, the AHJ can readily determine whether or not the proposed building, addition, or alteration, and all proposed building equipment will conform to this *Code*.
- (e) The AHJ shall review the application for a construction permit and the construction documents where applicable and shall issue a permit, a conditional permit with specific terms and conditions, or deny the application. The AHJ may require additional information before issuing, or denying the application for a construction permit. Any conditions of the permit or reasons for denial of the permit shall be transmitted to the applicant in writing.
- (f) The AHJ may provide consultation or preliminary plan review for proposed construction to identify high priority code issues when deemed warranted by the significance or complexity of the project.
- (g) A construction permit shall expire if the work authorized under the permit is not commenced, or is suspended or abandoned, for a time period of 12 months.
- (h) Construction permit fees are established by the Vermont Legislature under Title 20 V.S.A. section 2731. The current construction permit fees are available on the Division's website or by contacting any office of the Division.
 - (1) In the case of abandonment or discontinuance of a building project involving a construction permit fee greater than \$150 the construction permit fee may be refunded, upon written request to the AHJ, prorated on construction work, services, reviews and inspections conducted prior to such abandonment. Such request shall be received within 12 months of the date that the construction permit was issued.
 - (2) The AHJ may refuse to issue a construction or occupancy permit if the owner or a designated representative owes the Department fees or penalties.

Dimensional Tolerances, Americans with Disabilities Act Accessibility Guidelines (ADA) [104.1.1] – The ADAAG, adopted under the Vermont Access Rules, recognizes conventional industry standards for field conditions. For instance a handrail specified to be 1½ " in diameter in accordance with section 4.26.2 is permitted to be almost 2" in diameter based on field condition standards for the trade. The outside diameter of a nominal 1 ½" pipe is 1 29/32".

<u>Electrical Controls in Adaptable Dwelling Units</u> – The Vermont Access Rules, similar to the Federal Fair Housing Act, require light switches, electrical outlets, thermostats and other environmental controls to be in accessible locations when they are newly installed. These controls are required to be mounted between 15" and 48" off the floor for front reach limits and between 9" and

54" for side reach limits. Electrical panels or sub-panels containing circuit breakers are not required to be located at a height within the side or front reach limits.

Light switches, electrical outlets and environmental controls including thermostats for heating, air-conditioning and ventilation systems are covered by the rules and need to be located within reach limits. Circuit breakers, appliance controls and outlets dedicated for specific appliances are not covered and do not need to be within the reach limits. For additional information see the Federal Fair Housing Act Design Manual Part two, Chapter 5, Page 5.4.

Reinforced Walls for Grab Bars – The Vermont Access Rules require reinforcement in bathroom walls to allow later installation of grab bars in both adaptable dwelling units and in dwelling units designed to meet "Act 88" or so-called "visitable units". The reinforcement is required around the toilet, tub, shower stall and shower seat, where such facilities are provided. The minimum size for a reinforced area is 24" long by 6" wide, located between 32" and 38" above the floor. However, a larger reinforced area is actually needed to provide adequate reinforced area to attach standard size mounting brackets and flanges for grab bars. A longer reinforced area is also needed so that each end of the reinforced area is supported at wall studs. A 2" x 8" x 32" let into wall studs is a common solution. Another common solution is to provide plywood for reinforcement over a larger area. A larger reinforced area provides greater flexibility in placement of grab bars, easier installation of grab bars and the plywood may also act as the base for ceramic tile or other finish material. For details on the exact location of reinforced areas for differ types of fixtures use Chapter 6 of the Fair Housing Act Design Manual.

<u>Space used for Storage</u> – The Vermont Access Rules exempts space used for storage that is used on an infrequent basis, or is not occupiable, from the requirement to provide an elevator or platform lift for vertical access to the space. The ADAAG defines "Occupiable" as "A room or space designed for human occupancy in which individuals congregate for amusement, education or similar purposes, or in which occupants are engaged at labor, and which is equipped with means of egress, light and ventilation." Infrequent is defined as occasional, rare or irregular. An example of a space that is not occupiable could be an unheated second floor space used to store automotive exhaust pipes. Although the frequency of use may vary for the space, the space is unheated and would not be occupiable. An example of a space that is used on an infrequent basis could be the basement of an office building used for filing cabinets that contain records from prior years as a back up to electronic records and are rarely used.

<u>Municipal Agreements</u> – Some municipalities have agreements with the Division of Fire Safety to administer construction permits. Check with your local municipality for requirements.

Annex IV. Ramp Specifications:

From the Americans with Disabilities Act Accessibility Guidelines (ADAAG) contained in 28 CFR Part 36, Subpart D, and the 2004 ADAAG at 36 CFR part 1191, appendices B and D revised as of September 15, 2010.

Chapter 4. Any part of an accessible route with a slope greater than 1:20 shall be considered a ramp and shall comply with Table 405. (See ramp definition page 47)

Slope and Rise. The least possible slope shall be used for any ramp. The maximum slope of a ramp in new construction shall be 1:12. The maximum rise for any run shall be 30 in (760 mm) (see <u>Fig. 405.6</u>). Curb ramps and ramps to be constructed on existing sites or in existing buildings or facilities may have slopes and rises as allowed in 406 if space limitations prohibit the use of a 1:12 slope or less.

405.5 Clear Width. The minimum clear width of a ramp shall be 36 in (915 mm).

405.7 Landings. Ramps shall have level landings at bottom and top of each ramp and each ramp run. Landings shall have the following features:

- (1) The landing shall be at least as wide as the ramp run leading to it.
- (2) The landing length shall be a minimum of 60 in (1525 mm) clear.
- (3) If ramps change direction at landings, the minimum landing size shall be 60 in by 60 in (1525 mm by 1525 mm).
- (4) If a doorway is located at a landing, then the area in front of the doorway shall comply with 405.7.1 thru 405.7.5

405.8 Handrails. If a ramp run has a rise greater than 6 in (150 mm) or a horizontal projection greater than 72 in (1830 mm), then it shall have handrails on both sides. Handrails are not required on curb ramps or adjacent to seating in assembly areas. Handrails shall comply with 505.7 and shall have the following features:

- (1) Handrails shall be provided along both sides of ramp segments. The inside handrail on switchback or dogleg ramps shall always be continuous.
- (2) If handrails are not continuous, they shall extend at least 12 in (305 mm) beyond the top and bottom of the ramp segment and shall be parallel with the floor or ground surface (see Fig. 405.9.1).
- (3) The clear space between the handrail and the wall shall be 1 1/2 in (38 mm).
- (4) Gripping surfaces shall be continuous.
- (5) Top of handrail gripping surfaces shall be mounted between 34 in and 38 in (865 mm and 965 mm) above ramp surfaces.
- (6) Ends of handrails shall be either rounded or returned smoothly to floor, wall, or post.
- (7) Handrails shall not rotate within their fittings.

405.3 & 405.4 Cross Slope and Surfaces. The cross slope of ramp surfaces shall be no greater than 1:48. Ramp surfaces shall comply with 405.7.1.

405.9 Edge Protection. Ramps and landings with drop-offs shall have curbs, walls, railings, or projecting surfaces that prevent people from slipping off the ramp. Curbs shall be a minimum of 2 in (50 mm) high (see Fig. 405.9.1 & 405.9.2).

405.10 Outdoor Conditions. Outdoor ramps and their approaches shall be designed so that water will not accumulate on walking surfaces.

Annex V. Table for Adaptable and Visitable [Act 88] Dwelling Units:

Use	Adaptable	Visitable [Act 88]	Accessible Entrance	Notes
four or more dwelling units served by an elevator	all units		all units	any altered elements, spaces or features in existing construction must be adaptable
four or more dwelling units not served by an elevator	all ground floor units	all other units	all ground floor units	any altered elements, spaces or features in existing construction must be adaptable
four or more dwelling units, not served by an elevator, with units that contain more than one story	all single floor units	all units	5 % or at least one unit	
three or less dwelling units		all units	not required	

Annex VI. Frequently Asked Questions:

Question: When renovating, when must I comply with ADA standards?

Answer: During alterations or renovations 20% of the project cost must be applied to access. Access

begins with an accessible entrance and route to the altered area. ADA §35.151 (4) (iii)

(Disproportionate) (page 8)

Question: I have an existing building constructed prior to May 4, 1977 and no renovations, alterations or

additions are planned. Must I comply with Vermont Access Rules?

Answer: No (Section C, Vermont Rules page 4) However, 2010 ADA Standards has requirements for

Title III facilities (Public Accommodations and Commercial Facilities). The Vermont Center for

Independent Living provides guidance on requirements. (1-800-639-1522)

Question: If an area has been altered without providing an accessible path due to disproportionality, and

next year additional alterations take place, must I now make area accessible?

Answer: Yes. When alterations are undertaken within 3 years of original alteration, the total cost of

alterations to primary function area shall be considered. ADA §35.151 (4) (v)(B)(1) (page 9)

Question: How many residential units must be accessible?

Answer: Refer to Annex V, or for Public Housing projects see: (ADA section 233.3.1, page 92)

Question: How many guest rooms must be accessible?

Answer: One unit up to 25, two units up to 50, 4 units up to 75. §36.406 (page 28) (c)(1)(i) (see chart

on page 84)

Question: Can a LULA (Limited-Use Limited-Application) elevator be used?

Answer: Yes, the LULA may be used in limited applications. (ADA Section 206.2.3, page 56, and

Vermont Rules 206.2.3, page 6)

Question: How many toilet rooms must be accessible?

Answer: All new toilet rooms must be accessible and useable unless toilet rooms are clustered at a

single location (ADA Section 213.2, page 69) (ADA Section 603.1, page 160).

Question: Can a unisex toilet be used?

Answer: Only when one toilet room is required by plumbing code and only one toilet room is

constructed. (ADA Section 603.1, page 160) See exceptions for cluster toilet rooms (ADA

Section 213.2, page 69)

Question: Must minimum clear width of a ramp be measured inside the handrails?

Answer: Yes (ADA 405.5 page 129)

Question: When a landing changes direction, does ramp width need to increase?

Answer: Yes (60" minimum - ADA 405.7.4 page 129)

Question: Do all areas within an employee work area need to be accessible?

Answer: No (See ADA 203.9, page 54; Employee Work Areas 206.8, 207.1 Egress & 215.3 Alarm

Coverage)

Question: What construction tolerances are allowed?

Answer: All dimensions are subject to industry tolerances except where requirement is stated as a

"range". (ADA 104.1.1, Page 38) See 604.2 Water closet tolerance, page 161)

Question: Are outdoor recreation facilities required to meet the requirements of Chapter 10?

Answer: Yes, (2010 ADA Standards, page 224)

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Annex VIII. Contact Information:

The Division of Fire Safety's four regional offices are located in:

Barre

1311 U. S. Route 302, Berlin Suite 500 Barre, VT 05641 802.479.4434 Fax: 802.479.4446

Springfield

100 Mineral Street, Suite 307 Springfield, VT 05156 802.885.8883 Fax: 802.885.8885

Williston

Rutland

56 Howe Street

802.786.5867 Fax: 802.786.5872

802.479.7561

Building A, Suite 200

Rutland, VT 05701

372 Hurricane Lane, Suite 102 Williston, VT 05495-7151 802.879.2300 Fax: 802.879.2312

The Division of Fire Safety Main Office is located at:

1311 U. S. Route 302 – Berlin Suite 600

 Suite 600
 Toll Free 800.640.2106

 Barre, Vermont 05641-2351
 Fax: 802.479.7562

Codes and Standards Adopted and referenced under this Code are available at:

HUD USER PUBLICATIONS P.O. Box 23268 Washington, DC 20026-3268 1-800-245-2691 TDD: 1-800-927-7589 www.huduser.org

United States Access Board 1331 F Street, NW, Suite 1000 Washington, DC 20004-1111

Phone (voice): (202) 272-0080 toll free: (800) 872-2253 Phone (TTY): (202) 272-0082 toll free: (800) 993-2822

Fax: (202) 272-0081

E-mail:info@access-board.gov

A link to the *Americans with Disabilities Act Accessibility Guidelines (ADAAG)* is provided from the division website to http://www.access-board.gov

A link to the Fair Housing Act Design Manual is provided from the division website to http://www.huduser.org/Publications/

New England ADA Center Institute for Human Centered Design 200 Portland Street Boston, MA 02114

Phone:1-800-949-4232 Voice/TTY-in New England only) 1-617-695-1225 (Voice/TTY) **Fax:**1-617-482-8099 **Email:** ADAinfo @NewEnglandADA.org

Web Site: www.NewEnglandADA.org

What Is Breaking Housing Matters?

A registered 501(s)(3)
nonprofit organization in
the United States, Breaking
Housing Matters (BHM) is a
grassroots housing
movement coordinating
with local officials and
stakeholder groups to
achieve affordable housing
profitably.



BHM promotes
Compassionate Capitalism
by bridging local public and
private efforts to adopt a
financially sustainable
solution to the affordable
housing crisis.



Peter de Krassel

BHM Founder

If you or someone you know is angry, frustrated, or stressed out about not being able to afford a home-- as a buyer or a renter-- please consider getting involved in the Breaking Housing Matters (BHM) movement.

We need your help to solve the affordable housing crisis -- working together on customizing and implementing the Housing Subsidy Solution (HSS) in your community.

Please check out our website or email us to learn how we can, together, address one of the most pressing issues of our time.



www.breakinghousingmatters.org

What Is Our Solution?

BHM's Housing Subsidy Solution (HSS), a partnership between the public and private sectors, consists of:

- 1. Housing Solution
 Ordinance (HSO) and
- 2. Housing Subsidy Fund (HSF)

Housing Solution Ordinance, a locally customizable framework, states:

- No buyer or renter shall pay more than 25% of their income for housing.
- The difference is paid for by the Housing Subsidy
 Fund, a local privately managed fund contributed to by five key collaborative stakeholders (see "5 Steps" section of this brochure).
- Landlords, developers, and sellers shall be guaranteed a reasonable return on their investment (ROI).

5 Steps to Begin Implementing HSS in your community

- Municipal government leaders determine what grants and tax benefits they currently offer and pursue additional funding from county, state, and federal governments.
- Foundations, philanthropic organizations, and interested individuals channel grants and donations to the Housing Subsidy Fund (HSF).
- Landlords, developers, and real estate professionals direct a small percentage of their profit, plus their charitable contributions, to the HSF.
- Financial institutions that make mortgages and construction loans or finance bonds for infrastructure projects allocate a % of their basis points, and charitable contributions, to the HSF.
- Religious houses of worship and housing-related nonprofits contribute a percentage of the donations they receive to the Housing Subsidy Fund.

www.breakinghousingmatters.org

nto@breakinghousingmatters.org

Breaking Housing Matters





planning for the transportation system

Barre City recognizes that the city's transportation system contributes significantly to economic vitality and community well-being. To achieve our vision for a healthy future, Barre City needs a transportation system that enables all residents to conveniently and safely travel around the community, accessing homes, jobs, schools, parks, shopping and services.

The transportation system directly affects health through traffic accidents, air pollution, and reduced physical activity. It also has indirect impacts on health as a result of economic factors such as access to employment opportunities, transportation costs, and the vitality of the local economy. Not only does the transportation system provide for the mobility of people and goods, it also influences patterns of growth and economic activity by providing access to land.

Barre City's transportation system is more than just roads. It includes:

- Sidewalks and paths traveled by pedestrians and bicyclists;
- Public transit:
- The rail line; and
- The connections between these modes of transport within the city and to transportation systems in the larger region.

Barre City has more potential for - and need for - effective and efficient transportation alternatives than most Vermont communities due to our relatively high density, compact development pattern and large percentage of residents who do not drive or own a vehicle.

key points

- 1. **Downtown Traffic**. Almost 17,000 vehicles per day travel on North Main Street, a large percentage of which is through traffic. Traffic creates both a significant challenge and potential opportunity for downtown revitalization efforts. The North Main Street Reconstruction Project from 2011 has improved both traffic flow and the appearance of the downtown streetscape. The project has mitigated some of the negative impacts of heavy traffic and created a more pedestrian-friendly downtown. This effort needs to be continued with the planned Merchants Row and the North Main to Summer Street projects.
- 2. **Downtown Parking**. The city is the principal provider of downtown parking with more than 500 parking spaces in several municipal lots in addition to on-street parking. Generally, Barre City has an ample supply of public parking, but improvements are needed to provide safe pedestrian access within parking lots, to maximize use of and direct drivers to available parking, and to make parking areas a more attractive part of our downtown. A more pedestrian-friendly downtown and near-downtown will also encourage people to park and walk from place-to-place, rather than driving to and parking at each destination.

- 3. **Pedestrians and Bicyclists**. There is demand for an improved sidewalk/path network in Barre City for pedestrians and bicyclists. Sidewalks and paths provide opportunities for exercise and a healthy, low-cost transportation alternative for those who cannot or choose not to drive. There are numerous challenges to overcome to construct sidewalks and paths including obtaining rights-of-way and securing funding. The city struggles to pay for the maintenance of existing sidewalks and paths, raising concerns about whether we should build more sidewalks and paths. The City has completed portions of the City Bike Path, and needs to finish those segments that will interconnect the completed ones.
- 4. **Public Transit**. Barre City has a large transit-dependent population people who do not/cannot drive or do not own a vehicle and many households that are burdened by increasing transportation costs. There are private taxi companies that operate within the City, as well as Uber and Lyft. While GMTA (Green Mountain Transit Authority) does provide public transit service in the city, a more robust public transit system is needed to fully meet the transportation needs of our residents. Improvements to the current public transit system could encourage more people to choose transit over driving to destinations within the city and region, thus reducing traffic and parking congestion. Expanding the number of people living or working downtown will expand the base of potential public transit riders, which should help support improved service in Barre City.
- 5. **Road Maintenance Costs**. Road maintenance costs consume a significant portion of the city's budget. Road maintenance costs continue to rise with energy costs due to dependence on petroleum products (asphalt, vehicle fuel, etc.) making the challenge of keeping up with road maintenance needs more difficult for the city over time.

issues & challenges

Barre City has identified the following transportation challenges and issues that need to be addressed to achieve our vision for a healthy future:

- 1. **Facilities for Pedestrians and Bicyclists**. Barre City residents regularly identify improved walking and biking routes within the city and to neighboring communities as an important goal. However, given the city's limited resources and other priorities, it continues to be a challenge to focus on this issue. The Semprebon bequest renewed efforts to complete the multi-use path between Barre City and Barre Town, and only certain segments have been constructed to date. If that project is successfully completed, it may spur further efforts to make the city a more walkable and bikeable place.
- 2. **Public Transit**. There is a recognized need to expand public transit service within the city, but additional city funding would likely be needed to improve public transit service. City residents and workers are currently limited in their transportation choices by public transit service location and frequency, and commuting destinations and distances. Through changes in land use, urban design, street design, and public transit services, our city can improve the viability of public transit service while also becoming more walkable and bikeable. Improving our public transit service by studying the impacts of rail service between Barre City and Montpelier would particularly benefit lower-income residents who are more heavily burdened by transportation costs and could expand their access to employment opportunities.

3. **Aging Infrastructure**. The City of Barre, like municipalities around the state and country, faces the challenge of aging infrastructure. With declining federal and state dollars available, the city will have to finance a larger share of the upgrade, replacement and repair costs. The cost-permile of repaving, other road repairs and regular road maintenance are significantly affected by rising energy costs. Unlike many communities, Barre City has recognized the need to address the issue of aging infrastructure. For more than two decades, the city has been engaged in an ongoing street reconstruction program. The challenge in future years will be finding the funding needed to keep that program going at the level needed to keep the city's transportation infrastructure in adequate condition.

strengths & opportunities

Barre City has already acted to address transportation issues, and there remain many strengths and opportunities we can build upon to continue those efforts as we strive to achieve our vision for a healthy future:

- 1. **Proximity and Quality of Interstate Access**. Route 62, a five-mile long, four-lane, limited-access state highway, provides a direct link between downtown Barre City and Interstate 89 at Exit 7. Route 63 is 3 ½ mile long three-lane, limited access state highway that also provides a direct link to Barre City from Exit 6.
- 2. **Highways**. Routes 14 and 302 bring many travelers into Barre City and bring many potential customers into our downtown. Traveling between downtown Barre City and Montpelier via Route 302 is a 20-minute trip, which made by more than 12,000 vehicles per day.
- 3. **Traffic**. While there is considerable traffic on North Main Street, downtown Barre City is less congested than most urban areas in Vermont. Vehicles flow with limited delay into and out of the city. Transportation studies have determined that none of our intersections will fail to meet level of service standards, even after City Place was constructed and approximately two hundred more people are working downtown. Except for the intersection in front of the library (Route 302, Route 14 and Elm Street), all other intersections in the city have a level of service of C or better, which is outstanding for an urban area.
- 4. **Public Parking**. There are more than 500 public parking spaces available downtown. The availability of public parking has allowed the city to eliminate on-site parking requirements for downtown businesses.
- 5. **Rail**. With rising fuel costs, the ability to ship and receive freight via rail is again becoming a competitive advantage and a factor that businesses will consider when selecting where to locate. Many of Barre City's industrial areas have direct rail access. In 2019, a grant was awarded to the City of Montpelier to study the use of the rail service between them and Barre City. This may conflict with the "granite train" that runs in Barre City delivering grout.
- 6. **Airport**. Downtown Barre City is four miles from a regional airport, the Edward F. Knapp State Airport just across the city line in Berlin.

goals & strategies

Barre City has established the following transportation goals and strategies in order to achieve our vision for a healthy future:

- 1. For Barre City to optimize and maintain its transportation infrastructure as needed to support economic vitality and quality of life in the city.
 - A. Invest in improvements to transportation infrastructure needed to attract and retain businesses in the city.
 - B. Improve the appearance and function of existing arterial roads in the city.
- 2. For Barre City to accommodate future transportation needs primarily by improving the quality and use of existing infrastructure rather than by building additional infrastructure.
 - A. Optimize existing traffic configurations and traffic lighting to provide for the efficient movement of existing and future vehicular traffic.
 - B. Promote and improve safe vehicular access with new development and redevelopment.
 - C. Incorporate Complete Street elements such as sidewalks, crosswalks and curb ramps into street reconstruction and repair projects.
- 3. For Barre City residents and workers to have viable alternatives to driving a personal vehicle to destinations within the city and region.
 - A. Maintain current public transit service, and expand that service as warranted by demand and as can be sustained financially.
 - B. Maintain and improve the city's sidewalk network so more city residents can safely walk from their homes to jobs, schools, parks, shopping and services.
 - C. Complete construction of the planned bike path through the city.
- 4. For Barre City to provide a pedestrian- and bicyclist-friendly environment.
 - A. Maintain and construct new sidewalks that serve areas of existing or anticipated high volumes of pedestrian use.
 - B. Maintain neighborhood sidewalks within the financial constraints approved by the city voters.
 - C. Make improvements when streets are being repainted, repaired or reconstructed to better accommodate safe walking and biking throughout the city (ex. narrowing travel lanes/widening shoulders, bike lanes, sharrows (road marking in the bike lane), sidewalks, cross-walks, curb ramps, traffic calming, signage, etc.).

D. Improve the connectivity of existing walking and biking routes.

next steps

Barre City should pursue the following actions in order to achieve our vision for a healthy future:

1. Develop and adopt a Complete Streets policy.

Status: No action has been taken to date.

Timing: 2024

Partners: City Planner, City Engineer, Planning Commission, City Engineer, Transportation Advisory Committee, City Council, Paths, Routes & Trails Committee

Notes: The website of the National Complete Streets Coalition provides information about developing a local Complete Streets policy and links to policies adopted by municipalities around the country. In Vermont, Montpelier, the City of Rutland and the City of Burlington have developed Complete Streets policies.

2. Investigate demand for and establish additional scheduled stops as needed along the City Route, City Commuter and Hospital Hill bus routes.

Status: Action has begun in 2018.

Timing: discussions and changes by GMTA have had them reviewing polices on off-route pick-ups, larger busses and added stops with additional shelters.

Partners: CVRPC, City Planner, Planning Commission, City Engineer, Transportation Advisory Committee, City Council, GMTA

Notes: Opportunities to provide bus service to the high school should be explored, which could reduce downtown traffic generated by students driving or being driven to/from school. Attention should be given to the changes that GMTA is making, and the City should participate in their work.

3. Encourage and support Barre City Elementary and Middle School's (BCEMS) involvement in the Safe Routes to School program.

Status: No action has been taken to date.

Timing: 2022.

Partners: BCEMS, City Planning Commission, City Planner, City Engineer, City Council

Notes: This state/federal program helps to generate enthusiasm around biking/walking to school and can provide financial resources to improve city infrastructure. More information is available online at http://saferoutes.vermont.gov.

4. Identify and take appropriate action with regard to paper streets, particularly those that are limiting the use and development of otherwise suitable lots.

Status: No action has been taken to date.

Timing: 2022

Partners: City Planner, City Engineer, City Attorney, City Council, Paths, Routes & Trails Committee

Notes: Paper streets are strips of land that were designated for use as a street when a subdivision was initially laid out, but the street was never constructed as planned. The ownership of some of these strips has become uncertain over time. This limits the ability of adjoining land to be developed because the city cannot grant the right to install a street or infrastructure on the strip of land (as originally intended) without the approval of the owner. The city would need to identify the owners of paper streets or institute a legal process to municipal ownership of these strips if no owner can be determined to facilitate development of the adjoining land.

5. Develop and adopt road standards.

Status: The city has a set of road standards, but have not been formally adopted and are very old.

Timing: 2024

Partners: City Engineer, City Planner, Transportation Advisory Committee, City Council

Notes: Having an adopted set of road standards would enable the city to qualify for transportation grants. The existing set of road standards should be reviewed to assure that new roads will be accessible to emergency vehicles and that they will incorporate appropriate stormwater infrastructure before being formally adopted. All street segments in Barre City should be classified as arterial, connector or neighborhood streets, and adopted standards for each classification should reflect the appropriate planned usage as described in Section 3. This will also entail revisiting the Streets and Sidewalks Ordinance. This project should take into consideration National Association of City Transportation Officials design guides.

6. Complete a citywide Pedestrian Environment Quality Index (PEQI) and Complete Streets assessment.

Status: No action has been taken to date.

Timing: 2021

Partners: City Planner, Planning Commission, City Engineer, Transportation Advisory Committee, Paths, Routes & Trails Committee, City Council

Notes: More information about conducting a PEQI assessment is available from the UCLA Center for Occupational and Environmental Health at www.peqiwalkability.appspot.com. There are a number of Complete Streets assessment tools available and examples of assessments completed in communities around the country. Trained volunteers can conduct these assessments, which examine both the physical infrastructure available to pedestrians and whether the overall environment is safe and pedestrian-friendly.

7. Review access management¹ provisions in the city's land use regulations and update as needed.

Status: No action has been taken to date.

Timing: 2022

Partners: City Planner, Planning Commission, City Engineer, Transportation Advisory Committee, City Council

Notes: Vermont Agency of Transportation has published an Access Management Guidebook and Best Practices document that include recommended access management provisions. This could be incorporated into the revision of the city's commercial and industrial zoning districts recommended in the land use chapter.

8. Develop a citywide long-range bicycle and pedestrian plan.

Status: No action has been taken to date.

Timing: 2024

Partners: City Planner, Planning Commission, Paths, Routes & Trails Committee, City Engineer, Transportation Advisory Committee, City Council

Notes: This could build upon the bike path planning work already completed, as well as the PEQI and Complete Streets assessments recommended above. The plan would be tool to help the city prioritize bike and pedestrian improvements, and to coordinate small sidewalk or path projects into an interconnected system that would be completed over time.

9. Complete construction of the bike path through the city.

Status: Final engineering for the path is on-going.

Timing: 2022

Partners: City Engineer, City Planner, Transportation Advisory Committee, City Council

Notes: Supported by the Semprebon funding, the city should come up with a schedule to complete the Depot-to-Museum segment and the Depot-to-Barre Town segment by 2022.

¹ Access Management is utilizing tools and techniques to manage vehicular access to businesses, homes and other land uses without sacrificing safety and efficiency.

10. Re-engineer the railroad trestle on Vanetti Place to mitigate flood hazards.

Status: No action has been taken to date.

Timing: 2022

Partners: City Engineer, Transportation Advisory Committee, City Planner, VTrans, City Council

Notes: This project falls to the responsibility of VTrans. The railroad is using this bridge for the use by the granite train, and city departments have made arrangements to regularly inspect the trestle for debris buildup.

11. Construct Barre's first traffic circle.

Status: No action has been taken to date

Timing: 2022

Partners: City Engineer, Transportation Advisory Committee, City Planner, VTrans

Notes: This project will be considered a text for replacing further uncontrolled or signaled intersections with traffic circles. Candidate locations include Washington and Hill Streets, or North Main and Berlin Streets. Traffic circles should always be considered as a lower maintenance alternative to a signaled intersection.

benchmarks

Barre City should measure progress towards achieving our vision for a healthy future against the following benchmarks:

1. **Miles of sidewalk in Barre City**. Walking contributes to minimum requirements for physical activity, does not contribute to noise or air pollution emissions, and reduces transportation energy consumption and costs. A vibrant pedestrian environment contributes to economic vitality and social interaction within the community. *Source: Barre City GIS Mapping*

In 2010: 22 Target for 2024: 25

2. **Miles of multi-use paths in Barre City**. A multi-use path network can help encourage people to increase their daily activity by providing a convenient and appealing place to walk or bike that is separated from vehicles and that can provide a safer, quieter and more relaxing environment. *Source: Barre City GIS Mapping*

In 2010: <1

In 2019: 0.3 miles

Target for 2023: 4

3. **Percentage of Barre City residents who walk, bike or take transit to work**. Environments that support walking, biking and transit trips as an alternative to driving have multiple potential positive health impacts. Studies have shown that around 30% of people using transit to get to work meet their daily requirements for physical activity from walking between destinations and transit stops. *Source: US Census Bureau, American Community Survey*

In 2010: 5% In 2017: 13% Target for 2023: 20%

planning for public utilities

Public utilities greatly affect the city's economic vitality, our residents' health and quality of life. To achieve our vision of a healthy future, Barre City needs a system of public utilities that is reliable and well maintained, that has affordable rates, and that is capable of supporting growth.

The pipes and wires that run beneath city streets, inside building walls and overhead provide the basic necessities of modern life – clean drinking water, sanitation, electric power and communications. The city is directly responsible for providing some public utilities, while utility and private companies or regional entities provide other services. While the city no longer directly provides solid waste facilities, it is still involved in planning how that essential service is provided in the region and where any future solid waste facilities may be located.

A large part of the city's role as a utility provider relates to managing water. An adequate supply of potable water is one of our most basic needs with every person requiring two liters of clean drinking water each day. Sanitary sewers that properly collect and treat wastewater are essential for protecting the health of all city residents and the natural environment to which our wastewater is returned. Stormwater also needs to be effectively managed to prevent flooding hazards and pollution. Collecting, processing and pumping water are energy intensive activities, which result in both financial and environmental costs.

key points

- 1. **Aging Infrastructure**. Barre City has a well-developed system of public utilities with public water, public sewer, electric and broadband telecommunications services available throughout the city. Some components of these systems, however, are aging and need to be replaced and/or upgraded to modern standards. With little state or federal financial assistance for infrastructure projects, the city and utility providers look primarily to rate payers to fund needed improvements, requiring a careful balance between the goals of maintaining quality service and affordable rates for customers.
- 2. **Capacity to Support Growth**. Barre City's water and wastewater systems have capacity available to support growth and development. The water filtration plant is operating at less than one-third of its capacity and the wastewater treatment facility is operating at less than three-quarters of its capacity. This infrastructure capacity provides the city with an advantage over other communities in the area that do not have further capacity to support growth.
- 3. **Stormwater**. Barre City's storm drainage infrastructure is less developed than municipal water and wastewater systems and will likely need to be expanded over time. To continue efforts to minimize flooding damage and improve water quality, the city will likely need to construct additional infrastructure to collect, treat and manage the discharge of stormwater. The completed North Main Street Reconstruction project addressed a number of stormwater problems in downtown Barre City. The city's hazard mitigation plan identifies a number of

additional infrastructure improvement projects that would improve stormwater management and reduce flood hazards.

- 4. **Telecommunications**. Access to state-of-the-art telecommunications infrastructure is critical to the city's future economic success. Just as Barre City needed a connection to the railroad to spur industrial development in the late 1800's, today the city needs to be connected to the digital information networks that are the catalysts for economic development in the 21st century. Barre City has complete broadband service, but given the rapid pace of change in the telecommunications sector, the city will need to remain vigilant to ensure infrastructure is upgraded as technology evolves and to improve the ability of all city residents to use and have affordable access to these technologies. CV Fiber is a non-profit organization made up of 16 Central Vermont towns, including Barre City whose goal is to get fast, dependable and affordable internet to every single person in our community. They are in the planning stages for initial deployment that will include a targeted deployment location.
- 5. **Solid Waste**. On average every Vermont resident currently generates one ton of waste per year, two-thirds of which is landfilled either in state or out of state. Central Vermont Solid Waste Management District (CVSWMD) has adopted a goal of working to achieve "zero waste" in our district. The "zero waste" goal should help create new businesses and jobs through waste-based economic development, strengthen existing businesses, and protect public health and the environment. By the end of the next decade, we anticipate that a much larger percentage of our waste will be reused, recycled, composted or otherwise diverted from the waste stream.

issues & challenges

Barre City has identified the following challenges and issues related to our public utilities that need to be addressed to achieve our vision for a healthy future:

- 1. **Water and Wastewater Infrastructure**. Barre City's drinking water and wastewater treatment plants are modern, but our distribution system still has some pipes that more than 90 years old. The city is actively working to upgrade the distribution system, but it will take time and sustained funding to modernize underground pipes throughout the city. The city has identified approximately \$2.5 million worth of improvements needed to the water transmission and distribution system, and \$8 million in improvements to the wastewater collection system. Most of these projects have been planned for at least a decade.
- 2. **Safe Drinking Water**. Barre City's water supply is an open reservoir in the Town of Orange, which is susceptible to contamination whether accidental or intentional. While there have never been any contamination problems, there have been incidents that could have caused contamination such as a plane that landed on the reservoir and a car that crashed into it.
- 3. **Stormwater Infrastructure**. Similar to the water and wastewater distribution system, much of the city's stormwater infrastructure was built prior to modern engineering standards. The pipes and culverts designed to transport stormwater out of the city are undersized in many places. Much of the flooding damage that has occurred in recent years is related to the inability of the stormwater system to handle the amount of run-off being generated. There are nearly \$1 million in stormwater-related projects included on the city's list of planned infrastructure improvements.

- 4. **Stormwater Management**. During the 2000's, federal and state stormwater regulations became more stringent and were applied to smaller development projects. More communities around the country are establishing stormwater management utilities, whereby property owners pay a fee to the municipality based on the amount of additional runoff from their site in return for the municipality taking responsibility for maintaining and/or providing a stormwater management system. The city may need to consider establishing a stormwater management utility fee if the costs for complying with stormwater regulations exceed the ability to fund required improvements through regular property taxes, or if meeting state and federal regulations becomes too burdensome for individual property owners and coordinated action is required. Alternatively, the city can use various regulatory techniques to help reduce stormwater run-off such as requiring development to limit new or reduce existing impervious surfaces.
- 5. Landfill Siting. The possibility of the need to site a new landfill in the region is always a matter of concern, although the only landfill in Vermont was granted an expansion in 2019. The city was satisfied with CVSWMD's 2005 landfill siting criteria and it is the city's policy that the criteria requirements should not be made any less stringent in the future. Further, it is the city's position that when reviewing a proposed landfill site, the impact of additional vehicles hauling regional waste on Barre City's arterial roads should be closely evaluated. Route 302, which serves as a major arterial through Barre City runs through the downtown business district. Downtown already suffers from the problems associated with truck traffic and additional truck traffic resulting from a regional landfill should not travel through downtown on a regular basis. In addition, Route 14 runs mostly through high-density residential areas and is also not suitable for the amount of additional truck traffic that could be generated by a regional landfill.
- 6. **Yard Waste**. Barre City residents have the ability to utilize the special yard waste days set aside for disposal of yard waste (grass clippings, branches, leaves, etc.) in Barre Town, and the City trucks will pick up the remaining piles left at the ends of driveways after the last day of the planned events. Some residents continue to dispose of their yard waste by dumping it over a river bank or on nearby undeveloped land. The resulting debris left in drainage ways has and will continue to become a hazard during storms as it can create blockages that lead to flooding of nearby property when water cannot flow through a channel. Yard waste can become a potential resource if properly collected, and then composted or chipped.
- 7. **Property Maintenance**. Barre City has increased its enforcement of property maintenance ordinances in recent years. The result has been a noticeable decrease in the number of properties where trash, junk vehicles and vehicle parts, appliances, furniture and similar household items have accumulated, creating unsightly, unsanitary and unsafe conditions for residents and neighbors. Continued enforcement of property maintenance ordinances and providing convenient, affordable options for proper disposal of large household items will be needed to keep this problem in check.

strengths & opportunities

Barre City has already acted to improve our public utilities, and there remain many strengths and opportunities we can build upon to continue those efforts as we strive to achieve our vision for a healthy future:

- 1. **Capacity to Support Growth**. Barre City's water and wastewater systems have excess capacity available to support growth and development. The city is currently using less than one-third of the capacity of the water filtration plant and the wastewater treatment facility is operating at less than three-quarters of its capacity. There is also three-phase power throughout downtown and in many other parts of the city. This infrastructure capacity provides the city with an advantage over other communities in the area in attracting new businesses. The economic development implications of extending infrastructure further outside the city or selling additional capacity to outlying towns should be carefully considered.
- 2. **Upgraded Infrastructure**. Unlike many communities, Barre City has recognized the need to address the issue of aging infrastructure. The city has spent the past decade upgrading our water and sewer distribution system. This effort has been coordinated with the street reconstruction program so that old pipes are upgraded at the same time as the street an efficient and cost-effective approach that avoids digging up a new street in order to repair an old pipe. The challenge in future years will be finding the funding to keep this program going at the level needed to keep our infrastructure in adequate condition. In recent years, the city has invested more than \$7 million in our water, sanitary sewer and storm sewer systems.
- 3. **Phosphorus Removal**. The city's treated wastewater effluent is released into the Steven's Branch, which is part of the Lake Champlain watershed. There is a cap on how much phosphorus the wastewater treatment plants within the watershed are allowed to send into the lake. The Barre City wastewater treatment plant has been upgraded to improve its ability to remove phosphorus from the effluent and is currently discharging less than 25% of its limit, providing ample capacity to accommodate growth.
- 4. **Well-Mapped and Inventoried Utilities**. Barre City has also mapped and inventoried underground infrastructure more accurately and completely than most communities. This information allows for more efficient repairs when a line breaks or other problem occurs, and it improves our ability to effectively plan for improvements to the distribution systems.
- 5. **Source Water Protection Plan**. Barre City has a Source Water Protection Plan and inventories the properties adjoining the reservoir that provides the city's drinking water every three years to prevent potential contamination.
- 6. **Waste-Based Economic Development**. ReSOURCE completed a project to restore the historic granite shed at 30 Granite Street, and is an example of waste-based economic development and adaptive reuse of the city's industrial buildings. The project's retail component, the ReSTORE which opened in December 2008, is a reuse operation offering household goods, appliances, building materials, and art supplies. The former granite shed serves as a learning site for at-risk youth and unemployed workers called youthBuild, provides creative materials for artists and educators, and give families in crisis access to basic household goods and services.

goals & strategies

Barre City has established the following goals and strategies for public utilities in order to achieve our vision for a healthy future:

- 1. For Barre City's Public Works Department to provide business and residential customers with reliable and affordable utilities services as needed to support economic vitality and quality of life in the city.
 - A. Maintain public water and sewage systems that meet state and federal standards, and that support the city's goals for economic and residential growth.
 - A-1. Continue upgrading aging water and sewer pipes in coordination with the city's street reconstruction program.
 - B. Continue to actively pursue a new Public Works Facility.
 - C. Continue efforts to improve stormwater drainage infrastructure within the city.
 - C-1. Adopt a policy to guide the sizing of culverts to ensure that new or replacement infrastructure will be better able to carry stormwater out of the city during heavy storms.
 - C-2. Implement the stormwater improvements identified in the city's hazard mitigation plan.
 - D. Continue to actively participate in the Central Vermont Solid Waste Management District and advocate for regional solid waste management practices, policies and facilities that will benefit Barre City residents and business.
 - D-1. Support CVSWMD's "zero waste" goal and assist in its implementation.
 - D-2. Oppose solid waste projects that would re-direct more of the region's waste hauling truck traffic through the city's downtown business district or residential neighborhoods.
 - D-3. Review the regional Solid Waste Implementation Plan (SWIP) each time it is revised and re-adopted.

next steps

Barre City should pursue the following actions in order to achieve our vision for a healthy future:

1. Prepare and adopt a Capital Improvement Program, which would incorporate the capital improvements needed by city-owned utilities into a municipal capital planning and budgeting process that would include all city departments/services.

Status: A Plan for city vehicles is currently managed through the City.

Timing: 2021

Partners: City Finance Director, City Manager, City Planner, Planning Commission, Department Heads, Council

Notes: The city could apply for a Municipal Planning Grant to prepare a capital plan & budget.

2. Install guard rails around the city's reservoir.

Status: No action taken to date.

Timing: 2025

Partners: City Engineer, City Manager, City Council

Notes: This project is listed in the city's 2017 Hazard Mitigation Plan as a low priority action. It may be eligible for partial funding from the EPA.

3. Pursue further waste-based economic development, expanding and building upon the success of ReSOURCE's project at 30 Granite Street.

Status: The solid waste district's "zero waste" policy and Act 148, which established universal recycling and composting statewide, create an opportunity for economic growth in this sector.

Timing: Work currently underway and continuing in subsequent years.

Partners: City Manager, City Planner, Barre Area Economic Development

benchmarks

Barre City should measure progress towards achieving our vision for a healthy future against the following benchmarks:

1. **Annual number of water quality violations**. The quality of drinking-water is a critical determinant of health. Clean drinking water is a foundation for the prevention and control of waterborne diseases. *Source: Vermont Agency of Natural Resources, Drinking Water and Groundwater Protection Division*

In 2010: 1 Target for 2025: 0

2. **Annual number of sewer overflows**. Untreated sewage carries pathogens that can be spread to surface waters, drinking water supplies and swimming areas. It can also kill aquatic life and create algal blooms. *Source: Vermont Agency of Natural Resources, Wastewater Section*

In 2010: 1 In 2011: 1 In 2015: 1 In 2016: 2

Target for 2021 and beyond: