



LAND USE REVIEW BOARD

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CHITTENDEN COUNTY
VERMONT

2026

ecos REGIONAL PLAN

DRAFT

October 16, 2025



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Introduction & Plan Overview

CCRPC RESOLUTION (INSERT SPRING 2026)

ACKNOWLEDGEMENTS

Land Acknowledgement

As planners, we work on land issues every day. We must acknowledge that Chittenden County is part of the ancestral homeland of the Alnôbak, the Western Abenaki people, who have been the ongoing stewards of these lands and waters for over 10,000 years.

The Alnôbak have sustained continuous and reciprocal relationships with this land—through hunting, fishing, farming, and careful management of rivers, forests, and seasonal cycles. Despite forced removal and centuries of dispossession, violence, and state-sanctioned erasure, Abenaki communities have endured and continue to live, lead, and care for these homelands today.

We acknowledge this land and honor the legacy, experience, and existence of these Indigenous people.

We also take this space to recognize the land itself and the many blessings and responsibilities that come with our presence here. The health of our human communities is deeply connected to the well-being of all beings, human and non-human. While it is important to craft a land acknowledgement statement, our actions must reflect our words. As planners, we have a responsibility to engage with Indigenous communities in meaningful, collaborative, and lasting ways as we work toward a more just and inclusive future.

We have begun the important work of building relationships with Indigenous communities in and around Chittenden County. We are committed to continuing this work with humility, openness, and care—learning from Indigenous leadership and deepening collaboration over time. This is part of our broader effort to move beyond words and toward shared action for a just and collective future. See *Actions 1.b, 1.d, 2.a, 2.d, 2.e, and 4.d in Equitable Planning Practices*, *4.a and 4.b in Land Use*, and *3.c in Scenic, Recreation and Historic Resources* for more details.

ECOS Plan Acknowledgements

This document is the product of a multi-year planning effort that included many residents, businesses, organizations, CCRPC staff, and members of advisory committees and commissions. Thank you to all who participated. This plan reflects your vision, ideas, and commitment to Chittenden County's future.

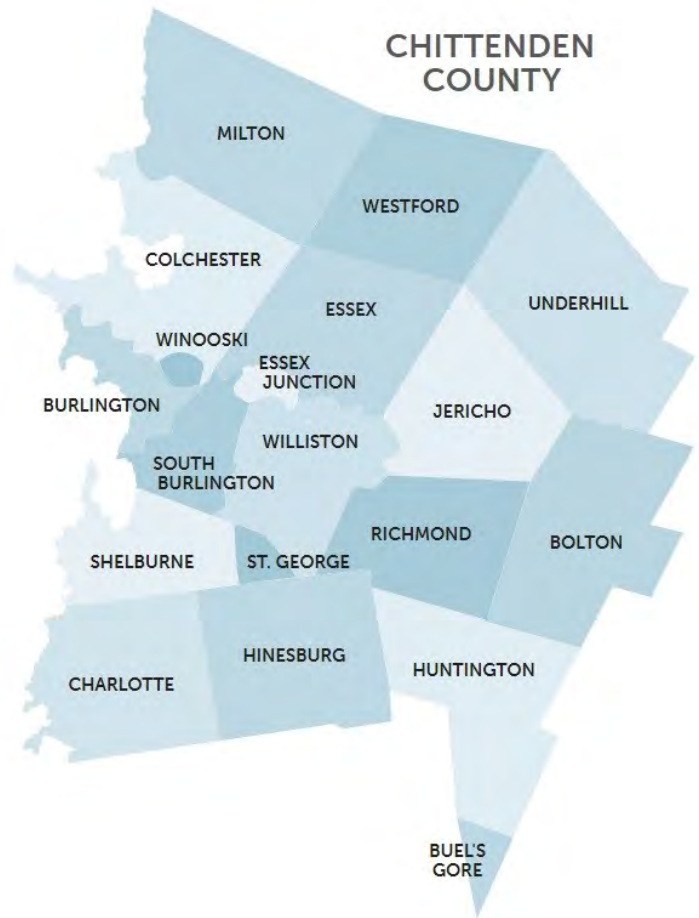
A special thanks to Dan Albrecht, Charlie Baker, Maya Balassa, Eleni Churchill, Marshall Distel, Christine Forde, Kate McCarthy, Sarah Muskin, Melanie Needle, Taylor Newton, Darren Schibler, Anne Nelson Stoner, Emma Vaughn and to the many current and former CCRPC employees who spent countless hours putting this plan together. Thank you to the Long-Range Planning Committee (LRPC), LRPC's Energy Sub-Committee, the Planning Advisory Committee (PAC), the Transportation Advisory Committee (TAC), the Clean Water Advisory Committee (CWAC), and the Community Engagement Advisory Committee (CEAC) for your collaboration in this process, and to CCRPC's Board of Directors for their oversight. For a full list of CCRPC Staff, committee members, and Commissioners, please visit the [CCRPC website](#).

THE CHITTENDEN COUNTY REGIONAL PLANNING COMMISSION

The municipalities of Chittenden County [created the Chittenden County Regional Planning Commission](#) (CCRPC) in 1966 to guide the development of policies, plans, and programs that address regional issues and opportunities within the county. The CCRPC is one of 11 regional planning commissions (RPCs) in Vermont. It also serves as the state's only Metropolitan Planning Organization (MPO), an entity created and designated to carry out the metropolitan transportation planning process. In the absence of county government, Vermont's RPCs play a crucial role in connecting communities and state government.

As an MPO, CCRPC conducts transportation planning and manages the distribution of federal transportation planning funds. As an RPC, it guides broader efforts in land use, environmental protection, and economic development, offering support to municipal governments and leading regional initiatives. The CCRPC provides planning and technical assistance to its member municipalities and the public while remaining consistent with federal and state requirements.

The CCRPC is governed by a [Board of Directors](#), composed of 19 municipal representatives, five at-large (non-municipal) representatives, and five organization-specific seats. The legislative body of each of Chittenden County's 19 municipalities selects and appoints its own commissioner and alternate commissioner. In addition, the Board appoints at-large representatives from agriculture, socio-economic / housing, industrial / business, conservation / environment, and the railroad industry. The Vermont Secretary of Transportation, or their designated alternate, represents the state of Vermont Agency of Transportation (VTrans), while the following entities appoint their respective representatives and alternates: Federal Highway Administration (FHWA), Federal Transit Administration (FTA), Green Mountain Transit (GMT), and the Patrick Leahy Burlington International Airport (PLBIA).



Key focus areas of the CCRPC include:



Key achievements in the past decade include:

Supporting Public Health | Worked on the Regional Prevention Partnership (RPP) grant with the Chittenden Prevention Network, United Way of Northwest VT, and the VT Department of Health; and served as a core organization of the Chittenden County Population Health Alliance. Through RPP, four municipalities included healthy community design and substance use prevention actions in their comprehensive plans. Another municipality has a substance-free parks and public event ordinance, and in 2019 established its first sharps disposal kiosk.

Building Capacity to Address Systemic Racism and Inequities | Efforts include signing on to the community declaration of racism as a public health emergency; assisting VTrans with a RAISE grant application to develop a

transportation equity framework; working with VTrans to revamp its annual project selection and prioritization process to incorporate equity criteria; undertaking an organizational equity audit; hiring an outreach and engagement manager; and establishing a Community Engagement Advisory Committee comprised largely of community members.

Planning for Safe, Sustainable Regional Transportation | Completed the multi-year I-89 2050 Study, in collaboration with VTrans, municipalities, and other partners to develop an investment plan for the 37-mile I-89 corridor in Chittenden County through 2050. The I-89 Study Implementation Plan identifies and prioritizes the projects and programming necessary to guide the corridor toward the vision of a safe, sustainable, resilient, reliable, and efficient interstate system over the next 30 years, and includes recommendations for the short term (1-5 years), medium term (6-15 years), and long term (15+ years). Other regional transportation projects include the [ECOS Metropolitan Transportation Plan](#) (2023), [Regional Active Transportation Plan](#) (2022), [Chittenden County Park and Ride Plan](#) (2022), and [Advanced Traffic Monitoring System](#).

Addressing the Region's Housing Shortage | In 2016, Champlain Housing Trust, Evernorth, and the Chittenden County Regional Planning Commission launched the Building Homes Together campaign to address the region's severe housing shortage. During the campaign's first five years, 3,600 homes were successfully built, eclipsing the original goal, but challenges remain. Building Homes Together 2.0, launched in 2021, seeking to build 5,000 homes by 2025 for people of all incomes, including at least 1,250 affordable homes. The campaign has successfully raised awareness of the regional and statewide housing shortage and the passage of several legislative changes (the HOME Act in 2023 and Act 181 in 2024) which set new statewide, regional, and municipal housing targets.

Creating a More Inclusive Public Participation Plan | As part of ongoing efforts to engage the public, CCRPC updated its Public Participation Plan throughout 2025 and 2026 in collaboration with the Community Engagement Advisory Committee and community partners. The plan provides the methodology for involving the public in CCRPC's work, using traditional and innovative outreach methods to meet the needs of the growing and increasingly diverse community.

Helping to Increase Dialogue Between Municipal Officials and State Legislators | Since 2015, the CCRPC has held an annual legislative breakfast in December, where member municipalities discuss high-priority issues and actions important to them in advance of the legislative session.

Increasing Access to and Interest in Regional Data Trends | CCRPC has historically produced an [ECOS Annual Report](#) to monitor and build on successes, bring new information to the legislature and community leaders, and continue to work on areas that need improvement. These resources, combined with an [online data scorecard](#), provide insight into current and future needs in Chittenden County, and allow us to focus on long-term solutions rather than just treating short-term symptoms.

Advancing State Energy and Climate Goals | CCRPC developed and updated a [Regional Enhanced Energy Plan \(EEP\)](#) to advance the state's Comprehensive Energy Plan (CEP) and Climate Action Plan's (CAP) climate and energy goals, while staying consistent with municipal and regional land use plans. The CCRPC also [provides guidance](#) to municipalities on how to amend the land use regulations to limit low density sprawl, enable compact walkable neighborhoods, and protect the working and natural landscape to ensure climate change resilience.

Strengthening Local Economic Partnerships | In 2023, CCRPC adopted the [West Central Vermont Comprehensive Economic Strategy \(CEDS\)](#), a strategy-driven plan for regional economic development. The regional planning commissions (RPCs) and regional development corporations (RDCs) serving Addison, Chittenden, Rutland, and Washington counties, and part of Orange County, developed the CEDS over the course of three years.

Land Use Reform | In late 2023, CCRPC led efforts to collaborate with the Vermont Association of Planning and Development Agencies (VAPDA) to complete a legislatively required study on potential reforms to regional future land use planning. This [report](#), combined with two other reports on the state designation program and location-

based Act 250 jurisdiction, provided the basis for significant reform to land use planning and Act 250 during the 2024 legislative session (Act 181).

Knowing the CCRPC’s capabilities, aspirations, and track record of successful project completion and support to member municipalities, the organization remains confident that it will continue to receive support from Chittenden County communities, and that the region will collectively work together toward creating a healthier, more inclusive, and more prosperous community.

INTRODUCTION TO THE ECOS PLAN

ECOS: Environment. Community. Opportunity. Sustainability.



Environment: The natural landscape, human-built, and cultural context of local surroundings.



Community: The unique, vibrant individuals and landscapes that create the environment. Community is valuable to the work of CCRPC, an organization that is of and for the people.



Opportunity: The ability for groups or individuals to build capacity and reach self-actualization, by increasing opportunities.



Sustainability: The just preservation of social, economic, and environmental resources for present and future generations.

ECOS Plan Vision and Mission



Vision
Chittenden County is a healthy, inclusive, and prosperous community.



Mission
CCRPC will have a collaborative planning process with residents, and public and private organizations, to develop a consensus toward prioritizing actions that will achieve the goals below. The intent of this effort is to strengthen and enhance coordination, accountability, and implementation of plans developed by participating organizations, including state and local governments, planning organizations, and partners from among businesses, environmental groups, educational facilities, and human services.

What is the ECOS Plan?

The ECOS Plan:

- **Is a statutorily required plan** to protect Chittenden County’s resources and guide its development by providing guidelines for managing growth.

- **Incorporates the visions and goals** of municipalities, organizations, businesses, and residents to enhance the whole community’s quality of life.
- **Is collective:** no one piece will bring success without the others.

It combines four plans into one: the **Chittenden County Regional Plan**, **Metropolitan Transportation Plan (MTP)**, **Enhanced Energy Plan (EEP)**, and **Comprehensive Economic Develop Strategy (CEDS)**.



The **CEDS** establishes economic development priorities for Chittenden County. Updates occur every five years. See Supplement 4.



The **MTP** evaluates the long-term transportation needs of Chittenden County and develops strategies to meet the needs and achieve the county’s transportation and climate goals. Updates occur every five years. See Supplement 5.



The **EEP** establishes the magnitude of change needed in the heating, electricity, and transportation sectors to advance Vermont’s energy and decarbonization goals. Updates occur every five-to-eight years. See Supplement 6.

Combining these plans into one allows the CCRPC to align objectives and collaborate across sectors on coordinated agendas of action.

The original ECOS Plan, adopted in 2013 and revised in 2018, stitched together hundreds of voices from community members, and more than 60 organizations, to create and convey shared visions and priorities for the region. This 2026 ECOS Plan is an update to the original version. It incorporates new data, complies with new statutory requirements, and accounts for shifting regional priorities.

Goals

The ECOS Plan includes the following goals that frame the actions and the projects CCRPC will implement to achieve Chittenden County’s vision for the future. There are **17 goals** with associated key issues and indicators throughout the plan:

ECOS GOALS

The following **17 goals** frame the strategies and projects that set a course for achieving Chittenden County's vision for the future. The goals have associated key issues and indicators throughout the plan.



EQUITABLE PLANNING PRACTICES

Develop, support, and implement collaborative planning systems that are equitable, accessible, and inclusive; that use taxpayer dollars effectively and efficiently for public benefit; and that assess and address environmental benefits and burdens to advance sustainability and environmental justice.



WORKING LANDS

Support the growth and vitality of working farms and managed forests by increasing investments and decreasing subdivisions. Minimize and mitigate environmental impacts of industry.



TRANSPORTATION

Provide a transportation system that is safe, efficient, reliable, and resilient; provides for interconnected and sustainable mobility choices for livable, equitable, and healthy communities; supports regional and municipal land use goals; addresses the climate crisis; and strengthens the economy of the region.



ECONOMY

Retain and support existing employers, grow living wages and high wage employment, and work to attract and sustain a greater diversity of businesses and people in the economy.



INFRASTRUCTURE & FACILITIES

Advance infrastructure and facilities that support Centers, Planned Growth Areas, and Village Areas while protecting ecological systems.



ECOLOGICAL SYSTEMS

Conserve, protect and improve air quality, water quality and quantity, and the health of native species and habitats.



LAND USE

Focus 90% of development in areas planned for growth (Downtown Centers, Village Centers, Planned Growth Areas, Village Areas, and Transition), in order to maintain a settlement pattern of compact centers separated by rural countryside.



HOUSING

Strengthen and promote access to affordable, safe, energy efficient, accessible, and fair housing in all neighborhoods in Chittenden County for all people, and plan to accommodate a substantial majority of housing in centers, planned growth areas, and village areas.



HOUSEHOLD FINANCIAL SECURITY

Support multi-pronged efforts that foster economic security so that all households in Chittenden County can not only meet their basic daily needs, but also prepare for the future and achieve a high quality of life.



ARTS & CULTURE

Increase and support access and participation in the arts and cultural opportunities.



CIVIC ENGAGEMENT

Foster trust in local and regional government and find ways for Chittenden County community members to have influence in political and non-political decisions that affect their lives, neighborhoods, and communities.



WATERSHED HEALTH

Improve the safety, water quality, and habitat of rivers, streams, wetlands and lakes in each Chittenden County watershed.



ENERGY

Transform the region's energy system to meet Vermont's energy and greenhouse gas reduction goals. In the process, avoid unfair impacts on marginalized groups, and maintain ecological health, economic vitality, and equitable access to affordable energy.



HEALTH

Promote preventative care, healthy lifestyles, and community wellness, and improve access to affordable healthcare services, while reducing healthcare disparities for all community members.



EMERGENCY MANAGEMENT

Protect Chittenden County communities from natural, technological, and societal hazards through prevention, preparedness, response, recovery, and mitigation.



SCENIC, RECREATIONAL & HISTORIC RESOURCES

Conserve and protect valued scenic, recreational, and historic areas and resources.



SOCIAL CONNECTEDNESS

Foster social connections and supports for all people in their communities.

Actions

The CCRPC and its partners will undertake a number of actions in order to achieve the goals stated above. The actions appear at the end of each chapter.

How Is the ECOS Plan Used?

The CCRPC and municipal planning partners use the ECOS Plan to frame and guide planning and project priorities. Uniting community plans under a comprehensive regional plan provides key insights for communities through regional studies and enables a broader understanding of the trends and regional dynamics that drive planning and investment decisions. State regulatory proceedings also use the ECOS Plan in relation to large scale development (Act 250/Section 248). The ECOS Plan provides an opportunity for governmental and non-governmental organizations, communities, and residents to engage in the planning process through its development every eight years. As a public document, residents can and should reference and rely on the ECOS Plan to hold the CCRPC accountable for implementation (see Chapter 18: Stewardship, Implementation, and Monitoring).

For the purposes of complying with VT Statute (24 VSA 4348a), the ECOS Plan's goal statements and the maps are located throughout this document and online (more detail about the maps can be found below). These goals of the plan are influenced by analysis reports, data, sub-committee expertise and public participation efforts. The actions described in the ECOS Plan will help CCRPC, member municipalities and partners reach our desired goals. CCRPC deliberately chose to make the 2026 ECOS Plan a strategic plan that is intended to provide general advisory guidance and intentionally chose to use "should", rather than "shall," in many of the Plan's goal statements.

EQUITY & REGIONAL PLANNING



"Equality is leaving the door open for anyone who has the means to approach it; **equity** is ensuring there is a pathway to that door for those who need it."

-Caroline Belden, *The Inclusion Solution*

"America is an old house. We can never declare the work over. Wind, flood, drought, and human upheavals batter a structure that is already fighting whatever flaws were left unattended in the original foundation... Not one of us was here when this house was built. Our immediate ancestors may have had nothing to do with it, but here we are, the current occupants of a property with stress cracks and bowed walls and fissures built into the foundation. We are the heirs to whatever is right or wrong with it. We did not erect the uneven pillars or joists, but they are ours to deal with now. And any further deterioration is, in fact, on our hands."

-Isabel Wilkerson, *Caste: The Origin of Our Discontents*

Planning has long been used as a central tool of government at the federal, state, and local levels to create, maintain, and exacerbate inequities, especially across racial lines. As a result of planning decisions such as redlining, restrictive zoning and development laws, racial covenants, unfair lending practices, environmental degradation, and other federally sanctioned programs, Black, Indigenous, and people of the global majority have been denied equal access to housing, earning potential, environmental health, healthcare, wealth access, and other systems of social support.¹

While Vermont has its own unique history, it does not operate outside of this larger history. Chittenden County has seen state-sanctioned eugenics, exclusionary housing covenants, urban renewal projects, exclusionary zoning and development restrictions, highway construction through low-income neighborhoods, and poor-quality public housing constructed in its communities. These planning practices have contributed to worsening inequality:

- Income inequality has risen steadily since the 1970s.² White households within Chittenden County have more than double the income of Black households.³
- A family making the median household income in Chittenden County is estimated to spend nearly half of it on housing and transportation costs combined. This statistic is above the 45% threshold to be considered cost burdened.⁴
- Roughly 16% of households in Chittenden County are considered *severely* cost-burdened, based solely on their housing costs (households that spend more than 50% of their income on housing are considered severely cost-burdened).⁵
- About 65% of White households own their homes, compared to only 26.1% of Black households in 2021.⁶ This homeownership gap has widened by more than 18% since 2010.
- Vermont has the second-highest homelessness rate per-capita in the country behind only California.

Between 2010 and 2020, the population of Chittenden County grew by nearly 12,000 people, or 7.5%. Almost all of that population growth (99.7%) was concentrated among residents who are Hispanic, Black or American, Asian, American Indian or Native Hawaiian. Chittenden County and Vermont must consider systemic inequities in its future development and planning practices as the State grows more diverse to ensure that existing inequality is not increased and/or perpetuated.

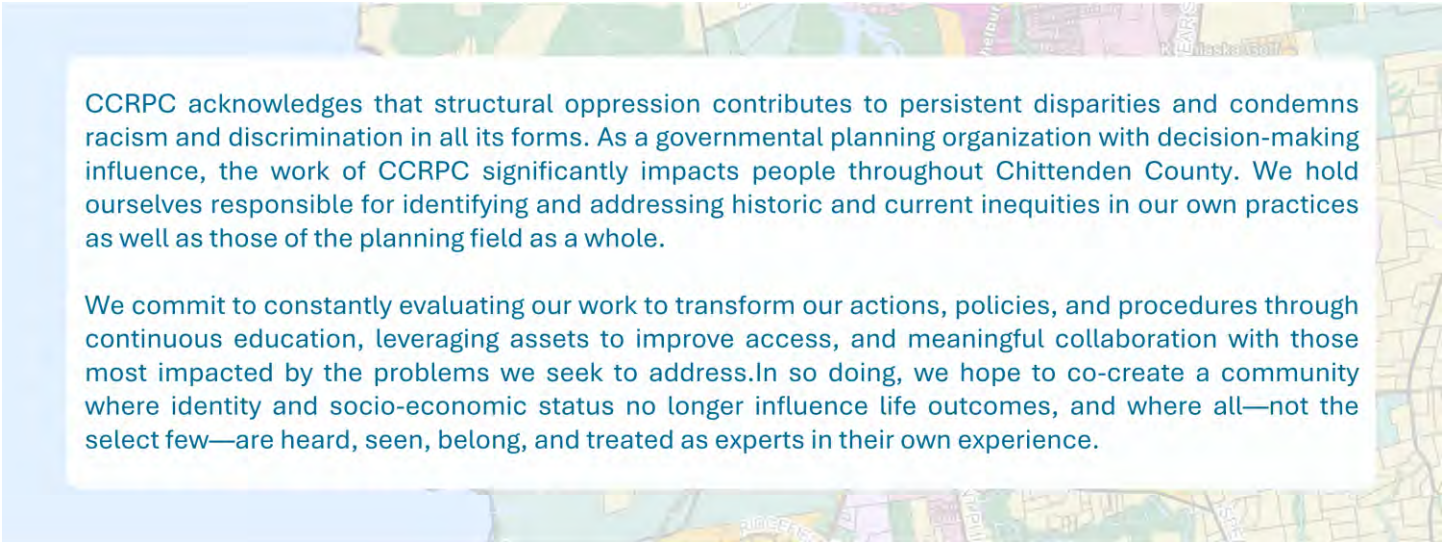
Achieving a healthy, inclusive, and prosperous future for all Chittenden County community members is the vision of the ECOS Plan. Addressing inequity in the Chittenden County community can be seen throughout the plan's goals and actions. There is much work to be done.

The CCRPC's Commitment to Equity

As an organization that holds decision-making influence about land-use and resource distribution, CCRPC has a unique responsibility to promote equitable opportunities to thrive for all Chittenden County communities. In the wake of COVID-19, a number of social justice movements surfaced long-existing systemic inequities embedded within the United States. In response, the CCRPC began a deliberate journey to understand its institutional history and community impacts, integrate systemic change into organizational culture, reframe institutional processes for collaboration and decision making to rectify the inequities within the planning field, and to develop policies and programs to foster equity and opportunity.

This journey began in 2020 with an organizational [commitment](#), followed by the 2021 hiring of a Vermont-based third-party consultant to conduct an [organizational equity assessment](#). The goal was threefold: 1) to gain a deeper understanding of organizational problematic processes and shortcomings; 2) to develop actionable steps to begin rectifying past harm; and 3) to commit to future processes that center justice in CCRPCs work. Since then, the CCRPC has formed a [Community Engagement Advisory Committee \(CEAC\)](#) to address and prioritize these recommendations, developed an internal Equity Leadership Team, and hired a full-time Outreach and Engagement Manager.

In 2021, CCRPC hosted a virtual Equity Summit to gather advocates, municipal elected officials, and municipal staff to discuss challenges and opportunities in planning for racial and economic equity. In 2023, CCRPC joined the Government Alliance on Race and Equity (GARE) to take part in national learning and conversations around transforming government. Through this process, and in collaboration with CCRPC staff and the CEAC, CCRPC adopted a formal organizational [equity statement](#) in 2023:



CCRPC acknowledges that structural oppression contributes to persistent disparities and condemns racism and discrimination in all its forms. As a governmental planning organization with decision-making influence, the work of CCRPC significantly impacts people throughout Chittenden County. We hold ourselves responsible for identifying and addressing historic and current inequities in our own practices as well as those of the planning field as a whole.

We commit to constantly evaluating our work to transform our actions, policies, and procedures through continuous education, leveraging assets to improve access, and meaningful collaboration with those most impacted by the problems we seek to address. In so doing, we hope to co-create a community where identity and socio-economic status no longer influence life outcomes, and where all—not the select few—are heard, seen, belong, and treated as experts in their own experience.

While it is important to craft a statement as a starting point, actions speak louder than words. To follow this statement, in 2024, CCRPC staff and the Community Engagement Advisory Committee developed organizational values and a code of conduct to guide staff, board and committee behavior and incorporate restorative practices into conflict management. Building on recommendations outlined in the equity assessment, The CCRPC has added an Equitable Planning Practices chapter to the ECOS Plan to ensure equity moves beyond ideals to actions embedded in the daily practices of CCRPC staff. For more information on CCRPC's current and ongoing efforts to incorporate justice, equity, inclusion and belonging into its work, visit the [Community Engagement webpage](#).

LANGUAGE

Even the most frequently used language around identity can cause confusion. To achieve a degree of shared understanding, this section is CCRPC's attempt to define certain terms used in the ECOS Plan when referring to populations and groups that have been discriminated against and currently experience marginalization to ensure that the intent of the language is clear. CCRPC recognizes that these categories and identities are not bound or stagnant, but rather complex and intersectional, changing in relation to power and different identities such as race and gender.

The following list includes several terms used throughout this plan, with brief definitions of how CCRPC intends the term to be understood. Many of these terms and definitions were adapted from the [American Psychological Association's Inclusive Language Guide](#). CCRPC anticipates that terms used in the plan will continue to evolve to best represent these communities.

For a complete glossary of terms used in this plan, please see [this glossary](#).

BIPOC (Black, Indigenous, and People of Color): People use the term "BIPOC" to acknowledge that not all people of color face equal levels of injustice. The construction of the term recognizes that Black and Indigenous people are severely impacted by systemic racial injustices. The term BIPOC is used in this plan, however, the term people of color and communities of color is preferred and used when possible. This is because some scholars argue that the term BIPOC homogenizes communities of color together and a need exists to account for people's unique racial, cultural, and intersectional identities.

Black and/or African American: Generally, the term Black denotes a racial identification, while African American refers to an ethnicity, specifically Americans with ancestry from one or more of the African continent's Black racial groups.

Disability: A broad concept that describes the interaction of physical, psychological, intellectual, and socioemotional differences with the social environment.

Equity: An ongoing process of assessing needs, correcting historical inequalities, and creating conditions for optimal outcomes by members of all social identity groups. Equity also consists of providing resources according to the need to help diverse populations achieve their highest state of health and other functioning and identifying and breaking down barriers to achievement of fair outcomes.

Global Majority: Also known as people of the global majority (PGM), a collective term that encourages those of African, Asian, Latin American, and Arab descent to recognize that together they comprise the vast majority (around 80%) of people in the world. Understanding the truth that Whiteness is not the global norm has the power to disrupt and reframe conversations on race. Countries that tend to have less economic power and wealth are also sometimes referred to as “majority world” nations instead of “third world” or “developing” countries, terms that are no longer accurate in categorizing countries.

Inclusion: The measure of the quality of representation, such as full access, authentic representation, empowered participation, true belonging, and power-sharing. Inclusion is a qualitative measure of representation and participation.

Latino/a, Latine, Hispanic: Latino and its variations refer to a person with origins from anywhere in Latin America (Mexico, South and Central America) and the Caribbean. Latine is a gender-inclusive alternative to Latino/a that is more adaptable to the Spanish language than Latinx and is therefore preferred. Hispanic refers to a person with ancestry from a country whose primary language is Spanish.

LGBTQ+: LGBTQ+ stands for lesbian, gay, bisexual, transgender, and queer. The plus sign symbolizes the other innumerable identities included under the LGBTQ+ umbrella, like [asexual](#) and [intersex](#).

Low-Income: Families and individuals whose incomes do not exceed 80% of the median income of the area involved with adjustments for smaller and larger families.

Marginalization: Marginalized communities are those excluded from dominant social, economic, educational, and/or cultural life. Examples of marginalized populations include, but are not limited to, groups excluded because of age, gender, gender identity and expression, race, ethnicity, religion, national origin, immigration status, language, disability, sexual orientation, and socioeconomic status. Marginalization occurs because of “unequal power relationships between social groups” that perpetuate and sustain inequities.

Older Adults: For the purposes of this regional plan, older adults are defined as individuals age 60 and older. This aligns with the Vermont Department of Disabilities, Aging and Independent Living (DAIL) and the federal Older Americans Act, which set 60 as the threshold for eligibility for many aging-related programs and services. At the same time, CCRPC recognizes that aging is a continuum. People ages 50–59 may also experience many of the same challenges (e.g., housing accessibility, mobility, healthcare, or caregiving responsibilities) and should be considered in contexts where early aging-related needs intersect with planning, housing, and transportation policy.

People of Color: This term represents a shift from the term “[minority](#)” to refer to individuals from [diverse](#) racial and ethnic backgrounds. Although it is acceptable for communities to be described as “minoritized,” it is not recommended to refer to people or a population as *minority*. Instead, use “people of color” or “communities of color” when referring to groups from diverse backgrounds who are non-White. This plan uses the terms ***underserved, underrepresented, or marginalized*** to describe populations of color, using the specific group title when possible, such as Asian American women, Black students, or Indigenous communities.

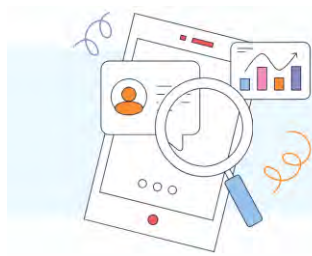
Race: The social construction and categorization of people on the basis of perceived shared physical traits that result in the maintenance of a sociopolitical hierarchy.

Vulnerability: Refers to the state of being susceptible to harm, risk, or exploitation. It can arise from various factors, including personal circumstances, social dynamics, or systemic inequalities. Vulnerability can manifest in different forms, such as physical, emotional, economic, or social vulnerability. Vulnerable communities may face increased challenges in protecting their well-being, rights, and interests. This can include populations such as children, the elderly, individuals with disabilities, those experiencing poverty, or marginalized communities.

CLIMATE CHANGE & ENVIRONMENTAL JUSTICE

Climate change is a pressing global issue that demands immediate attention and action. As CCRPC embarked on the redevelopment of the ECOS Regional Plan the organization determined that it is crucial to acknowledge the significant impact that climate change has on the environment, economy, and communities. In previous iterations of the ECOS Plan, climate change was a separate chapter with its own overview, goals, and actions. As the impacts of climate change expand to all corners of society, it is clear that the ECOS Plan must address the impacts of climate change in all the chapters of the plan. Thus, as with equity, CCRPC has adopted a systemic approach of integrating and embedding climate change- and environmental justice-related actions throughout the plan.

Climate Change in Vermont



Data for this section is drawn from the [2021 Vermont Climate Assessment](#).

The world is witnessing changes in climate due to human activities, particularly the burning of fossil fuels. Climate model forecasts for the Northeast U.S. predict that, regardless of mitigation efforts, temperatures will continue to increase during this century. In Vermont, the average annual temperature is about 2°F warmer than it was in 1900. Winter temperatures have warmed 2.5x more quickly than the average annual temperature since 1960. Extreme weather events such as heat, droughts and floods are also increasing with climate change. Since 1900, the average annual precipitation has increased by 7.5 inches. Vermont experiences 2.4 more days of heavy precipitation than in the 1960s, most often in summer. However, Vermont still experiences prolonged droughts due to shifts in the water cycle, indicating that different regions of Vermont can experience different climate impacts.

A few examples of Vermont climate change impacts follow, all of which harm public health, affect the economy, and add to planning uncertainties:

- **Air Quality** | Climate change is compounding issues with air pollution by facilitating higher pollen production, wildfire smoke, and summer smog formation.
- **Water** | More frequent intense rainfall increases storm water runoff and the potential for flooding, with impacts ranging from increasing pollutants in local waterways to creating dangerous conditions for people and property. Warmer water nutrients encourage the growth of bacteria and blue-green algae. Cold-water native aquatic species are struggling to survive in warmer waters.
- **Heat** | Heat stress is especially concerning for the elderly, very young children, and populations living in urbanized areas that experience the heat island effect. This occurs when trees and other vegetation are limited, and buildings and roads reflect the sun's heat, which increases daytime temperatures.
- **Ecological Communities** | Vermont forest composition is changing. Oak and hickory trees, which are better adapted to warmer, wetter conditions, are replacing maple, beech, and birch trees. Invasive species, like the hemlock woolly adelgid, and the emerald ash borer, will further affect change in forest composition. Warmer temperatures allow the spread of insect-borne diseases, such as West Nile virus, and Lyme disease.

- **Agriculture** | Warmer temperatures disrupt maple sugar production, reduce yields of cool-weather crops, and decrease production from heat-stressed dairy animals. Climate change may also extend and expand the growing season. However, conditions are becoming less predictable because of greater variability in temperatures, precipitation, and increased frequency and intensity of flooding. These conditions are causing significant crop losses.
- **Built Environment** | Climate-induced flooding puts infrastructure at risk and can impact the safety of the state's water supply. Although warmer winters will require less fuel for heating, hotter summers will increase electricity demands for cooling.
- **Recreation and Tourism** | Warmer temperatures impact the ski season and other activities (i.e. leaf peeping and apple picking) and may decrease tourism dollars coming into the state. However, new tourism activities could arise with longer summers and warmer shoulder seasons.

The State legislature has enacted several pieces of legislation in recent years related to climate change. The Global Warming Solutions Act sets ambitious targets for greenhouse gas emissions reduction. The Community Resilience and Biodiversity Protection Act sets goals for land conservation. These efforts may appear in conflict with other legislative actions in recent years to develop goals for new housing development in the HOME Act and Act 181 of 2024. However, CCRPC finds that these legislative directives are not in conflict but are in fact mutually required to secure our future during a time of climate change. Both conservation and housing, in the appropriate locations, need to be pursued to ensure that our communities remain both climate resilient and economically resilient.

The Vermont Climate Council adopted the 2025 Vermont Climate Action Plan in June 2025. The plan includes Top 10 Priority Actions. The 2026 ECOS Plan is aligned with, and supports, these Top 10 Priority Actions.

Environmental Justice

In 2022, the State of Vermont passed [Act 154](#), the Vermont Environmental Justice (EJ) Law. The law is the state's first law specifically meant to address environmental health disparities and improve the health and well-being of all Vermont residents. The purpose of the Environmental Justice Law is to ensure all Vermonters regardless of race, cultural background, or income have equitable access to environmental benefits such as clean air and water, healthy food, and public transportation. The Environmental Justice Law also protects communities from disproportionate environmental burdens such as polluted air and water, climate change impacts, and limited access to green spaces. The Environmental Justice Law requires State agencies to meaningfully engage Vermonters in the environmental decision-making processes.

Act 181 of 2024 updated Vermont's state planning goals (24 VSA 4302) by adding a goal to "equitably distribute environmental benefits and burdens," particularly in underserved or overburdened communities. To comply with this goal, CCRPC is evaluating the equity impacts of land use decisions, conducting robust public engagement with historically excluded groups, utilizing data and mapping tools to identify environmental inequities, and documenting efforts to address these issues in their plans. This work will be ongoing. The goal is to advance equitable and sustainable regional development that promotes environmental justice.

The Environmental Justice bill ([Act 154](#) of 2022) highlights the following inequities specific to Vermont's BIPOC population, which primarily resides in Chittenden County, and to mobile home occupants:⁷



BIPOC individuals are **2x** as likely to have trouble affording fresh food and to go hungry in a month than white individuals.



76% of BIPOC individuals in Vermont live in “nature deprived” census tracts with a higher proportion of natural areas lost to human activities than the Vermont median, compared to **27%** of white individuals.



BIPOC individuals were **7x** more likely to have gone without heat in the past year, over **2x** more likely to have trouble affording electricity, and **7x** less likely to own a solar panel than white Vermonters.



Mobile homes make up **7.2%** of all housing units in Vermont and were approximately **40%** of sites affected by Tropical Storm Irene.

The Environmental Justice bill (3 V.S.A. 6002) defines Environmental Justice as:

- All individuals are afforded equitable access to and distribution of environmental benefits and burdens.
 - An **environmental benefit** is an asset and service that enhances the capability of communities and individuals to flourish in society. Examples include *access to healthy environment, clean natural resources (air, water, land, green spaces, playgrounds, outdoor recreational facilities and venues), affordable clean renewable energy sources, public transportation, fulfilling and dignified green jobs, healthy homes and buildings, health care, nutritious food, Indigenous food and cultural resources, environmental enforcement, training and funding.*
 - An **environmental burden** is a significant impact to clean air, water, and land, including any destruction, damage, or impairment of natural resources resulting from intentional or reasonably foreseeable causes. Examples include *climate change impacts, air and water pollution, improper sewage disposal, improper handling of solid wastes and other noxious substances, excessive noise, activities that limit access to green spaces, nutritious food, Indigenous food or cultural resources, or constructed outdoor playgrounds and other recreation facilities and venues, inadequate remediation of pollution, reduction of groundwater levels, increased flooding or stormwater flows, home and building health hazards (lead paint, lead plumbing, asbestos, mold), damage to inland waterways and waterbodies, wetlands, forests, green spaces, or constructed playgrounds or other outdoor recreation facilities and venues from private, industrial, commercial, and government operations or other activities that contaminate or alter the quality of the environment and pose a risk to public health.*
- All individuals are afforded fair and equitable treatment and meaningful participation in decision-making processes, including the development, implementation, and enforcement of environmental laws, regulations, and policies.
- The particular needs of individuals of every race, color, income, class, ability, status, gender identity, sexual orientation, national origin, ethnicity or ancestry, religious belief, or English language proficiency level are considered.
- The redressing of structural and institutional racism, colonialism, and other systems of oppression that result in the marginalization, degradation, disinvestment, and neglect of Black, Indigenous, and Persons of Color.
- A requirement to provide a proportional amount of resources for community revitalization, ecological restoration, resilience planning, and a just recovery to communities most affected by environmental burdens and natural disasters.

No segment of the population should, because of its racial, cultural, or economic makeup, bear a disproportionate share of environmental burdens or be denied an equitable share of environmental benefits. The State of Vermont has defined an Environmental Justice Focus Population as any census block group in which:



The annual median household income is not more than **80%** of the State median household income;



Persons of Color and Indigenous Peoples comprise at least **6%** or more of the population; or



At least **1%** or more of households have limited English proficiency (a household does not have a member 14 years or older who speaks English “very well” as defined by the U.S. Census Bureau).

Chittenden County contains 118 census block groups (out of 121 census block groups) that contain Environmental Justice Focus Populations according to this definition. Much of Chittenden County’s urbanized areas are also identified as high or possible high poverty areas according to the Federal Government’s [EDA Census Poverty Status Viewer](#).

Addressing the disparate impacts of climate change on marginalized communities requires a comprehensive approach that includes equitable policies, meaningful participation, and targeted support. To make sure that environmental benefits and burdens are equitably distributed throughout Chittenden County, CCRPC has conducted a quantitative and qualitative analysis of how the distribution of environmental benefits and burdens is impacted by actions outlined in the ECOS Plan and categories on the Future Land Use Map. While there is no standardized methodology for conducting an environmental benefits and burdens analysis, CCRPC’s approach has included:

1. Identifying the location of environmental justice focus populations in Chittenden County;
2. Identifying which environmental benefits and burdens are impacted by CCRPC actions and changes to the Future Land Use map;
3. Determining where there are existing baseline environmental justice concerns for focus populations in Chittenden County;
4. Analyzing whether these environmental benefits and burdens are impacted (exacerbated, improved, mitigated, or unchanged) by CCRPC-led actions in this plan and changes to the Future Land Use Map;
5. Conducting robust and equitable community engagement and integrating this community knowledge into the analysis to ensure consistency with lived experience;
6. Updating CCRPC-led actions in the ECOS Plan and changes to the Future Land Use map based on findings.

To ensure that no segment of the population, because of its racial, cultural, or economic makeup, bears a disproportionate share of environmental burdens or is denied an equitable share of environmental benefits, CCRPC staff have integrated environmental justice findings throughout this entire plan and its associated actions. For more details on the analysis of environmental benefits and burdens, see Supplement 3: Environmental Benefits and Burdens.

The CCRPC will continue to consider the cumulative environmental burdens and access to environmental benefits when making decisions about the environment, energy, climate, and public health projects, facilities and infrastructure, and associated funding.

Climate Mitigation & Adaptation

Although Chittenden County is a small part of global greenhouse gas emissions, the county must do its part to both mitigate global climate change and foster equitable distribution of environmental benefits and burdens in adaptation activities. Mitigation involves limiting greenhouse gas emissions contributing to climate change. Climate adaptation strategies seek to help individuals, businesses, and communities withstand, recover from, or even take advantage of the impacts of climate change.

Mitigation strategies include supporting the state in reaching its goals of reducing 40% of greenhouse gas emissions from the 1990 baseline by 2030, and 80% of greenhouse gas emissions from the 1990 baseline by 2050 (see Chapter 6: Energy and Supplement 6 – Enhanced Energy Plan).

Adaptation strategies include supporting implementation of the [Vermont Climate Action Plan](#), which includes pathways for adaptation and building resilience for communities and the built environment, natural and working lands, and other cross-cutting pathways. For example:

	Strategic retreat from floodplains and river corridors, flood-proofing at-risk buildings, and increasing flood-carrying capacity of stormwater infrastructure will help communities adapt to climate change impacts from flooding.
	Restoring riparian buffers and wetlands, replacing impervious surfaces with green spaces, and increasing urban canopy cover will help to reduce the magnitude of flooding, while improving wildlife habitat, sequestering carbon, and improving aesthetic value. Flood mitigation is just one example of climate adaptation (see Chapter 2: Ecological Systems).
	Designing buildings with energy-efficient systems, promoting green building practices, and prioritizing clean transportation can create healthier and more sustainable built environments that can withstand many of the challenges climate change poses. These practices can also address public health threats from heat and poor air quality. See Chapter 8: Energy for further details.

CCPRC will address the challenges and opportunities climate change presents by implementing sustainable practices, promoting renewable energy sources, and fostering resilience in infrastructure and natural resources. Further actions that support climate mitigation and adaptation are woven throughout the plan to ensure a comprehensive approach to climate action.

REGIONAL CONTEXT

A Brief History of Chittenden County

Chittenden County is located in northwestern Vermont, between Lake Champlain and the high peaks of the Green Mountains. For thousands of years, before the arrival of European colonists and the founding of Chittenden County, the Abenaki peoples thrived in this region and stewarded the land. Archaeological research shows permanent Paleoindian settlements existed in many places throughout Vermont.⁸ These populations hunted big game animals, such as mastodons and caribou, but as the climate shifted after the last glacier receded, they adapted to hunt smaller animals, fishing in the region's rivers and lakes, gathering herbs and berries, cultivating crops, and making maple syrup.

The Abenaki communities' connection to the land was one of both survival and spirituality, with the earth seen as a living entity where each animal, plant, and waterway played a vital role in sustaining the balance of life. The legacy of the Abenakis' presence is still felt today, and many place names in Vermont still bear Abenaki origin. For example, Winooski means *wild onion place*, a nod to the region's natural abundance.⁹

During the 1600s, European settlers began to arrive, dramatically altering Indigenous communities and their relationship to the land.. Samuel de Champlain, guided by Algonquin allies from Canada, arrived in Vermont in 1609 and claimed northern Vermont for France.¹⁰ As English colonists began to migrate north from southern New England, violent conflicts became common. While the Abenaki tried to protect their homelands, the French sought to establish dominance over beaver hunting grounds, and the colonizing English attempted to farm and occupy the region.¹¹

The struggle for dominance over Vermont's fertile land and valuable resources created an era of instability. The Abenaki fought to protect their homeland from the British and French, who were trying to secure the lucrative beaver hunting grounds and establish permanent settlements. The tensions culminated in the French and Indian War—a conflict that spanned much of the mid-1700s and ended in 1763 with the signing of the Treaty of Paris and the French ceding claims to the region to the British. Vermont became a part of British-controlled New England.

The period following the war was marked by disputes over the land between New Hampshire and New York. Many colonists who received land from New Hampshire found that other settlers had received the same land from New York. In 1775, Ethan Allen formed the Green Mountain Boys to defend the New Hampshire land grants against the New Yorkers.¹² Fourteen years after the United States declared independence, Vermont became the 14th state, and the first state to join the Union after the original 13 colonies in 1791. In this same year, the University of Vermont became the fifth college in New England.

Chittenden County was officially founded by English colonists in 1787, after the Revolutionary War ended, and before Vermont was an independent state.¹³ The county's name comes from Thomas Chittenden, a delegate to the 1777 Constitutional Convention that established Vermont's constitution. Chittenden went on to serve as governor of the republic, and then of the newly admitted state until his death in 1797.¹⁴

During Vermont's early statehood, the main economic drivers were agriculture and lumber. This led to the region's almost complete deforestation. In the mid-1800s, Burlington was the third largest lumber port in the country.¹⁵

Around 1900, the lumber industry began declining, and the total population of Chittenden County was around 39,600 (11% of the state).¹⁶ Small-scale agriculture continued throughout the region, and Burlington Harbor evolved into a bulk petroleum facility. Millions of gallons of fuel shipped in large transport barges through the Hudson River/Champlain Canal system annually until the early 1990s.¹⁷ During the Great Depression, many of the county's small towns saw a steady population decline, a trend that reversed in the 1960s, when new regional employers, including IBM, arrived. As the economy expanded, Burlington saw urban development and infrastructure improvement. The University of Vermont expanded its campus and academic programs, attracting students and contributing to the city's intellectual and cultural life. The area saw a rise in social and political activism, including labor movements, environmental conservation efforts, and back-to-the-land movements.



COLCHESTER AVENUE, BURLINGTON, 1950S

The area saw a rise in social and political activism, including labor movements, environmental conservation efforts, and back-to-the-land movements.

Today, approximately 168,000 residents live throughout Chittenden County's 19 municipalities, with populations that range from as small as 29 to more than 40,000. Across nearly 350,000 total acres, Chittenden County offers a rich diversity of landscapes: forests, farms, water bodies, small cities, suburban areas, and villages. Located in the heart of the Burlington/South Burlington Metropolitan Statistical Area (Vermont's economic engine), Chittenden County is home to the state's largest higher education institution, health care facility, and private sector employer. While many rural regions have experienced population decline in the past 30 years, Chittenden County is growing at a rate higher than the rest of Vermont (5.6% vs. 2.8% respectively), the New England region, and the U.S. as a whole.

Demographic Overview of Chittenden County

Information about the people in Chittenden County helps us understand those for whom CCRPC and its partners are planning for. Individuals and groups experience projects, planning, and investments into the built environment

differently, based on a multitude of identity factors (e.g. economic status, race, ability level, household size, age, ethnicity, gender identity, etc.). Additionally, aggregated data helps decision makers anticipate potential pressures on the wider social, economic, and physical environments. The best plans will account for the population they are meant to serve.

Population, Employment & Household Forecast

During the update of the 2018 ECOS Plan, CCRPC worked with consultants to prepare a [2050 demographic and employment forecast](#), to estimate the county's future household, population, and employment conditions. The forecast aided the development of the Enhanced Energy Plan, and the MTP. Figure 1 shows the 2050 forecasts for population, employment and households in the county.

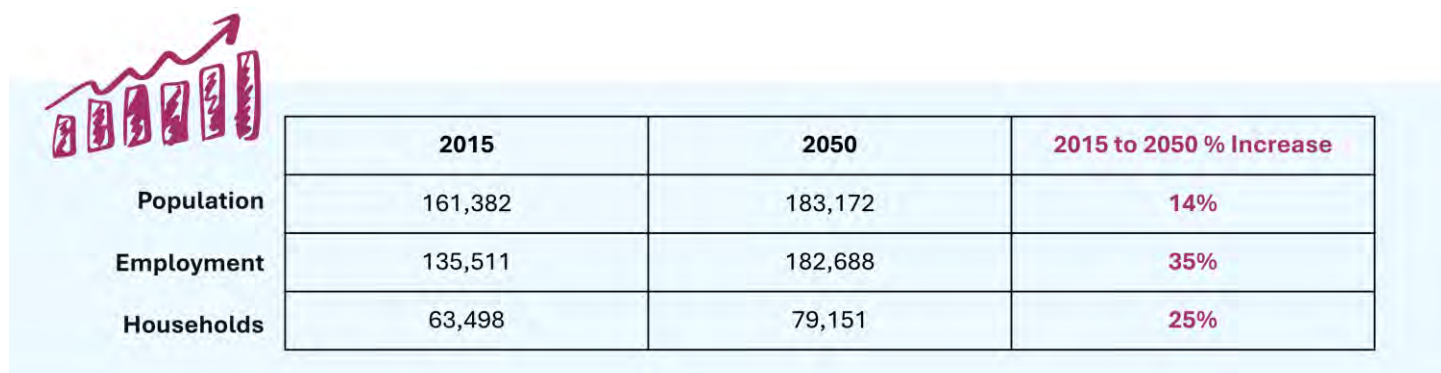


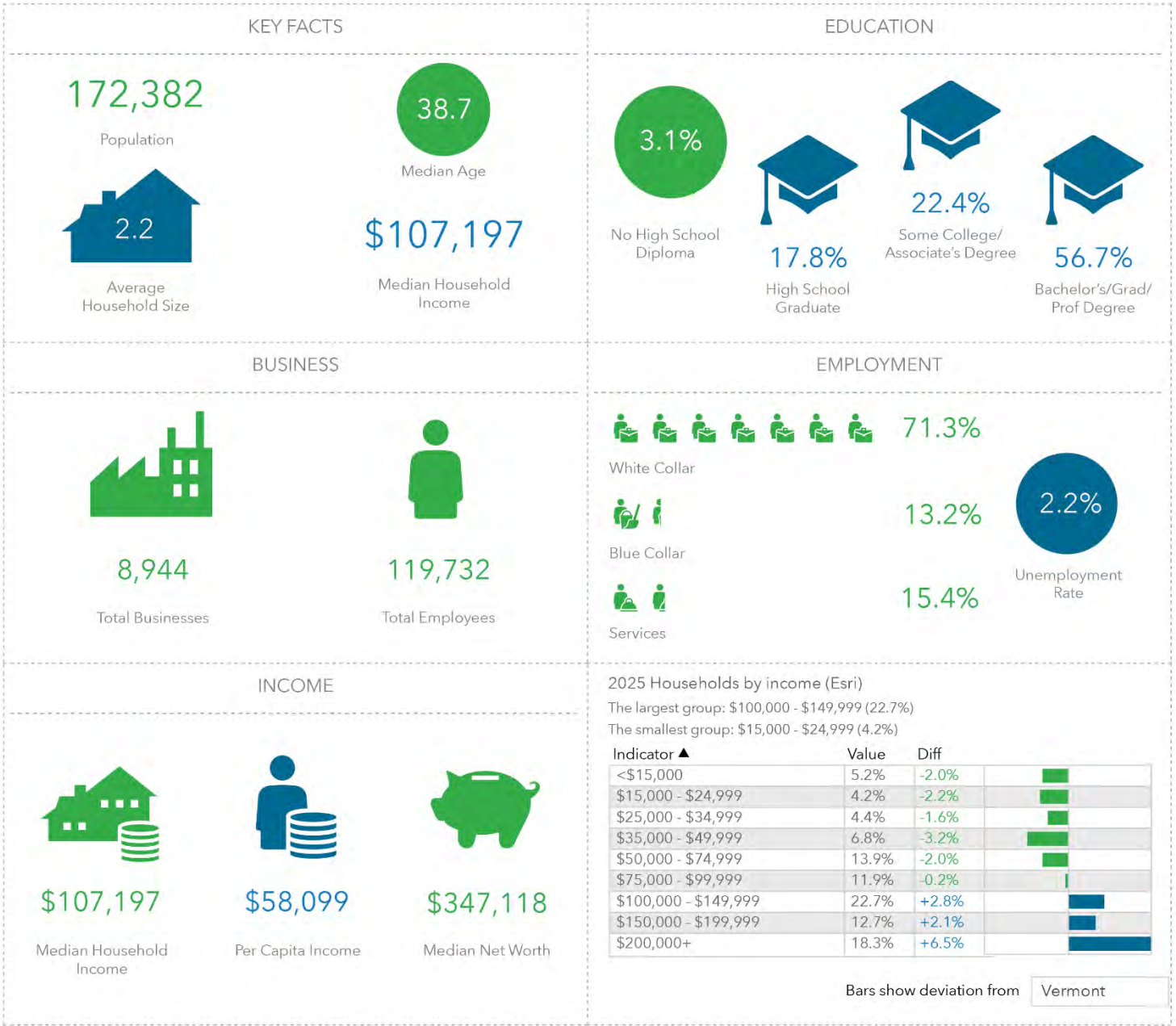
FIGURE 1: 2050 FORECASTS FOR POPULATION, EMPLOYMENT AND HOUSEHOLDS IN CHITTENDEN COUNTY

To prepare for the 2026 plan update, staff compared current census, American Community Survey, and Bureau of Economic Analysis data (Year 2020 and Year 2019) to the forecast to determine if an update to the forecast was needed. This comparison showed that the number of households, and the total population, of Chittenden County is 2% more than the 2020 population and household forecast in the 2018 ECOS Plan. Current total employment is 6% less than the 2020 estimate for employment. Given the minimal difference between current demographic and employment data, and the forecast, staff determined that the existing forecast is still valid. Staff recommended to CCRPC's Board that the 2018 ECOS Plan forecast be utilized for the 2026 ECOS Plan (including the MTP). The CCRPC Board approved this recommendation at their meeting on November 17, 2021.

The regional housing targets (see Chapter 8: Housing) are not projections and were not developed using the 2050 demographic and employment forecast. The regional housing targets were developed by the Vermont Agency of Commerce and Community Development and Vermont Housing Finance Agency in 2025 using another methodology. For more information, please see the [Vermont Housing Needs Assessment](#).

See the following four pages for some key demographic facts.

Demographics: Key Facts



Source: This infographic contains data provided by Esri (2025, 2030), Esri-Data Axle (2025). © 2025 Esri

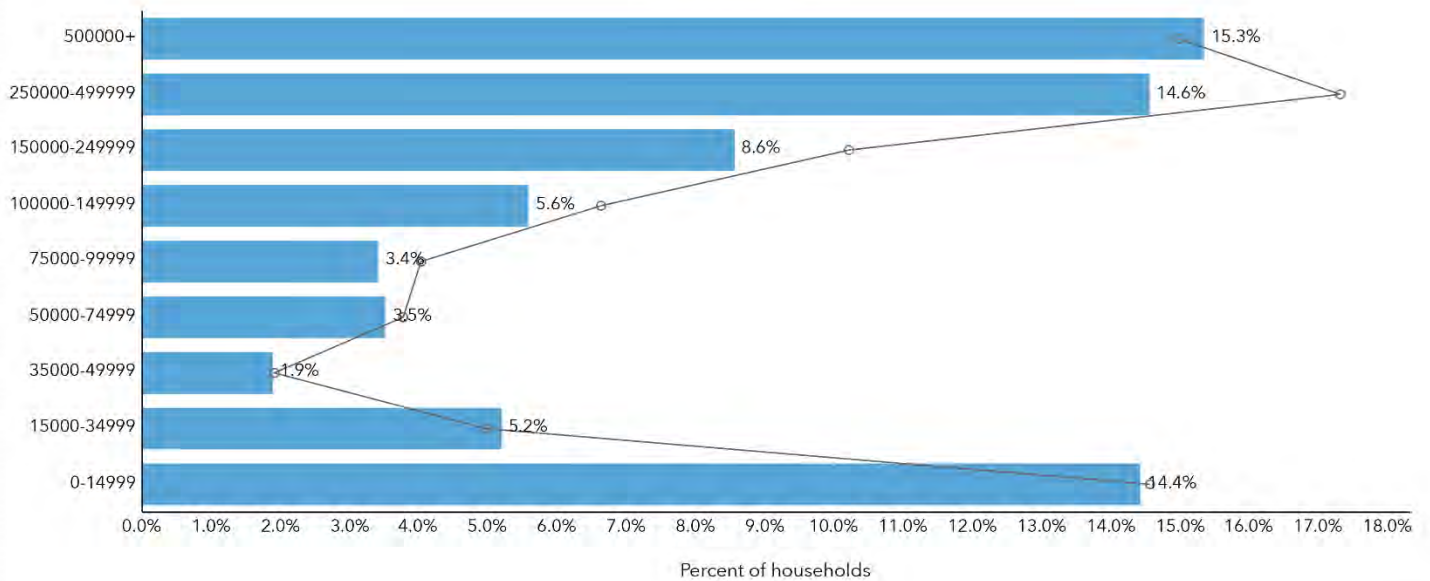
FIGURE 2: DEMOGRAPHICS: KEY FACTS (1 OF 4)

Per Capita Income



Dots show comparison to

Net Worth (%)



Dots show comparison to

FIGURE 3: DEMOGRAPHICS: KEY FACTS (2 OF 4)

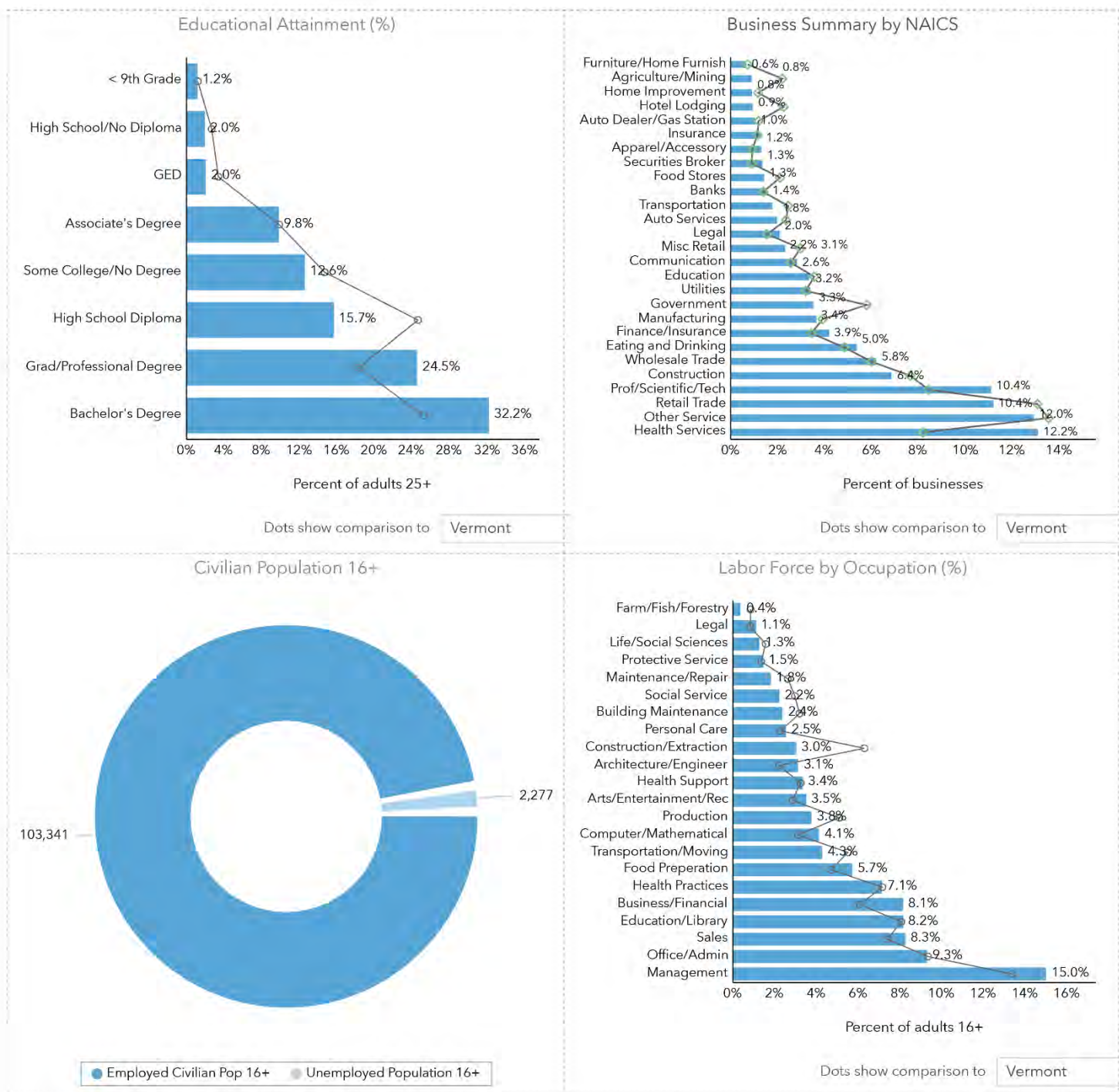


FIGURE 4: DEMOGRAPHICS: KEY FACTS (3 OF 4)



FIGURE 5: DEMOGRAPHICS: KEY FACTS (4 OF 4)

Plan Methodology

The process of developing this iteration of the ECOS plan began in 2022. What initially began as a data update soon evolved into a more rigorous re-evaluation of the plan for a variety of reasons. The need for meaningful community engagement and input into the plan made itself clear, CCRPC had a shift in staffing, and Act 181 passed in 2024. Therefore, the revision process extended. This is important information for a reader to understand because different sections of the plan were updated at different times and therefore different sections of the plan reflect the evolving context in which they were developed.

The ECOS Plan combines quantitative information (data and maps) and qualitative information (engagement) to establish goals and related actions. This section reviews CCRPC's method to tie these pieces of information together in a narrative that is specific, intentional, and meaningful.

DATA

The 2026 ECOS Plan uses a wide variety of data to help us better understand existing conditions and trends. This subsection provides a summary of data sources used, the limitations of using data, and how data is used by CCRPC to measure the success and failure of plan implementation.

Data Sources

The 2026 ECOS Plan uses data from a variety of sources from regional and state agencies. When possible, the 2026 ECOS Plan utilizes data from local or state sources. This is because data from local or state sources are typically based on counts or surveys with a relatively small margin of error. Most Federal data sources, with the exception of the US Census, rely on surveys that have a relatively high margin of error.

Most demographic data in the plan comes from the United States Census Bureau (USCB). The USCB publishes its decennial count (also known as the Population and Housing Census) every 10 years, which is the most accurate count of population available. It provides data on housing, age, sex, and race/ethnicity.

The other demographic data available from the USCB is the American Community Survey (ACS). The ACS releases data annually in the form of five-year estimates. Smaller samples are associated with 1-year estimates, which means the margin of errors tends to be higher when compared to the 5-year ACS estimate. When available and relevant, CCRPC relies on the USCB's Decennial Census. However, for annual updates of the ECOS indicators, and the ECOS Annual Report, CCRPC relies on the ACS 1-Year or 5-year estimates, as appropriate.

CCRPC also relies heavily upon the following organizations for data in the 2026 ECOS Plan:

- **Health:** Vermont Department of Health; Centers for Disease Control and Prevention



MEMBERS OF THE PUBLIC REVIEWING A PROJECT MAP, BURLINGTON

- **Economy and Household Finance:** US Census Bureau; US Bureau of Labor Statistics; Vermont Department of Labor
- **Energy:** Vermont Public Service Department; Efficiency Vermont/Drive Electric Vermont; Vermont Energy Action Network; Vermont Electric Power Company; Green Mountain Power; Vermont Electric Cooperative; Burlington Electric Department; VGS; Vermont Center for Geographic Information; US Energy Information Center
- **Transportation:** Vermont Agency of Transportation; University of Vermont Transportation Research Center; Green Mountain Transit, Special Services Transportation Agency; Chittenden Area Transportation Management Association; LocalMotion; Federal Highway Administration
- **Housing and Land Use:** Member municipalities; Vermont Housing Finance Agency; US Census Bureau; Chittenden County Homeless Alliance
- **Environment:** VT Department of Environmental Conservation; VT Department of Forests, Parks, and Recreation; Vermont Center for Geographic Information; Federal Emergency Management Agency; US Geological Survey
- **Working Lands:** Vermont Department of Taxes; Use Value Appraisal; U.S. Department of Agriculture

CCRPC has also begun to develop our own primary source data when our staff identifies insufficient federal or state data. For example, CCRPC has collaborated with our municipalities to collect annual housing unit construction data. This partnership with our municipalities has yielded high-quality housing data that all our partners can use to accurately discuss and analyze the Chittenden County housing market. Data sources used in the plan are often cited in endnotes to ensure accountability and so that the reader can verify information used in the plan.

Data Limitations

No data set is perfect. The following data limitations should be accounted for when reviewing the ECOS Plan.

DATA COLLECTION

As it pertains to the Census Bureau, certain communities can be especially difficult to count. This is because residents can be difficult to contact (if they live in inaccessible places), interview (if they have limited English proficiency), locate (if they are homeless or have been displaced by a natural disaster), and/or persuade (if they are distrustful of government; migrant workers can fall into this group). Many of these obstacles are higher for BIPOC residents, and thus people of color tend to be systematically undercounted. For example, Black children are twice as likely to be undercounted as children who are not Black.¹⁸

DATA CATEGORIZATION

Another shortfall of using census or ACS data involves categorization design. Prior to the 2020 Decennial Census, race and ethnicity were captured collectively among only five categories: White; Black or African American; American Indian or Alaska Native; Asian; and Native Hawaiian or Other Pacific Islander. These options do not reflect the reality of complex identities.¹⁹ For example, the category “White” tends to include those of Middle Eastern and North African decent, Greeks, Irish, Italian, Slavs, and Jews, all of whom remain targets of white-supremacist violence. Further, the category of “Asian or Pacific Islander” encompasses those whose origins stretch from islands in the Western Pacific to the Indian subcontinent. And sub-Saharan people who have recently immigrated often get lumped together with other Black Americans whose families have been in the United States for centuries.²⁰ Recently, the Census Bureau expanded its categorization of race and ethnicity groups to about 1,500 groups including detailed information about American Indian, Alaska Native and Native Hawaiian tribes. However, this data was unable to be used at the time the ECOS plan was drafted.

Some data sources used in the plan provide some information about age, sex, race/ethnicity. This includes much of the public health data in the plan provided by the Vermont Department of Health and some economic data from US Bureau of Labor Statistics or the Vermont Department of Labor.

Other data used in the plan is not granular enough to provide information about age, sex, race ethnicity. This includes energy data used in the plan from Vermont Public Service Department, Efficiency Vermont, local electric utilities and the United States Energy Information Center.

SURVEY DATA AND SAMPLE SIZE

Many Federal data sources are created primarily through survey information. Because of Vermont's low population many of these Federal data sources have a relatively small sample size and therefore a high margin of error. This impacts CCRPC's ability to rely on these data sources for accurate information.

Additionally, the ECOS Plan uses county-wide data to provide a regional snapshot. This means that more detailed and disaggregated data, which tends to be more readily available at a municipal level, is not included. Since Vermont's communities of color are relatively small, the margin of error on disaggregated data can sometimes prevent data from being seen as statistically significant enough to be included. Or the USCB suppresses data to protect privacy because the sample size is under a certain threshold. Leaving this information out also has implications for important members of the community.

Consequences of Poor Data

There are numerous consequences to overlooking populations through poor data collection methods. This is particularly true in census taking. For example, USCB data is often used to decide where federal funds are allocated. Inaccurate data leads to gaps in the allocation of resources for infrastructure, housing, education, and community development programs. In 2017 alone, \$1.5 trillion in federal funds were allocated based on Census Bureau data. If underrepresented groups are overlooked in the data, they are likely to be denied representation.²¹ These consequences can impact Chittenden County and the implementation of the ECOS Plan.

Future Data Collection

In a small rural state like Vermont, where community nuances are not always captured in large data sets, there is a need for increased investment in disaggregated quantitative and qualitative data gathering and sharing. Gathering complete data sets, where data can be disaggregated, is particularly important to advance a deeper understanding of the realities facing marginalized communities, and the systemic levers that might be used to generate better outcomes.

CCRPC commits to being supportive of data gathering initiatives (See Chapter 1: Planning Practices) and will look to update and incorporate the most up-to-date and thorough data into all of CCRPC's planning process and documents.

Data Indicators

The ECOS Plan uses specific data points, or data indicators, to track implementation of the ECOS Plan. In past iterations of the ECOS Plan these data points were imbedded in-text. In the 2026 ECOS Plan, data indicators will be linked in-text to the ECOS website where the data can be viewed within a set of dynamic graphs.

MAPS

To comply with VT Statute (24 VSA 4348a), the ECOS Plan contains the following maps located throughout this document and online. More details about the maps can be found below.

The maps included in the ECOS Plan are limited illustrations of the underlying datasets that reside in CCRPC's Geographic Information System (GIS) and are intended to provide a general overview of future and existing

conditions. The accuracy of information presented in the maps is determined by its sources. Errors and omissions may exist and the Chittenden County Regional Planning Commission is not responsible for these errors.

These maps identify the presence of features, and may indicate relationships between features, but are not a replacement for surveyed information or engineering studies. These maps are not sufficient for delineation of features on-the-ground. Questions of on-the-ground location can be resolved by site inspections and/or surveys by registered surveyor.

Data shown on the maps outlined below can also be accessed via the [ECOS Plan website](#). The ECOS Plan website includes a map viewer that allows users to locate their area of interest and control the display of various layers. It also enables unique creation and printing of individual maps. Users can see data at the county level as well as at the address level. Map updates will be incorporated into the online map as data is available and time allows.

Map 1: Forest Blocks and Wildlife Habitat

Map 1 includes both landscape and community scale forest resources and habitat connectors. These resources, designated as highest priority and priority, are from the Agency of Natural Resources' [Biofinder](#). This map is intended to help identify important forest blocks and wildlife habitat to assist with planning for their protection.

Map 2: Water Quality and Safety

The Water Quality and Safety map illustrates the level of impairment for streams and lakes based on the Vermont Department of Environmental Conservation 303d List and the 2020 List of Priority Surface Waters. Additionally, it shows the location of wetlands, fluvial erosion hazard areas, special flood ways, and the 500 year flood hazard area.

Map 3: State and Local Development Constraints

The State and Local Development Constraints map depicts environmentally sensitive and protected areas in the County. The resources included on the map are listed in [Supplement 6: Energy Analysis, Targets, and Methodology](#) and consolidated into four categories on the map: state known constraints, local known constraints, state possible constraints, and local possible constraints. Development should be located to avoid state and local known constraints. Development should also be located to minimize impacts to state and local possible constraints. Constraints are based on state or local policies that are currently adopted or in effect (as of April 2023). Municipalities that are not listed in the table in Supplement 6 do not have any local constraints.

Map 4: Future Land Use

The future land use map identifies the location and boundaries of the Chittenden County Regional Future Land Use Planning Areas in accordance with the future land use categories outlined in 24 V.S.A. 4348a. The Future Land Use Planning Areas include: Downtown Center, Village Center, Planned Growth Area, Village Area, Transition, Enterprise, Resource-based Recreation, Hamlet, Rural General, Rural Agriculture and Forestry, and Rural Conservation. In addition, CCRPC created a custom category, as permitted by statute, to identify the Burlington International Airport, Camp Johnson, and the Ethan Allen Firing Ranges, as unique uses.

The Future Land Use Planning Areas aim to describe the appropriate type of future growth expected in each planning area; however, the exact uses and densities allowable are determined by local zoning and local and state permitting. The Downtown Center, Village Center, Planned Growth Area, Village Areas, and Transition Areas together make up the Future Land Use Planning Areas that are areas planned for growth.

The Future Land Use Planning Areas reflect the outcome of an intensive public engagement process involving municipalities, state agencies, and other interested and affected parties (see Supplement 1 – Engagement Process).

Map 5 and Map 6: Ground Mounted Solar Energy Resource Areas and Wind Energy Resource Areas

These maps combine GIS analysis of either solar generation potential, or wind generation potential, respectively, with state and local identified *known* and *possible* constraints (see Supplement 6: Energy Analysis, Targets, and Methodology). The maps and corresponding data are intended to be used to inform energy planning efforts by municipalities and regions, and provided a basis for CCRPC to estimate solar and wind generation potential and municipal and regional ability to meet the generation targets. For more information on the constraints, see the discussion of Map 9 and Supplement 6: Energy Analysis, Targets, and Methodology.

Areas with state and locally identified constraints are removed from the Generation Potential maps completely. This results in the following areas on the map:

1. Prime Solar or Wind Areas: areas with generation potential and no local or state constraints, and
2. Base Solar or Wind Areas: areas with generation potential and possible local or state constraints.

Map 7: Existing Renewable Energy Sites and Preferred Sites

This map shows the location of existing renewable energy generation sites and legislatively-identified preferred sites. Preferred sites as defined by the State of Vermont include:

- Rooftops and other structures
- Parking lots
- Previously developed sites
- Brownfields
- Gravel pits
- Quarries
- Superfund sites

Map 8: Future Transportation Improvements

The Future Transportation Improvements map gives an overview of the projects that fit within the funding constraints identified in the ECOS project list in Supplement 5 – the MTP part of the ECOS Plan. These future improvement projects create a multimodal strategy to address the efficient and long-term movement of people and goods, while respecting ECOS goals.

Map 9: Economic Infrastructure Map

The Economic Infrastructure map identifies areas within the county that are appropriate for commercial and industrial uses, per municipal zoning regulations. These uses exist throughout the county and include warehouses, manufacturing, office buildings, hotels, retail stores, medical buildings, and auto sales. This map also shows whether the areas zoned for commercial and industrial uses are within the sewer service area.

Map 10: Utilities and Facilities

The Utilities and Facilities map shows the existing sewer service area, water supply districts, solid waste facilities, natural gas service area, and cellular towers.

COMMUNITY ENGAGEMENT

The CCRPC and municipal planning partners use the ECOS Plan to frame and guide planning and project priorities. Therefore, it is critical that the ECOS Plan meaningfully incorporates the needs of diverse communities throughout Chittenden County. The ECOS Plan provides an opportunity for governmental and non-governmental organizations,

communities, and residents to engage, vision and collaborate in planning processes every eight years. This collaboration on goals and objectives results in decisions that build more sustainable, resilient, and equitable communities.

A summary of the engagement process is provided here. For the 2026 ECOS Plan, there were two “phases” of engagement conducted: the first phase focused specifically on hearing from, and collaborating with, communities whose voices have been underrepresented in previous versions of the ECOS Plan. This engagement process focused on having marginalized communities inform the goals and actions of the plan. The second phase of engagement focused on working with municipal partners to develop a new future land use map as required by the State Legislature in 2024 (Act 181). The entire Engagement Plan and accompanying results can be found in [Supplement 1 – Public Process](#).

Phase 1: ECOS Plan Chapters: Goals & Actions (Fall 2023 – Summer 2024)

Because the ECOS plan has been accessed and reviewed by partner organizations and residents who have participated in civic processes for decades, this engagement effort sought the voices of community members whose needs, wants, and goals may not already be represented in the current plan. To minimize taking time from already over-burdened community members and groups, CCRPC staff spent significant time researching other engagement efforts that have happened in Chittenden County since 2020 to use community-informed information already gathered to inform this plan. Additionally, CCRPC strived to be thoughtful and clear in its asks of community members. Engagement efforts focused on where gaps existed, and CCRPC compensated community members appropriately for their participation and time.

To gather meaningful feedback across the many chapters and subjects in this plan, CCRPC staff organized the plan’s chapters into four themes: Environmental Stewardship, Community Well-Being, Critical Infrastructure, and Social Empowerment. Working through and with community partners and liaisons, CCRPC staff organized and hosted a total of eight focus groups, including focus groups with Arabic, Nepali, Somali, Swahili and Lingala speaking community members, as well as mobile home park residents and rural seniors. CCRPC Staff attended over 13 events, meeting community members where they are at locations such as laundromats, town meeting day, Neighborhood Planning Assembly meetings, festivals, and spaces of worship. Lastly, CCRPC staff distributed a county-wide survey available in five languages through channels such as Front Porch Forum, flyers, coasters, and newsletters. These efforts reached nearly 800 people across the county in the short timeline of four months.

Despite CCRPC’s best effort, no engagement effort is perfect. CCRPC staff recognize that the process of building community relationships and trust takes time, and worked within the timeline, resources, and relationships it had built for this engagement process. While there are many voices still missing from this plan, CCRPC is committed to continuing to build reciprocal relationships with community members to enhance the transparency and accessibility of regional planning and support more meaningful engagement with each plan’s update. As a public document, residents can and should reference and rely on the ECOS Plan as they hold the CCRPC and its partners accountable for implementation.

Phase 2: Future Land Use Map & Housing Targets

Following the initial engagement phase centering underrepresented communities, CCRPC launched a second, equally intensive phase of engagement focused on developing a new Regional Future Land Use (FLU) Map and associated housing targets as required by Act 181. This round centered on municipal engagement, while still incorporating regional and state interested and affected parties (particularly partners from the housing and environmental justice communities). Engagement efforts prioritized collaboration, transparency, and education, with the understanding that local governments would be critical partners in shaping the updated ECOS Plan’s Regional FLU Map.

To prepare for engagement, CCRPC developed resources for all 19 municipalities and regional parties, including draft FLU maps based on the VAPDA mapping methodology, educational materials, and templates for input and engagement planning. Staff assigned municipal liaisons for each municipality. The municipal liaisons conducted initial briefings with legislative bodies, planning commissions, and other interested and affected parties and offered a variety of engagement activities tailored to each municipality's context and needs.



Input and lessons learned were compiled, shared back with partners, and used to inform changes to the draft the FLU map in consultation with CCRPC's Long-Range Planning Committee (LRPC). CCRPC staff also provided support and information to municipalities considering opting-in to Tier 1B (see Chapter 5: Land Use for more information).

CCRPC emphasized accountability and transparency during this round of engagement. A final summary of our outreach efforts, outstanding tensions related to the draft Regional FLU Map, and staff recommendations to revise the draft Regional FLU Map were delivered to the Long-Range Planning Committee in summer 2025. For more detailed information, please see Supplement 1: Engagement Process.

Throughout this round of engagement, CCRPC recognized the complexity of balancing regional growth, climate resilience, housing needs, and community goals. This round of engagement laid a foundation for forward-looking land use planning in Chittenden County.



CHAPTER 1

Equitable Planning Practices



GOAL

Develop, support, and implement collaborative planning systems that are equitable, accessible, and inclusive; that use taxpayer dollars effectively and efficiently for public benefit; and that assess and address environmental benefits and burdens to advance sustainability and environmental justice.



KEY ISSUES, TRENDS & INSIGHTS



2026 **ECOS** Plan website

For an interactive experience, visit the [Equitable Planning Practices](#) page on the 2026 ECOS Plan website 

To work toward the collective goals and actions outlined in this plan, the way in which the regional planning process itself operates in Vermont and Chittenden County must first be addressed.

Funding and Project Prioritization | The CCRPC receives local, state, and federal funds, which are allocated to transportation and land use planning initiatives. For example, in fiscal year 2024, CCRPC leveraged approximately \$5.4 million in federal and state funding. Additionally, Chittenden County municipalities pay annual dues to support operations and access its resources and technical assistance. Each year, CCRPC puts out an application to solicit municipalities and partner organizations for priority planning projects. CCRPC staff, along with the Unified Planning Work Program (UPWP) committee decide which projects get selected for the upcoming year. The UPWP outlines projects and deliverables for the next fiscal year and describes how CCRPC will be involved with activities. The UPWP also acts as a mechanism to implement actions outlined in the ECOS Plan and helps municipalities implement their local plans.

Project Processes | There are multiple types of projects outlined in the UPWP. For most projects, CCRPC acts as a project manager and fiscal agent between municipalities and consulting firms, assisting in the consulting selection process, supporting under-resourced municipalities in project implementation, and reviewing deliverables. CCRPC also carries out some of its own projects, such as updating regional plans, or leading projects the state legislature delegates. For other projects, CCRPC provides technical assistance and support to municipalities.

Community Engagement | CCRPC's Public Participation Plan outlines how the organization and partners must engage with community members for different types of project planning and implementation. This document stipulates the activities necessary to move a project forward with public support. Included with this document are more recently updated policies, such as a stipend policy, language access plan, and an equity impact assessment.

Environmental Benefits and Burdens | As outlined in the Environmental Justice section, CCRPC is responsible for promoting the equitable distribution of environmental benefits and burdens throughout Chittenden County. CCRPC has developed a map to visualize where environmental justice focus populations are located within the county and conducted an analysis to ensure that changes to the ECOS Plan, including updates to the Future Land Use Map, do not exacerbate environmental burdens and work toward greater equity in the distribution of environmental benefits. Additionally, CCRPC developed, and is continuing to update, a mapping tool to visualize where CCRPC resources are allocated geographically. This tool will help inform CCRPC decisions to distribute regional planning resources equitably and to provide accountability in the process.

Committees | Ten committees inform and advise on the actions of CCRPC as an organization. These committees tie CCRPC's actions to the priorities of the representatives on the committees. Many committee representatives have connections to municipal governments, while others are connected to state agencies. Active committees are: [Board Development Committee](#), [Brownfields Advisory Committee \(Ad Hoc\)](#), [Clean Water Advisory Committee](#), [Executive Committee](#), [Community Engagement Advisory Committee](#), [Finance Committee](#), [Hazard Mitigation Plan Update Committee \(Ad Hoc\)](#), [Long-Range Planning Committee](#), [Planning Advisory Committee](#), and the [Transportation Advisory Committee](#).

ACTIONS

Many of the actions mentioned below build on recommendations in the CCRPC's organizational equity assessment with additional input from the Community Engagement Advisory Committee (CEAC) and community partners.

1. Capacity Building

- a. **CCRPC Leadership** | Establish and support internal leadership to guide and sustain equity work, including a full-time Outreach and Engagement Manager, an internal Equity Leadership Team, and a Community Engagement Advisory Committee. Allocate dedicated time and resources to support these efforts.
- b. **Education** | Provide ongoing education and collaborative learning opportunities to increase understanding of how systemic inequities intersect with planning. This includes regular staff dialogue, external training, mentorship, and the development of accessible materials to support integration of equity into daily work.
- c. **Organizational Policies and Procedures** | Implement, and update as needed, relevant organizational policies and procedures to guide cultural and procedural transformation.
- d. **Representation** | Establish and support diverse community representation within the organization at all levels through updating HR policies, strengthening relationships, supporting community education, and increasing accessibility of committee and board participation.

2. Community Engagement

- a. **Connect** | Increase meaningful engagement and mutually beneficial relationships with marginalized and underrepresented communities. Increase CCRPC presence in public spaces to enhance awareness about the organization.
- b. **Track** | Develop systems to monitor who participates in CCRPC engagement efforts and evaluate the effectiveness and inclusivity of engagement strategies. Use these insights to guide improvements over time.
- c. **Increase Accountability** | Improve transparency and two-way communication with the public by clearly explaining CCRPC's roles, decisions, and impacts. Share progress on projects, policies, and engagement opportunities and outcomes.
- d. **Build Relationships** | Sustain long-term, mutually beneficial partnerships with community groups by supporting events, providing sponsorships or stipends, collaborating on education and outreach, and exploring community liaison roles.
 - i. **Indigenous Participation in Land Use Decisions**: Connect with indigenous communities and build indigenous representation on local, regional, and state bodies that guide land use planning decisions.
- e. **Update Engagement Processes** | Update methods and processes for community engagement in CCRPC projects to foster meaningful and inclusive engagement from the beginning of the project.

3. Project and Regional Planning Processes

- a. **Equity Assessment** | Integrate an Equity Impact Assessment into CCRPC's project lifecycle to identify and address potential inequities and guide decision-making at the policy, program, and budget level.
- b. **Equitable Resource Allocation** | Regularly monitor how and where CCRPC resources are distributed with respect to EJFP populations. Ensure that resources are distributed equitably, taking into account Supplement 3- the Environmental Benefits and Burdens Analysis.
- c. **Environmental Benefits and Burdens Analysis** | Monitor development of State's environmental benefits and burdens analysis. Continue to refine CCRPC's approach to our own environmental benefits and burdens analysis to reflect best practices and qualitative data.

- d. **Targeted Projects** | Target and prioritize positive programs and investments in low opportunity places and areas with Environmental Justice Focus Populations.
- e. **Town Plan Review & Approval** | Review and revise CCRPC's town plan approval processes to ensure alignment with state planning goals and the ECOS Plan. Provide support to municipalities to strengthen plan implementation to address environmental benefits and burdens.

4. Leadership and Collaboration

- a. **Leadership** | Leverage CCRPC's authority, networks, and resources to lead regional equity efforts. Support staff and partners in engaging with national networks, conferences, and peer-learning opportunities to advance equity in planning practices.
- b. **Resources** | Develop and share tools, training materials, and best practices with municipal and regional partners. Foster collaboration across organizations to align efforts, reduce engagement fatigue, and increase the collective impact of equity work.
- c. **County Coordination and Alignment** | Coordinate with municipalities, state agencies, and community organizations to align policies, investments, and engagement strategies that advance ECOS Plan goals. Collaborate with partners to advance policy changes that address systemic inequities.
- d. **Support Indigenous Planning Capacity** | Support Indigenous community access to funding, training, and technical support for Indigenous-led planning efforts, aligned with their priorities and knowledge systems.

5. Financing and Plan Implementation

a. Community Development

- i. **Financing Tools** | Expand and improve how municipalities implement available financing tools, with particular emphasis on options that level the playing field between greenfield and infill development, and that help direct new investment dollars to strengthen existing neighborhoods. This would include tax increment financing (TIF), local option sales taxes, impact fees, special assessment districts, capital planning and budgeting, and [fiscal impact analysis](#). Explore and develop other financing mechanisms for maintaining and improving infrastructure.
- ii. **Tax Credits** | Support downtown and village center tax credits, and additional incentives as part of the State Designation Program.
- iii. **Revolving Loan Funds** | Develop revolving loan funds for business to improve access to capital.

b. Monitor State and Municipal Tax Burdens

- i. **Efficiency and Cost Management** | Identify opportunities for restructuring, streamlining or eliminating programs to increase efficiency, reduce costs and enhance accountability.
- ii. **Tax Policy** | Monitor proposed changes to state tax policy.



CHAPTER 2

Ecological Systems



GOAL

Conserve, protect and improve air quality, water quality and quantity, and the health of native species and habitats.



KEY ISSUES, TRENDS & INSIGHTS



Data for this section is drawn from the ECOS [Natural Systems Analysis report](#), [VT Parcelization website](#), and the [Lake Champlain Basin Program's State of the Lake reports](#).



2026 ECOS Plan website

For an interactive experience and additional data, visit the [Ecological Systems](#) page on the 2026 ECOS Plan website.

Climate change is expected to bring a range of new challenges to Vermont's human and ecological systems. Maintaining a connected network of lands and waters to allow for regular and climate-driven migration is one of the most important climate change adaptation strategies.

Plants remove carbon dioxide from the atmosphere, and store it in biomass and soils. Therefore, to ensure current and future carbon storage, it is critical to maintain forests, wetlands, agricultural lands and vegetated spaces. Vegetated landscapes, especially in urban areas, help moderate extreme heat, absorb stormwater, reduce runoff, and minimize the potential for flooding. Finally, reducing fragmentation of forest blocks and riparian areas will help limit the effects of climate change on native species. By concentrating development, and including green infrastructure in areas planned for growth, Chittenden County can minimize the impacts of climate change on ecosystems.

Wildlife, Forests, and Native Species

HABITAT HEALTH AND FRAGMENTATION

- **Forest Cover** | Vermont's forest cover dropped to 35% in the mid to late 1800s due primarily to agriculture. Reforestation, due to diminishing agricultural land demands, had led to forest cover to be 74% today. Vermont is now the third most forested of the lower 48 states by percentage. However, in the 2000s, Vermont began experiencing a loss of forest cover again due primarily through conventional subdivision and development in rural areas. Loss of forest cover is leading to: ongoing habitat loss and fragmentation; an increase in non-native species; a reduction in productive forest land and carbon sequestration; and diminished resiliency in the face of a rapidly changing climate. While these statewide issues are of concern in Chittenden County, the county's forest cover remains steady (~52% between 2001 and 2019).²²
- **Fragmentation** | Despite the retention of forest cover, the county still experiences incremental development outside of areas planned for growth, which breaks up forest habitats. Development that occurs outside of planned areas for growth has had a visible (and ecological) impact on the pattern of forests and forest cover. The most significant change is in the pattern of forest cover, and how connected forest blocks remain to each other and riparian areas. [Vermont Conservation Design](#) is a statewide framework for identifying ecologically functional landscapes that support biodiversity and resilience, which is intended to support statewide, regional, and local planning and decision-making on land use and development. As the Agency of Natural Resources' [BioFinder map](#) shows, forest blocks in Chittenden County are getting smaller and more isolated from other forest blocks, surface waters, and riparian areas. This limits the ability of plants and animals to use habitat connectors to move between isolated islands of habitat to meet their needs, and contributes to losses in biodiversity. Forest fragmentation – the increased land parceling and subsequent habitat conversion from clearing and development, as well as the construction of transportation infrastructure, including roads and trails – continues to adversely impact forest blocks and habitat connectors. In addition, acid deposition from air pollution, migration of invasive species (including destructive insect species), and climate change continue to threaten native forest plant and animal habitat.

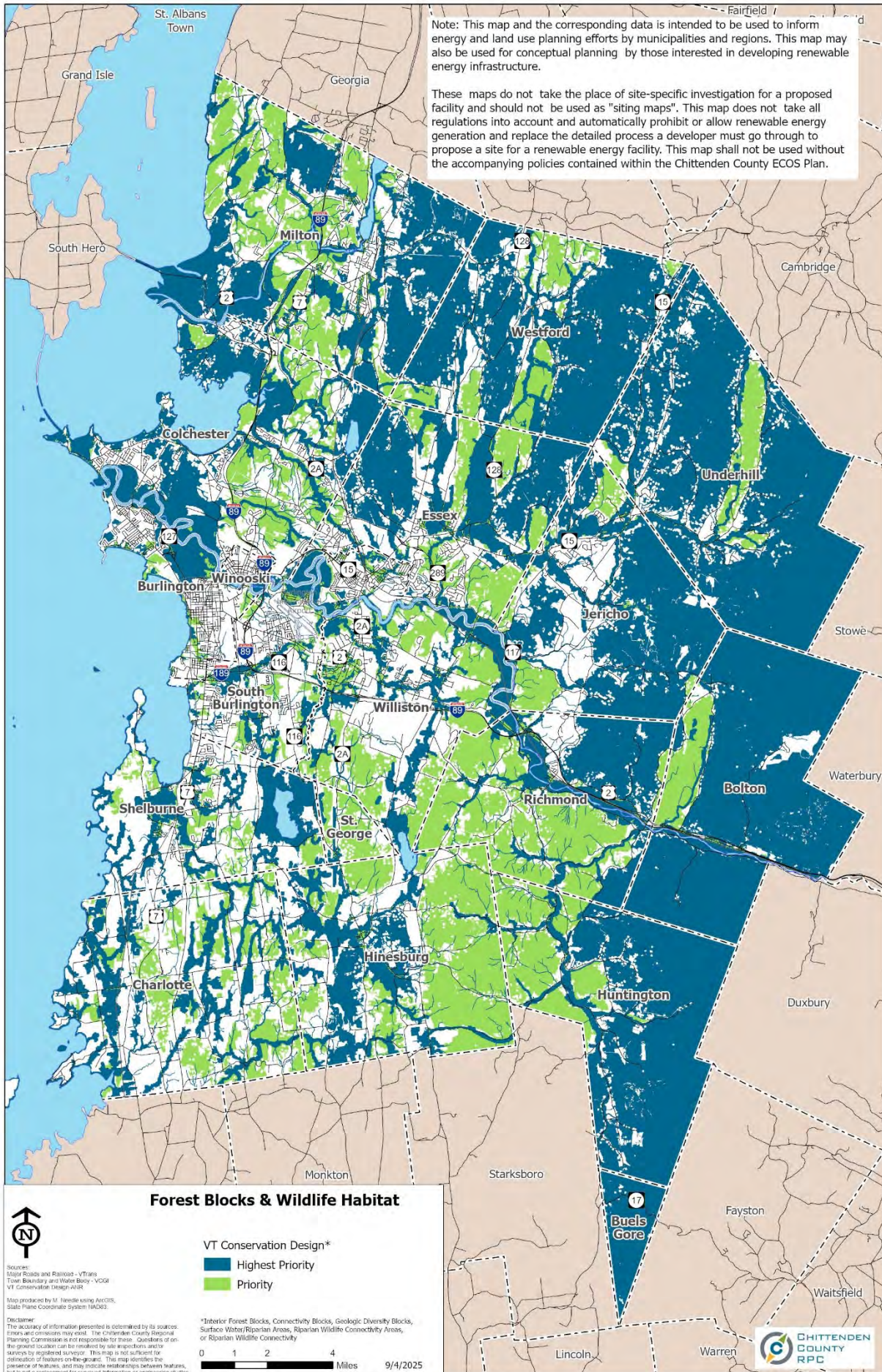
- **Wetlands** | Though limiting forest fragmentation remains a challenge, there has been success in protecting wetlands. Between 2011-2019, Chittenden County lost only .04% of its wetlands.²³ This is due to robust protections at the state and sometimes municipal levels to limit impacts of development on wetlands and to provide mitigation options to offset any impacts.

Community Resilience and Biodiversity Protection Act (Act 59) | In 2023, the Vermont Legislature set a goal of conserving 30% of the state's land area by 2030, and 50% by 2050, in alignment with the state's Climate Action Plan. Currently conserved land was inventoried in 2024, and a conservation plan will be established by 2026. This plan will include strategies and recommendations to achieve the conservation targets, and address many of the key issues identified in this section. Currently, more than 57,000 acres (17% of Chittenden County's land area) are available for recreation in the form of town and state parks, athletic fields, and publicly accessible natural areas, while 24% of the county is conserved (a number that also includes private land).²⁴

Working Lands | As noted in Chapter 4: Working Lands, the economic value of maintaining productive working farms and forests is crucial to preventing their conversion to other uses. Maintaining farms and forests also supports the production of food and materials, in addition to ecosystem services such as wildlife habitat, water quality, and carbon storage and sequestration. This is one path to supporting long-term, sustainable management of conserved land as defined in the Community Resilience and Biodiversity Protection Act of 2023.

Urban Forest Health | In urban areas, trees are crucial to maintaining air quality, mitigating stormwater impacts, cooling buildings and sidewalks, providing wildlife habitat, increasing property values, and improving public health and wellbeing.²⁵ These benefits create more vibrant places to live, and also increase resilience to the impacts of climate change. CCRPC works closely with the Vermont Urban & Community Forestry Program to assist municipalities in urban forestry planning and management. This includes coordinating funding for tree planting and maintenance, and providing education on tree pests and diseases.

Outdoor Air Quality | Pollution in significant concentrations can raise aesthetic and nuisance issues, impair scenic visibility, and create unpleasant smoke or odors. Pollution also poses human health problems, especially for more sensitive populations such as children, asthma sufferers, and the elderly. While Chittenden County's air quality meets current National Ambient Air Quality Standards (NAAQS), it is close to the limits for ground-level ozone. (The attainment level for ozone is .070 ppm; levels should not exceed this.⁴¹) While ozone levels in Chittenden County have continuously decreased for the last twenty years, [the 2021 ozone level measured .057 ppm](#). Particulate matter is well below the attainment level of 12.0 ppm. [Chittenden County's level in 2021 measured 6.7 ppm](#). The county is also subject to pollution from other areas and regions beyond local jurisdiction. If the NAAQS are revised to be more stringent, or if air pollutant levels increase and the county exceeds the NAAQS, additional and costly environmental regulations will apply to the region. See the [Agency of Natural Resources, Department of Environmental Conservation](#) for more information.



Note: This map and the corresponding data is intended to be used to inform energy and land use planning efforts by municipalities and regions. This map may also be used for conceptual planning by those interested in developing renewable energy infrastructure.

These maps do not take the place of site-specific investigation for a proposed facility and should not be used as "siting maps". This map does not take all regulations into account and automatically prohibit or allow renewable energy generation and replace the detailed process a developer must go through to propose a site for a renewable energy facility. This map shall not be used without the accompanying policies contained within the Chittenden County ECOS Plan.

ACTIONS

1. **Habitat Preservation** | Protect forest blocks, wildlife connectivity resources and crossings, surface waters, riparian areas and other significant habitats (e.g. wetlands) from development and fragmentation; and promote vegetative landscaping in urban areas to maintain natural habitats, natural stormwater management, water quality, air quality, carbon sequestration and cultural heritage. This work should focus on the broader concept of the pattern of forest cover, rather than core forest areas to avoid isolating forest blocks and losses in biodiversity.
2. **Inventory and Planning** | Map 10 provides a starting point for regionally important forest blocks and wildlife habitat, and is the basis for this plan's compliance with Act 171 of 2016 (Forest Integrity). The map includes [Vermont Conservation Design's](#) highest priority and priority resources defined as two scales: Landscape Scale (e.g. forest blocks and connectivity resources), and Species and Community Scale (e.g. rare, threatened and endangered species and other specific habitat sites). This data and the component layers are located on the Agency of Natural Resources' [BioFinder Map Viewer](#). Over the coming years, CCRPC will work with municipalities to be compliant with this statutory requirement, as well as the conserved lands inventory and conservation plan currently in development under the [Community Resilience and Biodiversity Protection Act of 2023 \(Act 59\)](#), by taking the following actions:
 - a. **Inventories and Mapping** | Assist with surveys, inventories, and mapping of forest blocks, wildlife crossings, natural communities (i.e. special features within forest blocks, surface waters, and riparian areas), and other significant habitats (e.g. wetlands), scenic resources, and locations of invasive species. Consider how to incorporate indigenous knowledge into these processes.
 - b. **Municipal and Regional Plans** | Incorporate this data into municipal and regional plan text and maps, and establishing specific policies that address and protect these resources.
 - c. **Maps** | Aggregate locally important forest blocks, wildlife habitats, and associated resources into a regionally significant map in order to see these resources across municipal boundaries, and work with local, state, and federal partners to protect them.
3. **Municipal Development Review Regulations** | Help municipalities create clear development regulations and definitions to protect ecological and habitat resources without having an exclusionary effect on current and future residents. Example measures may involve limiting intrusions to interior forest and connectivity blocks or maintaining vegetative cover and larger culverts around wildlife road crossings.
4. **Education**
 - a. **Professional Education** | Educate engineers, developers, real estate professionals, planners, and the public regarding resources and methods for restoration and protection.
 - b. **Public Outreach** | Support accessible education efforts, for all demographics, about the impacts of climate change, mitigation efforts and resiliency strategies.
5. **Non-regulatory Protection** | Support non-regulatory conservation and/or preservation efforts conducted through public and land trust investments in alignment with guidance of conservation targets and plans established under the [Community Resilience and Biodiversity Protection Act of 2023](#).
6. **Invasive Species** | Help municipalities establish and implement invasive plant removal management plans and monitor their long-term effectiveness. In addition, help municipalities plan for and manage invasive tree diseases and pests, such as emerald ash borer, that threaten urban and rural forests.
7. **Development Constraints** | To protect significant habitats, development should be located to avoid field-verified state and local known constraints, and to minimize impacts to field-verified state and local possible constraints. See Land Use Action 3(f).

8. **State and Municipal Collaboration** | Collaborate with state and municipal bodies, including the Vermont Agency of Natural Resources' Climate Action Office, to help implement strategies and actions in the [Vermont Climate Action Plan](#) related to natural and working landscapes.
9. **Air Quality** | Support efforts to improve, maintain, and respond to the overall air quality within the region to protect public health, reduce environmental impact, and comply with national standards.
10. **Urban Forest and Native Plants** | Work collaboratively with the Vermont Urban & Community Forestry Program to design, fund, and implement programs to support urban forestry and native plantings.



CHAPTER 3

Watershed Health



GOAL

Improve the safety, water quality, and habitat of rivers, streams, wetlands and lakes in each Chittenden County watershed.



KEY ISSUES, TRENDS & INSIGHTS



2026 **ECOS** Plan website

For an interactive experience and additional data, visit the [Watershed Health](#) page on the 2026 ECOS Plan website 

Trends and Challenges | Vermont water bodies face mounting pressures from development patterns, farm practices, and logging activities. Cumulative impacts from these land use activities have degraded water quality and aquatic habitat, and altered the stability of river corridors and lakeshores. Predominant issues in the county include increasing impervious surfaces, erosion, and steady high pollutant loads (mainly from nonpoint sources such as unmanaged stormwater) that result in nutrient enrichment, sedimentation, and other impairments. In addition, aquatic nuisance species continue to enter regional waterways, contributing to the degradation of habitat and recreational opportunities.

Stormwater Management | Concentrating development in areas planned for growth and proper stormwater management will continue to improve water quality measures. The Vermont Agency of Natural Resources (ANR) has supported water quality improvement via numerous initiatives since 2012, including: updates to the Lake Champlain Watershed Basin Plans within Chittenden County; updating the Municipal Roads General Permit (MRGP), and the Stormwater General Permit 3-9050; and most recently the Municipal Separate Storm Sewer System (MS4) permit for urbanized areas.

MRGP and MS4 Permits | Under the latest [MS4 permit requirements](#), nine Chittenden County municipalities are implementing various measures to reduce the impacts of non-source runoff, and help meet the total maximum daily load requirements for impaired streams, rivers, and Lake Champlain. These include Municipal Roads General Permit (MRGP), which requires improvements to municipal roads that drain to waterways. All municipalities are subject to the MRGP permit.

The nine municipalities must implement their MS4 Stormwater Management Plans, which include elements such as Minimum Control Plans, Flow Restoration Plans for impaired streams, and Phosphorus Control Plans for municipal owned roads, rights-of-ways, and properties. These permits require additional public investment in storm water facilities or investments, as well as increased municipal inspection of private construction sites' minimum control measures. However, this has created some confusion for developers, as the ANR still holds jurisdiction over those sites' individual stormwater permits. Greater integration of municipal MS4 permits and state stormwater permits, as improved coordination between agencies, will help clarify requirements and reduce runoff into local waterways.

Clean Water Service Providers | In 2022, the Department of Environmental Conservation prepared phosphorus reduction budgets by sector and watershed. These budgets have informed next steps in phosphorus reduction needs through regulatory and non-regulatory programs. Clean Water Service Providers have been established to address these non-regulatory reductions. [CCRPC is the Clean Water Service Provider for the Northern Lake Champlain Basin](#).

Road Erosion Mapping and Data | The Vermont Agency of Transportation (VTrans) has developed the [Vermont Transportation Resilience Planning Tool \(TRPT\)](#), which combines and applies river science, hydraulics, and transportation planning methods at a watershed scale. This web-based application identifies bridges, culverts, and road embankments that are vulnerable to damage from floods (or that have been damaged recently during actual disasters), estimates risk based on vulnerability and criticality of roadway segments, and identifies potential mitigation measures based on factors that drive vulnerability.

River Corridors | A river corridor is the land area adjacent to a river that accommodates the dimensions, slope, planform, and buffer of the naturally stable channel, which is necessary for the natural maintenance or restoration of a dynamic equilibrium condition (as defined in 10 V.S.A. §1422), and for minimizing fluvial erosion hazards. A river corridor includes the meander belt and the area to maintain a riparian buffer (defined as 50 feet from the meander belt). These areas are mapped in the 2022 update of the Chittenden County Multi-Jurisdictional Hazards Mitigation Plan, and its associated municipal annexes. River corridor protection is a goal in statute for municipalities, regions, and state agencies. Important incentives such as the Emergency Relief Assistance Fund (see the Public Safety, Criminal Justice & Hazard Mitigation Section for more information) are available to communities protecting river corridors. River corridor resilience is critical to the health of all ecological systems and nearby infrastructure. (To date, 776 structures exist within Chittenden County’s river corridor.) A number of practices lead to river corridor instability, cause excessive erosion of river channels and other fluvial erosion hazards, and increase pollution. Among these include: channelization of streams and rivers; reduction and alteration of natural floodplains; river corridor encroachment; stormwater runoff and reduction; and the elimination of vegetative buffers. Of the river miles assessed in Vermont, 74% have become confined to deeper, straighter channels, and no longer have access to historic floodplains to help stabilize streams, and promote sustainable water quality management.²⁶

Regulations | Most Chittenden County municipalities have regulations that are designed to ensure that development isn’t threatened by inundation flooding (rising water over land) or fluvial erosion (erosion of land due to fast-moving water). However, there is a disconnect that exists between the vision for natural riparian systems as expressed in municipal plans, and development regulations that implement those plans, due to a lack of local expertise and capacity to enforce effective floodplain and river corridor regulations. The volunteers and staff who administer the majority of this work have many other responsibilities. In many cases, they are not trained in floodplain and river corridor management. Local bylaws protect the majority of the county’s river corridors with stream setbacks and floodplain inundation regulations from new development. However, regulations vary significantly by municipality, even within the same watershed. In addition, many development regulations possess vague review standards, which complicates enforcement, and opens towns to legal challenges. Finally, agriculture and forestry practices are exempt from local review, while the state’s inconsistent enforcement of Required Agricultural Practices lacks coordination between agencies with jurisdiction. These issues point to a need for regulatory reform for river corridors and floodplains, and perhaps a single statewide standard and administrative body. The type of regulatory reform is being studied by the Vermont Agency of Natural Resources in response to the passage of the Flood Safety Act (Act 121) during the 2024 legislative session.

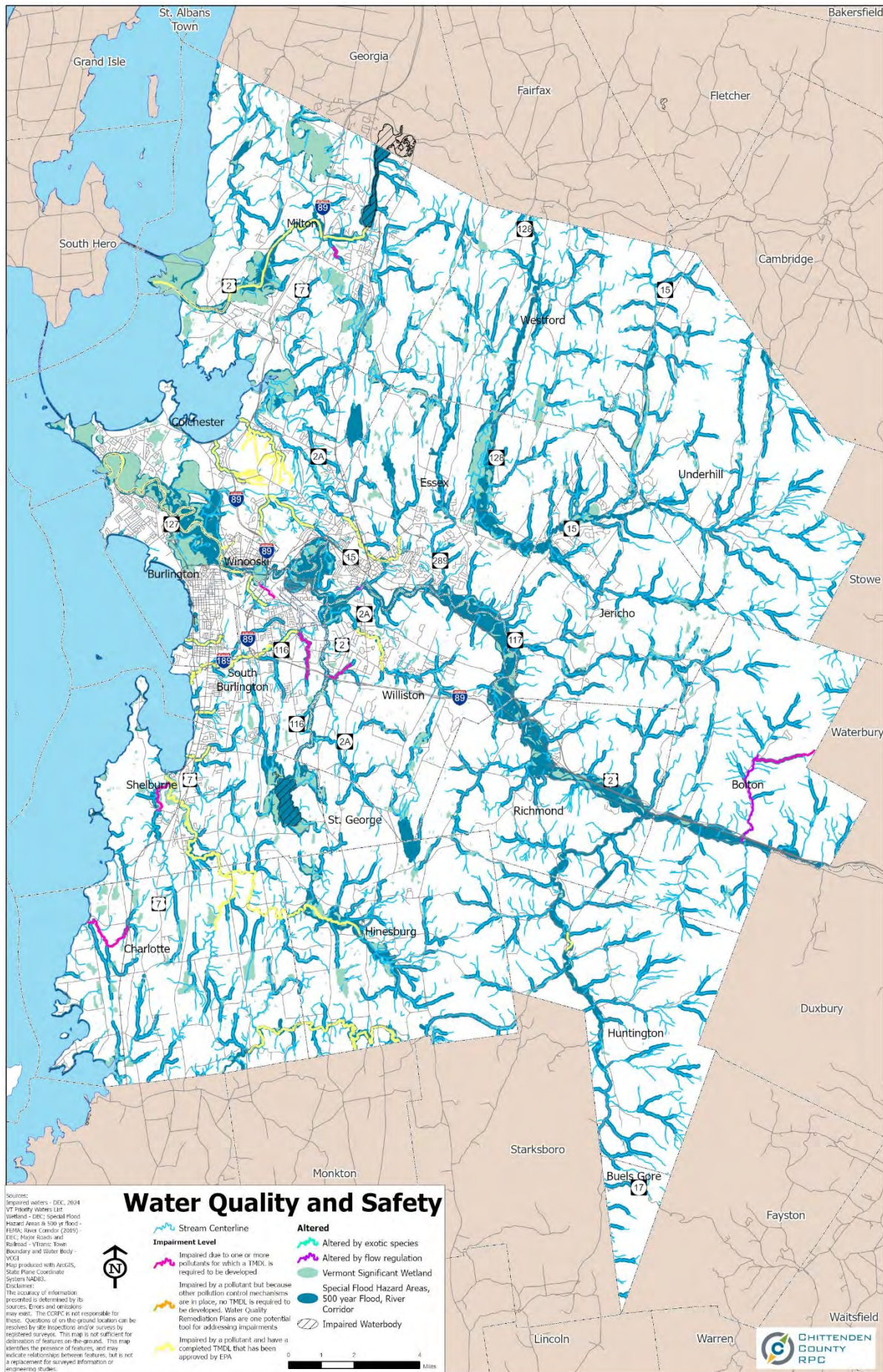
Groundwater | As of 2015, 30,713 Chittenden County residents (19% of the 2015 population) relied on groundwater sources for drinking water.²⁷ Protection of groundwater resources from failing septic systems and petroleum spills/leaks is critical.

Altered and Impaired Streams | The U.S. Clean Water Act requires states to develop a list of streams, lakes, and ponds (called Priority Surface Waters in Vermont) that require remediation because they do not meet water quality standards and [are impaired](#). These surface waters may be hydrologically altered from lack of flow or flow fluctuations (listed as Part F; e.g. Winooski River); altered by the presence of aquatic invasive species (Part E; e.g. Indian Brook, Arrowhead Mountain Lake, Shelburne Pond and Lake Champlain); or impaired by pollutants (Parts A, B, and D; e.g. Englesby Brook, Potash Brook, Lamoille River Tributary #4, Winooski River, Muddy Brook, Centennial Brook, Sunnyside Brook, and Lake Champlain). For certain impaired streams, the U.S. Environmental Protection Agency (EPA) has developed a Total Maximum Daily Load (TMDL) of specific pollutants, including for phosphorus that enters Lake Champlain. As of 2024, 125 stream miles (9% of total) in Chittenden County were listed as impaired under Parts A, B, or D. This has increased from 8% in 2018 but decreased from 14% in 2014, demonstrating a need for continued progress on stream restoration.^{28,29}

Phosphorus Level Concentrations | The overall Lake Champlain Total Maximum Daily Load requires a total phosphorus load reduction of 212 metric tons per year by 2038. The state is tracking progress on this goal, and the details are outlined in the [Vermont Clean Water Initiative 2024 Performance Report](#). As of 2024, an estimated 54.7

metric tons of phosphorus reduction has been achieved in Vermont's Lake Champlain basin. This represents 25% of the reduction required to achieve the state's water quality goals to create safe, swimmable and fishable waters.

PFAS (Per- and Polyfluoroalkyl Substances) | This group of human-made chemicals has been widely used in various industries and consumer products for decades. In Vermont, PFAS contamination remains a concern. These chemicals have been found in drinking water sources, particularly in areas near industrial sites, military bases, and airports where PFAS-containing firefighting foams were used. The presence of PFAS in drinking water has raised health concerns due to their adverse effects on human health. The state has set a drinking water standard for five PFAS compounds, including PFOA and PFOS, and has implemented testing requirements for public water systems.³⁰ PFAS exposure is a complex and evolving topic, and ongoing research and regulatory efforts are being conducted to better understand and mitigate the risks associated with these chemicals.



ACTIONS

1. **Hazard Protection** | Develop and implement adaptation strategies to reduce inundation flooding and fluvial erosion hazards while supporting planned growth, evaluate growth in terms of preparedness for a changing climate. Chittenden County and its municipalities will: continue efforts to avoid development in vulnerable areas, including floodplains, river corridors, wetlands, lakeshores and steep slopes; protect people, buildings, and facilities in vulnerable areas where development already exists in order to reduce future flooding and erosion risks; plan for and encourage new development in areas that are less vulnerable to future flood and erosion events; and implement stormwater management techniques to slow, spread, and sink floodwater (see the Non-point Source Pollution section below).
 - a. **Mapping and Data** | Use mapping and data tools to prioritize and address road erosion issues, including the VTrans Transportation Resilience Planning, VT Culverts, and the Reducing Repeat Damage tools.
 - b. **Revise Bridge/Culvert Designs** | Help revise municipal public works standards and zoning ordinances with culvert and bridge design specifications that allow for wildlife passage and movement of floodwater and debris during high intensity events. Implement culvert and bridge designs that produce stable structure in river channels (i.e. fluvial geomorphology).
 - c. **Continue Non-Regulatory Protection of River Corridors** | Work with partners to conserve and/or preserve vulnerable areas through public and land trust investments, stream re-buffering, river corridor easements on agricultural lands, river corridor restoration, and culvert and bridge improvements.
 - d. **Protect River Corridors Through Regulation** | Work with municipalities and ANR to improve bylaws to protect floodplains and river corridor areas not currently protected through implementation of the statewide minimum floodplain management standard, state river corridor permit and municipal delegation contemplated in Act 121 of 2025.
 - e. **Increase Flood Resilience** | Support non-regulatory efforts to reduce damage from future floods. This includes: identifying repetitively damaged structures; providing technical and financial assistance to elevate, relocate, or buy out structures; supporting planning and mitigation in mobile home parks vulnerable to flooding; and identifying where flood storage capacity may be restored and conserved.
 - f. **Tactical Basin Planning** | Participate in developing and implementing the Lamoille (Basin 7), Winooski (Basin 8), and Northern Lake Champlain Direct Drainages (Basin 5) Tactical Basin Plans. CCRPC will work with the state, municipalities, and other partners to address river hazard protection, flood resiliency, and water quality through these plans, including prioritizing projects for funding.
 - g. **Avoid Development Constraints** | See Land Use Action 3(h).
2. **Non-Point Source Pollution**
 - a. **Assemble Data** | Work from existing data and continue to identify locations that contribute to water pollution via flow, sediment, pathogens, and nutrients. Where needed, conduct on-the-ground inventories of water quality and biological assessments (in-stream), wetlands, sub-watersheds, river corridors (buffered or not), and geomorphology. Map existing and new data on one regional map.
 - b. **Revise and Enforce Plans and Bylaws** | Incorporate the above data into municipal plans; establish specific statements that protect these resources; develop clear standards for how to protect these resources within development regulations; and initiate ongoing enforcement of regulations. Encourage Low Impact Development (LID) policies, Green Stormwater Infrastructure (GSI) techniques, and shared storm water control programs to maximize land development in areas planned

for growth. Incentivize best management practices for agricultural uses. Encourage the Agency of Agriculture to better enforce required agricultural practices.

- c. **Implement Watershed Restoration and Non-Regulatory Approaches** | Identify and implement non-regulatory approaches to nutrient, pathogen, and sediment pollution management, especially projects implemented through the Clean Water Services Provider framework authorized under Act 76. Support the work of watershed organizations.
- d. **Implement Permits** | Work with municipalities and other partners to implement the Municipal Roads General Permit, Stormwater General Permit 3-9050 for Developed Lands (with three or more acres of impervious surface), and integrate phosphorus reduction into the existing MS4 permit. See Chittenden County's Work Plan, and the [2022 Chittenden County Multi-Jurisdictional Hazards Mitigation Plan](#) for more details. CCRPC will also advocate for better coordination of municipal and state regulatory oversight and enforcement of individual stormwater permits for private development projects.
- e. **PFAS and Emerging Pollutants** | Monitor and support efforts to assess and minimize the presence and risks associated with contamination from PFAS, pesticides, fertilizers, and other polluting substances in the region.

3. Clean Water Financing

- a. **Areas Planned for Growth** | Ensure that stormwater regulation and requirements do not financially burden or penalize dense and compact development in areas planned for growth.
 - b. **State Financing Reform** | Monitor and participate in state financing reform, which the Agency of Natural Resources is leading, to make recommendations on how to implement and fund the remediation or improvement of water quality.
4. **Wastewater** | Work with municipalities to upgrade wastewater treatment plants to comply with the Lake Champlain Phosphorus TMDL Phase I Implementation Plan and decrease impacts of sewage on ecological systems (see Chapter 13: Infrastructure and Facilities). Support underserved settlements in the county (such as mobile home parks) to develop, and redevelop, wastewater solutions.



CHAPTER 4

Working Lands



GOAL

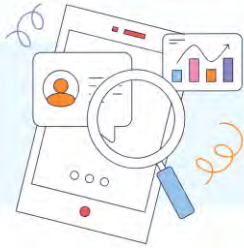
Support the growth and vitality of working farms and managed forests by increasing investments and decreasing subdivisions. Minimize and mitigate environmental impacts of industry.



KEY ISSUES, TRENDS & INSIGHTS



Data for this section is drawn from: [Natural Systems Analysis Report](#); [Vermont Agriculture and Food System Strategic Plan 2021 – 2030](#); the [Action Plan of the VT Working Landscape Partnership \(2012\)](#); [Vermont Wood Fuel Supply Study](#) – Biomass Energy Resource Center, 2010; [Informing Land Use Planning and Forestland Conservation Through Subdivision and Parcelization Trend Information](#) – Vermont Natural Resources Council, September 2010.



2026 ECOS Plan website

For an interactive experience and additional data, visit the [Working Lands](#) page on the 2026 ECOS Plan website.

Land Use and Working Lands | This plan’s Future Land Use map includes 81.6% of Chittenden County’s land area in the three “rural” future land use categories (Rural-General, Rural-Agriculture and Forestry, and Rural-Conservation). One main goal within these areas is to maintain the vitality of working lands enterprises and ecological systems by minimizing parcelization and fragmentation. Twelve percent (12.8%) of the land area is defined as “areas planned for growth,” with the intent of concentrating development in these areas to relieve development pressures on rural areas. The remaining 5.6% of land area falls into other land use categories (Enterprise, Resource-Based Recreation, and Airport / Camp Johnson / Ethan Allen Firing Range). The intent of this plan is to minimize degradation of working lands in rural areas to prevent far-reaching consequences on Vermont’s local economies, including tourism.

Current Use | The pressure of property taxes and other expenses often forces farms out of business and/or requires landowners to sell or develop their property to meet financial needs. Between 2012 and 2022, the average property taxes per acre for farms in Chittenden County increased 44% from \$39.22 per acre to \$56.87 per acre (Dollar figures are expressed in current dollars and have not been adjusted for inflation or deflation).³¹ Between 2011 and 2019, 1.27 acres of agricultural and natural resource land was lost annually to development per new resident.^{32, 33}

Vermont’s Use Value Appraisal or “Current Use” Program was established in 1978 to support working lands. According to the [VT Department of Taxes](#), about a third of Vermont’s total land, most of which is privately owned, is enrolled in this tax equity program that assesses property taxes based on the productive value of the land rather than its potential value as real estate. Current Use also advances conservation goals since enrolled parcels must follow specific management plans and land management practices required by the program. In Chittenden County, the amount of [agricultural land in Current Use](#) remained stable between 2017 (29,178 acres) and 2022 (29,076 acres). The amount of [forest land in Current Use](#) increased significantly over the same timeframe (51,338 acres in 2017 to 67,210 acres in 2022). Combined, 96,286 acres in Chittenden County are enrolled in Current Use (28% of the county’s land area).

Community Resilience and Biodiversity Protection Act (Act 59) | As noted in Ecological Systems, this 2023 law sets conservation targets for 2030 and 2050. The law includes a category for “natural resource management areas” that are permanently protected from conversion to other land uses, and subject to long-term sustainable land management. The conservation plan developed under this legislation will include strategies and recommendations to achieve conservation targets, and increase equitable access to conserved lands and land-based enterprises. This work fully aligns with CCRPC’s Working Lands and Ecological Systems goals.

Regenerative Economy | Working lands are critical components of a self-reliant and diverse economy. Historically, the Chittenden County economy has seen working lands through the lens of maximizing resource extraction and production of goods or services without much regard to outcomes for long-term ecological health or economic

prosperity. Pursuing a myth of infinite economic growth ultimately will result in degraded landscapes unable to support human society (or life at all), as human consumption exceeds the planet's carrying capacity. The alternative view of a regenerative or circular economy, as depicted in the graphic to the right, places human economic needs within the context of ecological cycles, aiming for stable long-term circulation of resources, rather than a linear process that results in waste.

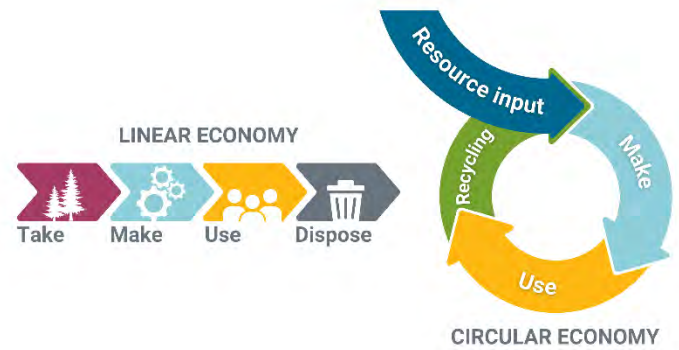


FIGURE 6: LINEAR AND CIRCULAR ECONOMY

Local Economic Impact | Working lands are a significant contributor to the regional and state economy. Based on 2017 statewide figures, the forest and wood products industries economic output is \$2.1 billion annually;³⁴ and the food system economic output is \$11.3 billion annually.³⁵ These figures do not consider the ecological benefits of forests, nor the tourism economy which relies heavily on forested and agricultural landscapes. Furthermore, local food production makes the region less vulnerable to market disruptions, reduces transportation-related expense to import food, and decreases transportation energy use and pollution. Also, markets for forest products are necessary to ensure that landowners can afford to retain and manage their forest land.

Despite its contributions to the local economy, farming itself is not a lucrative profession. As of 2022, the average net cash income of farm operations in Chittenden County was \$25,619 per farm.³⁶ This is a 37% increase from 2017. In comparison, Vermont's average net cash income was \$47,517 per farm in 2022.³⁷ While these figures do not account for the size or acreage of farms, Chittenden County's farm income is still well below the county median income (\$85,213)³⁸ as well as the Vermont livable wage (\$15.33 hourly or \$31,886 annually)³⁹; it is barely above Vermont's minimum wage (\$13.18 hourly or \$27,414 annually).

Forests for Biomass | The 2022 Vermont Comprehensive Energy Plan, the State Climate Action Plan, and the 2023 Vermont Legislative Act 59, which sets conservation goals for 2030 and 2050, place significant emphasis on the importance of carbon storage and sequestration.

- **Biomass for Electricity** | The McNeil Generating Station in Burlington is the region's largest user of biomass for energy generation. Most of the wood fueling the McNeil Station in Burlington comes from within 60 miles of the station, and is a byproduct of other forestry operations. At full load, approximately 76 tons of wood chips are consumed per hour (about 30 cords).⁴⁰
- **Biomass for Heating** | Between 2.5 and 5.2% of homes in Chittenden County use firewood or wood pellets as a heating fuel,⁴¹ as do several commercial and civic buildings (some of which are shown in Map 3).
- **Biomass Sustainability** | As Vermont continues to deploy renewable resources, it is vital to maintain the ecological function of Vermont's natural landscape and that biomass used for electricity production is harvested in a truly sustainable manner that does not negatively impact the ability of forests to act as the single-largest source of carbon sequestration and storage in the State.⁴² At the same time, managing forests for biomass fuel provides economic value that supports retention of the ecological functions of forests, including carbon storage and sequestration, rather than conversion to non-forest uses. (See Supplement 6: Enhanced Energy Plan for analysis of the supply of biomass for heating and electricity.)

Farm to Plate | Farm to Plate has been a success story in Vermont since it formed in 2011, with significant growth in farm and food sales, jobs, food businesses, and local food consumption.⁴³ Vermont intends to build on this success and address structural problems as defined in the [Vermont Agriculture and Food System Strategic Plan 2021 – 2030](#). These structural problems include “development pressure, generational transfer of farm assets, changing consumer preferences and markets, income inequality and food insecurity.”

Farm Worker Equity | Since the 1990s, Latine farmworkers have supported Vermont’s dairy industry and agricultural economy, but some individuals work under unsafe conditions with low wage, and/or without full payment. Some Latine farmworkers lack access to basic human needs, including safe housing, health care, and culturally relevant foods.⁴⁴ For more information, see the [Farm to Plate Issue Brief: Racial Equity in the Vermont Food System](#).

Agricultural Lands | Per the 2022 USDA Census of Agriculture, between 2017 and 2022, [the number of farms in Chittenden County](#) remained stable (585 farms and 584 farms respectively).⁴⁵ The [acreage of farmland](#) increased from 64,226 acres to 85,015 acres and the average farm size increased from 110 acres to 128 acres.⁴⁶ However, while acres in pasture and woodland have remained steady despite fluctuations, the acres in cropland has steadily decreased over time, indicating that crops are becoming less economically viable.⁴⁷ These trends indicate progress on the statewide goal of supporting working lands, but may indicate that smaller farms and farms producing crops are less economically viable than before. Having farmland aggregated within larger farms that specialize in one crop makes our food system less resilient to changing markets and climate conditions. It can also make it more difficult for small farms to compete and for new farmers to find land.

The market value of agricultural products sold varies based on crop and/or livestock type. In 2022, Chittenden County ranked first compared to other VT counties for sales in two categories of crop types: sales of nursery, greenhouse, floriculture, and sod products amounted to a market value of \$8,937,000; sales of berries amounted to \$1,385,000.

The farming profession in Chittenden County is becoming slightly more diverse. The number of farm owners/producers in Vermont who identify as a race other than white alone rose from less than 1% in 2017 to 2.1% in 2022.

Farm Size							1987 to 2022 Change	
(Acres)	1987	1997	2007	2012	2017	2022	Number	Percent
1,000 or more	7	10	11	11	6	11	4	57%
500 to 999	44	23	25	12	17	21	-23	-52%
180 to 499	140	123	203	88	75	83	-57	-41%
50 to 179	134	137	178	180	169	182	48	36%
10 to 49	99	123	143	223	224	194	95	96%
Under 10	28	40	81	73	94	93	65	232%
Total	452	456	641	587	585	584	132	29%

FIGURE 7: NUMBER OF FARMS OF DIFFERENT SIZES IN CHITTENDEN COUNTY, 1987 – 2022

SOURCE: U.S. AGRICULTURE CENSUS. A NEGATIVE NUMBER (-) IN THE CHANGE COLUMNS INDICATES A DECREASE IN NUMBER OF FARMS.

Bedrock Geology | Chittenden County contains two major zones of bedrock geology: sedimentary zone, formed by the deposit of sediment, located predominantly in the lowlands between Lake Champlain and the uplands on the eastern side of the county; and metamorphosed zone, formed by metamorphic processes located predominantly in the uplands on the eastern side of the county. No major geologic threats (e.g. major active fault lines, areas prone to sinkholes or subsidence) or opportunities (e.g. deposits of valuable minerals) exist in the county.

Mining | The extraction of sand, stone, and gravel are commercially viable in the county. These resources play an important role in construction and land development practices. Extraction operations can have environmental impacts, particularly related to water quality and wildlife habitat, and are regulated by state and local governments in order to minimize these impacts. Sand, stone, and gravel are finite resources. Alternatives to these resources for use in construction have not been identified, but efforts are underway to minimize the demand for these resources by recycling those already extracted. For example, Glavel, an Essex-based business, converts post-consumer glass

bottles into road and building foundation aggregates. Chittenden County contains three sites that primarily produce construction sand and gravel areas. The county has a total of 10 producing mines.⁴⁸

ACTIONS

1. **Working Lands Implementation** | Increase investment in and decrease subdivision of working lands and significant wildlife habitats. Protect farmland and forestland and support existing and new operations.
 - a. **Farm to Plate** | Cooperate with stakeholders to implement projects identified in the 2021 – 2030 Vermont Agricultural and Food Systems Strategic Plan (Vermont Farm to Plate) that will support continued growth of the local farm, food, and forestry economy within the region.
 - b. **Regenerative Farming** | Support effort to implement regenerative and biodynamic farming and widespread small-scale food production in urban and small-lot rural residential areas, to help make local food systems more accessible and resilient to climate change. Discourage the use of pesticides and chemical fertilizers.
 - c. **Forest Economy** | Cooperate with stakeholders to implement projects and actions intended to strengthen the forest economy as identified in the [2017 Vermont Forest Action Plan](#) and the [Vermont Forest Sector Systems Analysis](#).
 - d. **Municipal Development Regulations** | Help municipalities create clear development regulations and definitions of working lands to be protected. Maintain access to and scale of working lands to support viability after subdivision in the rural landscape. This may include protection of log landings of previously logged forested parcels, zoning techniques such as fixed area ratios, which separate lot size from residential density, and conservation zoning and homeowners association bylaws that allow for farming on the open space lots and in urban spaces.
 - e. **Farmland Access** | Work with the Vermont Housing Conservation Board, Vermont Land Trust, Land Access and Opportunity Board, and other similar organizations to increase access to farmland for Black, Indigenous, and people of color.
 - f. **Urban Agriculture** | Promote urban agriculture in areas planned for growth to cultivate a land ethic, improve resilience of food systems, and increase food access, particularly in areas of high poverty and food insecurity.
 - g. **Biomass Energy Potential** | Support the harvesting of biomass in Chittenden County, when sustainably harvested, for uses such as combined heat and power, which will support the viability of the forestry industry and move the region toward the energy goals discussed in the Enhanced Energy Plan.
 - h. **Development Constraints** | See Land Use Action 3(h).
2. **Earth Resources Extraction** | Mineral extraction and processing facilities, including smaller private extraction operations existing to support agricultural operations, should be planned, constructed, and managed, in accordance with state and local regulations, to:
 - a. **Minimize Transportation Impacts from Extraction Uses** | Avoid placing an excessive or uneconomic burden on local and state highways and bridges, including but not limited to the function and safety of existing roads and bridges serving the project site; strain from heavy loads on roadbeds and bridges; conflicts with pedestrians or bicyclists; and increased heavy traffic in dense residential areas.
 - b. **Minimize Land Impacts** | Minimize adverse effects on water quality, fish and wildlife habitats, human health, and adjacent land uses.
 - c. **Reclamation** | Plan for their eventual rehabilitation so that slopes are stable, and the surface is revegetated with a variety of native species to support a wide range of biodiversity. Maintain topsoil at sites, and ensure that excavations stop early enough in order to establish stable slopes on the property.
 - d. **Screening** | Screen extraction sites to the extent practical if topography and vegetation allow.
3. **Outdoor Recreation** | See Chapter 15: Scenic, Recreational, and Historic Resources.



CHAPTER 5

Land Use



GOAL

Focus 90% of development in areas planned for growth (Downtown Centers, Village Centers, Planned Growth Areas, Village Areas, and Transition), in order to maintain a settlement pattern of compact centers separated by rural countryside.



KEY ISSUES, TRENDS & INSIGHTS



Data from this section is drawn from [Historic Development and Future Land Use/Transportation Analysis Report](#), [ECOS Project Building Homes Together Campaign](#), [Prevention Institute's Four Shifts to Heal Communities Report](#).



2026 **ECOS** Plan website

For an interactive experience and additional data, visit the [Land Use](#) page on the 2026 ECOS Plan website 

Land Use Overview

Land use plans and development regulations (zoning bylaws and subdivision regulations) influence how a community situates and accounts for local transportation, recreation opportunities, medical care and emergency response, food access, safe and affordable housing, access to employment, energy use, and environmental quality. Thoughtful land use planning can guide development to provide diverse housing types and options for renting or owning in all communities, robust walking and biking infrastructure, employment opportunities, and community services in a compact development pattern. Compact development patterns enable people to walk instead of drive, engage with neighbors, and obtain the services they need. This helps preserve habitat for wildlife, reduces greenhouse gas emissions, and increases everyone's access to a healthy and livable community.

In Chittenden County, land use is governed via development regulations. Each zoning district has different rules that regulate the use of land and development design. Good land use planning and development regulations result in the benefits listed above. However, as the American Planning Association points out, the practice of zoning is inherently designed to exclude.⁴⁹ This is because those with more time to participate in local political systems, and those with more wealth, generally have greater influence over land use planning and the rules that regulate development. Inequitable participation and influence within land use governance systems can lead to inequitable outcomes. For example, when compared to affluent neighborhoods, low-income housing is located closer to industrial uses, and in areas more susceptible to environmental hazards. Poor land use and public facilities planning may also lead to inequitable access to green space in a community.

According to the American Planning Association, development regulations impact the following six equity concerns: public health, environmental justice, fair access to attainable housing, fair access to economic opportunity and services, the ability to age in place, and cultural preservation. These concerns greatly impact community health. Therefore, in order to improve health equity in Chittenden County, it is critical to understand the ways in which land use policy and development regulations shape the places where people live. An additional equity concern raised during public outreach for this plan is the importance of ensuring housing choice across the county, so that people have options regarding the types of communities, services, and amenities they can access. Feedback specifically cited concerns about lack of affordable places to live in rural communities.

Chittenden County Land Use Trends

Suburbanization and Smart Growth | After World War II, development regulations and consumer preferences shifted growth away from the metropolitan areas around Burlington to more suburban and rural locations in and beyond Chittenden County. The scattered development that followed occurred at low densities, consumed large amounts of land, created high infrastructure costs, caused habitat, forest, and agricultural fragmentation, decreased the ability to walk to services and jobs, and diminished opportunities for social interaction.⁵⁰

In recent decades, CCRPC and member municipalities have updated zoning and pursued investments to support smart growth. The HOME Act and Act 181 have further promoted smart growth. Changes in the HOME Act include a requirement to allow duplexes where single family homes are otherwise allowed, and require minimum densities in areas served by sewer and water. These changes are intended to help promote housing and better use existing infrastructure. Smart growth principles encourage more sustainable and efficient use of land by encouraging higher density development, which makes varied modes of transportation more accessible (carpooling, public transit, transportation of goods, pedestrian/bicycle travel, etc.), protects wildlife habitats, and encourages opportunities for social interaction.

Areas Planned for Growth | CCRPC has designated several locations on the future land use map as areas planned for growth. Areas planned for growth include Downtown Centers, Village Centers, Planned Growth Areas, Village Areas, and Transition Areas. These areas include 12.8% of the County’s land area. These areas are locations with existing development in a compact form, transit services, water/wastewater infrastructure, employment, broadband services, bike/ped infrastructure, and health/medical services (or with Transition areas, an intent to plan toward these features). Many of these attributes enable smart growth. CCRPC’s land use strategy is to encourage at least 90% of growth in areas planned for growth. [Between 2019 and 2023, the five-year average was 88% of new housing units constructed in areas planned for growth.](#)

Prior to Act 181, CCRPC intended to include a Transit Oriented Development (TOD) Overlay on the future land use map (see Supplement 5 – Metropolitan Transportation Plan). This overlay illustrates areas within a ¼ mile walking distance to public transit service in areas planned for growth with the intent to encourage municipalities to consider higher density development within these areas. The TOD overlay constitutes 6% of Chittenden County’s land area, all of which is within areas planned for growth. CCRPC decided not to include the TOD Overlay in our future land use map given the adoption of Act 181 and the number of substantial map changes. CCRPC intends to reference the TOD Overlay in the MTP when it is relevant and to discuss possible inclusion of the TOD Overlay on the regional future land use map with the Land Use Review Board in subsequent plans.

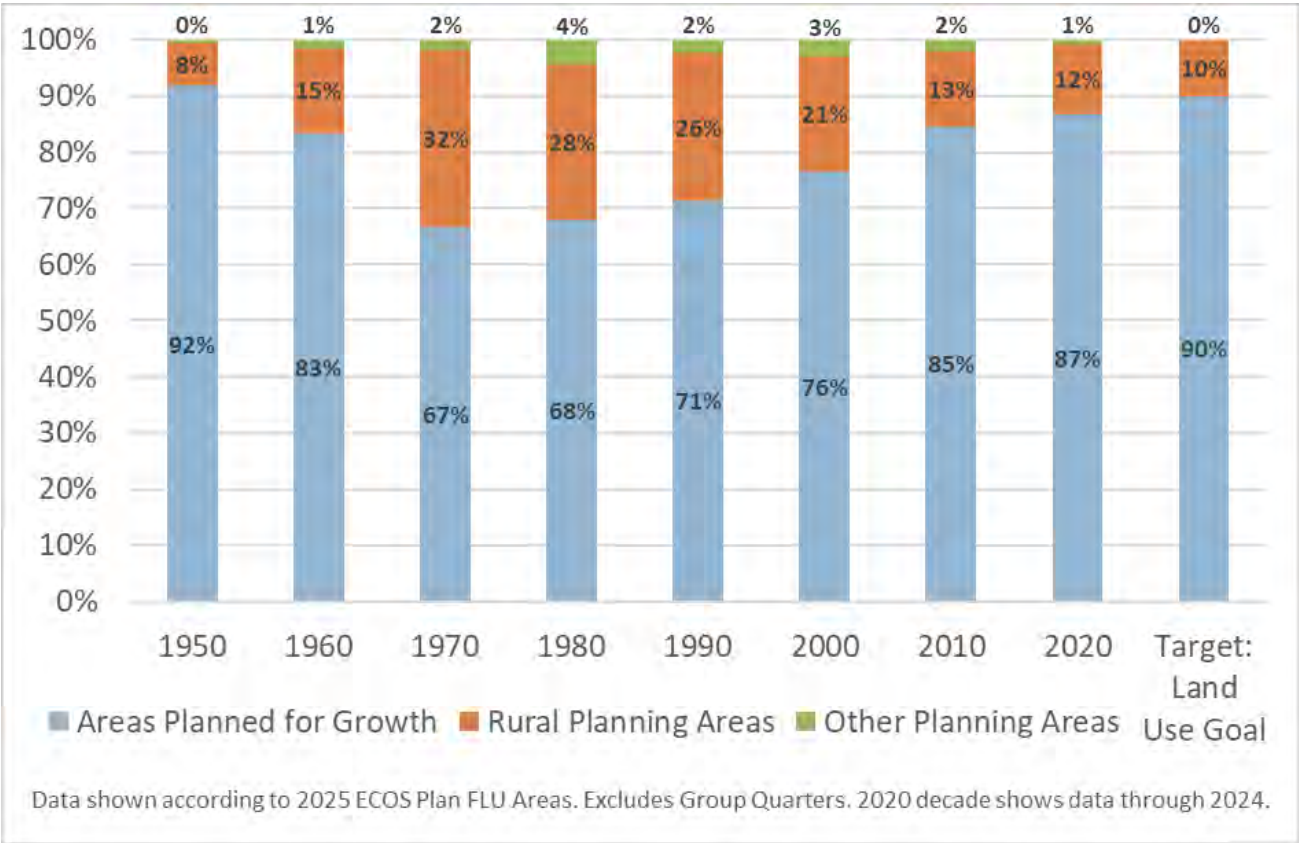


FIGURE 8: PERCENT OF HOMES IN AREAS PLANNED FOR GROWTH BY DECADE

Jobs-Homes Index and Commuting | A balanced jobs-to-homes index (the number of jobs in an area divided by the number of occupied [non-seasonal] homes) promotes more affordable housing, and lowers commuting rates. The jobs-homes index in Chittenden County was 1.24 as of 2023. While the number of jobs has remained relatively steady in Chittenden County, fewer workers live in the county now than in 2002 (65% in 2022, down from 75% in 2002.)⁵¹ As of 2023, between 22.9 – 29.1% of Chittenden County residents commute 30 or more minutes to work each day.⁵² Though the COVID pandemic led to a sharp increase in employees working from home, it is too soon to tell how long this shift will endure. Still, these trends indicate a lack of available, affordable homes within the county, which results in more commuting from outside the county. This has many ramifications, including: more spending on transportation; less time for other activities; increased health risks from extended sitting; a greater likelihood of vehicular accidents; and increased greenhouse gas emissions from fossil fuel burning autos. Also, the state’s 2022 Analysis of Impediments to Fair Housing Choice identifies the following transportation issue for people in protected classes: “Lack of public transit service outside higher-density, developed areas limits housing choice, especially for low-income Vermonters, including a disproportionate number of minority groups.”

Other Land Use Considerations

State Designated Centers | The [State Designation Program](#) is designed, in part, to promote smart growth principles, and support traditional development patterns.⁵³ As of July 2025, Chittenden County has 15 Village Centers, 2 Downtowns, 2 Growth Centers, 2 New Town Centers, and 5 Neighborhood Development Areas that are part of the State Designation Program.

Per Act 181, the five existing designation programs will be consolidated into two programs: Centers and Neighborhoods. Centers and neighborhoods are now mapped on the regional future land use map. This presents an opportunity for new or updated designated areas. These new designations will take effect upon approval of the Regional Future Land Use Map by the Land Use Review Board, or by December 31, 2026, whichever is sooner. All existing Village Centers, New Town Centers, and Downtowns designations (known as “Legacy Designations”) are intended to transition into the new program as Downtown and Village Centers. All existing Growth Centers and Neighborhood Development Area designations are intended to transition into the new program as Neighborhoods.

Housing Targets. In addition to requiring that housing targets now be included in regional and municipal plans, changes to statute in 2025 call for the “substantial majority” of those targets to be accommodated in four Future Land Use Areas: Downtown Centers, Village Centers, Planned Growth Areas, and Village Areas. (24 V.S.A. §4302(c)(1)(a)). (These categories are described in more detail below, and housing targets are discussed in greater detail in the Housing Chapter and Supplement 7.) Having the housing targets linked with future land use areas helps promote state smart growth goals, and also helps guide how regions and municipalities plan for the infrastructure, services, transportation, and other investments needed to support housing development.

Brownfields | A brownfield is a property for which expansion, redevelopment, or reuse may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Contamination impairs the environment, poses risks to human health, and discourages productive use or reuse of property. The Agency of Natural Resources identifies 81 brownfield sites in Chittenden County. Most brownfield sites in Chittenden County exist in historic downtowns and village centers. More than a quarter of all identified brownfield sites (28%) have received a Certificate of Completion of cleanup.⁵⁴ CCRPC’s Brownfields Program helps property owners complete environmental assessments for properties with possible contamination. These critical assessments allow property owners the ability to access federal and state funds for cleanup.

Between 2016 and March 2023, CCRPC provided over \$500,000 in brownfield assessment funds through grants from the U.S. Environmental Protection Agency and the Vermont Agency of Commerce & Community Development. These grants support identifying old contamination, and creating cleanup plans that enable the redevelopment of new homes, commercial space, new community parks, roadway improvements, and other public facilities. CCRPC obtained another \$500,000 from the EPA in May 2023, and \$200,000 from the Vermont legislature in early 2023, to fund future brownfield assessment work in Chittenden County. In 2025, CCRPC established a Revolving Loan Fund

(RLF) with funds from the Environmental Protection Agency. The RLF will fund property cleanup after assessments are complete.

Parcelization and Fragmentation | Future opportunities for farming, forestry, recreation, and tourism in the county will become more limited as suitable open land becomes less available. Land parcelization (the increased subdivision of larger lots into smaller ones) and subsequent fragmentation has negatively impacted working land in Vermont for decades. While the number of parcels in rural areas has increased, average parcel size has decreased. This diminishes economic viability of agriculture and forestry, and can negatively impact scenic value, wildlife habitat and connectivity, and the ecological services that intact forests provide (see Chapter 4: Ecological Systems). Looking ahead, land fragmentation threatens far-reaching consequences for Vermont’s local and tourism economies, and local resilience to the effects of climate change.

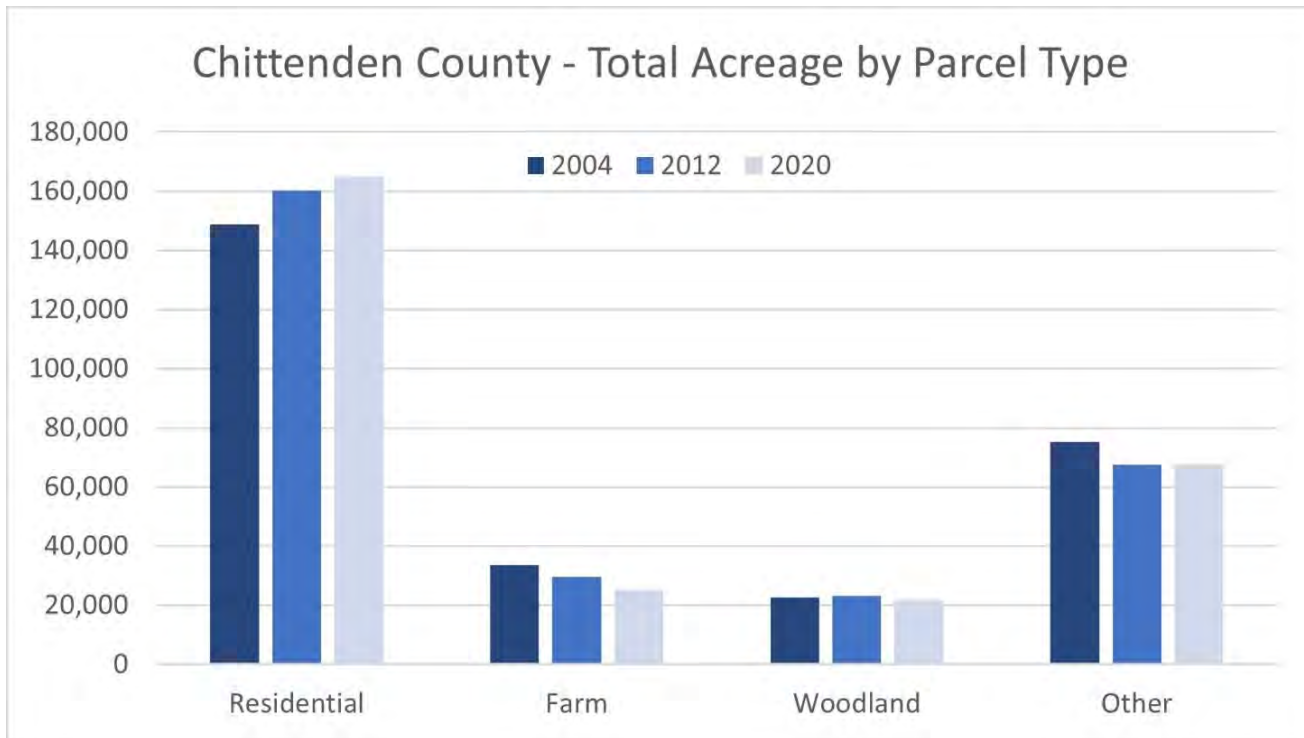
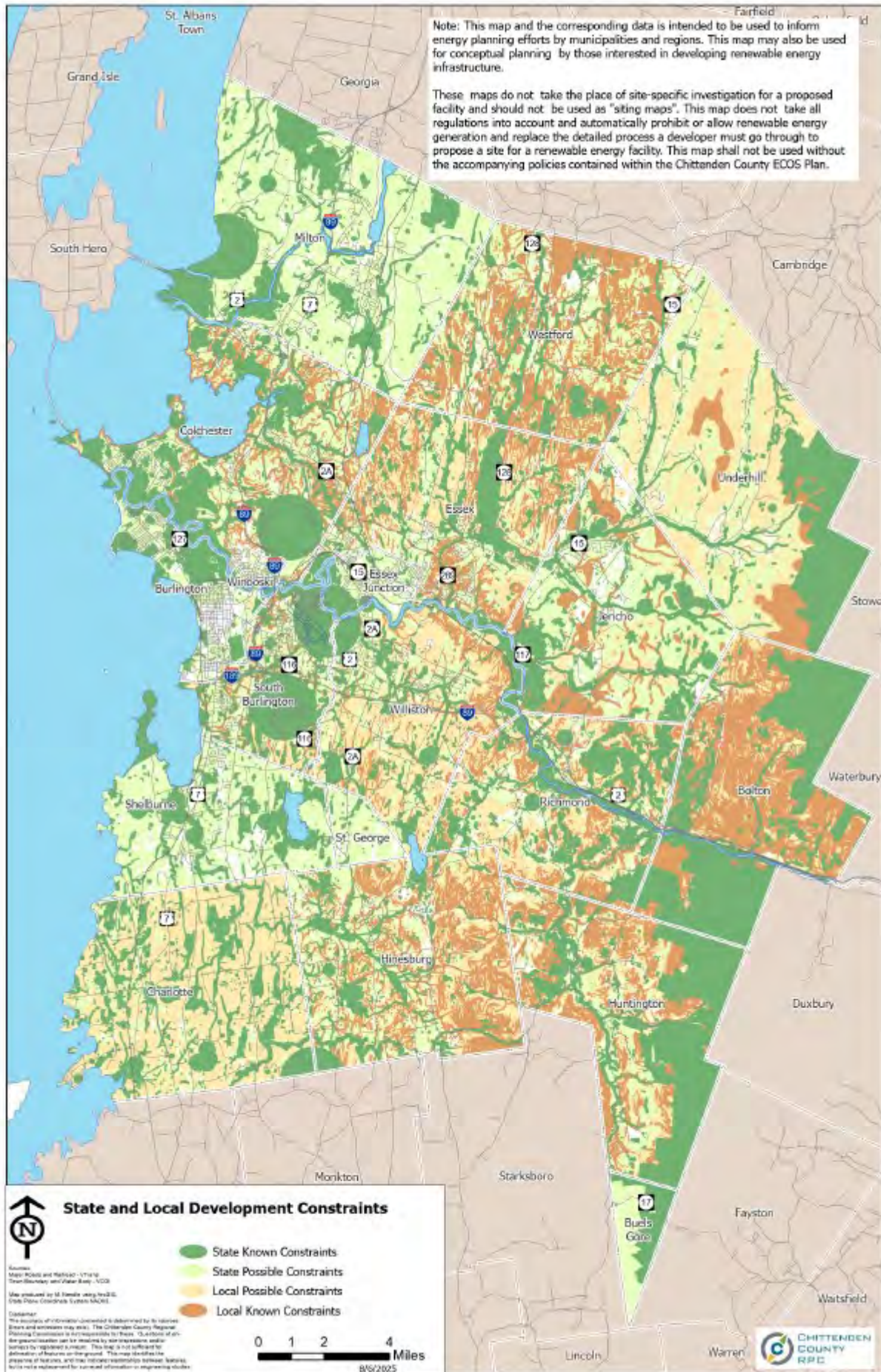


FIGURE 9: CHITTENDEN COUNTY TOTAL ACREAGE BY PARCEL TYPE

Land Access | As discussed in the Equitable Planning Practices chapter, since the 2018 ECOS plan, there has been increased acknowledgement that land use regulations, lending practices, and other systems have limited access to home ownership and land ownership, especially for systemically marginalized groups. This has led to persistent disparities in wealth and opportunities for these groups.

The Vermont Legislature acknowledged this gap in wealth and opportunity in 2022 by creating the Land Access and Opportunity Board. The intent of the Board is to “acknowledge structural racism and address prevalent wealth disparities by creating new opportunities to improve access to woodlands, farmland, and land and home ownership for Vermonters from historically marginalized or disadvantaged communities who continue to face barriers to land and home ownership.”⁵⁵ CCRPC supports this work through collaboration, support for programs that increase land access, and regional plan actions that elevate this issue.



Future Land Use Planning Areas

The ECOS Plan uses Future Land Use (FLU) Planning Areas to identify places that share similar features and future planning goals. The FLU Planning Areas describe the appropriate types of future growth expected in different areas of Chittenden County. However, the exact uses and densities allowable are determined by local bylaws. The ten FLU Planning Areas depicted on Regional FLU Plan Map are defined in statute (24 V.S.A. § 4348a(12)) and are as follows:

- **Downtown Centers and Village Centers:** These areas are mixed-use centers bringing together community economic activity and civic assets. The Downtown or Village Centers are the traditional and historic central business and civic centers within Planned Growth Areas, Village Areas, or may stand alone. Village Centers are not required to have public water, wastewater, zoning, or subdivision bylaws.
- **Planned Growth Areas:** These areas include the high-density existing settlement and future growth areas with high concentrations of population, housing, and employment in each region and town, as appropriate. They include a mix of historic and non-historic commercial, residential, and civic or cultural sites with active streetscapes, supported by land development regulations; public water or wastewater, or both; and multimodal transportation systems.
- **Village Areas:** Settlement area or a proposed new settlement area, typically comprised of a cohesive mix of residential, civic, religious, commercial, and mixed-use buildings, arranged along a main street and intersecting streets that are within walking distance for residents who live within and surrounding the core. Village Areas must have either municipal water or sewer service, or adequate soils for wastewater disposal, and must have land development regulations. Village Areas provide some opportunity for infill development or new development areas where the village can grow and be flood resilient.
- **Transition/Infill Areas:** Includes areas of existing or planned commercial, office, mixed-use development, or residential uses either adjacent to a Planned Growth or Village Area or a new Transition Area and served by, or planned for, water and/or wastewater. The intent of this land use category is to transform these areas into higher-density, mixed use settlements, or residential neighborhoods through infill and redevelopment or new development. New commercial linear strip development is not allowed as to prevent negatively impacting the economic vitality of commercial areas in the adjacent or nearby Planned Growth or Village Area. This area could also include adjacent greenfields safer from flooding and planned for future growth.
- **Resource-Based Recreation Areas:** Includes large-scale resource-based, recreational facilities, often concentrated around ski resorts, lakeshores, or concentrated trail networks, which provide infrastructure, jobs, and housing to support recreational activities.
- **Enterprise:** Includes locations of high economic activity and employment which are not adjacent to Planned Growth Areas. These include industrial parks, areas of natural resource extraction, or other commercial uses which involve larger land areas. Enterprise areas typically have ready access to water supply, sewage disposal, electricity, and freight transportation networks.
- **Hamlet:** Small historic clusters of homes and perhaps a school, church, store, or other public buildings not planned for significant growth; no public water supply or wastewater systems, and mostly focused along 1-2 roads. These may be depicted as points on the FLU map.
- **Rural – General:** Includes areas that promote the preservation of Vermont’s traditional working landscape and natural area features. These areas allow for low-density residential and limited commercial development that is compatible with productive lands and natural areas. This area could also include an area that a municipality is planning to make more rural than it is currently.

- **Rural – Agricultural and Forestry:** Includes blocks of forest or farmland that sustain resource industries, provide critical wildlife habitat and movement, outdoor recreation, flood storage, aquifer recharge, and scenic beauty, and contribute to economic well-being and quality of life. Development in these areas should be carefully managed to promote the working landscape and rural economy, and address regional goals, while protecting the agricultural and forest resource value.
- **Rural – Conservation:** These are areas of significant natural resources, identified by regional planning commissions or municipalities based upon existing Agency of Natural Resources mapping that require special consideration for aquifer protection; for wetland protection; for the maintenance of forest blocks, wildlife habitat, and habitat connectors; or for other conservation purposes. The mapping of these areas and accompanying policies are intended to help meet requirements of 10 V.S.A. Chapter 89. Statute requires that any portion of this area that is approved by the Land Use Review Board as having Tier 3 area status shall be identified on the future land use map as an overlay upon approval.
- **Other Special Land Uses** – Statute (24 V.S.A. § 4348a(12)) allows RPCs to create “any other special land use category the regional planning commission deems necessary.”

Applying these definitions to the FLU Map involved both a technical mapping exercise and extensive outreach to gather information about local policies, knowledge, priorities, values, and needs. The mapping methodology was developed by the Vermont Association of Planning and Development Agencies (VAPDA), and can be found [on the VAPDA website](#). The outreach process, a multi-year effort which shaped the maps and the plan, is summarized in Supplement 1: Public Process.

In addition to the factors outlined in the mapping methodology, CCRPC used the following **guidelines** to create the maps:

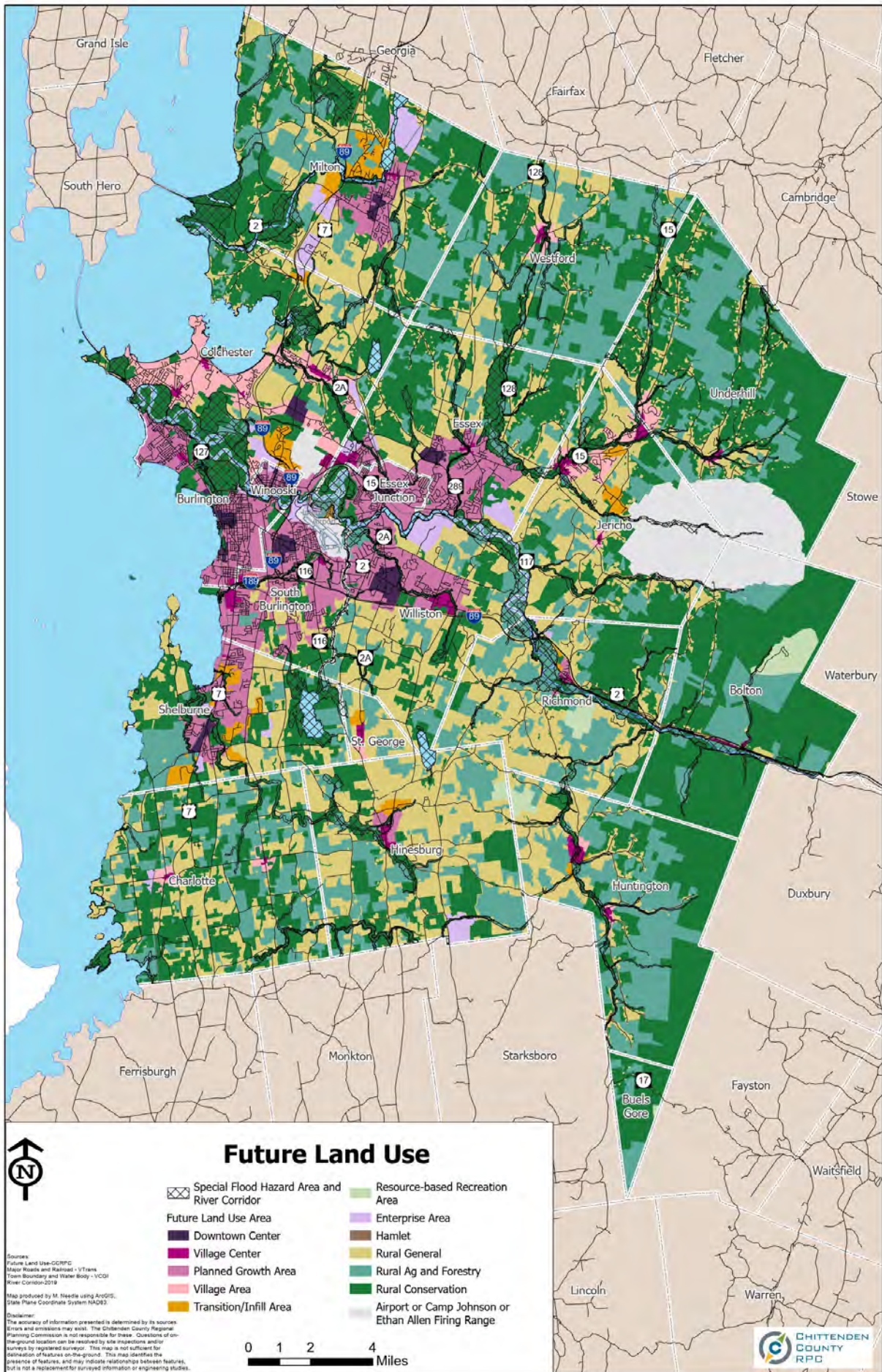
- Since the FLU Map is regional in scale and uses broad, state-defined land use categories, the location of specific natural resources, or regulations currently in place to protect those resources, was generally not used to define FLU Map boundaries. CCRPC expects municipalities will be more specific about future land use in their municipal plans and municipal bylaws.
- Parks, cemeteries, schools, and golf courses are often included within Planned Growth Areas (PGA), since these land uses are considered part of the overall neighborhood fabric. CCRPC also took a similar approach to existing commercial/industrial parks that are walkable to centers.
- CCRPC typically considered any areas served by water and sewer to be Downtown Center, Village Center, or Planned Growth Area. Areas with only water, sewer, or soils that could be used for sewer, are typically mapped as a Village Center or Village Area. Designating areas served by infrastructure as “rural” seemed counterintuitive and incompatible with statutory definitions.
- Given the statutory definition, the Transition Area category was applied to several types of existing land uses, from low-density commercial development to existing neighborhoods. For example, there are some Transition Areas that may be served by water or sewer, yet are not mapped as Planned Growth Area because they are not connected to a Downtown Center or Village Center or because local land use planning does not plan for a mix of uses, including residential uses, in the area. While this category does not account for these differences between the underlying uses, it does serve to identify areas in the county ripe for future planning initiatives. Any planning will be based on the existing context and community need.
- CCRPC created a custom land use area category, as permitted by statute, to identify the Burlington International Airport, Camp Johnson, and the Ethan Allen Firing Range, since these are unique land uses and all three properties have a connection to the federal government (though the airport is owned by the City of Burlington).

Boundaries for all Future Land Use Planning Areas, except Rural Conservation and Rural General, generally follow parcel boundaries as of January 2025 unless there is clear and obvious need, as determined by CCRPC, to deviate from this general rule. Similarly, boundaries for Rural Conservation are intended to follow boundaries of underlying natural features as mapped by the Vermont Agency of Natural Resources. CCRPC will work collaboratively with the Land Use Review Board (LURB), the District Commission, and municipal partners to resolve any boundary issues that may arise related to which Future Land Use Planning Area may apply to a particular piece of land.

FLU Category	Acres	% of Total		
Downtown Center	2,301	0.65%	12.82%	Areas Planned for Growth
Village Center	2,445	0.69%		
Planned Growth Area	24,102	6.83%		
Village Area	12,403	3.52%		
Transition / Infill Area	3,975	1.13%		
Resource-Based Recreation Area	2,460	0.70%	5.57%	Other Areas
Enterprise Area	4,622	1.31%		
Airport or Camp Johnson or Ethan Allen Firing Range	12,568	3.56%		
Hamlet	56	0.02%	81.61%	Rural Areas
Rural General	81,693	23.15%		
Rural Agriculture and Forestry	84,253	23.88%		
Rural Conservation	121,966	34.57%		
Grand Total	352,845	100.00%		

FIGURE 10: FUTURE LAND USE PLANNING AREAS BY ACRES AND PERCENTAGE OF COUNTY

Upon request by a municipality to make a change to the Future Land Use Planning Area as a result of a municipal plan, zoning and/or infrastructure service area change, CCRPC will review the request for consistency with the Future Land Use Planning Area definitions prior to any action. If a change to a Future Land Use Planning Area is potentially justified, CCRPC will include that change in the next iteration of the regional plan and/or future land use map as may be appropriate (see Action 3(b)). Note that minor future land use map amendments (changes that cumulatively involve less than 10 acres) follow an abbreviated process that is defined by the Land Use Review Board.



Act 250, Section 248 & Substantial Regional Impact

In accordance with 24 VSA § 4345a(17) a regional planning commission shall, as part of its regional plan, define a substantial regional impact, as the term may be used with respect to its region. This definition shall be given due consideration, where relevant, in state regulatory proceedings. Those proceedings are:

1. Act 250 – Certain proposed developments are required to obtain a permit from one of Vermont’s nine District Environmental Commissions in order to establish that the proposed development will satisfy 10 criteria defined by Act 250 (10 VSA §6086). One of these 10 criteria is that the proposed development be “in conformance with any duly adopted local or regional plan or capital program.”
2. Section 248 – Certain proposed utility facilities are required to obtain a permit from Vermont’s Public Service Board to establish that the proposed facility will satisfy criteria defined by Section 248 (30 VSA §248). One of the Section 248 criteria is that the proposed facility will “not unduly interfere with the orderly development of the region with due consideration having been given to the recommendations of the municipal and regional planning commissions.”
3. In addition, the Secretary of the Agency of Natural Resources may not issue a new Solid Waste Management Facility Certification (10 VSA §6605(c)) unless the facility is “in conformance with any municipal or regional plan adopted in accordance with 24 VSA Chapter 117.”

In accordance with 24 VSA §4348 (o), in the above three proceedings, in which the provisions of a regional plan or a municipal plan are relevant to the determination of any issue in those proceedings, the provisions of the regional plan shall be given effect to the extent that they are not in conflict with the provisions of a duly adopted municipal plan. To the extent that such a conflict exists, the regional plan shall be given effect if it is demonstrated that the project under consideration in the proceedings would have a “substantial regional impact.” **That is, the issue of whether a proposed development has a “substantial regional impact” is important only when there is a conflict between the regional plan and municipal plan.** CCRPC will attempt to reduce the potential for such conflicts through its municipal plan review and approval process.

The following is the required definition of “substantial regional impact,” as this term is defined by CCRPC for use in Chittenden County:

A proposed development has a substantial regional impact if it is not consistent with the Land Use Goal and the Future Land Use Planning Area(s) for the subject parcel as shown on the Regional Future Land Use Map (Map 4).

This definition puts the emphasis on the Future Land Use Planning Area – and stipulates that if a development proposal is not consistent with the Future Land Use Planning Area, then the Regional Plan will take effect in the State proceedings (as described above) if there is a conflict between the regional plan and the municipal plan. The Future Land Use Planning Areas form the basis for the appropriate areas for growth in the next 25 years as shown on the Regional Future Land Use Map (Map 4).

The CCRPC has a role in development review outside of the very limited circumstances in which the substantial regional impact definition will come into play. RPCs “shall appear before district environmental commissions to aid them in making a determination as to the conformance of developments and subdivisions with the criteria of 10 VSA § 6086” (24 VSA § 4345a(13)). Both Act 250 and Section 248 require the permit applicant for a project that is proposed within Chittenden County to submit a copy of the application to CCRPC. CCRPC is a party in any such application for an Act 250 permit and may apply to be a party in any such application for a Section 248 permit.

CCRPC deliberately chose to make the 2026 ECOS Plan a strategic plan that is intended to provide **general advisory guidance** and intentionally chose to use “should,” rather than “shall,” in the Plan’s goal statements. CCRPC does

not consider the definitions of the Future Land Use Planning Areas to be regulatory for the purposes of reviewing individual land development activities. The review of individual land development activities remains under the jurisdiction of the respective municipalities or state agencies.

Approval of the plan and Regional Future Land Use Map by the LURB, combined with municipal requests and approval for Tier 1A and/or 1B status, provides the basis for the LURB to use the map as a regulatory tool in proceedings under the LURB's jurisdiction.

Additional information about CCRPC's involvement in Act 250 and Section 248 reviews is outlined in CCRPC's *Guidelines and Standards for Reviewing Act 250 and Section 248 Applications*.

Act 250 Jurisdiction and Tiers

Since inception, Act 250 jurisdiction has been established primarily by the size or impact of development regardless of physical location. Act 181 changes the existing system by introducing location-based jurisdiction. This change recognizes that some areas of Chittenden County, and Vermont, are planned for growth, contain required infrastructure, and have sufficient local zoning regulations in place to adequately regulate development.

- **Tier 1:** These areas are intended to accommodate development and are subject to limited Act 250 exemptions (Tier 1B) or full exemption from Act 250 (Tier 1A):
 - o **Tier 1B:** Areas identified on the Regional Future Land Use Map as Downtown Center, Village Center, Planned Growth Area and Village Area Future Land Use Planning Areas are eligible to be Tier 1B areas. Upon municipal request, CCRPC shall show these areas as Tier 1B on the Regional Future Land Use Map or may produce a separate map layer if required by the Land Use Review Board. Tier 1B areas are then subject to review and approval by the Land Use Review Board. Tier 1B allows for limited Act 250 exemptions for residential or mixed-use developments including 50 units or fewer of housing on a tract or tracts of land involving 10 acres or less.
 - o **Tier 1A:** Areas identified on the Regional Future Land Use Map as Downtown Center, Village Center, or Planned Growth Area are eligible to be approved as Tier 1A by the Land Use Review Board upon municipal application. Municipalities must demonstrate a high level of staff capacity, robust development regulations, and adequate infrastructure to support dense development. Areas approved as Tier 1A areas by the Land Use Review Board are fully exempt from Act 250.
- **Tier 2:** This tier includes the Transition/Infill Area, Resource-Based Recreation Area, Enterprise Area, Hamlet, Rural – General, Rural – Agricultural and Forestry, and Rural - Conservation Future Land Use Planning Area, unless included in Tier 3.
- **Tier 3:** This tier will be defined by rulemaking by the Land Use Review Board during 2025 and 2026, and is not based on the future land use maps created by regional planning commissions.

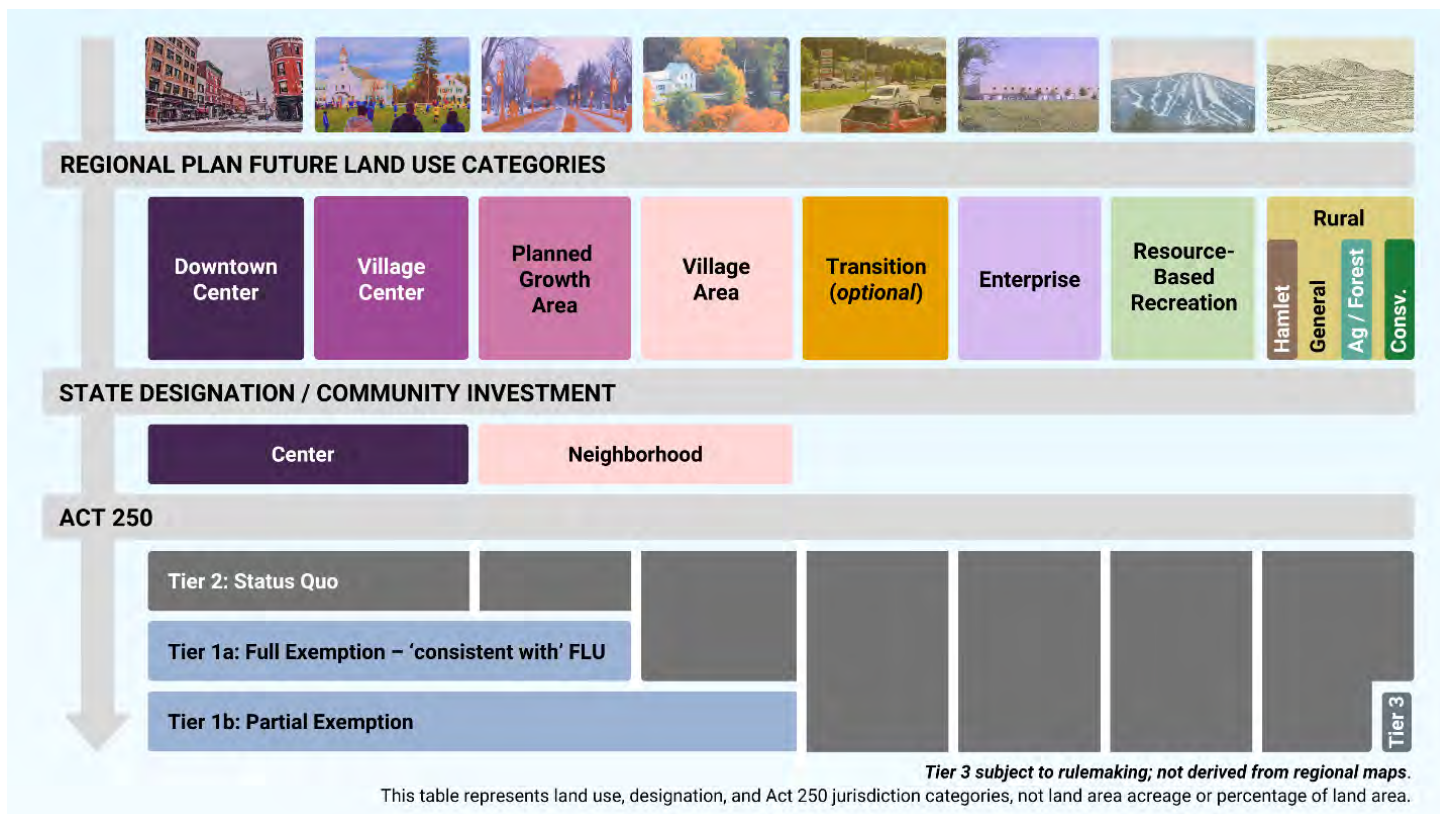


FIGURE 11: REGIONAL FUTURE LAND USE CATEGORIES

Statement of Compatibility and Consistency

Pursuant to 24 VSA 4302 (f), 4345a (5), 4348a (a), and 4348a (a)(8), CCRPC has reviewed the approved plans of its member municipalities and of its adjoining RPCs (see below) and concluded that this ECOS Plan is compatible with those plans (that is, this ECOS Plan, as implemented, will not significantly reduce the desired effect of the implementation of the other plans). CCRPC has also reviewed, to the extent possible, draft regional plans of adjoining RPCs that are concurrently updating their regional future land use maps by the end of 2026 and maintains the conclusion that the ECOS Plan is compatible with those drafts.

Chittenden County is bordered to the north by Grand Isle and Franklin Counties, which are served by the Northwest Regional Planning Commission (NRPC). The ECOS Plan is compatible with the NRPC 2023 Regional Plan and the proposed NRPC 2026 Regional Plan. Most bordering areas are designated as one of the three Rural Future Land Use Areas in the ECOS Plan and as Agricultural Resource, Rural or Conservation and Forest Resource in the NRPC 2023 Regional Plan (and comparable rural land use areas in the draft 2026 Regional Plan). There are two areas near the border with Franklin County that should be monitored. Any development near Exit 17 on Route 2 in Colchester may have an impact on Grand Isle County. Additionally, there is an area in Milton planned for Enterprise in the ECOS Plan near, but not bordering, an area planned for Rural Agriculture & Forestry and Rural Conservation in Georgia in Franklin County. Development of these areas should be monitored to ensure that it does not reduce the desired effect of NRPC's planning in these adjoining areas.

Chittenden County is bordered to the east by Lamoille County (served by the Lamoille County Planning Commission, LCPC) and Washington County (served by the Central Vermont Regional Planning Commission, CVRPC). The ECOS Plan is compatible with the Lamoille County Regional Plan: 2023-2031. The LCPC's Future Land Use Map designates the areas bordering Chittenden County as Rural and Working Land, Working Lands – Forest, and State Forest. This is compatible with the rural future land use areas in the adjoining municipalities in the ECOS Plan's Future Land Use map.

The ECOS Plan is also compatible with the 2024 Central Vermont Comprehensive Regional Plan. The Plan's future land use map designates areas bordering Chittenden County as Resource and Rural areas. This is compatible with the ECOS Plan's use of rural areas in the adjoining municipalities.

Chittenden County is bordered to the south by Addison County (served by the Addison County Regional Planning Commission). The ECOS Plan is compatible with the Addison County 2018 Regional Plan. The Addison County 2018 Regional Plan designates areas bordering Chittenden County to the south as Rural and Agricultural or Forestland and Conservation/Floodplain areas, which is generally compatible with the designation of bordering areas in the ECOS Plan as rural. There are two possible points of conflict between future land uses. In Hinesburg, a designated Enterprise Zone in Hinesburg borders a Rural and Agricultural area in Starksboro. In Ferrisburgh, a Residential District around the village of North Ferrisburgh borders the Rural General Planning Area in Charlotte. Development of these areas should be monitored.

Municipal Plan Review & Compatibility

In determining whether the Municipal Plans are compatible with this Regional Plan (a review that is undertaken upon request by the Municipality and in accordance with 24 VSA §4350(b)), the CCRPC will refer to the Future Land Use Planning Areas depicted on the Future Land Use Map, as well as applicable goals and the strategies. In conducting municipal plan reviews and determining compatibility, CCRPC's Planning Advisory Committee (PAC) and Board of Directors will use the *Guidelines and Standards for Confirmation of Municipal Planning Processes and Approval of Municipal Plans*. When needed, PAC and Board of Directors may seek guidance from community partners with expertise in subject areas outside of CCRPC's realm when conducting municipal plan reviews.

Municipalities are encouraged to apply the ECOS Plan goals and actions to their planning and development decisions. Specific implementation of the ECOS strategies will vary throughout the county as municipalities consider their own unique needs and relationship to the region.

Upon receipt of a Certification of Energy Compliance from the Department of Public Service for this energy enhanced ECOS Plan (Supplement 6), CCRPC will have the authority to grant Certificates of Energy Compliance to its member municipalities for municipal plans that meet the enhanced energy standards of Act 174.

ACTIONS

The areas planned for growth are defined as Downtown Center, Village Center, Planned Growth Area, and Village Areas and Transition Areas, and are displayed on the Future Land Use Map.

Increasing investment in denser, mixed-use growth areas will improve economic opportunities, along with housing and transportation options, and will improve community health. Focusing growth in the appropriate Future Land Use Planning Area is also a cost-effective approach to increasing the supply of affordable housing and efficiently using existing infrastructure. Also, this pattern of growth reduces energy consumption for transportation. When homes are in closer proximity to jobs and other services, commute times and distances lessen, and walking, biking, transit, and car sharing become more feasible.

1. Invest in Areas Planned for Growth

- a. **Support Centers and Neighborhoods** | Invest in wastewater, water, and stormwater infrastructure, energy systems (e.g. transmission, distribution, storage, and generation), urban forestry, brownfields assessment and remediation, and transportation infrastructure (prioritizing bicycles, pedestrians and public transit) in areas currently developed and/or planned for growth. See Chapter 3: Planning Practices.

- b. **Retrofit Existing Buildings** | To reduce energy use and greenhouse gas emissions, and adaptively reuse historic buildings for housing, economic development, community gathering spaces, or other locally and culturally significant purposes.
 - c. **Improve Walkability, Bikeability, and Streetscape Design** | In areas planned for growth, using a complete streets approach.
 - d. **TOD Overlay** | Discuss use of a transit-oriented development (TOD) overlay on the regional future land use map with the LURB, VAPDA, and other partner organizations.
- 2. **Municipal Planning and Zoning** | Strengthen and direct development toward areas planned for growth through infill development, adaptive reuse of existing buildings, municipal plan and bylaw revisions, and use of the state designation programs.
 - a. **Municipal Regulatory Reform** | Work with municipalities to revise development regulations to develop places with affordable housing, a mix of land uses, jobs, healthcare, opportunities for shared parking, and access to a variety of services (restaurants, grocery stores, parks, entertainment, etc.) via public transit and active transportation modes.
 - b. **Infrastructure Planning** | Integrate capital planning and budgeting in municipal planning efforts. Work with municipalities to develop official maps and other tools to drive infrastructure improvements in the areas planned for growth.
 - c. **Education** | Empower local officials through trainings and education on strategies to achieve the above through municipal plan and development regulation amendments and implementation. This could include how to effectively analyze development costs and benefits, and how to select appropriate multi-modal congestion mitigation measures.
 - d. **Housing Targets** | Promote and support planning and zoning modernization efforts that enable and catalyze housing development in areas planned for growth, in order to help reach local and regional housing targets.
- 3. **State/Local Permitting Coordination and Improvement** | Support changes to local and state permitting processes to make them more coordinated and effective at addressing state, regional, and local land use goals.
 - a. **Permitting Reform** | Collaborate with legislators, state agencies, municipalities, and partner organizations to improve how development review (e.g. municipal permitting, state permitting, and Act 250) is conducted in Vermont. Monitor the effectiveness of recent improvements to Act 250 and other development review processes, including local processes modified by the HOME Act and Act 181.
 - b. **Plan Review Guidelines** | Work with PAC and the Board of Directors to revise the *Guidelines and Standards for Confirmation of Municipal Planning Processes and Approval of Municipal Plans*. The revised guidelines should directly address how the CCRPC should review municipally proposed changes to areas planned for growth.
 - c. **Act 250 and Section 248 Review** | Review and revise CCRPC's *Guidelines and Standards for Reviewing Act 250 and Section 248 Applications* to ensure consistency with the regulatory changes required in Act 181.
 - d. **Vermont Zoning Atlas** | Collaborate with stakeholders, including the [Vermont Zoning Atlas](#) project, so that local and state regulations, bylaws, and plans encourage transparency, predictability, equity, and timely review of development applications.
 - e. **Permit Navigators** | Support the establishment of a state position to help housing developers, entrepreneurs and business owners understand and navigate the state's permitting process.
 - f. **Transportation Options Assessment** | Implement the recommendations of the Transportation Options Project by supporting member municipalities, Act 250 District Commission, VTTrans, and the

LURB in implementing, and potentially improving, their requirements for land development density and design that support increased transportation mode choice.

- g. **Permit Review** | Policies and planning studies that are adopted as part of this ECOS Plan and subsequent amendments will guide CCRPC's position in state permit proceedings.
- h. **Avoid Constraints** | Ensure site development, including renewable energy generation, avoids and minimizes impacts to field-verified state and local known constraints, such as floodplains and steep slopes. Renewable energy generation sited on existing structures or parking lots complies with this policy. The list of known constraints and possible constraints is located in the Plan Methodology Section (see Maps) and in Supplement 6 – Enhanced Energy Plan.

4. Support Land and Housing Access

- a. **Indigenous Land Access** | Partner with indigenous communities to restore access to ancestral lands and culturally significant sites. Use models, like [First Light](#), so that our approach centers indigenous priorities and decision-making power in land conservation efforts.
- b. **Traditional Land Management and Food Sovereignty** | Connect indigenous communities with State and local governments to support Indigenous ways of relating to and caring for the land. This includes ensuring access to land for growing food, gathering traditional plants, and protecting culturally important places, even in areas that are being developed.
- c. See Housing Action 2(d) which aims to create BIPOC-specific financing for homeownership.
- d. **Agrihoods:** Identify approaches and actions for providing adequate farmer and farmworker housing, such as farmstead clusters, agrihoods, reduced minimum lot sizes for housing that supports working lands, etc.



CHAPTER 6

Energy



GOAL

Transform the region's energy system to meet Vermont's energy and greenhouse gas reduction goals. In the process, avoid unfair impacts on marginalized groups, and maintain ecological health, economic vitality, and equitable access to affordable energy.



KEY ISSUES, TRENDS & INSIGHTS



See Supplement 6 of this Plan for a more comprehensive discussion of key issues, trends, and insights, as well as data for current and future energy use/generation and other indicators of energy goals.



2026 ECOS Plan website

For an interactive experience, visit the [Energy](#) page on the 2026 ECOS Plan website

Vermont Energy and Climate Goals | Climate change will have profound impacts on the environment, public health, infrastructure, and economy of Chittenden County. The state of Vermont has adopted several ambitious goals related to reducing greenhouse gas emissions and energy consumption, and increasing renewable energy generation via the 2022 Vermont Comprehensive Energy Plan, and the Global Warming Solutions Act. These goals, incorporated by reference in this plan, reflect the policy of CCRPC, and include:



Reduction of greenhouse gas emission (**26%** from 2005 levels, and **40%** from 1990 levels, by 2030; **80%** from 1990 levels by 2050).



Weatherization of **120,000** Vermont homes by 2030 (relative to the 2008 baseline).



Meeting **25%** of total energy needs across all sectors from renewable sources by 2025, **45%** by 2035, and **90%** by 2050.



Meeting **10%** of transportation energy needs from carbon-free resources by 2032, with at least **75%** of those energy needs coming from renewable energy. Zero-emission vehicles will account for **100%** of light-duty sales in Vermont by 2035.



Meeting **30%** of thermal energy needs from renewable energy by 2025, and **70%** by 2042.



Creating an electric sector that is **100%** decarbonized and at least **75%** renewable by 2032.



Achieving net-zero ready construction for all newly constructed buildings by 2030.

Fossil fuel combustion is a major cause for increases in the atmospheric concentration of carbon dioxide and other greenhouse gases—the causes of global climate change. Fossil fuels drive the present-day economy. However, just as the contribution to climate change is not distributed evenly, nor are the impacts of climate change. Countries with higher gross domestic products and a greater population of wealthy individuals have higher carbon footprints than poorer countries.⁵⁶

According to the state of Vermont's Climate Council's Guiding Principles for a Just Transition, studies show that low-income communities, Indigenous people, and Black and/or communities of color remain particularly vulnerable to the impacts of climate change. Impacted populations also include older and chronically ill Vermonters, as well as people with disabilities. Additionally, the initial up-front cost of transitioning to electrification in the renewable energy generation, heating, and transportation sectors may be burdensome to these impacted communities. Therefore, investments, policies, administration, and oversight should tackle the needs of impacted people first, by including targeted strategies for different groups that consider their specific histories, sociocultural, and economic realities.

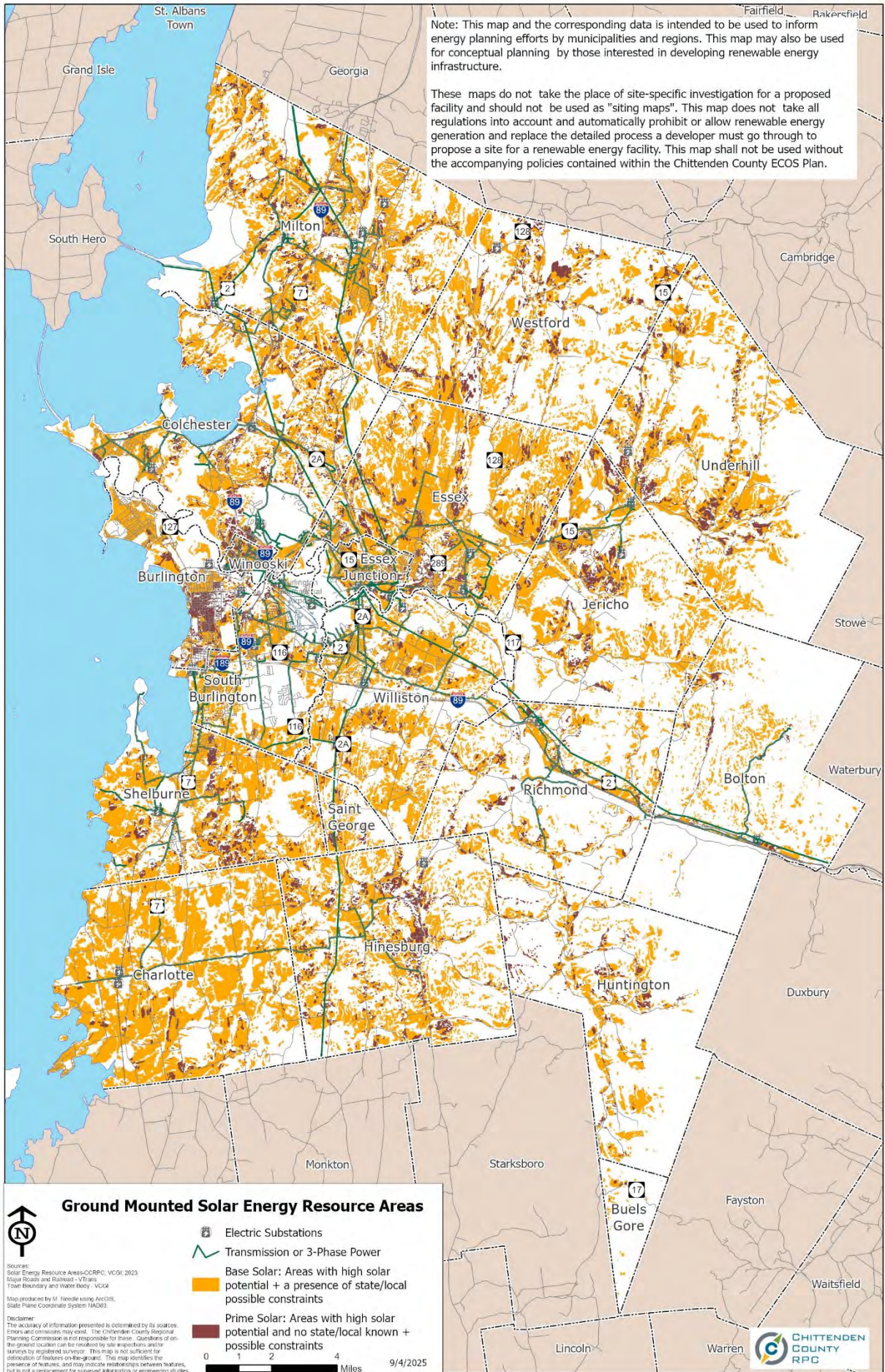
A transition to renewable energy will drive down carbon emissions to avoid more severe impacts of climate change. To meet the goals in the state of Vermont Comprehensive Energy Plan (CEP), the region is planning for a major shift away from fossil fuels in the transportation and heating sectors to renewable sources of energy, efficiency in all sectors, and an increase in renewable energy generation within the state and from outside the state. See Supplement 6 for more information on future energy targets.

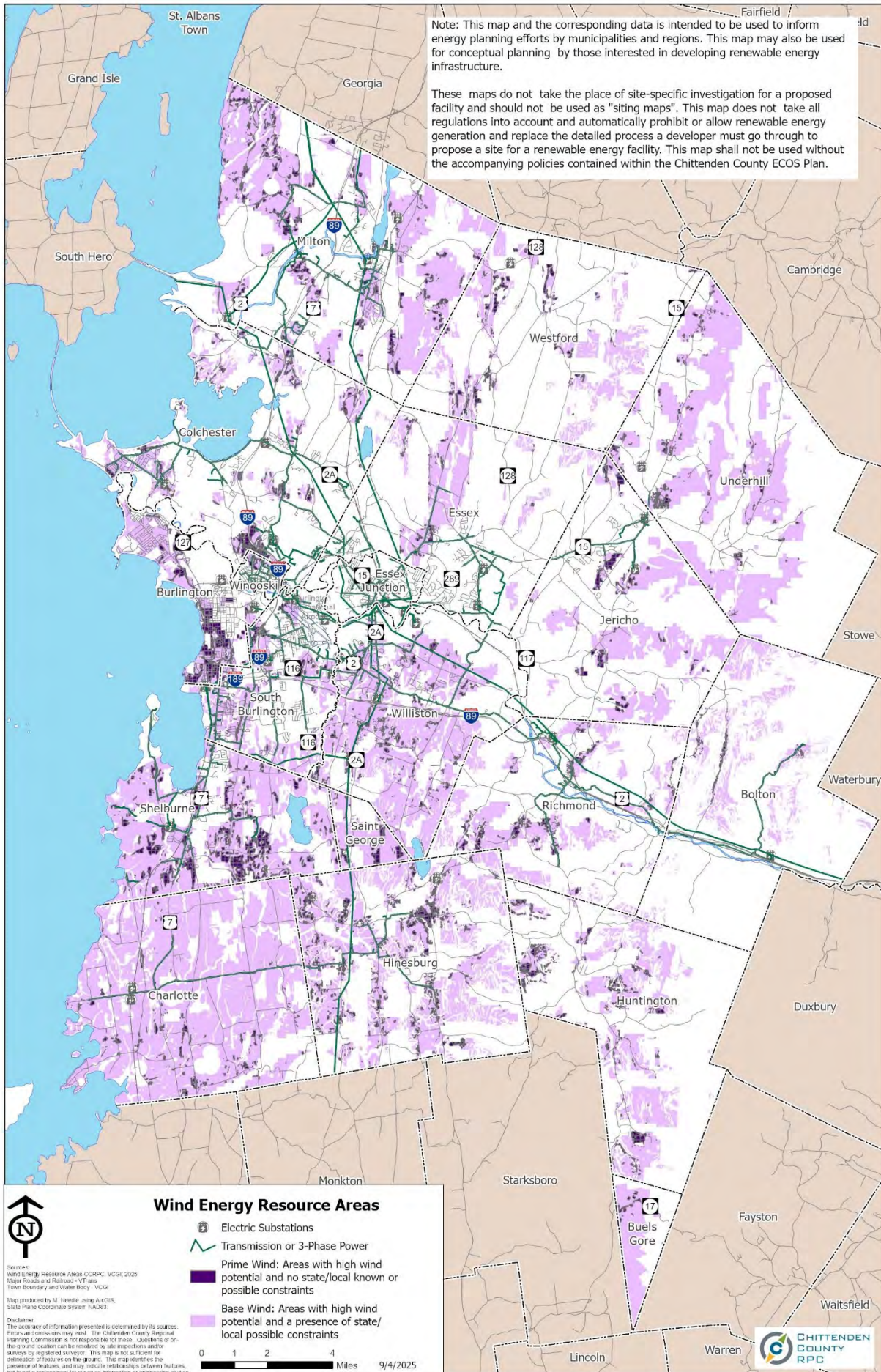
Enhanced Energy Plan | ECOS Plan Supplement 6 serves as CCRPC's enhanced energy plan per 24 V.S.A. 4352 and is adopted concurrently, and as a component of, the ECOS Plan. Please refer to Supplement 6 for more detailed analysis of energy use, energy transformation and generation targets, and enhanced energy maps.

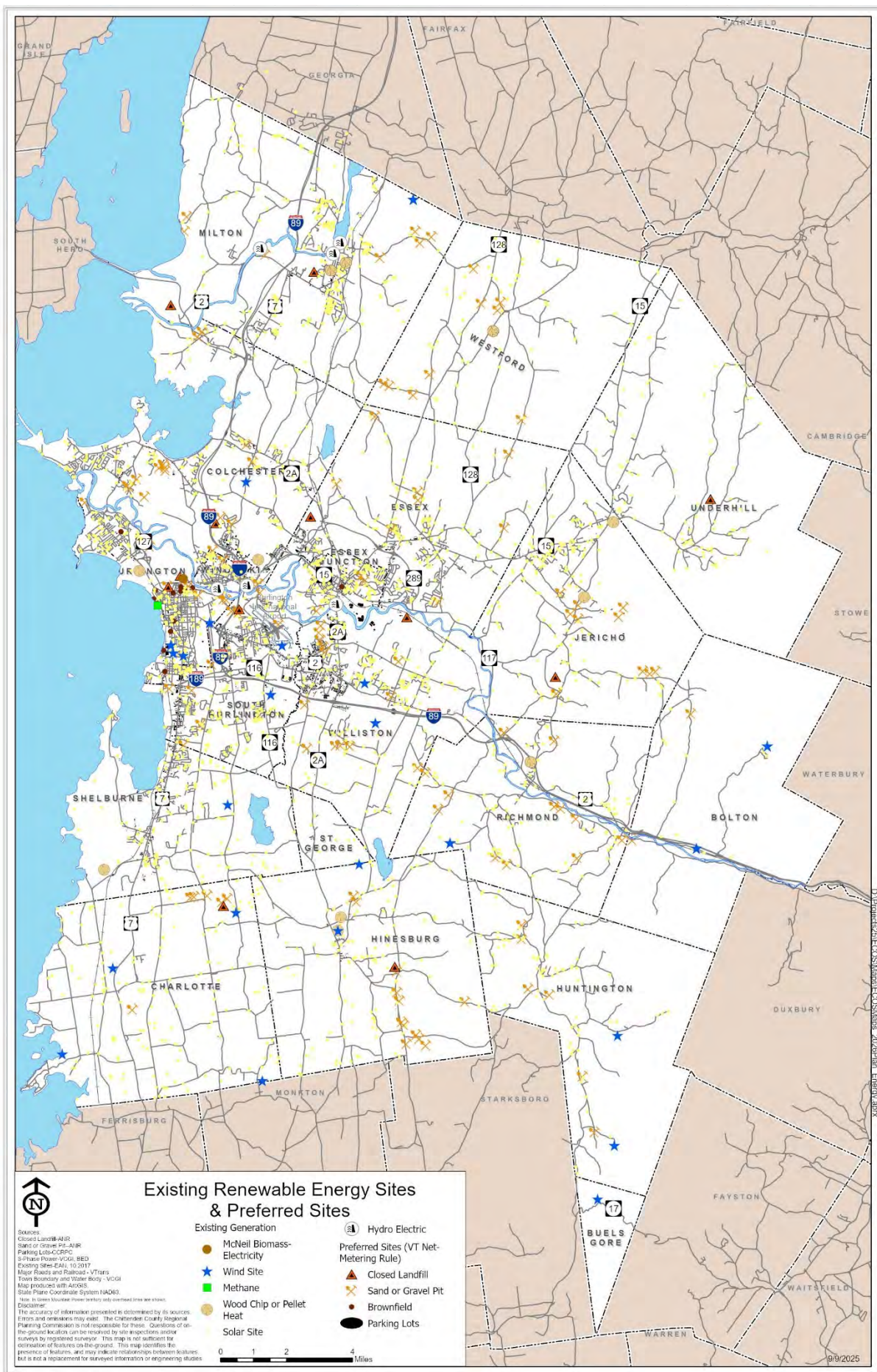
Siting and Suitability Policies | Ground mounted renewable energy generation is constrained in certain areas due to state and local restrictions on development. Additionally, different levels of suitability exist for different scales and types of renewable energy generation, depending on location within the county.

The following statements are CCRPC's renewable energy generation facility siting and suitability policies. These policies are the land conservation measures that shall be considered in the Public Utility Commission's (PUC) Section 248 review of proposed projects. Within these proceedings, CCRPC recommends the location of renewable energy generation facilities in accordance with these policies. Inability to meet these policies does not necessarily preclude the ability to develop renewable energy generation development:

- **Avoid Constraints** | See Land Use Action 3(h).
- **Setbacks and Screening** | Site ground-mounted solar development in accordance with setback standards as defined in [30 V.S.A. §248\(s\)](#) and municipal screening requirements adopted in accordance with [30 V.S.A. §248\(b\)\(B\)](#).
- **Grid Capacity** | Locate energy generation proximate to existing distribution and transmission infrastructure with adequate capacity and near areas with high electric load. (See Green Mountain Power's [Solar Map](#), and Burlington Electric Department's [Distributed Generation Map](#).)
- **Municipal Preferred Sites** | Locate renewable energy generation in areas designated by a municipality in an adopted plan for such use, including specific preferred sites for net-metering, in accordance with PUC rule 5.1, rule pertaining to construction and operating of net-metering systems. State preferred sites are mapped on Map 7.
- **State Preferred Sites** | Locate solar generation (including but not limited to net metering) on previously impacted areas (such as, parking lots, previously developed sites, brownfields, State regulated landfills with post-closure certification, gravel pits/quarries, or on or near existing structures).
- **Centers and Historic Districts** | Locate ground-mounted solar larger than 15 kW AC (except for parking lot canopy solar installations) and wind turbines with a hub height larger than 30 meters (98 ft.) outside of state designated centers and historic districts on the state or national register.
- **Infill Development Design** | To mitigate transmission and distribution load growth, while supporting compact development, integrate renewable energy generation facilities in a manner that prioritizes infill with non-energy development within centers.
- **Prioritize Prime Locations for Wind** | Locate wind generation in areas with high wind potential, such as the prime and base wind potential areas shown on Map 6.







ACTIONS

1. Municipal Technical Assistance

- a. **Energy Planning Assistance** | Provide technical assistance to municipalities when requested to enhance comprehensive plans consistent with Act 174 standards, and thereby enable municipalities to gain substantial deference in the Certificate of Public Good Section 248 process. This assistance will include working with municipalities to identify natural, cultural, historic, or scenic resources to be protected from all development, and to identify preferred locations for renewable energy generation facilities.
- b. **Energy and Climate Action Implementation Assistance** | Provide technical assistance to municipalities to implement energy plans, including securing grant funding, and encourage municipalities to lead by example with respect to energy efficiency for buildings, reduction on greenhouse gas emissions in transportation, and the deployment of renewable energy.
- c. **Just Transitions** | Support policies that ensure state, regional, and local programs and initiatives intended to build climate resilience and decarbonize do not have an unfair burden on any group, community, or economic sector and equitably distribute environmental and economic benefits. Support the affordability and accessibility of all climate resiliency and mitigation programs (Air Conditioning, Weatherization, transportation/transit programs, etc.). Encourage more education, guidance, and financial support for low-income Vermonters to participate in these programs.
- d. **Off-Road Equipment** | Provide technical assistance to municipalities that wish to require fuel switching for off-road equipment, such as lawnmowers, to clean and non-fossil fuels.
- e. **Land Use and Energy** | Provide municipalities with guidance from the [CCRPC Climate Change & Land Use guide](#) on how to amend their land use regulations to limit low density sprawl, enable compact walkable neighborhoods, and protect the working and natural landscape to promote climate change resilience and mitigation (See Chapter 5: Land Use).

2. Thermal Sector Partnerships

- a. **Weatherization** | Continue partnerships with VGS, Burlington Electric Department, Efficiency Vermont and the Champlain Valley Office of Economic Opportunity Weatherization Assistance Program to promote weatherization and energy efficiency programs and incentives for homes and businesses.
- b. **Thermal Fuel Switching** | Transition the thermal sector away from fossil fuels by working with partners such as Green Mountain Power, VGS, Efficiency Vermont, Burlington Electric Department, and other energy service providers to educate developers, businesses, and homeowners about cold climate heat pumps, heat pump hot water heaters, wood heating, biofuels, and geothermal heating and cooling systems.
- c. **Weatherization Workforce Development** | Advocate for the state, utilities, and workforce/business development organizations to address weatherization workforce challenges identified in the 2021 Weatherization Workforce Report. Promote the expansion of current workforce training programs that are effective, such as ReSOURCE's Weatherization and HVAC 101 training programs.
- d. **Energy Codes** | Coordinate with state and local stakeholders on building energy code requirements and compliance to encourage consistency and accelerate net-zero building practices and electric vehicle charging infrastructure. The state must ensure that energy efficient construction is accessible to and does not unfairly burden communities of color and lower income households.
- e. **Networked Geothermal** | Support VGS and other organizations efforts to install networked geothermal in Chittenden County.

3. Transportation Sector Partnerships

- a. **Transportation Fuel Switching** | Promote a shift away from gas/diesel vehicles to vehicles powered by lower carbon fuel sources.
- b. **Municipal Fleet Electrification** | Work with the Clean Cities Coalition, Drive Electric Vermont, and municipalities to encourage municipal fleets to switch to lower emission heavy-duty vehicles and install charging for electric vehicles.
- c. **Transportation Fuel Infrastructure Planning** | Work with municipalities and relevant stakeholders to plan for local renewable transportation refueling networks and infrastructure, such as Level 2 and Level 3 electric vehicle recharging and hydrogen refueling. Ensure that these networks support commuting and regional destinations (e.g., downtowns, villages, resorts, tourist sites, transportation hubs, major employers, and multi-unit housing) and are planned along major regional transportation routes per the National Electric Vehicle Infrastructure (NEVI) Plan.
- d. **Electric Vehicle Parking Incentives** | Work with local employers, municipalities, and other energy advocates to encourage broader adoption of electric vehicles by providing free or reduced parking costs for EVs and fuel-efficient vehicle owners, and preferential access to parking spaces limited in supply.
- e. **Drive Electric Vermont and Electric Vehicle Use** | Promote the Drive Electric Vermont webpage, which connects users to financial incentives, types of available electric vehicles, and charging stations for EVs. Increase awareness of the benefits of and access to EVs and lower emission vehicles, in partnership with Drive Electric Vermont, Vermont Clean Cities Coalitions and other entities. Collaborate with electric utilities to educate and promote incentives to increase EV and hybrid adoption, and build awareness of charging opportunities as part of their strategy for complying with the state's Renewable Energy Standard.
- f. **National Electric Vehicle Infrastructure Plan and DC Fast Charging Infrastructure Funding** | Seek grants to fund the installation of DC fast-charging infrastructure at strategic locations along major travel corridors, in transit hubs, and along the Interstate 89 Alternative Fuels Corridor (I-89 from New Hampshire to the Canadian border). Collaborate with VTRANS and Drive Electric Vermont to implement the Vermont 2022 State National Electric Vehicle Infrastructure Plan (NEVI).
- g. **Local Public EV Charging** | Provide technical assistance to municipalities implementing the VT Department of Housing and Community Development Local Electric Vehicle Charging Station Regulation Guide, especially at multi-unit housing properties, businesses, and key public locations.

4. Renewable, Reliable, and Resilient Electricity

- a. **Diversify Electricity Sources** | Support a wide variety of renewable energy generation types, including storage, sustainable uses of biomass for heating (see Action 1.f. in Working Lands), passive solar building design, bio-digesters for electricity generation, photovoltaic solar, wind turbines, and optimize the energy potential for existing hydro-electric dams.
- b. **Grid Constraints** | Coordinate with transmission and distribution utilities to resolve electric grid constraints to enable the region to achieve Chittenden County's renewable energy generation target needed for the electrification of the heating and transportation sector.
- c. **Transmission Upgrade Funding** | Support in-place upgrades of existing facilities, including renewable energy generation, storage, transmission lines, distribution lines, substations, microgrids, and energy storage as needed to reliably serve municipalities and the region with a resilient and low-carbon electric grid that supports a growing renewable electricity economy and low electricity costs. The existing law (30 V.S.A. 218c and PUC Docket 7081) does not sufficiently enable VELCO with the authority needed to effectively plan for grid modernization that meets the state's energy and climate goals. To plan for the transmission constraints the State and Region face, the state must enable VELCO to design and fund a transmission system to address grid constraints in an equitable and proactive manner.
- d. **Battery Storage Siting** | Support the placement of utility scale battery storage systems (BESS), to provide grid resiliency and address peak load at times when solar energy is not available, in areas that are safe and that minimize potential risks to people and infrastructure from fire hazards associated with battery storage facilities.

5. Statewide Renewable Electricity Generation Regulation

- a. **Renewable Electricity Policy Reform** | Support changes in federal, state, and local policies to achieve the State of Vermont Comprehensive Energy Plan, Climate Action Plan goals, and to shift burdens away from impacted communities while increasing participation by those communities in the renewable energy industry.
- b. **In-State Generation** | Support changes to the Renewable Energy Standard to prioritize in-state generation over electricity imports to avoid externalizing environmental and societal costs and benefits.
- c. **Expand Net-Metering Eligibility** | Increase the maximum size of net-metered projects, and establish a tiered system for net-metering rates in which utilities pay a lower rate to facilities over a certain size (such as 500kW), in order to increase net-metering participation and reduce the energy burden for public and non-profit entities without negatively affecting existing net-metering rates. Increase the maximum size of net-metered projects (currently 500kW) for public, non-profit, and community ownership entities, to encourage them to maximize development of renewable energy sources.
- d. **Wind Generation Sound Rules** | Request that the Public Utility Commission open the rule making process on Rule 5.700, Sound Levels from Wind Generation Facilities, to reassess existing sound standards with the intent of allowing all sizes and scales of wind energy generation possible in Chittenden County.
- e. **Decarbonization** | Work with the Department of Public Service to educate the public and evaluate the existing carbon accounting system.

6. Renewable Energy Generation Target

- a. **Renewable Energy and Renewable Electricity Generation Target** | CCRPC supports generating new renewable energy in the county to meet Vermont's Global Warming Solutions Act requirements, and the Comprehensive Energy Plan's goal of using 90% renewable energy by 2050, in a manner that is cost effective, respects the natural environment, does not unfairly burden low-income communities with the impact of development, complies with CCRPC's Siting and Suitability Policies, and is resilient to a changing climate. Specifically, Chittenden County currently generates 606,554 megawatt-hours (MWh) of renewable electricity annually and has 2050 target of 954,833 MWh of electricity generated annually as a part of our renewable energy goal. Meeting this target will require 348,279 MWh more in-region electricity generation (a 57%, increase from 2022). The renewable electricity target is technology neutral and can be met with any mix of technologies.



CHAPTER 7

Transportation



GOAL

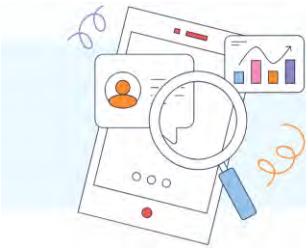
Provide a transportation system that is safe, efficient, reliable, and resilient; provides for interconnected and sustainable mobility choices for livable, equitable, and healthy communities; supports regional and municipal land use goals; addresses the climate crisis; and strengthens the economy of the region.



KEY ISSUES, TRENDS & INSIGHTS



Data for this section draws from CCRPC Metropolitan Transportation Plan (MTP) and associated appendices. See Supplement 5.



2026 **ECOS** Plan website

For an interactive experience, visit the [Transportation](#) page on the 2026 ECOS Plan website 

Metropolitan Planning Organization

CCRPC serves as a Metropolitan Planning Organization (MPO), a federally created organization that is supported by state and local governments and is designated to carry out the transportation planning process in Chittenden County. As an MPO, the CCRPC must develop a Metropolitan Transportation Plan (MTP) that is incorporated into the ECOS Plan in Supplement 5. The MTP evaluates the long-term transportation needs of Chittenden County and develops strategies to meet these needs and achieve the county's transportation and climate goals. The MTP also includes several federally required data indicators related to safety, infrastructure condition/asset management, system reliability, and freight. For more information, see Supplement 5.

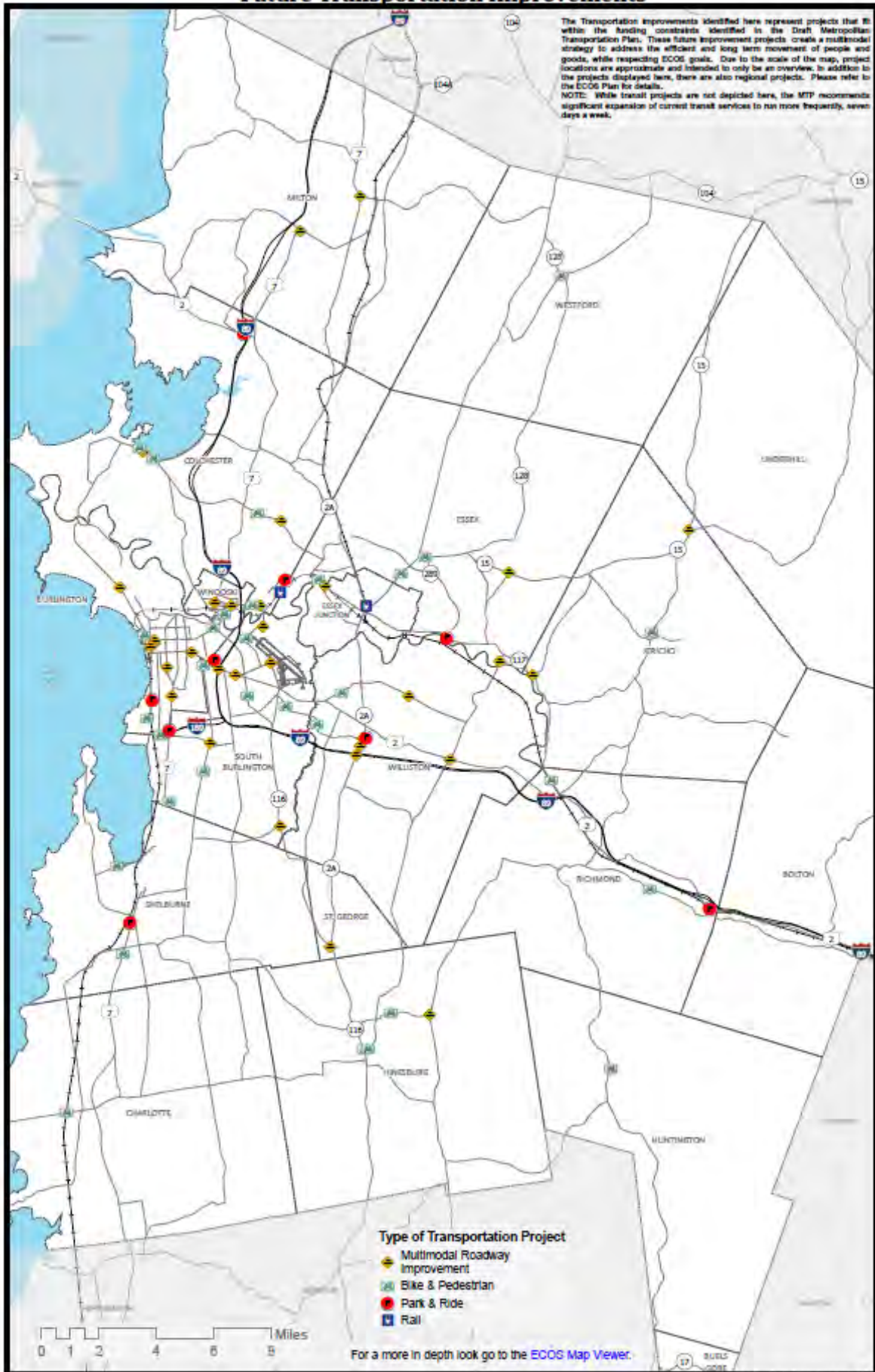
Transportation System

Road Network | Highways are classified as Interstate Highways, Principal Arterials, Minor Arterials, Major Collectors, and Minor Collectors. The classification system is organized as a hierarchy of facilities based on the degree to which the roadway facility serves mobility and access to adjacent land uses. Interstates and arterials make up just under 19% of county road mileage, yet they carry 69% of all vehicle miles traveled (VTrans 2020 VMT data). While not specifically addressed in this plan, local roads are also an important part of Chittenden County's road network. Local roads are owned and maintained by the municipality in which they are located, and they are generally not eligible for federal transportation funding.

The overall pavement condition of the interstate and arterial highways in Chittenden County has improved significantly since 2013, when more than 50% of the county's arterials were rated poor or worse in terms of pavement condition. By 2021, this figure dropped to only 26%. There are 180 bridge structures greater than or equal to 20 feet in length in Chittenden County. The state owns 85 of these bridges, while local governments own the remaining 95. Since 2010, there has been a marked improvement in the number of bridges with a sufficiency rating below 50 (down to 5 from 18, or 72%).

Active Transportation Facilities | Active transportation facilities create opportunities to increase physical activity, support healthy communities, enhance economic development, and promote environmental sustainability. Furthermore, communities that support walking and biking provide transportation access to all residents regardless of age, gender, or socioeconomic status. Chittenden County has a range of dedicated transportation facilities to accommodate bicyclists, pedestrians, and other physically active forms of transportation. Facilities dedicated to non-motorized uses (such as sidewalks, bike lanes, and shared-use paths) are concentrated in and around the metropolitan core. Non-dedicated facilities where non-motorized users share the road with motorized users exist throughout the county. In recent years, there has been an increase in [sidewalk and shared-use path mileage](#). While a concerted effort to improve the system may entice more users to walk, bike, or roll, more needs to be done.

Future Transportation Improvements



Public Transit | Public transit is a viable alternative to vehicle travel in the county’s urban/suburban areas. According to the 2020 VTrans Public Transit Route Performance Report, 46% of all public transit trips in Vermont originated in Chittenden County. While access to public transit has improved in the greater Burlington area, some suburban and most rural populations lack access to transit. This lack of access is especially pronounced for lower-income residents who are increasingly being pushed out of municipal centers due to affordability challenges, making it difficult for them to access essential services and employment opportunities. Limited bus routes in municipal centers limits mobility; transit riders may struggle to get to work, or the bus route may stop short of major employers, leaving workers to walk along high-speed arterials without sidewalks. [GMT ridership](#) steadily increased from 2000 to 2015, followed by a downward trend starting in 2015. This trend matches the overall national trend, due in large part to lower gasoline prices.

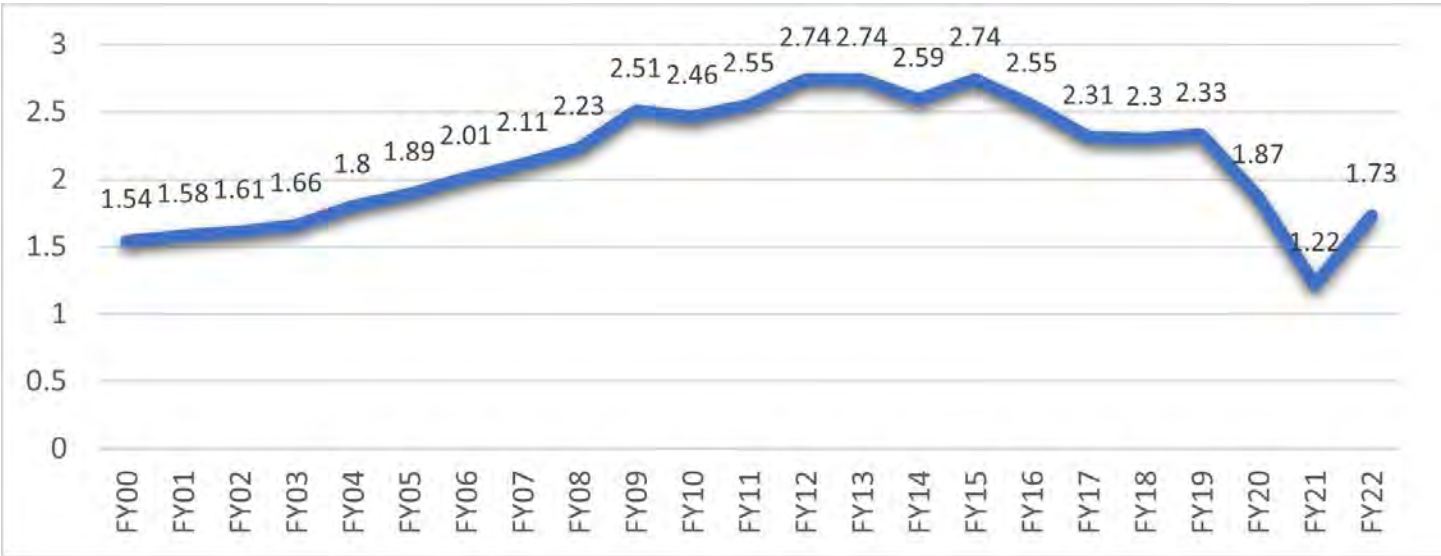


FIGURE 12: TOTAL YEARLY GMT RIDERS IN CHITTENDEN COUNTY (MILLIONS)

As with most national transit operations, the COVID-19 pandemic had a dramatic impact on GMT’s operations, with a 48% decrease in ridership at the height of the pandemic. By 2022, ridership bounced back from pandemic lows for most routes, though the commuter LINK services lagged behind mainly due to changes in commuting patterns and increased teleworking.

GMT began operating “fare free” in 2020, in response to the COVID-19 pandemic. However, fare free ridership ended in late Spring 2024. How this impacts ridership will be monitored. GMT is facing a significant financial challenge, with a projected budget deficit of \$2.7 million by fiscal year 2026 due to the expiration of COVID-19 relief funds. This funding shortfall could force GMT to reduce bus services if new revenue sources are not secured. GMT is actively lobbying for additional state funding to stabilize its operations but anticipates that major service reductions may be necessary starting mid-2025 if these efforts do not succeed.⁵⁷

CCRPC will be studying alternative approaches to funding public transit in Vermont in 2025 and as part of the RAISE grant from the U.S. Department of Transportation, and another study to evaluate transportation options in the county. These studies may assess if it is possible to maintain free or reduced fares, which are essential to maintaining access to public transportation for all. Alternative funding models may also enable GMT to extend service to municipalities that currently do not help fund GMT operations, nor have GMT routes.

Regional Travel Characteristics and Trends

Roadway Capacity | In general, the roadway system in Chittenden County has enough capacity to handle current traffic demand, except for specific segments of the interstate and arterial system during peak hours of travel. Even with enough capacity, congestion still exists on local roadways. Like many thriving metropolitan areas, the county's urban core has significant congestion, mainly at intersections, and during morning and evening commute (peak) hours. Capacity improvements might be needed at specific intersections throughout the county to address severe traffic congestion and safety issues arising from these conditions. Congestion during peak travel times has worsened due to the gradual increase of the number of people living outside of and commuting into Chittenden County for work, which correlates with the increased cost of, and lack of available and affordable housing in the county.

Single Occupancy Vehicles | Between 1980 and 2020, the rate of driving alone to work (commuting in a single occupancy vehicle, or SOV) in Chittenden County increased from 56% to 70%, according to the latest American Community Survey (ACS) 5-Year Estimate. When comparing data from the ACS's 2015 and 2020 estimates, the percentage of workers commuting alone fell from 73% to 70%. This was primarily due to increased teleworking opportunities, improved bike and pedestrian facilities in the county, and the effects of the COVID 19 pandemic.

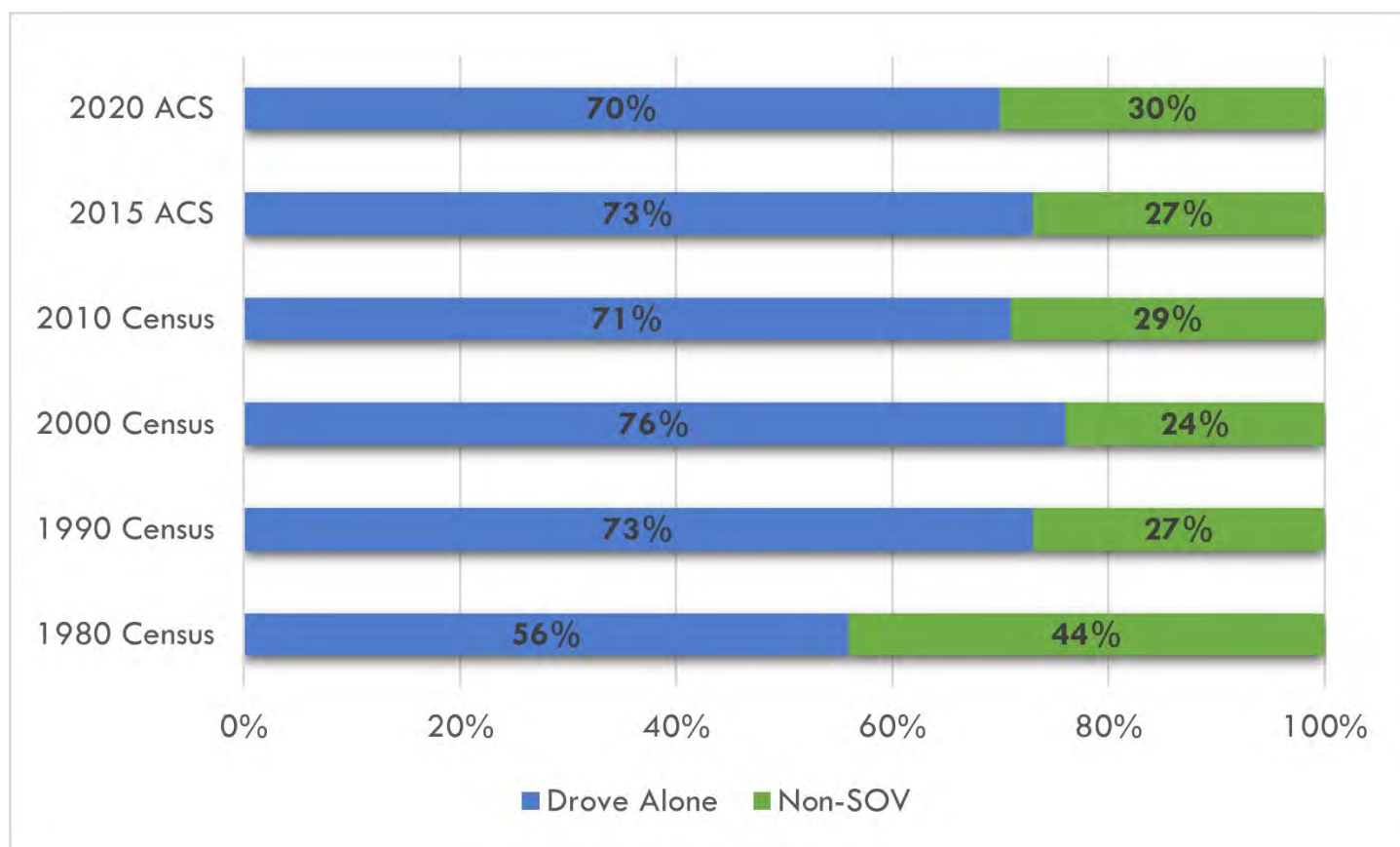


FIGURE 13: SINGLE OCCUPANCY VEHICLES IN CHITTENDEN COUNTY
SOURCES: U.S. CENSUS BUREAU, AMERICAN COMMUNITY SURVEY, 5-YEAR ESTIMATES, 2020 AND 2015.

Vehicle Miles Travelled (VMT) | [VMT per person in the county](#) declined drastically between the early 2000s and 2009. A number of factors may have influenced this decline, including increased safe and connected bike facilities and sidewalks; expanded transit services; increase in compact, mixed-use developments; and general economic conditions in the region and beyond. Between 2010 and 2019, VMT leveled off, with only minor fluctuations. In 2020, VMT per capita collapsed as a result of the COVID-19 pandemic. Post-pandemic, there has been a slow increase in VMT, with some locations reaching pre-pandemic levels.

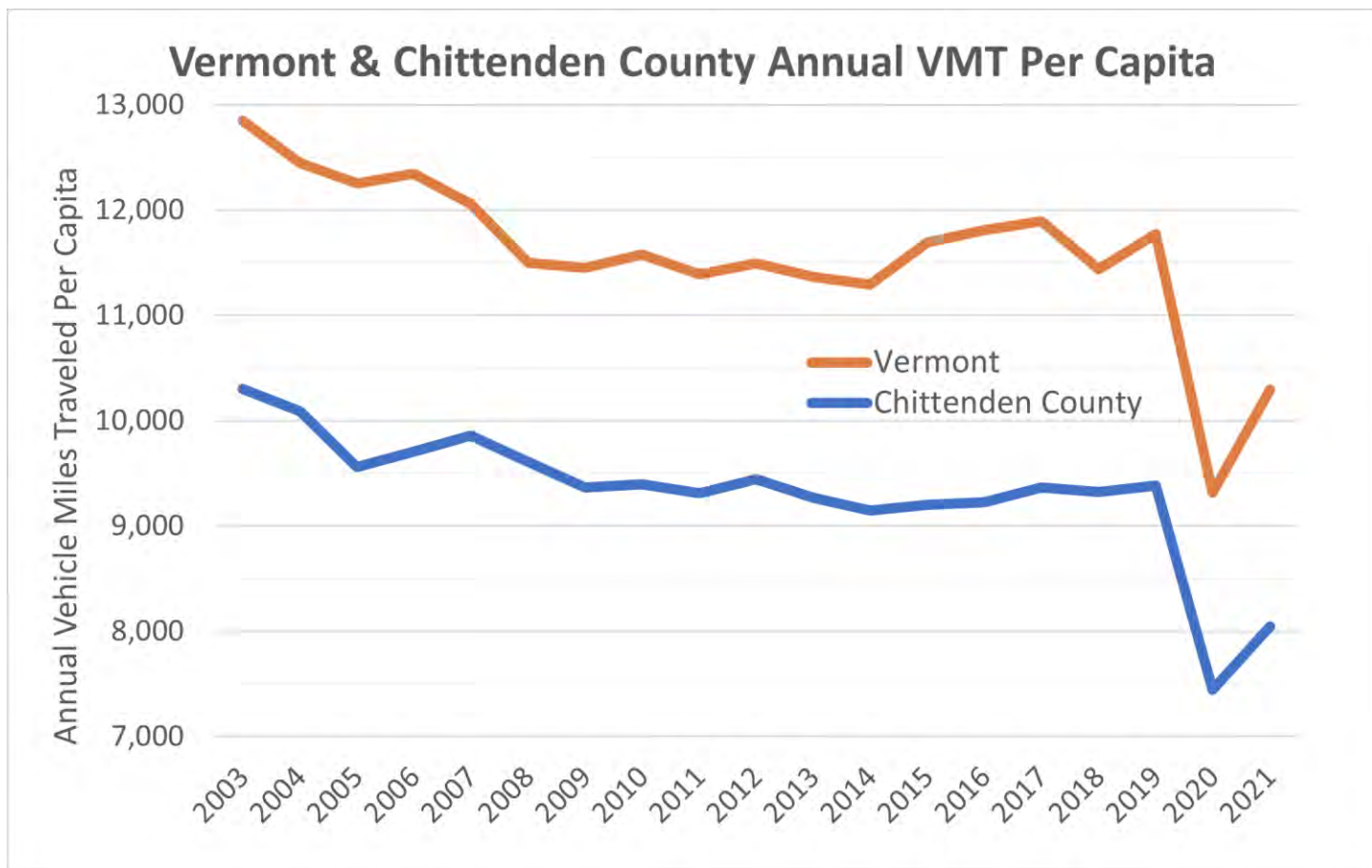


FIGURE 14: VEHICLE MILES TRAVELED
SOURCE: VTRANS & US CENSUS BUREAU

Safety | One of the CCRPC’s fundamental goals is to improve safety for all users of the regional transportation system. Through the Vermont Agency of Transportation’s (VTrans) programs such as the Highway Safety Improvement Program (HSIP), Systemic Local Road Safety (SLRS), and Road Safety Audits (RSA), the CCRPC helps member municipalities improve safety for high crash locations and explores systemic approaches to reduce hazards and improve safety. VTrans collects crash data statewide, and shares it with partners, regional planning commissions, municipalities, and the public. [Historical crash data](#) identifies trends and risk factors to use in scoping and planning studies toward developing alternatives that improve safety for all modes of transportation.

Transportation and Climate, Health, and Equity

Emissions | In Vermont, the largest contributor of greenhouse gas (GHG) emissions is the transportation sector—mainly carbon dioxide (CO₂) from the combustion of petroleum-based fuels, like gasoline and diesel in internal combustion engines. Transportation’s 40% statewide contribution to GHG emissions closely mirrors Chittenden County’s 48% estimate and is substantially higher than the nationwide share of 27% from transportation (according to the 2020 EPA Greenhouse Gas Emissions data⁵⁸).

Transportation’s higher contribution is mainly due to the rural nature of Vermont, and the state’s higher annual Vehicle Miles Traveled (VMT) per capita (11,680, as opposed to the nationwide VMT per capita of 9,630, according to the 2017 Vermont Transportation Energy Profile).

Health and Equity | The impact of transportation on health and equity is well established, particularly with regard to safety/injury, air quality, physical activity, equitable access to opportunities, and noise. Sadly, a number of

population segments throughout Chittenden County, including youth, elderly, low-income, new American, and historically underserved and excluded populations, lack access to viable public and private transportation.

The degree to which individuals in a community are physically active depends on transportation opportunities, infrastructure, and community design. Physical activity creates many positive societal impacts, provides numerous health benefits, and reduces the risk of chronic disease. Most risk factors for chronic disease do not occur randomly but are closely linked to the characteristics of neighborhoods in which people live, work, and play. The lack of safe and convenient alternatives to automobile travel disproportionately affects vulnerable populations, and limits personal options. This forces trade-offs in money or time, thereby compromising equitable choice.

The high costs of owning and operating a vehicle disproportionately affect low-income and rural Vermonters who rely on vehicles to get to work, shop, follow through on medical appointments, and attend social gatherings. Walkable communities with a reliable transit network generally have a lower dependence on automobiles and encourage physical activity. Hybrid commutes, (trips completed using several modes) are an effective option when distance and lack of transit service are barriers to a more active commute (such as walking or biking). With few exceptions, proximity to public transit stops is linked to higher transit use and higher levels of physical activity among adults.

As the population of Chittenden County continues to increase, bolstering the transit system, creating a contiguous infrastructure for active modes of transportation, and focusing on dense development patterns that encourage non-motorized trips will help preserve the goals of the ECOS/MTP Plan.

ACTIONS

Meeting the state and regional transportation and climate goals will require a multipronged approach. This includes major shifts in transportation investments and policies to facilitate significant increases in people using non-auto modes (walking, biking, etc.) or taking transit, thus reducing VMT and GHGs; supporting compact developments (90% of new growth) in areas planned for growth; electrification of the entire fleet (90% by 2050); instituting a mileage-based fee for all vehicles; and increasing the cost of parking in downtown and village areas. Specific actions include:

1. **Maintain and improve** the existing transportation system, including roads, bridges, culverts, rail, public transit, walking/biking facilities, park-and-rides, bus shelters, and expand transportation demand management (TDM) programs in the county.
2. **Invest** in the transportation system by addressing safety and localized congestion issues at intersections and roadways.
3. Collaborate with federal, state, and local partners to ensure a coordinated approach to improving transportation systems.
4. **Explore new sources for transportation funding** to shift from gas tax to more sustainable sources such as a mileage-based fee.
5. **Expand the deployment of Intelligent Transportation Systems (ITS)** to facilitate efficient flow of traffic on the roadway system, which will improve safety, reduce delays and congestion, decrease transportation energy use, and minimize the need for major roadway expansion projects.
6. **Implement** MTP and TIP (Transportation Improvement Program) Projects.
7. **Update the Regional Transportation Model** as a part of the next MTP update to incorporate the new regional future land use map, and the municipal housing targets, to facilitate alignment of land use, housing, and transportation planning efforts in Chittenden County.
8. **Explore future sustainable transportation investments** to support areas planned for growth and reduce fossil fuel consumption. This will help mitigate climate changing emissions by facilitating a shift away from single occupancy vehicle (SOV) trips by focusing on the following areas and programs:
 - a. **Triple transit ridership by 2050.** A FY24 study will explore the feasibility of this strategy. Increase investment in GMT transit services and explore micro-transit opportunities in the county.
 - i. Identify new, sustainable, and stable sources to finance public transit.

- ii. Work with GMT to identify opportunities for transit expansion. Integrate park-and-ride facilities with transit routes.
 - iii. Invest in transit signal priority technology in partnership with GMT, VTrans, and municipalities.
 - iv. Maximize ridership for public school buses and minimize use of private vehicles for student transport.
 - a. **Improve Active Transportation.** Expand walking and biking infrastructure to support active transportation and improve interconnection with the region's transit system.
 - i. Implement strategies, projects, and priorities identified in the 2022 Chittenden County Active Transportation Plan to provide safe and efficient facilities to connect common origins and destinations.
 - ii. Work with municipalities to update municipal road standards to reflect complete streets principles.
 - iii. Review state and municipal transportation projects to ensure that complete streets principles are implemented.
 - iv. Ensure that site plans include adequate bike and pedestrian infrastructure and safety measures, through participation in the Act 250 hearing process.
 - v. Assist municipalities with scoping future bike and pedestrian facilities to improve safety, accessibility, and continuity of the system. Municipalities could use the outcomes of scoping studies to apply for VTrans implementation grants.
 - b. **Promote Transportation Demand Management** and invest in Car/Bike Sharing programs.
 - i. Promote and support the Go! Vermont program that links travelers to a variety of transportation resources and choices.
 - ii. Support the continued development and expansion of Chittenden County park-and-ride facilities as recommended in the 2022 Regional Park-and-Ride Plan.
 - iii. Work with the Chittenden Area Transportation Management Association (CATMA) to support employer programs to encourage telecommuting, carpooling, vanpooling, walking, and biking for employee commute trips.
 - iv. Support CarShare Vermont's programs.
 - c. **Promote adoption of Electric Vehicles.** See Chapter 6: Energy.
9. **Support and enhance regional rail infrastructure** for passenger and freight. Promote the upgrade of the Essex Junction to Burlington line (Winooski branch). Where needed, provide additional rail infrastructure to support safer, more efficient movement, handling, and storage of goods.
10. **Encourage municipalities to implement local transportation financing and funding programs**, such as TIF, Local Option Sales Taxes, Impact Fees, or Special Assessment Districts as appropriate. Monitor and participate in state and federal transportation financing reform efforts, such as the 2023 Vermont Legislature's Act 62 study (Statewide Public Transit System), and the Land Use Review Board/VTrans Fair Share Cost Study, to help address declining revenue from the gas tax.



CHAPTER 8

Housing



GOAL

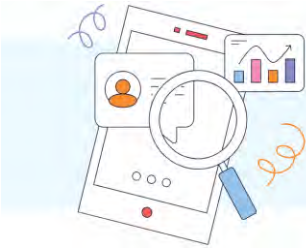
Strengthen and promote access to affordable, safe, energy efficient, accessible, and fair housing in all neighborhoods in Chittenden County for all people, and plan to accommodate a substantial majority of housing in centers, planned growth areas, and village areas.



KEY ISSUES, TRENDS & INSIGHTS



Data for this section is drawn from [Vermont Housing Needs Assessment 2025-2029](#); [ECOS Project Building Homes Together Campaign](#); [HousingData.org](#); [State's 2022 Analysis of Impediments to Fair Housing Choice](#).



2026 ECOS Plan website

For an interactive experience and additional data, visit the [Housing](#) page on the 2026 ECOS Plan website 

Housing Overview

Housing Affordability and Availability | Chittenden County is facing a housing crisis. [One third \(33%\) of all Chittenden County households \(owners and renters\) spend more than 30% of their income on housing](#), the commonly understood threshold for affordability.⁵⁹ Paying more than half of income on housing expenses severely strains a household's budget. This is the case for approximately 9% of owner households (4,045), and 26% of renter households (6,635) in Chittenden County.^{60, 61} These households face a higher risk of foreclosure, eviction, houselessness, and frequent moving, which harms residents and community connectedness. More housing, and more affordable housing, is needed now.

Availability of housing stock contributes to this lack of affordability. Pressure on housing supply in Chittenden County is from the dual demands to meet the housing needs of local households, but also the needs of in-migrating households. Strong in-migration is needed in Chittenden County, and Vermont, in order to fill local jobs and keep the local economy strong as our population continues to age and retire from the workforce. A mismatch between household size and home size also contributes to the lack of availability. Creating housing to that allows older adults to downsize and age in their communities can support successful aging while making larger homes available to growing families.

Age of Housing Stock | Per the American Community Survey, about 49% of the county's housing stock was built before 1980, when lead-based paint was widely used, when most home insulation, heating, and energy technology was inefficient, and when building and accessibility codes did not accommodate all types of residents.⁶² Much needed reinvestment in existing housing stock will ensure high quality homeownership and more rental housing opportunities for all Chittenden County residents.

Housing Quality | The Vermont Housing Needs Assessment 2025-2029 states that 4% of the county housing stock, or approximately 3,390 homes, has potential housing quality issues.⁶³ Housing quality issues may include: coal heating or no heat source, inadequate kitchen facilities, inadequate plumbing facilities, mobile homes built before 1979, rental units built before 1939 with rent less than \$500 per month, or an owner home with an estimated property value of \$75,000 or less. According to VHFA, this housing quality data "almost certainly undercounts the total number of households with housing problems because many issues such as poor sanitary conditions, inadequate weatherization and poor interior air quality" are not included in the US Census Bureau's criteria.⁶⁴

Vacant or abandoned homes, categorized by the US Census Bureau as "other vacant," are not counted as having quality issues. However, VHFA cites the importance of considering these homes in housing quality discussions since some may be under renovation, foreclosed, or abandoned. There are 1,119 "other vacant" homes in Chittenden County. "Other vacant" combined with homes with potential quality issues equals 4,509 housing units.

Overcrowding may also be considered a housing quality issue. According to VHFA, overcrowded housing units are defined as homes "with fewer rooms than household members."⁶⁵ The Vermont Housing Needs Assessment 2025-

2029 states that approximately 1,036 Chittenden County households are overcrowded (1.4% of total households). Most of these are rental units (793). This includes an estimated 547 households that are severely overcrowded. Statewide, 1.5% of households are overcrowded.

Houselessness | The [annual Point in Time \(PIT\) Count](#) is the only county-wide data available that estimates the number of people experiencing houselessness. The most recent PIT Count shows that on one night in January 2024, there were at least 811 individuals experiencing houselessness in Chittenden County, which represents a quarter of Vermont’s houseless population.⁶⁶ The PIT count inevitably underrepresents the total number of people experiencing houselessness. Conducted over only one night, it includes those sleeping in shelters or transitional housing, but not those staying with friends or family.

Racially marginalized communities experience houselessness 6.5 times more than the population as a whole in Chittenden County (see Figure 15 below). To properly address the county’s housing crisis, planners must account for these inequities when creating solutions.⁶⁷

Race / Ethnicity	% of Total County Population (2020)	% of 2023 County Homelessness PIT Count
American Indian, Alaska Native, or Indigenous	0.2%	1.3%
Asian or Asian American	4.3%	1.1%
Black, African American, or African	2.9%	7.5%
Native Hawaiian or Pacific Islander	0.0%	0.1%
White	85.7%	37.9%
Multiple Races	5.9%	2.0%
Hispanic / Latin(a)(o)(x)	2.8%	3.2%
Non-Hispanic / Latin(a)(o)(x)	97.2%	46.9%
<i>Sources: 2020 Decennial Census; 2023 Chittenden County Point-In-Time Count</i>		

FIGURE 15: HOMELESSNESS IN CHITTENDEN COUNTY BY RACE / ETHNICITY

The COVID pandemic exacerbated many existing housing challenges, and uncovered a housing market that was even worse than previously documented for low-income households. The number of houseless households in Chittenden County increased by 149% from the pre-pandemic houseless point-in-time count in January 2020 (217 households) to the January 2022 count (541 households). Swift response by the State of Vermont with the CARES Act and ARPA funding helped renters and homeowners cover their housing costs, and prevented further catastrophe with regard to houselessness. However, the state’s eviction moratorium ended in mid-2021, and most federal funding to support temporary housing ended in mid-2023. This includes the Rental Assistance Program, which supported 12,000 households statewide during the height of the pandemic. There were 586 houseless households in Chittenden County as of the January 2024 point-in-time survey.

Temporary solutions are necessary to address people’s immediate housing needs while additional, permanent housing is constructed. The primary program to date has been the state’s Emergency Housing Program, but its reach is limited: for example, among other parameters, effective September 15, 2024, the program is capped 1,100 rooms per night statewide, and the focus is on priority populations, such as families, older adults, and people with major

medical needs. As of September 9, 2025, room availability in Chittenden County is “extremely limited” (0 to 5 rooms available out of 270 total rooms) for families without children.⁶⁸

Homeownership | Chittenden County residents do not have equal access to housing opportunities. The [state’s 2022 Analysis of Impediments to Fair Housing Choice](#) identifies many issues that restrict housing choice and participation in local decision making, including the following: a lack of affordable housing supply accessible to persons with disabilities; discrimination based on disability, familial status (e.g. presence of minors), and other protected classes; barriers that make it difficult for minority households and new Americans to become homeowners; and lack of representation by members of protected classes on boards and commissions dealing with housing issues.

Specifically, historic exclusionary systems have prevented BIPOC households from developing household wealth at the same rate as white households (primarily through equity gained via homeownership). Systemic racism in housing practices, such as racially restrictive covenants, along with these differences in generational wealth, means that today some BIPOC households lack financial resources to participate in homeownership and rental markets. Other BIPOC households, including those that located in Chittenden County via the Refugee Resettlement program, may have even lower homeownership rates due to challenges related to refugee status and language access.

According to the most recent available ACS data, only 22% of Black or African American households own their homes compared to 66% of white households in Chittenden County. This disparity is particularly notable considering that statewide, 27% of Black or African American households own their homes . Black or African American households own approximately 0.7% of owned housing units in Chittenden County despite making up 2.6% of the population.⁶⁹ This data is important to consider because it shows how pathways to wealth found through homeownership continue to see disparities for Black and African American populations in Chittenden County.

Home prices and limited supply exacerbate housing access for all. According to Vermont Housing Finance Agency (VHFA), the median sales price of primary homes in Vermont reached \$325,000 in 2023 - a 5% increase over median home sales prices in 2022. Median sales price of primary homes was higher in Chittenden County in 2023 (\$460,500 – a 5.5% increase from 2022).⁷⁰

Rental Housing | Chittenden County has an extreme scarcity of housing units for rent, which results in higher rental housing costs.⁷¹ As of 2024, the regional apartment vacancy rate was 2.4% for market rate units.⁷² This is among the lowest rental vacancy rates in the country.⁷³ In addition, many households are qualified and waiting for affordable housing; as of September 2023, Cathedral Square had nearly 1,300 households on their waitlist, and Burlington Housing Authority had over 1,100 households on their master wait list. Champlain Housing Trust measures waitlists by the average time it takes from application to move in, which is averaging 15 months. The rental vacancy rate is slightly higher than the rate during the COVID-19 pandemic. During the pandemic, tenant turnover and rent loss were somewhat mitigated by temporary government rent relief programs and eviction moratoriums. Construction delays and work stoppages during the COVID-19 pandemic have also contributed to slow rental housing development.

The June 2024 Allen, Brooks, and Minor report indicates an extreme scarcity of available rentals caused upward rent pressure in 2023. The 4.8% rent inflation increase between 2022 and 2023 is the third largest annual rate increase seen since 2011.⁷⁴ As rental rates increase it limits a home buyer’s ability to save for a down payment; furthering demand for rental homes in the County. More than half of renters in the County (51%) are cost-burdened and spend more than 30% of their income on rent.⁷⁵

Short-Term Rental Housing | Short-term rental properties can reduce the number of available properties for long-term renters. The city of Burlington was the first community in the region to adopt an ordinance regulating short term rentals (STR) 2022, by adding restrictions and incorporating a 9% tax that funds the city’s Housing Trust Fund. Since that time, South Burlington has also adopted an ordinance regulating STRs, and several communities are evaluating possible ordinances. According to the 2025 Statewide Housing Needs Assessment, Chittenden County has the second lowest rate of short-term rentals (1.3%) as a percentage of its housing stock in the state, suggesting that STRs may have less of an impact on housing availability than in other areas. The number of short-term rental homes in the county was 872 in June 2025, up from 536 in July 2018.⁷⁶

Housing and Employment | The lack of housing is a major factor in jobs going unfilled, as employees at all income levels cannot find affordable homes. When completing the first ECOS Plan in 2013, 83% of Chittenden County businesses identified housing as the #2 obstacle to job growth. Businesses surveyed for the 2023 CEDS update indicated the same problem. Megan Sullivan, vice president of government affairs at the Vermont Chamber of Commerce, describes it well in a *VTDigger* commentary:⁷⁷

“While funding workforce development and capital investment opportunities remain crucial, there is only one ultimate solution. We need more people to call Vermont home. This requires a robust and sustained marketing effort of Vermont as a welcoming community, with job opportunities and an unmatched quality of life. It also requires taking immediate action to address the glaring barrier to workforce growth: an overwhelming lack of suitable and affordable housing stock for middle-income families.”

Construction Costs and Labor Availability | The rise in construction costs has a direct impact on the number of housing units affordable housing providers (and other developers) can construct given their fiscal constraints. Based on data aggregated by Vermont Housing Financing Agency (VHFA), the Producer Price Index (PPI) applicable to materials used in the construction of multi-family housing rose by 38% between February 2020 and May 2024. Similarly, labor costs for multi-family housing construction rose by 24% during the same time period.⁷⁸ The Agency of General Contractors cites labor availability as the #1 challenge for many contractors.⁷⁹ Attracting the laborers needed is also compounded by the lack of housing for workers. Equipment availability is also a concern, delaying project occupancy and increasing costs.

Building Homes Together | Together with Champlain Housing Trust and Evernorth, CCRPC launched the five-year Building Homes Together campaign in 2016. The campaign’s goal was to build 3,500 new homes, including 700 permanently affordable homes, through policy changes, increased capital, and education and advocacy. The first five-year campaign successfully achieved the total homes targets (3,659), though all partners agree that production is falling short of current demand. This is due to the impacts of COVID-19, an aging demographic, an increase in single-person households, and population growth. Furthermore, despite surpassing the total homes target, the campaign fell 164 homes short of the permanently affordable target.

Pent-up demand from low housing production rates since the 2000s means fewer homeownership opportunities, and an extremely low rental vacancy rate. There may also be increased demand from folks moving to the state and region to escape climate change challenges elsewhere (flooding, extreme heat, drought, etc.). Therefore, Building Homes Together 2.0 was launched in 2021 with a new target of 5,000 new homes by 2025 for people of all incomes, including at least 1,250 affordable homes. The first three years of the campaign have fallen short of the annual goal to build 1,000 new homes per year. In 2021, a net total of 900 new homes were added in the county. In 2023, only 720 net new homes were built. See the [BHT Dashboard](#) for more details.

The campaign was successful in raising awareness of the regional and statewide housing shortage and the passage of several legislative changes (the HOME Act in 2023 and Act 181 in 2024) which set new statewide, regional, and municipal housing targets. The HOME Act also established a process by which the Vermont Agency of Commerce and Community Development will now track [new housing units built](#).

Chittenden County Housing Targets and Estimates

State and Regional Housing Targets | Housing targets are estimates of the number of homes needed at the state, regional, and municipal levels to achieve and maintain a stable housing market. Vermont’s Municipal and Regional Planning and Development statute (24 §VSA Ch. 117) now requires that regional and municipal plans include housing targets for 2030 and 2050. While cities, towns, and regions have planned for housing for decades, adding these numbers to plans presents an important opportunity to focus conversations about the scale of housing need and the possible local solutions to achieve housing goals. As aspirational goals, rather than projections or quotas, the targets give municipalities and the region something to strive for – and plan toward.

Per 24 V.S.A. §4348a(a)(9), RPCs “shall estimate total needed housing investment in terms of price, quality, unit size or type, and zoning district, as applicable.” Regional housing targets come from the Vermont Housing Needs Assessment 2025-2029, a report that researches and analyzes housing needs. The report was written by the Vermont Housing Finance Agency (VHFA) under contract with the state’s Department of Housing and Community Development and is updated every five years.

The report provides both a “lower” scenario housing target and a “upper” scenario housing target for each Regional Planning Commission. Each scenario will “normalize vacancy rates, end houselessness, and replace homes lost from year-round housing stock due to disrepair and seasonal home use.”⁸⁰ The “lower” scenario is based on a 0.8% average annual rate of housing growth which would address the goals of normalizing vacancy rates, decreasing houselessness, and replacing lost homes, but provides little flexibility if population grows faster than expected . The “upper” scenario is based on a 1.6% average annual rate of housing growth which mirrors Vermont’s growth rate in the 1980 to 1990 period. This scenario would increase Vermont’s labor force, provide greater housing access, and decrease houselessness.

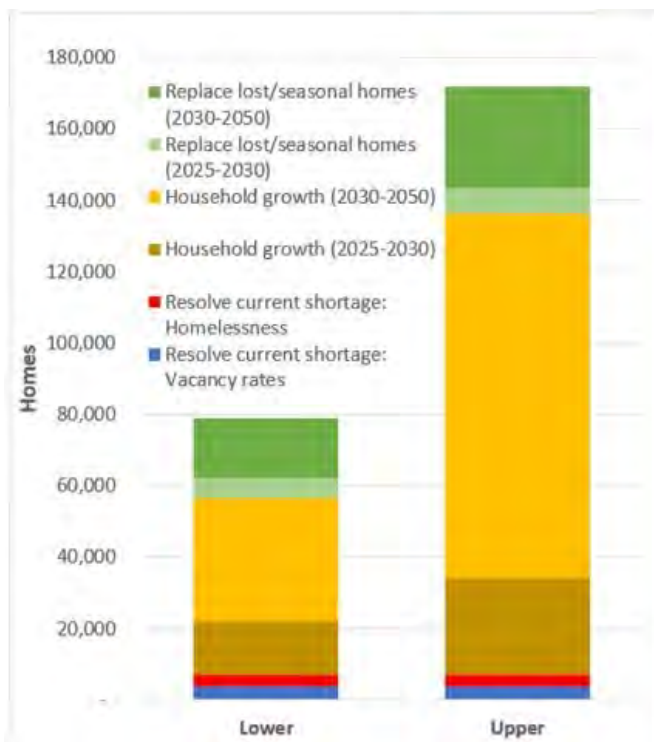


FIGURE 16: 2050 VERMONT HOUSING TARGETS

resources. However, collaborative planning processes can help direct the policy and investment changes needed to successfully overcome these challenges.

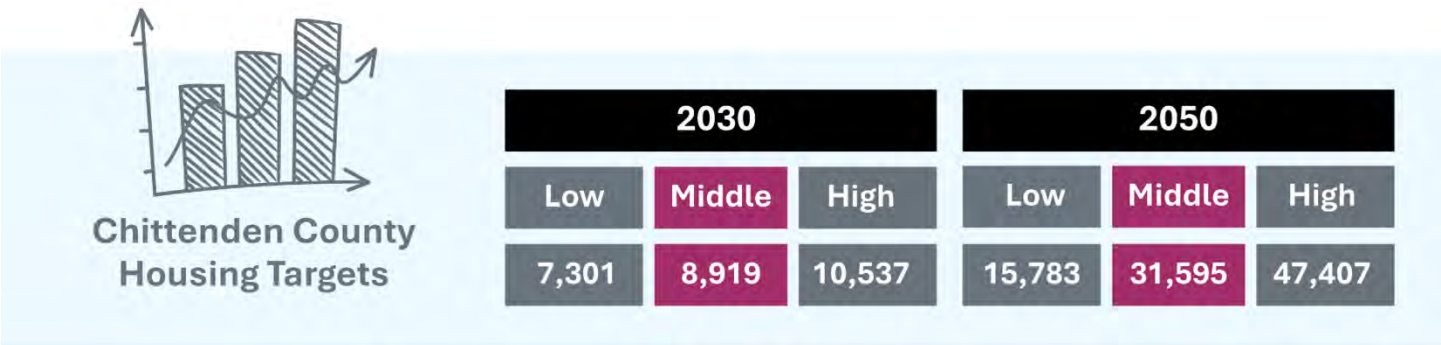


FIGURE 17: CHITTENDEN COUNTY 2030 AND 2050 HOUSING TARGETS

While the 2030 housing targets are helpful to emphasize the immediate needs and scale of development needed, the longer time horizon of this plan means that CCRPC has been focusing primarily on the 2050 housing targets.

Municipal Housing Targets | Per the HOME Act, each RPC is responsible for developing methods to allocate the regional housing target to their municipalities. CCRPC worked with its Planning Advisory Committee, made up of city / town planning directors and commissioners, to develop a method to assign housing targets to each city and town in Chittenden County. Similar to the regional target, CCRPC divided municipal targets into lower, middle, and upper. With the lower target largely representing the status quo for development, and the upper target representing a stretch goal, CCRPC opted to create and focus on a mid-range target. CCRPC encourages municipalities to include actions in their municipal plans that will assist achieving the middle or high targets.

In developing municipal housing targets, CCRPC considered factors like infrastructure availability, historic growth rates, and land available for development. These targets also reinforce and support the land use and transportation goals of the ECOS Plan. CCRPC assigned housing targets to cities and towns based on town type:

- **Cities:** The region's four cities (Burlington, Essex Junction, South Burlington, and Winooski) are home to 50% of all existing housing in our region. It is in our cities where infrastructure, social services, and transportation options are strongest, reinforcing these communities as the core of our built environments. To address state, regional, and local planning goals (24 VSA §4302(c)(1)(A)), CCRPC has allocated a "substantial majority" (60%) of the regional housing targets to our cities. Substantial planning and investment in public infrastructure (e.g. water, wastewater, stormwater management, public transit, schools, and other municipal services) should be focused in these communities to efficiently and cost-effectively create conditions to achieve the regional housing targets.
- **Rural:** Housing development in rural municipalities (Bolton, Buel's Gore, Charlotte, Huntington, St. George, Underhill, and Westford) is limited by lack of robust infrastructure and the presence of natural resource development constraints. Rural municipalities are allocated 3.8% of the regional housing target.
- **Mixed urban and rural:** The region's mixed urban and rural towns (Colchester, Essex, Hinesburg, Jericho, Milton, Richmond, Shelburne, and Williston) have hubs of activity and infrastructure and significant rural areas that together support the goals of our region. These municipalities are allocated 36.2% of the regional housing target is allocated with a recommendation that 90% of the housing takes place in areas planned for growth within those towns.

Please see Supplement 7: Housing Data for specific information about how municipal housing targets were created by CCRPC.

Vermont's **HOME Act** (Act 47 of 2023) introduced new requirements for regional and municipal plans. One is that plans must now include housing targets for 2030 and 2050 to ensure an adequate supply of safe, affordable housing in locations that keep transportation costs low.

Below are the draft housing targets for 2050. CCRPC has divided its regional target range (15,783 – 47,407) into **LOW**, **MIDDLE**, and **UPPER** targets for each city and town.

	EXISTING HOUSING UNITS (2023)	2050 HOUSING TARGET RANGES						ANNUAL HISTORIC GROWTH (2000-23)	2050 ANNUAL #S*		
		LOW # and %		MIDDLE # and %		UPPER # and %			LOW	MIDDLE	UPPER
BOLTON	550	59	11%	118	21%	177	32%	6	2	5	7
BUEL’S GORE	12	1	11%	3	21%	4	32%	0	0	0	0
BURLINGTON	18,245	3,490	19%	6,986	38%	10,482	57%	77	140	279	419
CHARLOTTE	1,643	176	11%	353	21%	530	32%	6	7	14	21
COLCHESTER	7,673	639	8%	1,593	21%	2,447	32%	39	26	64	98
ESSEX	4,889	1,226	25%	2,432	50%	3,614	74%	51	49	97	145
ESSEX JUNCTION	4,955	1,529	31%	3,062	62%	4,594	93%	52	61	122	184
HINESBURG	2,071	339	16%	640	31%	918	44%	16	14	26	37
HUNTINGTON	876	94	11%	188	21%	282	32%	6	4	8	11
JERICO	2,014	262	13%	448	22%	668	33%	10	10	18	27
MILTON	4,515	671	15%	1,255	28%	1,974	44%	42	27	50	79
RICHMOND	1,729	207	12%	360	21%	539	31%	8	8	14	22
SHELburne	3,529	771	22%	1,545	44%	2,263	64%	33	31	62	91
SOUTH BURLINGTON	9,921	3,788	38%	7,583	76%	11,378	115%	142	152	303	455
ST. GEORGE	314	34	11%	67	21%	101	32%	2	1	3	4
UNDERHILL	1,313	141	11%	282	21%	423	32%	9	6	11	17
WESTFORD	899	96	11%	193	21%	290	32%	6	4	8	12
WILLISTON	4,725	1,596	34%	3,161	67%	4,733	100%	70	64	126	189
WINOOSKI	3,665	663	18%	1,327	36%	1,991	54%	27	27	53	80
COUNTY TOTAL	73,538	15,783	21%	31,595	43%	47,407	64%	602	631	1,264	1,896

*Annual new units needed to reach 2050 targets.

HOW WERE THE NUMBERS ASSIGNED TO EACH CITY AND TOWN?

CCRPC worked with its Planning Advisory Committee, made up of city / town planning directors and commissioners, for over a year to develop a method to assign housing targets to each city and town in Chittenden County.

Housing targets consider factors like **infrastructure**, **historic growth rates**, and **land available for development**.

CITIES

Burlington, Essex Junction, South Burlington, Winooski

Receive **60%** of the regional housing target.

RURAL TOWNS

Bolton, Buel's Gore, Charlotte, Huntington, St. George, Underhill, Westford

Receive **3.8%** of the regional housing target and are encouraged to promote village development and protect working lands.

MIXED URBAN & RURAL TOWNS

Colchester, Essex Town, Hinesburg, Jericho, Milton, Richmond, Shelburne, Williston

Receive **36.2%** of the regional housing target, and weighting is applied based on accessibility of water and wastewater infrastructure.



This approach allows Chittenden County to meet its goals for livable downtowns and villages, intact farm and forest land, and healthy natural resources – while still accommodating development in all cities and towns.

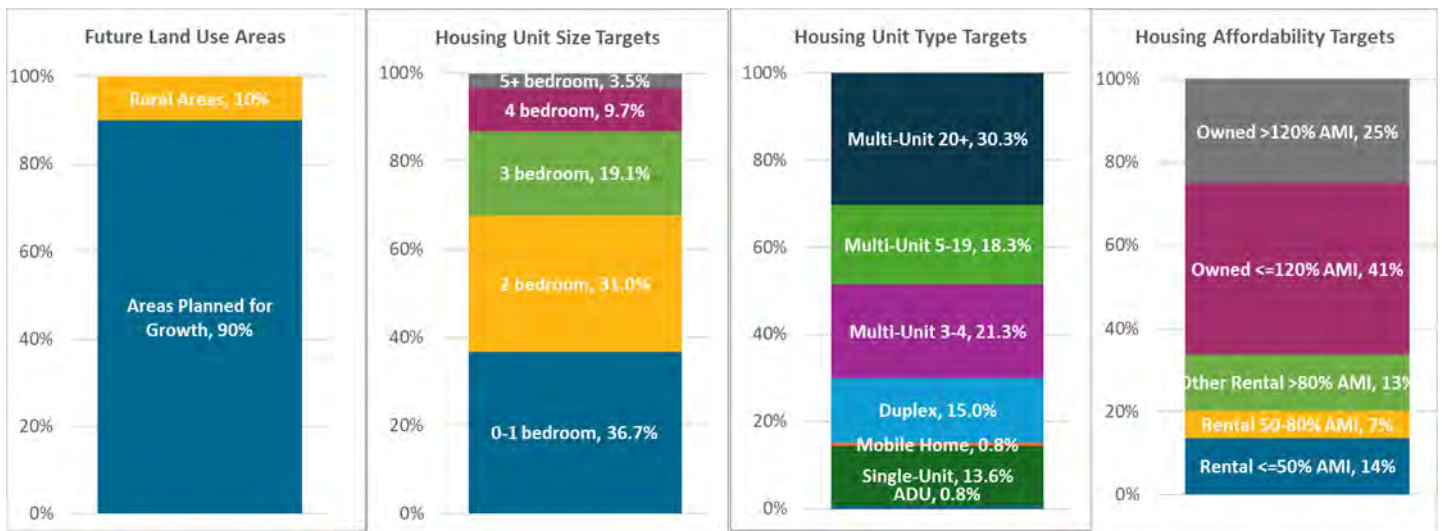


FIGURE 18: 2050 CHITTENDEN COUNTY HOUSING ESTIMATES

Other Housing Estimates | Planning for housing must include a mix of unit sizes and types, affordability levels, and locations to meet people’s housing needs. Statute requires that regional plans divide the regional housing targets into these categories (24 V.S.A. §4348a(a)(9)) and estimate future need. The following section describes CCRPC’s estimates for housing targets by zoning district (future land use area), unit type, unit size, and price (affordability). See Supplement 7: Housing Data for more information about the methods used to develop the housing estimates.

HOUSING BY ZONING DISTRICT

CCRPC does not have the authority to adopt zoning. Therefore, CCRPC has interpreted the statutory requirement to related to “zoning district” to instead mean “future land use planning area.”

The state’s planning goals (24 VSA §4302(c)(1)(A)) encourage residential development in areas planned for growth: downtown centers, village centers, planned growth areas, village areas, and transition areas. The goal further calls for planning these smart growth areas to accommodate a “substantial majority” of the housing needed to reach the region’s housing targets. CCRPC will work with our municipalities to develop over 90% of regional housing target in areas planned for growth. In some municipalities, this level of growth may be accommodated through additional planning and regulatory reform. In most Chittenden County municipalities, there will be a need not just for regulatory reform, but for substantial planning and investment in public infrastructure needed to support a growing region. This includes water, wastewater, stormwater management, public transit, schools, and other municipal services.

The remaining 10% of the regional housing target is intended to occur in other land use areas including the Resource-based Recreation and Rural General areas.

HOUSING UNIT TYPES

Based on demographic information, existing information about housing types in Chittenden County, goals to increase “missing middle” housing development, and assumptions about future housing growth, CCRPC estimates the following housing type needs in 2050:

2050 Estimates by Dwelling Unit Type	ADU	Mobile Home	Single-Unit	Duplex	Multi-Unit 3-4	Multi-Unit 5-19	Multi-Unit 20+	Seasonal Camp	Total
Downtown Center	0	0	79	79	869	869	4,739	0	6,635
Village Center	79	0	316	316	790	632	316	0	2,449
Planned Growth Area	79	0	1,580	2,528	3,870	3,949	4,423	0	16,429
Village Area	16	79	632	632	790	158	0	0	2,306
Transition/Infill Area	2	0	79	79	237	142	79	0	618
Resource-based Recreation Area	0	0	0	0	0	43	0	0	43
Enterprise Area	0	0	0	0	0	0	0	0	0
Airport or Camp Johnson or Ethan Allen Firing Range	0	0	0	0	0	0	0	0	0
Hamlet	0	0	0	0	0	0	0	0	0
Rural General	63	158	1,359	1,106	158	0	0	0	2,844
Rural Ag and Forestry	4	0	253	0	14	0	0	0	270
Rural Conservation	0	0	0	0	0	0	0	0	0
Grand Total	243	237	4,297	4,739	6,728	5,793	9,557	0	31,595

FIGURE 19: ESTIMATES BY DWELLING UNIT TYPE AND FUTURE LAND USE CATEGORY (2050)

HOUSING UNIT SIZE

Based on demographic estimates about future household size, information about existing housing unit size in Chittenden County, and assumption about likely number of bedrooms based on household size, CCRPC estimates the following housing unit size needs in 2050:

Housing Targets by Unit Size Estimates							
Target Year	Scenario	New Units	0-1 bedroom	2 bedroom	3 bedroom	4 bedroom	5+ bedroom
2030 Regional Housing Target	Low	7,301	2,374	2,351	1,442	771	363
	Middle	8,919	2,901	2,872	1,761	942	443
	Upper	10,537	3,427	3,393	2,081	1,113	524
	Percent Allocations		32.52%	32.20%	19.75%	10.56%	4.97%
2050 Regional Housing Target	Low	15,783	4,222	4,798	3,748	2,194	821
	Middle	31,595	8,452	9,605	7,504	4,392	1,643
	Upper	47,407	12,681	14,412	11,259	6,590	2,465
	Percent Allocations		26.75%	30.40%	23.75%	13.90%	5.20%

FIGURE 20: DWELLING UNIT SIZE ESTIMATES IN 2030 AND 2050 HOUSING TARGET SCENARIOS

PRICE

To meet this statutory requirement, CCRPC used housing unit affordability as a substitute for housing unit price. This is because housing prices matter relative to wages; alone, they do not describe how affordable or accessible housing is within the region. Housing affordability links housing price to area median income (AMI), CCRPC has measured affordability for homeowners and renters separately because of data availability from the American Community Survey (ACS).

Owner-Occupied Housing Estimates	Percent of Total New Units	2030 Housing Targets			2050 Housing Targets		
		Low	Middle	High	Low	Middle	High
Total Households		7,301	8,919	10,537	15,783	31,595	47,407
Owner-Occupied	66%	4,838	5,910	6,983	10,459	20,937	31,416
<30% AMI	4%	288	351	415	622	1,245	1,868
30-50% AMI	5%	386	472	558	835	1,672	2,508
50-80% AMI	8%	608	742	877	1,313	2,629	3,945
80-100% AMI	8%	553	675	798	1,195	2,392	3,589
100-120% AMI	16%	1,174	1,434	1,694	2,537	5,080	7,622
> 120% AMI	25%	1,830	2,236	2,641	3,956	7,920	11,883

FIGURE 21: OWNER-OCCUPIED HOUSING ESTIMATES BY AREA MEDIAN INCOME (AMI) COHORT IN 2030 AND 2050 HOUSING TARGET SCENARIOS

Renter-Occupied Housing Estimates	Percent of Total New Units	2030 Housing Targets			2050 Housing Targets		
		Low	Middle	High	Low	Middle	High
Total Households		7,301	8,919	10,537	15,783	31,595	47,407
Renter-Occupied	34%	2,463	3,009	3,554	5,324	10,658	15,991
<30% AMI	6%	466	569	672	1,007	2,016	3,025
30-50% AMI	7%	528	645	762	1,141	2,285	3,428
50-80% AMI	7%	484	592	699	1,047	2,096	3,146
80-100% AMI	5%	357	436	515	772	1,545	2,318
100-120% AMI	6%	471	575	680	1,018	2,038	3,058
> 120% AMI	2%	156	191	226	338	677	1,016

FIGURE 22: RENTER HOUSING ESTIMATES BY AREA MEDIAN INCOME (AMI) COHORT IN 2030 AND 2050 HOUSING TARGET SCENARIOS

CCRPC will complete a housing needs assessment for Chittenden County in the near future to provide even more detailed housing data, and related actions, for use by our municipal partners.

Current Approaches

Economic development efforts and infrastructure investments need to focus on housing production and housing affordability.

Zoning and Housing | In 2023, CCRPC began collaborating with the Vermont Zoning Atlas team to comprehensively inventory and map areas where municipal land use regulations restrict the type and density of housing development across the state. The Zoning Atlas translates hundreds of lengthy and complex legal documents into [a simple map](#). This allows for comparisons across jurisdictions, and highlights opportunities for reform.

HOME Act | The goal of Act 47 (2023) is threefold: 1) streamline municipal development review processes for housing development; 2) diversify the types of housing being built; and 3) increase densities in areas with municipal water and sewer service. The law removes certain restrictions on housing development from municipal and state regulations, prevents municipalities from adding restrictions to housing projects and shelters for those experiencing homelessness, and establishes numerous programs to support construction and rehabilitation of affordable housing. It also set in motion further reforms to Act 250, the State Designation Programs, and how regions and municipalities plan to address housing needs. CCRPC plans to support municipalities with technical assistance as they incorporate necessary changes into their development regulations in order to remove barriers to different housing types and construction.

Municipal Efforts | Chittenden County municipalities have taken significant steps to increase housing production, including but limited to: applying for grant funds to support affordable housing construction projects; increasing density in areas planned for growth; streamlining development review processes; enabling accessory dwelling units (ADUs); incorporating inclusionary zoning provisions; establishing housing trust funds and housing committees; and creating housing needs assessments and action plans. There is no single housing solution for all municipalities, as any number of unique circumstances (i.e. income levels, wastewater capacity, bus service, etc.) will require different solutions to help increase housing availability, choice, and affordability.

ACTIONS

The scale of the housing challenge, paired with the tools presented by recent legislative changes, means a renewed importance for regional planning, as well as leadership opportunities for the RPC and its member municipalities to address the local housing crisis. The regional and municipal housing targets are a catalyst to spur long-term regional infrastructure planning and investment. CCRPC should focus plan implementation efforts on developing and implementing policy tools that will achieve the regional housing target and advance state, regional, and municipal land use planning, housing and affordability goals.

1. **Policy and Regulatory Changes** | Support policies that encourage growth and investment in the housing sector, and remove barriers to constructing affordable housing.
 - a. **Reduce Regulatory Redundancies** | End duplication of review between Act 250, state agencies, and municipalities in Downtown Centers, Village Centers, Planned Growth Areas, and Village Areas.
 - b. **Regulatory Updates and Alignment** | Focus efforts on creating conditions to achieve 90% of the regional housing target in areas planned for growth. Improve permitting predictability for well-planned projects in Downtown Centers, Village Centers, Planned Growth Areas, and Village Areas. Eliminate the ability to deny applications for housing development at the municipal level based on the “character of the area” criterion in 24 V.S.A. §4414. Explore ways to improve Vermont’s appeals system to make sure the appeals process for housing is expeditious and fair.
 - c. **Reduce Permit Fees** | At the state and municipal levels, consider fee waivers or other development review process incentives for projects that include affordable housing.
 - d. **Infrastructure Investment** | Target government funding to infrastructure that will support housing development and achievement of housing targets in areas planned for growth. Work with municipalities to revise infrastructure requirements with a goal of reducing costs for developers of housing projects. Work with state and municipal partners to plan and implement housing development projects funded via the Community Housing and Infrastructure Program (CHIP).
 - e. **Inclusive Communities** | Integrate a variety of housing types for all income levels for new/infill housing projects throughout the county, to provide for different incomes and access to jobs and services. Adopt inclusionary zoning requirements, or other incentive programs, to serve all needs.
 - f. **Rental Registry** | Support a statewide rental housing safety inspection process and rental registry; while retaining existing municipal rental registry programs as is.
 - g. **Student Housing** | Work with the University of Vermont and Champlain College to develop specific plans to increase the percentage of students who reside in dedicated student housing.
2. **Increase Capital for Safe, Accessible and Resilient Affordable Housing** | Maintain or increase local and state resources that fund additional affordable housing, maintain existing affordable housing, and make housing more affordable. These actions include:
 - a. **Federal Funding for Housing** | Work with partner organizations and municipalities to secure new federal financial resources to support, convert, and construct new housing. Focus CCRPC use of EPA Brownfields Assessment and Clean-up funding on supporting housing development in Chittenden County.
 - b. **State Funding for Housing** | The state should fully fund the Vermont Housing and Conservation Board, with funds supporting an increase in Chittenden County’s stock of permanently affordable housing. Sustain state

bonding investment for capital and infrastructure investments in service of more housing. Work with institutions, businesses, and philanthropy to invest in housing for families. Finally, create avenues for social investment financing.

- c. **Planning Funding** | The state should fully fund the Regional Planning Commissions, Municipal Planning Grants, and the Vermont Center for Geographic Information, applying property transfer tax revenue to levels outlined in existing state statute 24 V.S.A. § 4306(2). This can assist toward reaching housing goals, as well as other state planning goals.
 - d. **BIPOC and New American Homeownership** | Work with partners to create BIPOC and New American-specific financing for homeownership, and/or the creation of a state program to support this type of financing. Support advancement of down payment assistance programs.
 - e. **Housing Trust Funds** | Support the creation and use of municipal housing trust funds to assist in the financing of affordable housing. Explore and support inter-municipal collaboration on projects utilizing housing trust funds.
 - f. **First-Time Homebuyers** | Support financial programs that assist first-time homebuyers. Support advancement of down payment assistance programs.
 - g. **Housing Preservation** | Take steps to preserve existing affordable housing from being converted to market rate housing and continue to encourage shared equity for new-owner homes. Provide technical assistance to municipalities that choose to regulate short-term rentals. Provide technical assistance and project management to support the preservation of, and reinvestment in, existing mobile home parks. Encourage rehabilitation and maintenance of existing housing stock.
 - h. **Location** | Work with partners to have affordable housing available in all neighborhoods that is climate resilient and proximate to amenities. See Action 1 in Land Use.
 - i. **Private Funding for Housing** | Work with state agencies and housing partners to cooperate with major employers with private capital to invest in housing.
3. **Education and Collaboration** | Work together to move toward a regional housing market that serves people of all backgrounds and incomes, addresses the persistent low rate of homeownership among Black Vermonters, supports business needs and economic growth, helps people retain their homes, and reduces houselessness. These actions include:
- a. **Building Homes Together and Regional Housing Targets** | Work with partners to facilitate new home construction to achieve the regional housing targets. New homes should be primarily located in areas planned for growth. Build cross-sector and public support for housing development in areas planned for growth.
 - b. **Housing Needs Assessment and Data** | Complete a regional housing needs assessment. Provide the public with the most accurate and up-to-date data to explain the region's critical needs, expose inequities, and show any measurable progress towards and benefits behind new housing. Collect information about the availability of vacant commercial space in Chittenden County that could be converted into housing as a part of the assessment.
 - c. **Housing for BIPOC individuals and families** | Provide educational resources for municipalities, employers, and other stakeholders to assist with increasing housing access to the BIPOC community.
 - d. **Improve Development Outcomes** | Train municipal officials and staff, the public, developers, banks, and real estate agents to promote better development practices that achieve a higher level of density with quality design.
 - e. **Tenant Support** | Increase capacity for essential tenant supports, such as the CVOEO Vermont Tenants hotline, direct aid, and educational programs for renters.
 - f. **Media Coverage** | Engage the media to ensure continued coverage of the housing crisis.
 - g. **Houselessness** | Work with partners to reduce houselessness in the region and investigate best practices for addressing the social, emotional, and health needs of those experiencing and transitioning out of houselessness into stable housing.

- h. **Resources** | Obtain and allocate resources to support municipalities, or community-based organizations, to advance housing development in areas planned for growth, particularly housing solutions and supportive programming for community members facing acute or chronic houselessness. Support pro-housing groups and the development of messaging and other resources to promote housing.
 - i. **Municipal Support** | Support and encourage municipal efforts to develop locally appropriate planning and implementation strategies that will help achieve local housing targets. Support development of housing choices for all income levels are available in rural, urban, and mixed urban and rural communities across the county.
4. **Living Conditions** | Work with private and public partners to make sure that future housing in Chittenden County is designed to prioritize health, safety and inclusivity, taking into account the needs of diverse communities within the county.
- a. See Chapter 9: Health.
 - b. **Rental Inspections** | Support policy that advances a safe, healthy, and fair rental market with established rules for inspection frequency, coverage of essential health and safety features, and mechanisms for enforcement to address non-compliance and to foster accountability among landlords.
 - c. **Lead Abatement** | Improve housing quality, and safeguard public health, by supporting initiatives for lead testing, remediation, and education. Strive for safe and healthy living environments for all residents.
 - d. **Universal Design** | Work with private and public partners to incorporate universal design in Chittenden County in a manner that also accounts for high-quality design, especially in urban areas.
 - e. **Quality** | Support the investigation of a state-wide building code with the intent of making sure that the development and redevelopment of housing is high quality, durable, and resilient.
5. **Fair Housing** | Increase compliance with fair housing requirements to better address housing equity in the County, as described in the [Vermont Fair Housing Action Plan from 2017](#) (or as amended) and the [Burlington Assessment of Fair Housing](#).
- a. **Fair Rental Housing Education** | Increase fair housing education and outreach for landlords, property managers, real estate professionals, and anyone involved in the sale, rental, or finance of housing. Work with the Vermont Refugee Resettlement Program, the Association of Africans Living in Vermont, Opportunities Credit Union, and other organizations to develop strategies for new Americans to quickly develop credit history. Create educational materials that encourage landlords to use alternative criteria for new Americans and other groups traditionally excluded from housing opportunities that don't penalize them for a lack of credit or rental history.
 - b. **Fair Housing and Land Use Planning** | Provide fair housing and land use planning training for land use professionals and municipal officials throughout the county.
 - c. **Disability Laws** | Identify gaps in municipal implementation of State Fair Housing laws and ADA compliance. One known gap (among many) is to ensure that municipal bylaws include language that explicitly permits officials to make reasonable accommodations for people with disabilities without delay or public input.
 - d. **Enforcement** | Increase enforcement and testing capacity of fair housing organizations, such as Vermont Legal Aid, particularly for classes protected only under Vermont law: marital status, age, sexual orientation, gender identity, receipt of public assistance, and victims of abuse.



CHAPTER 9

Health



GOAL

Promote preventative care, healthy lifestyles, and community wellness, and improve access to affordable healthcare services, while reducing healthcare disparities for all community members.



KEY ISSUES, TRENDS & INSIGHTS



Data for this section is drawn from the [State Health Improvement Plan 2019-2023](#) and [Healthy Vermonters 2020](#), unless noted otherwise.



2026 **ECOS** Plan website

For an interactive experience and additional data, visit the [Health](#) page on the 2026 ECOS Plan website 

Health is influenced by the various physical, social, and political environments that we are born into and experience across the lifespan. Our communities shape the availability of social and economic opportunities, the affordability of housing, the quality of schools and healthcare services, access to transportation and green spaces, overall safety and connectedness, and [health](#) behaviors. By designing communities that promote equity and make healthy choices easy choices, we create the potential for all people to live a safe, healthy and prosperous life. Considering health in land use decisions aligns with the broader vision outlined in the ECOS Plan introduction to work to equitable distribute environmental benefits and burdens and Supplement 3.



Health is a state of complete mental, physical, and social well-being and not merely the absence of disease or infirmity.
-World Health Organization

Healthy Communities

Through [Healthy Community Design](#), communities can be planned and developed in a way that increases access to sidewalks, parks, and healthy, affordable food.⁸¹ Improving air and water quality, and minimizing the effects of climate change, further support population health. Communities can develop in ways that make fitness easy to access, which also supports mental health by providing an outlet to reduce stress and encourage socialization and human connection. Improving living conditions for people who face the most barriers to health can decrease chronic disease rates. Community infrastructure must support physical activity, safe walking and biking, use of public transportation, and easy access to fresh foods.

University of Vermont Medical Center's [2022 Community Health Needs Assessment](#) identified the following as the top three health priorities for Chittenden and Grand Isle counties: 1) cultural humility and inclusive healthcare; 2) housing; and 3) mental health and wellbeing.⁸² The Vermont Department of Health's [3-4-50](#) campaign explains that three behaviors (tobacco use, lack of physical activity, and poor nutrition), lead to four chronic diseases (cancer, heart disease and



HEALTH FIGURE KEY

- **WnH:** White, non-Hispanic
- **SOC:** Students of Color
- **LGBTQ+ or LGBT:** Lesbian, Gay, Bisexual, Other sexual orientation, or Transgender
- **Non-LGBTQ+ or Non-LGBT:** Heterosexual or cisgender
- **Low income:** Annual household income is less than \$25,000
- **Middle income:** Annual household income is between \$25,000- \$49,999
- **High income:** Annual household income is between \$50,000- \$74,999
- **Highest income:** Annual household income is \$75,000 or greater
- **Low SES:** Low socioeconomic status is defined as adults with a household income less than 250% of the federal poverty level (FPL) and a high school education or less
- **Middle SES:** Middle socioeconomic status is defined as adults with a household income less than 250% of the FPL and some college education, or greater than 250% of the FPL and up to some college education
- **High SES:** High socioeconomic status is defined as adults with a four-year college degree or more

stroke, type 2 diabetes, and lung disease) that result in more than 50% of all deaths in Vermont.⁸³ Decreasing tobacco use, increasing physical activity, improving nutrition, and decreasing substance use are most effectively achieved by improving socioeconomic conditions and creating healthy places where people can live, learn, work, play, and age.

Disease rates among adults		
Indicator	Vermont	Chittenden
Diagnosed with cancer (A non-skin cancer diagnosis)	7%	6%
Diagnosed with cardiovascular disease (<u>Coronary</u> heart disease, myocardial infarction (heart attack), or stroke)	8%	6%
Diagnosed with diabetes	8%	6% *
Diagnosed with lung disease (chronic obstructive pulmonary disease (COPD) or asthma)	15%	15%

FIGURE 23: DISEASE RATES AMONG ADULTS

In Chittenden County, 63% of adults, and 18% of youth, get the recommended amount of exercise.^{84,85} Those with disabilities, low socioeconomic status, LGBTQ youth populations, and people of color generally have less opportunity to remain active and therefore have higher rates of inactivity than other populations. In addition to increasing physical activity, safe and accessible places to bike, walk, and roll decrease isolation, and increase connection to vital resources such as food and healthcare. See Chapter 7: Transportation, for key indicators on bike, walk and public transportation infrastructure in Chittenden County.

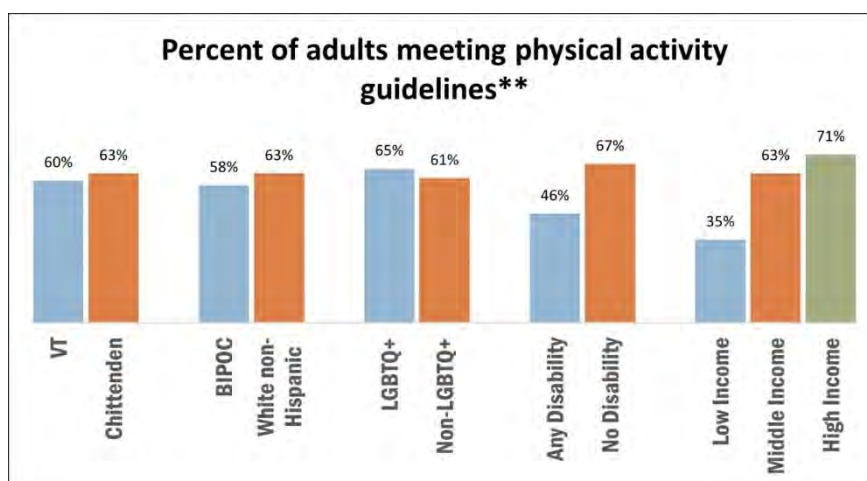


FIGURE 24: PERCENT OF ADULTS MEETING PHYSICAL ACTIVITY GUIDELINES

**TO MEET GUIDELINES, ADULTS MUST GET 150 MINUTES OF MODERATE ACTIVITY OR 75 MINUTES OF VIGOROUS ACTIVITY PER WEEK. DATA ARE AGE-ADJUSTED TO THE U.S. 2000 POPULATION. | SOURCE: BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM, 2017/2019

Most people experiencing food insecurity report they cannot afford to eat balanced meals. Before COVID-19, almost 10% of Vermont households experienced food insecurity. In 2022 [a University of Vermont study](#) found that that number had risen to close to 40% and people experiencing food insecurity during COVID-19 were more likely to be people of color, female, live in households with children, and live in larger households.⁸⁶ In Chittenden County, only 26% of adults, and 22% of youth eat the recommended number of fruits and vegetables.⁸⁷

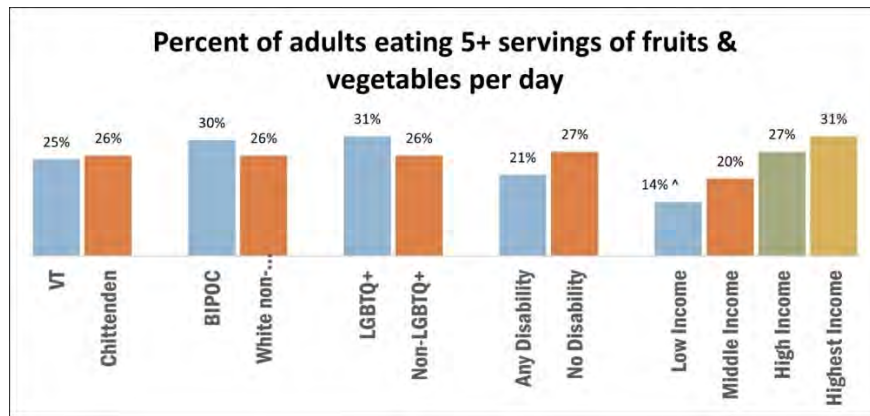


FIGURE 25: PERCENT OF ADULTS EATING 5+ SERVINGS OF FRUITS & VEGETABLES PER DAY
SOURCE: BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM, 2019/2021

Twenty-four percent of Chittenden County youth use tobacco products (Figure 27). The rate of Chittenden County adults who smoke cigarettes (10%) is less than the statewide rate (15%) (Figure 21).⁸⁸ Eleven percent of Vermont adults use at least one non-cigarette tobacco product, such as e-cigarettes, cigars, or smokeless tobacco.⁸⁹ In the U.S., [the tobacco industry](#) has a long history of targeting Black Americans with advertisements and products like menthol cigarettes. Thus, Black Americans continue to be burdened with a higher tobacco use rate than White non-Hispanic Americans.⁹⁰ This trend is reflected in Chittenden County’s data where BIPOC adults are more likely to smoke cigarettes than White non-Hispanic adults.

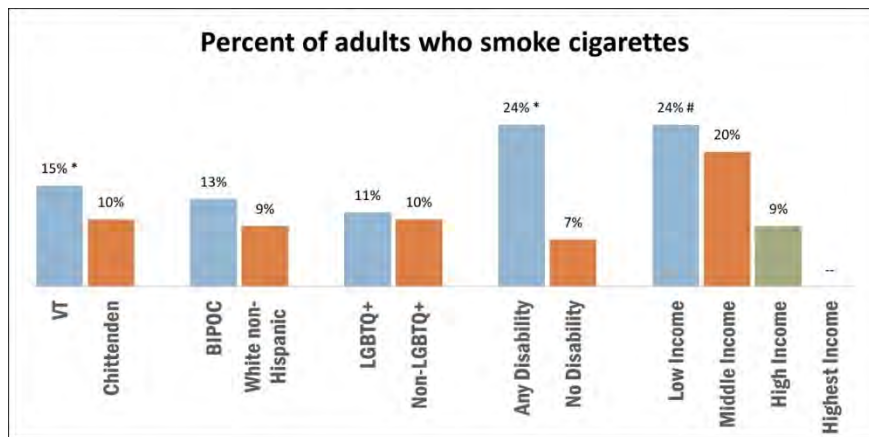


FIGURE 26: PERCENT OF ADULTS WHO SMOKE CIGARETTES
SOURCE: BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM, 2020-2021

Chronic disease, substance misuse, and mental health can all be impacted by building resilience, connection, and belonging. In Chittenden County, [8% of adults report they rarely or never get social and emotional support](#), and 23% of adults report being diagnosed with a depressive disorder. The rates of depressive disorders are highest among LGBTQ adults, and adults with a disability (Figure 4).⁹¹ Students of color and LGBTQ students experience feeling sad and hopeless at higher rates than White non-Hispanic and non-LGBTQ students. People who experience stigma, or feel mistreated by society, are more at risk for poor mental health outcomes.

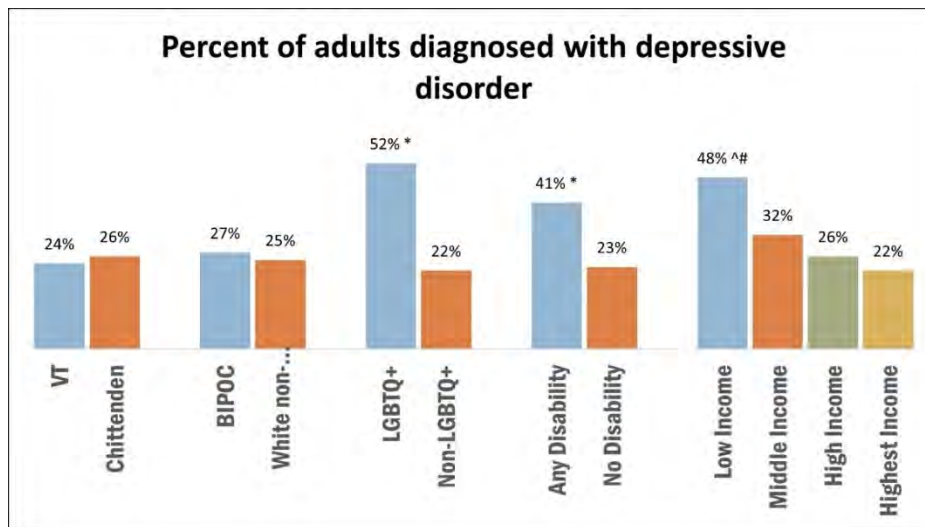


FIGURE 27: PERCENT OF ADULTS DIAGNOSED WITH DEPRESSIVE DISORDER
SOURCE: BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM, 2020-2021

The brain does not finish developing until the mid-20s. Alcohol, tobacco, and cannabis use before that time can interfere with brain development. Substance misuse prevention helps communities increase resilience and address the root causes of risky behaviors (especially for youth). Engaging in risky health behaviors makes a person more likely to have negative health outcomes. Preventing risky behaviors, like substance use, and promoting healthy behaviors through policy and the built environment can decrease death, disease, injury, and social problems among youth. The Vermont Department of Health has compiled key indicators to measure risk factors, substance use, and other protective factors among adults and youth on their [Substance Use Program website](#). Based on the most recent Department of Health Data by Count from 2021:

- Twenty percent of Chittenden County adults report binge drinking in the past 30 days, and 29% of Chittenden County youth drank alcohol in the past 30 days).
- [The CDC](#) states the following: “The risk of developing marijuana use disorder is greater in people who start using marijuana during youth or adolescence, and who use marijuana more frequently.”⁹²
- [Rates of cannabis use](#) among Vermont youth has increased significantly between 2017 and 2019, and has increased significantly among Vermont adults since 2013.⁹³ Among Chittenden County youth, 26% have used cannabis in the past 30 days (Figure 12), while 20% of Chittenden County adults have used cannabis in the past 30 days (Figure 6). Nine percent of adults have used cannabis on 11+ days, indicating more frequent use.⁹⁴
- Driving under the influence of cannabis can increase the risk of a car crash. Twenty-three percent of Chittenden County adults have driven after using cannabis. Communities should use science-based information and policies to support informed choices about cannabis use.
- Opioid misuse and overdose prevention includes individual, community, and state-level interventions that [create healthy and supportive spaces to live](#).⁹⁵ People who died from overdoses experienced [health disparities](#), such as higher rates of unemployment, substance use disorder, homelessness, mental health diagnoses, and obesity.⁹⁶ Communities can support interventions that [improve living conditions](#), [decrease stigma](#), increase [safe drug disposal](#), and increase access to overdose [prevention and treatment services](#).^{95,97,98,99} For more data on prevention efforts in Vermont, visit the Vermont Department of Health’s [Substance Use Program website](#).¹⁰⁰

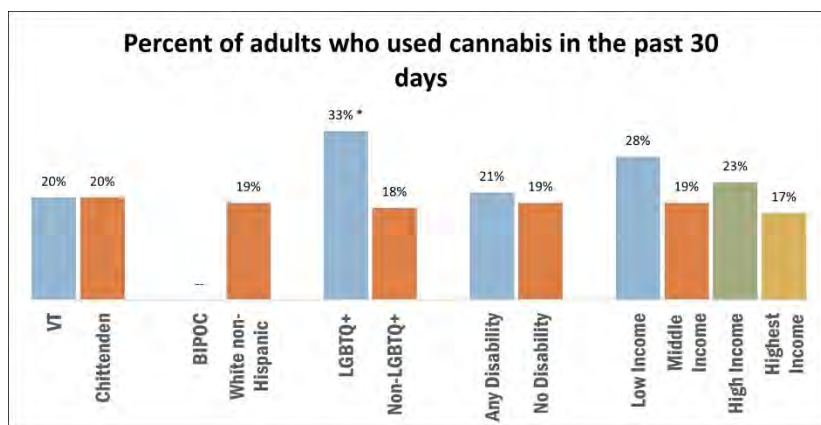


FIGURE 28: PERCENT OF ADULTS WHO USED CANNABIS IN THE PAST 30 DAYS
SOURCE: BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM, 2020-2021

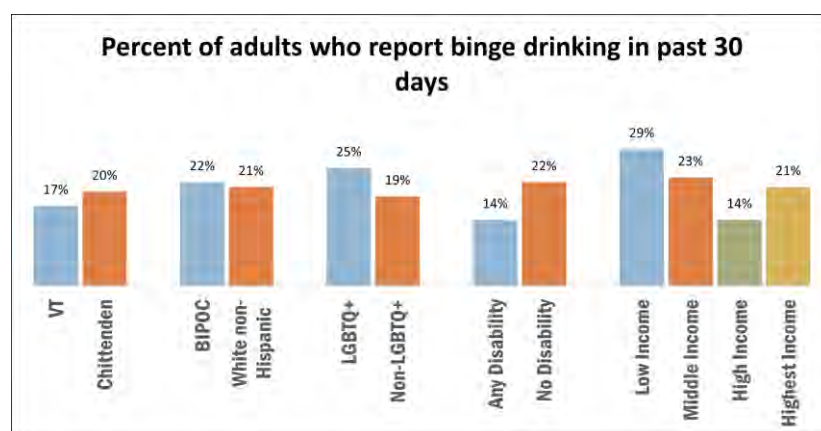


FIGURE 29: PERCENT OF ADULTS WHO REPORT BINGE DRINKING IN THE PAST 30 DAYS
SOURCE: BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM, 2020-2021

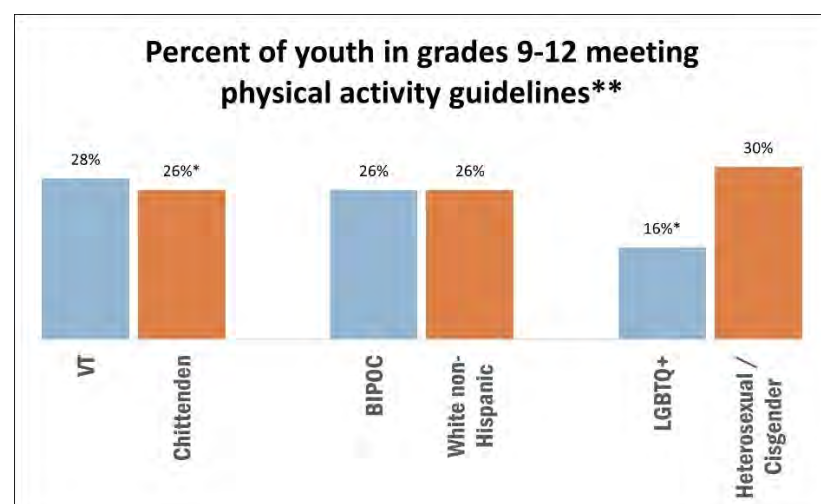


FIGURE 30: PERCENT OF YOUTH IN GRADES 9-12 MEETING PHYSICAL ACTIVITY GUIDELINES
**TO MEET GUIDELINES, YOUTH MUST GET 60 MINUTES OF PHYSICAL ACTIVITY EVERY DAY.
SOURCE: VERMONT HIGH SCHOOL YOUTH RISK BEHAVIOR SURVEY, 2021

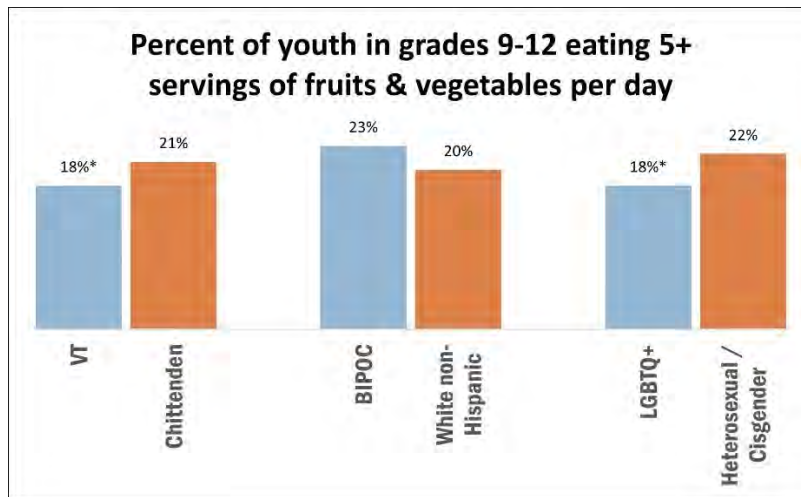


FIGURE 31: PERCENT OF YOUTH IN GRADES 9-12 EATING 5+ SERVINGS OF FRUITS & VEGETABLES PER DAY
SOURCE: VERMONT HIGH SCHOOL YOUTH RISK BEHAVIOR SURVEY, 2021

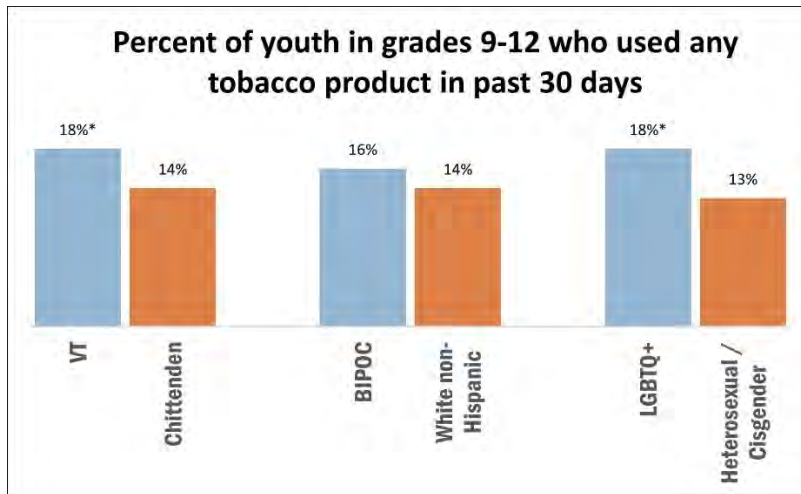


FIGURE 32: PERCENT OF YOUTH IN GRADES 9-12 WHO USED ANY TOBACCO PRODUCTS IN THE PAST 30 DAYS
SOURCE: VERMONT HIGH SCHOOL YOUTH RISK BEHAVIOR SURVEY, 2021

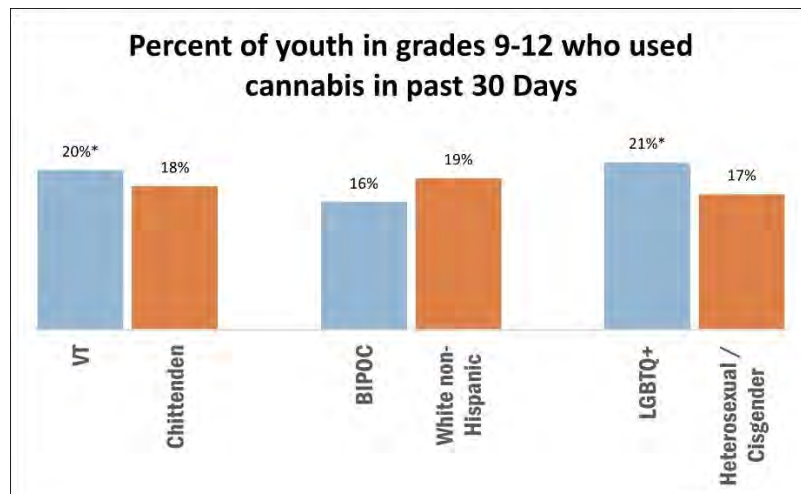


FIGURE 33: PERCENT OF YOUTH IN GRADES 9-12 WHO USED CANNABIS IN THE PAST 30 DAYS
SOURCE: VERMONT HIGH SCHOOL YOUTH RISK BEHAVIOR SURVEY, 2021

Health Equity

Health is intimately connected to how communities are planned and designed. Housing, transportation, income, education, and social connectedness all influence health opportunities and outcomes. Thus, public health practitioners, land use and transportation planners, economic developers, and municipal leaders must work together with the communities they serve to design, plan for, and create opportunities for greater wealth and wellbeing.

[Health equity](#) exists when all people have the same chance to be healthy. Unfortunately, systemic barriers, racism, and oppression prevent communities from accessing safety and health. To achieve health equity, attention must shift toward those with the most barriers to health. This includes people who face social and financial barriers, long-term injustice, and other barriers beyond their control.¹⁰¹ Chittenden County can change this, and achieve health equity through implementing policy, and making targeted public investments in social and physical infrastructure that help those who have historically been left out.

Recovery from the COVID-19 Pandemic

Collaboration and coordination among local, regional, and state organizations are key to providing equitable recovery services post-COVID, and preparing for future events. During an emergency response, municipalities must be ready to collaborate with the Vermont Department of Health and other state agencies to support residents with access to information and translation needs.

Not everyone in the Chittenden County community has equal access to decision making power and resources. The pandemic made this inequity worse, and some populations were more impacted by COVID-19 than others. Populations who experience discrimination and have been historically under-resourced are more likely to live in social and physical environments that put them at higher risk for COVID-19. The [Vermont Department of Health COVID-19 data reports](#) describe how BIPOC Vermonters were more affected by the pandemic.¹⁰² Providing greater access to decision making power and resources can promote good health and a high quality of life for all Chittenden County residents.

- During [March-October 2020](#), BIPOC Vermonters represented 6% of the State's population, but 18% of COVID-19 cases.¹⁰³ Chittenden County had the highest rate of COVID-19 among BIPOC communities, and it was significantly higher than the Vermont rate. In 2022, there were disparities in [up-to-date vaccination rates](#). Pacific Islander (16%) and Native American, Indigenous, or First Nation Vermonters (14%) experienced lower up-to-date vaccination rates than White (59%), Black (43%), Asian (52%) and multiracial (62%) Vermonters.¹⁰⁴

The [Vermont Tobacco Control Program 2021 Annual Report](#) highlights data showing the impact of the pandemic on mental health and tobacco use in Vermont. The [Vermont 2018-2020 Behavioral Risk Factor Surveillance System report](#) found that more than 60% of youth and young adults reported negative effects of COVID-19 on their wellbeing.¹⁰⁵ In the U.S., the rates of cigarette and e-cigarette sales increased, and use of tobacco cessation resources dropped.

Climate and Health

Climate change intensifies existing health risks and introduces new threats, ranging from extreme weather events to the spread of infectious diseases. Health impacts are widespread, affecting everything from respiratory ailments due to air pollution to mental health issues arising from displacement and trauma.

An example of a climate related health issue of concern in Vermont is Lyme disease. Lyme disease, primarily transmitted through tick bites, has seen a concerning rise attributed to warmer temperatures and altered

precipitation patterns. Ticks now have expanded habitats and longer activity seasons. As a result, [rates of Lyme disease have risen in the State](#).

In pursuit of healthy communities, climate change, climate resilience and health promotion must be integrated into regional planning. By addressing these interconnected issues, Chittenden County cannot only mitigate the adverse effects of climate change but also foster healthier, more resilient communities for generations to come.

ACTIONS

1. **Invest in living conditions** | Provide the basic needs of all people through access to healthy food, safe shelter, education, jobs, affordable housing, livable communities, and public transportation. Provide resources such as healthcare and affordable food in places that are easily accessible to everyone. Focus investment in communities that have been historically excluded from community power and resources.
 - a. **Green spaces** | Develop and support projects that combat the urban heat island effect, especially in areas with perpetually affordable housing, such as urban tree plantings and parks.
 - b. **Food access** | Promote and support initiatives that enhance healthy and local food access (see Action 1.a in Working Lands).
2. **Health in all policies** | Support and prioritize projects that use the [Health in All Policies \(HiAP\)](#) approach (a collaborative approach to improving the health of all people by including health considerations in all decision-making processes).¹⁰⁶
3. **Conduct Health Impact Assessments** | Work with Vermont Department of Health to conduct [Health Impact Assessments \(HIA\)](#). A HIA is a process that helps evaluate the potential health effects of a plan, project, or policy before it is built or implemented.¹⁰⁷ A HIA could identify potential positive and negative public health impacts of new transportation and land use projects. An HIA also identifies whether any populations will be more impacted by a project than others. A HIA provides practical recommendations to increase positive health effects and minimize negative health effects.
4. **Create policies that protect against addiction and substance misuse** | Reduce youth access and exposure to adult-only products (tobacco, alcohol, cannabis) by passing evidenced-based policies such as restricting retail promotion, preventing retail locations near schools, and designating substance-free outdoor public spaces. Support people in recovery and youth by normalizing and promoting substance-free events. Promote upstream approaches by working with communities to impact [risk and protective factors](#) and prevent substance use disorder.¹⁰⁸
5. **Healthy community design** | Create policies and environmental supports that increase access to active transportation, active recreation, and healthy foods.
6. **Promote community wellness** | See Chapter 17: Social Connectedness.
7. **Collaborate** | Collaborate with public health partners to improve health literacy, especially for marginalized populations, and protect against new emerging health threats (such as increased rates of mental health illnesses and Lyme Disease).



CHAPTER 10

Economy



GOAL

Retain and support existing employers, grow living wages and high wage employment, and work to attract and sustain a greater diversity of businesses and people in the economy.



KEY ISSUES, TRENDS & INSIGHTS



Data and indicators in this section are drawn from Supplement 4 – Comprehensive Economic Development Strategy; and the [West Central Vermont website](#) and [dashboard](#).



2026 **ECOS** Plan website

For an interactive experience and additional data, visit the [Economy](#) page on the 2026 ECOS Plan website 

Economic Development

Economic development is about building a community’s capacity for shared and sustainable improvements in the economic well-being of residents. Economic development is multi-faceted. It involves: providing access to good jobs that can support an adequate standard of living for all residents of a region or community; making continuous and sustainable improvements in the internal functioning of an economy, where structural underpinnings become stronger without sacrificing long-term quality of life; and creating the means and continuous processes to strengthen the foundation of communities.

Employment | Chittenden County contains only 26% of Vermont’s population, yet 33% of Vermont’s total jobs (covered employment) are located in the county (according to 2020 Census figures). Per the U.S. Bureau of Labor Statistics, the county accounted for 37.2% of the state’s GDP in 2023.¹⁰⁹ In FY2023, based on data from the VT Department of Taxes, the county accounted for: 35% of total state income tax revenues; 30% of rooms/meals tax revenue; and 36% of non-internet sales tax revenue generated across Vermont. The county is home to four of the state’s five highest retail sales tax revenue generating municipalities: Colchester (#1), South Burlington (#2), Williston (#3), and Burlington (#5).

Total covered employment is almost recovered from the COVID-19 pandemic. Following the economic recession (2008 – 2010), the county saw steady job growth each year. By 2019, the county was home to 102,705 jobs. In 2024, covered employment included 103,600 jobs.^{110, 110}

In 2022, Chittenden County’s employment base was concentrated within the health care and education “supersector,” (19% of county jobs, 19,302 total jobs, as aggregated according to the U.S. Bureau of Labor Statistics).¹¹¹ The supersectors that followed include: trade, transportation and utilities (18%, or 17,762 total jobs), federal, state, and local government (16% or 16,440), professional and business services (14% and 14,313) and leisure and hospitality (10% and 19,678).

The county’s largest employers are the University of Vermont Medical Center, and the University of Vermont. While there is some concern that the county’s largest employers are not in the private sector, these stable institutions are net dollar importers, and the county’s economy is not overly reliant on them.

Unemployment | The annual average unemployment rate in Chittenden County for the year 2024 was 1.9%, lower than state and national rates (2.3% and 4%, respectively).^{112 113} However, the labor force participation rate, a measure of how many working-age people are actively employed or seeking employment, has dropped consistently since 1999, from 73.4% to 65.6% in March 2020. This figure declined sharply during the pandemic, hitting a low of 59.7% in February 2021. The rate has since recovered, but has only reached 62.3% as of June 2025.¹¹⁴ There are a number of reasons for decreased labor participation, including the county’s aging population, and the impacts of the COVID-19 pandemic. Notably, labor force participation was higher among Black (75%) and Hispanic (74.1%) workers than among White workers (65.2%) between July 2019 and June 2020. This disparity may indicate that a

greater number of White workers are financially secure and could choose to not participate in the labor market in the early days of the COVID-19 pandemic.¹¹⁵

Wages | As of 2024, the average wage in Chittenden County was \$77,688. This is significantly higher than the state average wage (\$68,172). From 2018 to 2023, the average wage has increased by nearly the same amount (just over 25%) across Chittenden County and Vermont. However, average wage varies significantly by industry, and some have seen faster gains than others.¹¹⁶ Average wage also varies by municipality. The lowest average wage in 2023 was Bolton (\$42,156), a municipality with a substantial number of seasonal jobs in the ski industry. The highest average wage was in Shelburne (\$115,019). Approximately 38% of total wages in the State are from jobs in Chittenden County.¹¹⁷

Land Use and Economic Development | As of 2023, most permitted industrial parks in Chittenden County are approaching full build out. However, sufficient land is available in industrially zoned areas to support additional industrial development in the near term. The ECOS Plan does not recommend expanding the amount of land zoned for industrial uses at this time. CCRPC and Greater Burlington Industrial Corporation (GBIC) will conduct a longevity analysis to determine when new industrially zoned land will be needed. Having adequate industrial space is as much about having a wide variety of spaces as it is vacant square footage. GBIC reports that most industrial operations have very specific requirements for what size and configuration of space they need to begin or expand their business. If the right space is not available in the county, GBIC has found that some companies choose to expand elsewhere rather than reconfigure or build new space here.

Protecting the character of rural areas and downtown/village spaces must be part of economic development efforts. Downtowns, growth centers, and village centers (dense, livable areas) create places where workers can live close to their jobs, and where many businesses can thrive. These are significant economic drivers.

West Central Vermont Comprehensive Economic Development Strategy (CEDS) | CCRPC and GBIC have collaborated with RPC and RDC partners in Addison County, central Vermont, and Rutland County to develop the West Central Vermont CEDS. These organizations also created an Economic Development District (EDD) in July 2024 via a joint Memorandum of Understanding. The hope is that creation of an EDD will provide opportunities to access funding from the U.S. Department of Commerce Economic Development Administration (EDA) to support economic development related work within the region.

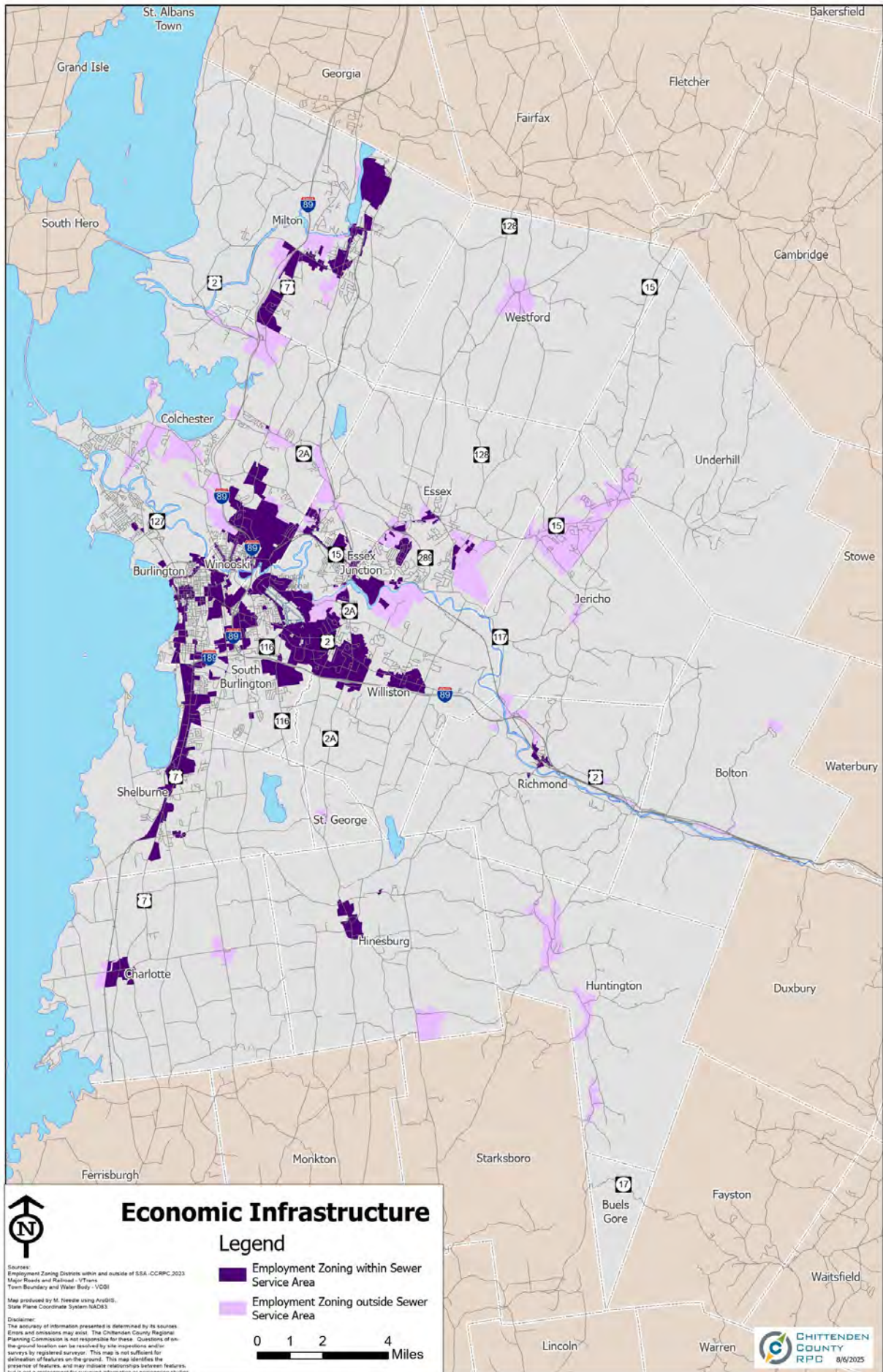
In a 2021 survey,¹¹⁸ employers in the West Central Vermont region identified a lack of affordable housing as one of the many barriers to economic development, and a key piece of infrastructure worthy of future investment to attract and retain workers.

Organizations such as the Vermont Center for Emerging Technologies, Generator Makerspace, and HULA (co-working campus, business incubator, and venture capital fund) are essential to the region. The organizations foster the creation and growth of small, “home-grown” businesses, which are key to diversifying the economy, increasing resilience to changes in large employers, and investing in future employment as companies grow. The West Central Vermont Comprehensive Economic Development Strategy (CEDS) directly establishes the need to develop these spaces to support the development of local business, in particularly BIPOC and women-owned businesses.

Tech Hub | In 2023, the University of Vermont led an effort to establish the Vermont Gallium Nitride Tech Hub in Chittenden County. This Tech Hub, which is one of thirty-one Tech Hubs recognized by the EDA, is focused on accelerating the development and adoption of high power, high frequency electric devices using Gallium Nitride-based semiconductor chips. The existence of this Tech Hub positions Chittenden County well for continuing to be a world-wide leader in semi-conductor manufacturing.

Other Trends | The nature of work is rapidly changing with the development of artificial intelligence (AI). How the adoption of AI will specifically impact Chittenden County must be monitored over the next decade and needs to be better addressed in the next CEDS. The increased ability to conduct remote work appears to benefit a place like

Chittenden County which has a relatively high quality of life. However, this trend must also be studied over the next decade to better understand how it directly impacts all aspects of the regional economy and housing market.



ACTIONS

The actions are closely aligned with the [West Central Vermont \(WCV\) Comprehensive Economic Development Strategy \(CEDS\)](#), adopted in spring 2023 by four Regional Planning Commissions (RPCs) and four Regional Development Corporations (RDCs) for Addison, Chittenden, Rutland, and Washington and Orange counties. The WCV CEDS is a strategy-driven plan for regional economic development. Its purpose is to build capacity and guide the economic prosperity, resilience, and well-being of all the region's residents. CCRPC intends to implement these actions in close partnership with the other WCV RDCs and RPCs.

1. **Attract New Workers and Expand Labor Force** | Attract new workers of all skills sets, training, and expertise to the region, and remove existing barriers to workforce participation for existing residents, to combat the state-wide labor shortage due to the impacts of COVID-19, an aging population, and other structural barriers to labor participation. This includes improving the availability of housing.
 - a. **Child Care** | See Action 3 in Household Finance.
 - b. **Marketing and Support** | Seek grant funding to support on-going marketing efforts by project partners and local employers to attract new workers to Chittenden County. Work collaboratively with the Stay-to-Stay network and other partners to better understand how to specifically market to BIPOC workers.
 - c. **Returnship Programs** | Work with the Vermont Returnship Program to strengthen and expand programs that help experienced workers transition to new careers that maximize their existing knowledge, transferable skills, and job goals.
 - d. **Livable Wage** | Work with partners to support businesses that offer livable wages and are interested in assessing for wage stagnation, wage inequities, and the changing cost of living.
2. **Rules and Practices Restricting Access to Capital** | Work with partners behalf of underserved populations to influence federal and state funders to provide flexibility when financing and making grants to underserved business and individuals in the regional community, based on insight gained as a part of the Community Navigator Pilot Program (CNPP). Similarly, CCRPC will work with partners to advance change among financial institutions and equity investor lending and investment to better serve socially and economically disadvantaged individuals (SEDI) and businesses.
3. **BIPOC Business Basics and Support** | Work with EDD partners to develop a “business basics” course specifically for BIPOC small business owners in the “start-up” or early stages of developing their business. Work with EDD and state partners to develop and make available a step-by-step guide and a directory of programs, services, and technical assistance.
4. **Hiring, Workforce Development, and Retention** | Work with partners to create and/or support trainings to help employers better understand the needs of immigrant and refugee communities and BIPOC workers. Build relationships with employees from underrepresented communities to better understand how to develop ways to meet workforce development needs and retention strategies. Determine ways to remove language barriers to workforce entry.
5. **Women-Owned Business** | Collaborate with the Vermont Women's Fund and other partners to implement projects that address the specific needs of women-owned businesses as identified in the This Way Up! Campaign.
6. **Just Transitions** | Work with the Vermont Climate Council to develop public policy and business actions so that the impacts of Vermont's transition into a low or zero greenhouse gas emitting economy will benefit and support all residents of the state fairly and equitably.

7. **Data** | Ensure that all data collection conducted by a future WCVT EDD and CCRPC includes information about race and gender to more accurately understand and report on economic development efforts and populations served/impacted. Seek funding to assist with partners' efforts to track identified CEDS indicators. Advocate for all state and federal economic data to include information about race.
8. **Funding** | Prioritize seeking economic development-related grant funding and technical assistance to support the needs of BIPOC and women-owned businesses.
9. **Job Creation and Business Development** | Support job retention and growth at existing high wage employers, expand economic diversification, and create a supportive ecosystem for entrepreneurs to create and grow businesses in the region.
 - a. **High Wage Employers** | Add high wage employment, attract businesses, and encourage the growth of those already here, including businesses in the following fields: information technology, communications and media (including information technology, e-commerce, and digital media); advanced manufacturing; higher education; clean tech/green tech; and health care and wellness.
 - b. **Economic Gardening** | Practice economic gardening (growing the local economy from within, rather than attracting employers from outside the area) as the primary method of economic development. Create jobs by supporting local entrepreneurs and existing companies, especially those with local ownership, including employee ownership, and other connections to the community.
 - c. **Access to Capital** | Work with partners to develop and administer programs that provide low-barrier access to capital for start-up small businesses, particularly BIPOC and women-owned small businesses. This may include grants with low match, or no match, requirements. This may also include exploration of a shared-equity program for commercial properties similar to existing residential shared-equity programs in the region.
 - d. **Innovation and Entrepreneurial Development** | Work with GBIC to promote and expand support systems for entrepreneurs from every sector, and create a system of resources that is easily navigable at all stages of the innovation and entrepreneurial continuum.
 - e. **Regenerative Economy** | Support a regenerative economic model that moves toward sustainability (see Working Lands Regenerative Economy Section).
10. **Workforce Development and Employee Retention** | Assist partner organizations (regional development corporations, educational institutions, and non-profits) in implementing goals of the CEDS related to employee recruitment and retention, specific workforce training, and professional development opportunities for career advancement.
11. **Brownfields** | Continue to seek funding from the EPA to fund brownfield assessment, site planning, and cleanup in Chittenden County and/or the West Central Vermont region.
12. **Underutilized Sites** | Support partner efforts to develop master redevelopment plans for currently underutilized sites within the region, particularly closed college campuses and public schools, that could be used to support housing, commercial development, municipal uses, or community uses.
13. **Tourism** | See Chapter 15: Scenic, Recreational, and Historic Resources.
14. **Creative Economy and the Arts** | See Chapter 14: Arts and Culture.
15. **Economic Development Coordination** | Work with the state to implement the 2020 Vermont Comprehensive Economic Development Strategy. Coordinate with West Central Vermont CEDS partner organizations and pursue creation of an Economic Development District (EDD). Cooperate with Northwest

Regional Planning Commission on their economic development efforts (due to the proximity and economic ties between regions). Support municipalities in local economic development efforts.

16. **Industrial Site Locations** | There is a limited supply of existing buildings or permitted sites left for high wage industrial or manufacturing businesses in the region. Additional sites need to be identified and carefully planned to meet employers' needs for expansion or relocation in Chittenden County. The best opportunities for these sites are on vacant portions of land owned by major employers, within close proximity to, or already connected to, existing infrastructure services for long-term efficiency.

- a. **Industrial Park Designations** | CCRPC and GBIC will work with ACCD to have business/industrial parks recognized as benefit locations in state designation programs.
- b. **Use Existing Industrial Land** | Prioritize industrial development on land that is already zoned for industrial uses, or has been used for industrial processes in the past.
- c. **Industrial Land Needs Analysis** | Prepare a longevity analysis to project when to add fully serviced and permitted land to the regional inventory.

17. **Farm to Plate** | See Chapter 4: Working Lands.



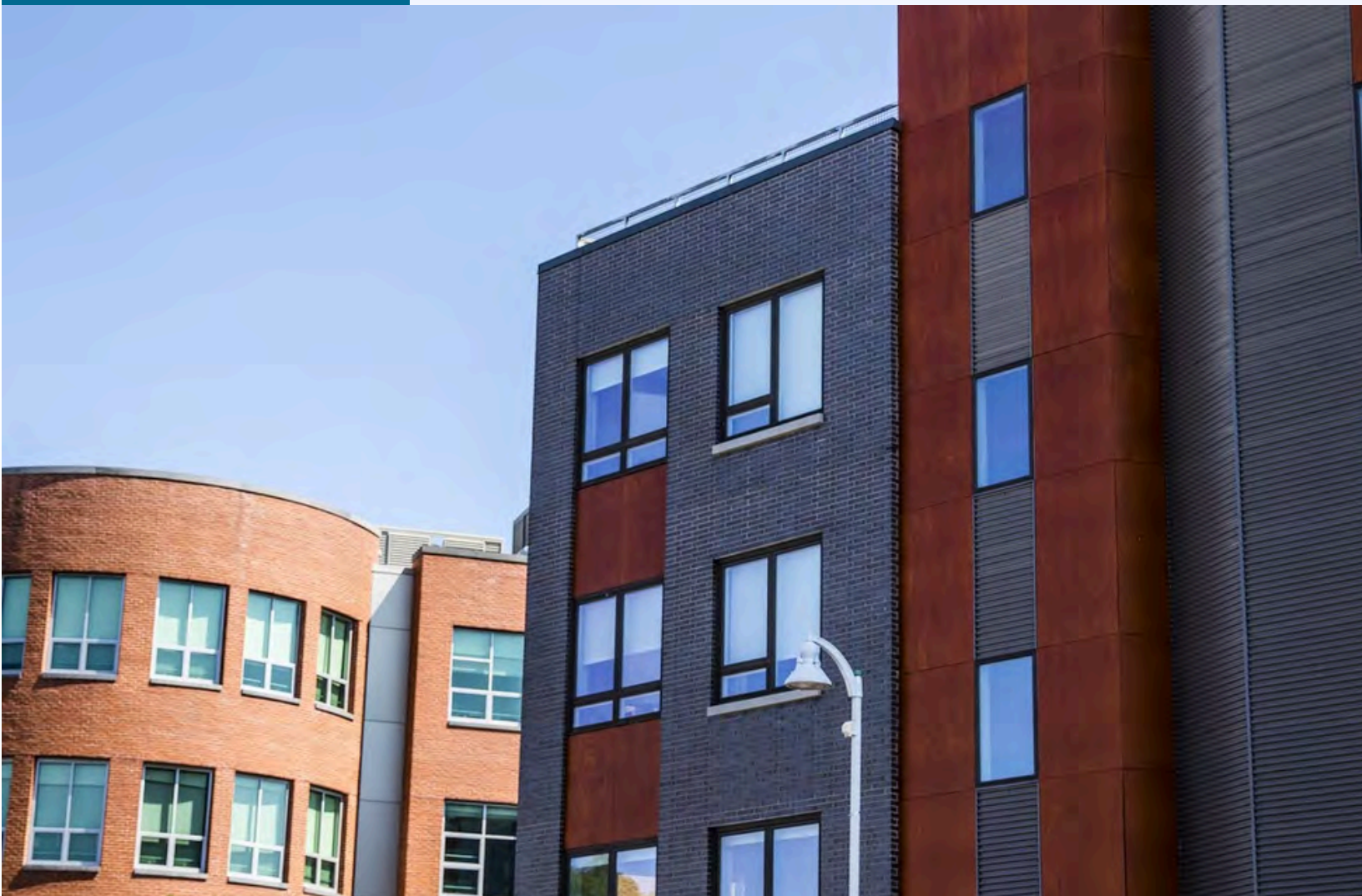
CHAPTER 11

Household Financial Security



GOAL

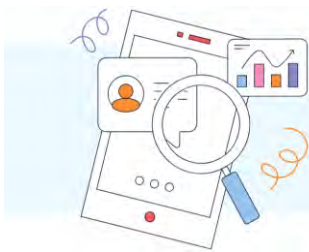
Support multi-pronged efforts that foster economic security so that all households in Chittenden County can not only meet their basic daily needs, but also prepare for the future and achieve a high quality of life.



KEY ISSUES, TRENDS & INSIGHTS



Data in this section is drawn from [Vermont Basic Needs Budget](#).



2026 **ECOS** Plan website

For an interactive experience and additional data, visit the [Household Finance](#) page on the 2026 ECOS Plan website 

Social Determinants of Health | Levels of income and wealth are key determinants of individual or family wellbeing. For example, low-income households, especially those with an income less than a livable wage, are more likely to experience all forms of insecurity (e.g. housing, access to food, health care, education, etc.) based on their lack of financial resources. The impacts of financial insecurity on individuals, particularly children, can be life long, and directly impact the need for social services (and associated costs) in the long term.¹¹⁹

Median Household Income | According to Public Asset's State of Working Vermont 2024 report, median household income in Vermont grew 7.8% (from \$66,766 to \$71,976) between 2019 and 2023. The jump followed a decade of slow growth after the Great Recession, and was helped by massive federal aid during the pandemic (including supplemental unemployment insurance). Vermont's rate of median household income growth was the fastest in the country during that time, though the state's median household income still lags behind most New England states.¹²⁰

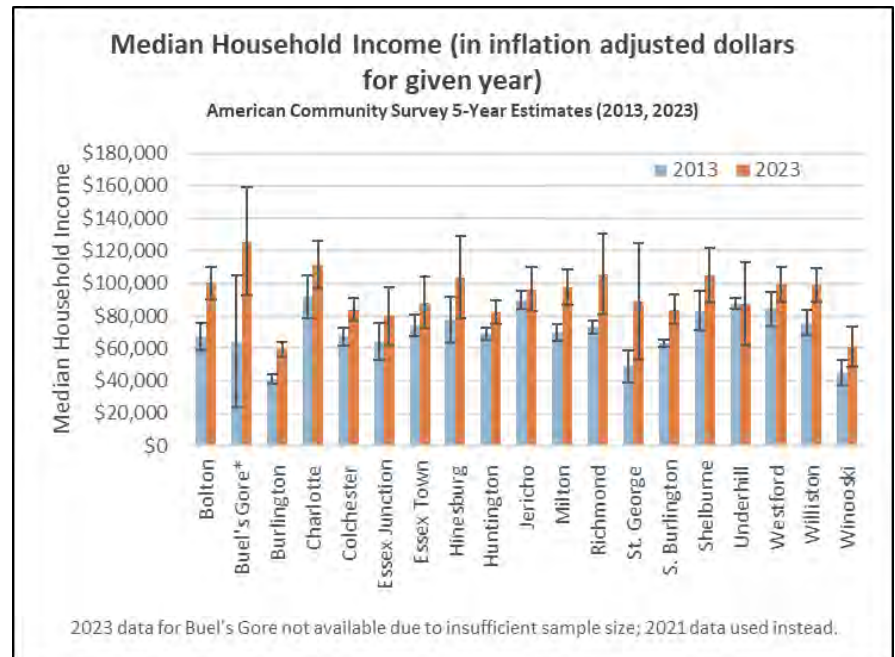


FIGURE 34: MEDIAN HOUSEHOLD INCOME

In 2023, the median household income for all Chittenden County households was \$94,310.¹²¹ Median household incomes range significantly between municipalities. Burlington's median household income was \$68,854 in 2023. Charlotte's median household income was almost double that amount at \$136,385.

Median household income differs significantly by race in Chittenden County. While median household income for White and Asian households was \$96,272 and \$81,375, respectively, the Black median household income was significantly lower (\$51,426).¹²² The income inequality in Chittenden County can be attributed to long-standing systemic racism that has existed in the United States for decades. This uneven distribution of median household income increases has been going on for at least the last decade. This includes significant differences in income growth across municipalities in Chittenden County.¹²³

Basic Needs Budget | Vermont's basic needs budget determines the hourly rate a worker would need to earn in order to pay for basic needs (such as food, housing, childcare, and insurance), and provides information on what it costs to live in Vermont. This rate, known as the "livable wage," is calculated differently depending on household

size/makeup, and rural or urban location. Using 2024 data, the average livable wage in Vermont is \$23.98 per hour for urban communities and \$21.32 per hour for rural communities, higher than the state's minimum wage (\$14.01, as of January 1, 2025). Additionally, the state's livable wage is 2.7 times the federal poverty level (FPL) for a single person, while the federal minimum wage is only 37% of the Vermont Livable wage. (See the Vermont Basic needs Budget and Livable Wage report for more information.)¹²⁴ The livable wage is higher in Chittenden County. Per the Burlington's Livable Wage Ordinance (updated in 2025), a livable wage in Burlington is \$17.96 per hour when an employer provides employer assisted health insurance and 19.15 per hour when an employer does not provide employer assisted health insurance.¹²⁵

Food Insecurity | Lack of financial resources is one cause of food insecurity – when households cannot access enough food. For the year 2023, [Chittenden County's food insecurity rate](#) was 11.5% (19,410 people).¹²⁶ Different programs mitigate food insecurity for families and individuals, including 3SquaresVT (SNAP), and school meals. In 2022, 7,618 households, 12,927 recipients, and 4,068 children under 18 in Chittenden County received 3SquaresVT benefits.¹²⁷

Food insecurity is also linked to obesity, as processed foods are less expensive than whole, more nutritious foods. According to the Vermont Agency of Education, families with an income at or below 130% the Federal poverty line have historically been eligible for free school meals. In 2023, the free school meals program in Vermont has been extended permanently to all school children statewide regardless of income.

Social Security Income | In 2023, approximately 26% of Chittenden County households received social security income. This number likely will increase as the population ages.¹²⁸ In addition, about 8% of householders older than age 65 have incomes lower than the Vermont basic needs budget. These households have fewer options to improve their financial security, since they are at or beyond retirement age.¹²⁹ Finally, nearly two-thirds of workers living with a disability have incomes less than the 2022 livable wage, compared to less than half of those without a disability.¹³⁰

Educational Performance | All youth need the skills and education to participate in the local economy, and to ensure their well-being and financial security. By advancing equity in education, all members of the Chittenden County community can have the opportunity to reach their fullest potential, leading to a more inclusive, prosperous, and sustainable region.

The first five years of life are critical to a child's lifelong development. Research shows that children who are not performing proficiently in reading by the end of third grade are at very high risk for poor long-term outcomes, such as dropping out of school, teen pregnancy, and juvenile crime. Children from low-income families currently have less access to high-quality early education, and are "more likely to start school behind their peers in the set of skills that correlate with future school success," which increases the risk of negative long-term outcomes.¹³¹ Narrowing the gap in access to early childhood education is essential to providing greater access to long-term success.

- Standardized test scores from Vermont's K-12 students show that "historically marginalized students" (BIPOC students, students with disabilities, English language learners, and students in poverty) are not attaining language arts, math, and science proficiency at the same level as non-marginalized students.¹³² Decreasing poverty rates may increase academic performance.
- The [Vermont Annual Snapshot of Education](#) shows clear performance gaps for low-income and students of color for every school district in the region. In addition, geographic disparities for academic proficiency exist between school districts with more students from historically marginalized groups compared to those with fewer.

Childcare | Childcare costs and availability remain significant issues in Chittenden County. Availability of childcare for infants is lacking. Though improved since 2018, approximately 43% of infants in Chittenden County do not have access to childcare services, according to Let's Grow Kids' 2022 Report.¹³³ (Conversely, access to care for toddlers and pre-school age children has improved since 2020.) Childcare availability is especially lacking for parents that work third shift or non-traditional hours.

The U.S. Agency of Health and Human Services' Department for Children and Families recommends childcare costs be no more than 7% of annual income. In Chittenden County, the 2022 Basic Needs Budget indicates that on average, [22% of household income goes toward childcare](#), with average market rate full-time licensed childcare costs of \$15,000 or more per year.¹³⁴ Meanwhile, the Let's Grow Kids' 2022 Report details how early childhood educators are expected to be educated, trained, and licensed, yet the average annual salary for an early childhood teacher is only \$38,870 (compared to \$55,580 for a kindergarten teacher). This low salary keeps many educators out of early childhood education. The VT Department of Health and Human Services continues to study how to finance high quality childcare that remains affordable to working families.

In 2023, the Vermont legislature passed the [Child Care Bill](#) (Act 76). This bill is implementing a series of programs that invest in recruiting and retaining childcare workers, expand childcare program capacity, and create the Child Care Financial Assistance Program for families earning up to 575% of federal poverty level. Programs related to the bill began to be implemented in January 2024 and are beginning to address child care affordability challenges for many families.

ACTIONS

1. **High Wage Employers** | See Chapter 10: Economy.
2. **Access to Capital** | See Chapter 10: Economy.
3. **Childcare** | Support working families and their young children (especially ages 0 – 5) by fostering adequate access to high quality, affordable early learning and education programs. Work with stakeholders in the childcare field (e.g. Building Bright Futures, existing childcare providers, school districts, etc.) and potential funders (e.g. VCDP, NBRC, and EDA) to identify existing sites that could support childcare facilities (particularly for infant care), and assist with accessing grant/loan funds for costs associated with business start-up, workforce development, and construction. Improve access and funding for pre-kindergarten programs so that children are ready to learn by the time they begin kindergarten. Support early care and education providers as they develop skills and knowledge to care for and educate children. Support increased public investment in childcare and programs designed to provide childcare for students enrolled in post-secondary education (e.g. Child Care Access Means Parents in School Program).
4. **New American / Refugee Programs** | Aid municipalities, and associated non-profits, seeking to establish designated refugee resettlement community programs within the region. These programs provide refugees with direct assistance with securing housing, employment, education/training, and other essential support, like translation, to overcome social, cultural, and economic barriers.
5. **Housing Costs** | Support affordable housing creation and initiatives including the actions in the housing chapter (See Chapter 8: Housing). Work with municipal and housing partners to explore other housing affordability programs that could help control housing costs. This may include rent control and rent-to-own programs.
6. **Transportation Costs and Access** | Support policies that prioritize equitable access to transportation systems by identifying and addressing barriers faced by underserved communities, ensuring all community members, regardless of physical ability and income, have safe, reliable, and affordable transportation options.



CHAPTER 12

Emergency Management



GOAL

Protect Chittenden County communities from natural, technological, and societal hazards through prevention, preparedness, response, recovery, and mitigation.



KEY ISSUES, TRENDS & INSIGHTS



Data for this section is drawn from the [2022 Chittenden County Multijurisdictional All Hazards Mitigation Plan](#). More information can be found on the [Flood Ready Vermont](#) website.



2026 ECOS Plan website

For an interactive experience, visit the [Emergency Management](#) page on the 2026 ECOS Plan website 

The Federal Emergency Management Agency (FEMA) defines emergency management as the managerial function charged with creating the framework within which communities reduce vulnerability to threats/hazards, and cope with disasters. Emergency management actions are considered by FEMA to take place in five phases: prevention, preparedness, mitigation, response and recovery:¹³⁵

Prevention focuses on preventing human hazards, primarily from potential natural disasters or terrorist (physical and/or biological) attacks. Preventive measures are designed to provide more permanent protection from disasters. However, not all disasters can be prevented. Good evacuation plans, environmental planning, and design standards can help limit the loss of life.

Preparedness is a continuous cycle of planning, organizing, training, equipping, exercising, evaluating, and taking corrective action. Training and exercising plans are the cornerstone of preparedness, which focuses on readiness to respond to all-hazards, incidents, and emergencies.

Mitigation is the effort to reduce loss of life and property by lessening the impact of disasters and emergencies. Mitigation involves structural and non-structural measures taken to limit the impact of disasters and emergencies. Structural mitigation actions change the characteristics of buildings or the environment. Examples include flood control projects, raising building elevations, and clearing areas around structures. Non-structural mitigation most often entails adopting or changing building codes.

Response includes coordinating and managing resources (including personnel, equipment, and supplies), utilizing the Incident Command System in an all-hazards approach, and taking measures to ensure life, property, and environmental safety. The response phase is a reaction to the occurrence of a catastrophic disaster or emergency.

Recovery consists of activities that continue beyond the emergency period to restore critical community functions, and begin to manage stabilization efforts. The recovery phase begins immediately after the threat to human life has subsided. The goal of the recovery phase is to bring the affected area back to some degree of normalcy.

In the context of Chittenden County and Vermont, municipal governments, along with entities such as universities, hospitals, utilities, and the state carry out emergency management. While CCRPC has no formal authority within the realm of emergency management, it does regularly assist municipalities and the state in the five phases of emergency management (listed above). CCRPC also assists preparation of the regional [All Hazards Mitigation Plan](#), and Local Emergency Management Plans.

Prevention

CCRPC's focus on prevention is primarily through ensuring that planning projects in the county are designed to minimize risks from hazards (primarily environmental hazards like flooding). To learn more, see Chapter 5: Land Use, and Chapter 2: Ecological Systems.

Preparedness

Regional Emergency Management Committee | Emergency Management Planning is needed in order to respond to, recover from, and mitigate disasters. As of 2022, regional coordination and support of all-hazards emergency planning and preparedness activities is conducted through the Chittenden County Regional Emergency Management Committee (CCREMC). The CCREMC includes membership from municipal Emergency Management Directors and public safety officials. The CCRPC provides administrative support to REMC, which meets quarterly.

Local Emergency Management Plans | Each municipality prepares, and updates annually, a Local Emergency Management Plan (LEMP), which provides local information as to how the municipality would respond to a disaster. The format of the LEMP is consistent with the National Incident Management System (NIMS), and a standardized, on-scene, all-risk incident management concept, known as ICS (Incident Command System). ICS allows users to adopt an integrated organizational structure to match the complexities and demands of single or multiple incidents without being hindered by jurisdictional boundaries. The LEMP details local contacts, local and state equipment and resources, shelters, locations, and the needs of vulnerable populations. CCRPC assists member municipalities every spring with updating LEMPs.

Emergency Relief and Assistance Fund | CCRPC assists with municipal preparedness by ensuring they comply with the requirements of the Emergency Relief and Assistance Fund (ERAF) program. ERAF funds are utilized during recovery from federal disaster declaration. Specifically, ERAF funds help cover local match requirements for public assistance projects (typically repairs to roads and culverts, or debris cleanup). FEMA covers 75% of the cost of public assistance projects. The state and municipality split the remaining 25% (12.5% and 12.5%), provided the municipality meets the following benchmarks:

- Adopt Local Emergency Management Plans annually (100% of Chittenden County municipalities have adopted LEMPs);
- Adopt the town road and bridge standards that meet or exceed the VTrans 2019 standards (100% of Chittenden County municipalities have adopted these);
- Participate in the National Flood Insurance Program (NFIP) (95% of Chittenden County municipalities participate; Buel's Gore has no mapped floodplain); and
- Adopt a FEMA-approved Local Hazard Mitigation Plan (100% of Chittenden County municipalities have an adopted plan).

The state will provide an additional 5% (for a total of 17.5%) toward the non-federal match if the municipality adopts river corridor regulations, or enters the FEMA Community Rating System (CRS). River corridors refer to the land that accommodates a river with a naturally stable channel and dynamic equilibrium conditions. The CRS program strictly regulates development in the floodplain to higher standards than the minimum requirements of the National Flood Insurance Program (NFIP).

As of October 2023, Colchester is the only municipality with CRS designation in Chittenden County. The majority of Chittenden County municipalities (15) qualify for the additional 5% ERAF match through their adoption of river corridor (or comparable) regulations. The municipalities of Burlington and Underhill have not adopted CRS or river corridor regulations. Buel's Gore has not joined the NFIP, and would receive only 7.5% match through ERAF.

Mitigation

All Hazard Mitigation Plans | [The 2022 Chittenden County All Hazards Mitigation Plan](#) (AHMP) identifies all potential hazards that may impact Chittenden County, and projects that could be mitigate the impacts of these potential hazards. Authored by a national consulting firm, and developed in cooperation with the CCRPC Multi-Jurisdictional AHMP Plan Update Committee, the plan includes municipal AHMPs, which provide specific municipal information, and are adopted by local selectboards.

- The three highest ranked countywide natural hazards identified in the 2022 plan include: severe rainstorms, severe winter storms, and human infectious disease.
- The three highest ranked countywide technological hazards identified in the 2022 plan include: power loss, water pollution, and hazardous materials incident.
- The three highest ranked county-wide societal hazards identified in the 2022 plan include: crime, civil disturbance, and economic recession.

Federally Declared Disasters | Chittenden County has experienced damage from numerous incidents, many of which were [federally declared natural disasters](#) (Figure 30). These include severe storms, flooding, hurricanes/tropical storms, and snow/ice storms. Federally declared disasters trigger allocation of logistical and financial resources to affected areas to support emergency management and recovery. The number of events and severity of their damage is expected to increase due to climate change.

	1990-1999	2000-2009	2010-2019	2020-2025
Total Declared Disasters*	7	2	11	6
Flooding	7	1	7	3
Heavy Rain	2	0	0	0
Severe Storms	2	1	8	3
High Winds	1	0	0	0
Tropical Storm / Hurricane	0	0	2	1
Severe Winter Weather / Ice/ Snow Storm	0	1	1	2
Pandemic	0	0	0	2
Landslides and Mudslides	0	0	0	2

FIGURE 15: FEMA-DECLARED DISASTERS IN CHITTENDEN COUNTY (1990-2025)

* A single declaration may include multiple sub-types

Flood Mitigation. Flooding and fluvial erosion are the most common natural hazards in Chittenden County, made worse by the changing weather patterns due to climate change. These events can damage or destroy homes, businesses, and transportation infrastructure.

- Severe rainstorms, flooding, and fluvial erosion may worsen by projected climate changes. For example, the July 2023 flooding resulted in crop losses initially estimated at \$1.553 million for Chittenden County alone.¹³⁶ Floods and droughts are now Vermont’s most likely natural disasters and both hazard are expected to increase in coming years. As a result, irrigation infrastructure will remain crucial for farms and gardens.” Many farmers do not carry crop insurance sufficient to cover the range or magnitude of losses, though the U.S. Department of Agriculture and Vermont Agency of Agriculture provide some funding for recovery and building future resilience.

- In the aftermath of flooding in July 2023 and July 2024, approximately 34 property owners applied for FEMA buyouts in Chittenden County, primarily in Bolton, Richmond, Huntington, and Milton. These properties, once acquired by FEMA, will be maintained as floodplain.
- In Chittenden County, 297 insurance policies (properties or policies) participate in the National Flood Insurance Program. Between 1978 and 2022, a total of 196 claims have been covered, paying out more than \$2,561,700 (in 1978 dollars). Of these claims, 42 came from properties damaged more than one time in a 10-year period. Currently, 759 structures (residential, commercial, industrial, institutional, and mass assembly), which is 1.3% of total county structures, exist within 30 feet of the mapped Special Flood Hazard Areas (aka the 100-year flood zone). There are 776 structures located in the river corridor in Chittenden County.

Human Infections Disease | The 2022 AHMP noted three infectious disease events: the 1918 Spanish Influenza, the 2009-2010 H1N1 Influenza, and the 2020 COVID-19 (coronavirus) Pandemic. The plan states that “based on the historical occurrence of human infectious disease outbreaks of a pandemic level in Vermont and Chittenden County, it can be estimated that the recurrence interval is 34 years, indicating that, on average, a human infectious disease event will occur within that time period.”¹³⁷ (This statistical calculation is based on 103 years of record, with three events between 1918 and 2021.)

Response

Emergency Personnel | Municipal police, fire, and rescue departments provide emergency response in Chittenden County. These agencies face a number of challenges, including a lack of staff (paid and volunteer), and the costs of services. Only a small number of fire departments in Chittenden County are made up entirely of full- or part-time paid staff. Most towns use a blend of paid and volunteer firefighters, while a few are completely reliant on volunteers. The lack of volunteers for fire departments and emergency medical services (EMS) is causing concerns about the ability and timeliness of response. Police departments are also experiencing staffing shortages.¹³⁸

Dispatch | Another challenge with emergency response is the cost and inefficiency of dispatch operations. The Chittenden County Public Safety Authority was established in April 2018 to improve dispatch services in the county, after six communities voted to form it (Burlington, Colchester, Milton, South Burlington, Williston, and Winooski). Recent efforts to establish a regional dispatch center have run into funding and start-up challenges, leaving its future uncertain.

Recovery

State Emergency Operations Center | Several CCRPC staff are trained in the Incident Command System to serve in the State Emergency Operations Center (SEOC), and help Vermont Emergency Management (VEM) coordinate recovery activities statewide during larger disaster events. CCRPC staff also complete specialized training in the Planning and Situational Awareness sections of the SEOC, which typically includes mapping, conveying information from the field to appropriate responders, and documenting and coordinating internal SEOC operations.

Local Liaisons | Via an agreement with VEM, CCRPC staff members act as local liaisons for VEM following a hazard event. This role includes contacting municipal officials to collect information on damages to public infrastructure, and impacts to businesses and residents.

ACTIONS

1. **Preparedness** | Assure all municipalities and social service organizations have well-developed emergency preparedness plans.
 - a. **Coordination** | Encourage collaboration and coordination between local, regional, and statewide organizations in preparedness and response.

- b. **Take an all-hazards approach** that can be used in weather, biological, chemical, radiological, and terrorist emergencies. In addition, municipalities and organizations should develop systems that monitor for impacts of climate change that affect human health or safety and build climate resiliency into all systems.
 - c. **LEMPs** | Assist with annual updates to municipal Local Emergency Management Plan.
- 2. **Mitigation and Hazard Mitigation Plans** | Update the Chittenden County All Hazards Mitigation Plan, and related municipal hazard mitigation plans, as needed.
- 3. **Response** | Continue to support the efforts of municipal partners to provide high quality and efficient emergency services to Chittenden County.
- 4. **Recovery** | Continue to assist with staffing State Emergency Operations Center and conducting local liaison reporting during major disasters.
- 5. **Equitable Emergency Management** | Work with state and municipal partners to identify communities vulnerable to disasters assess their needs, and ensure planning, mitigation, response and recovery operations center their unique circumstances. Convey information widely and accessibly through multiple channels.
- 6. **Social Response** | See Action 6 in Social Connectedness.



CHAPTER 13

Infrastructure and Facilities



GOAL

Advance infrastructure and facilities that support Centers, Planned Growth Areas, and Village Areas while protecting ecological systems.



KEY ISSUES, TRENDS & INSIGHTS



Data for this section and more information can be found in the following: the Ecological Systems chapter for water quality; [Broadband Action Plan](#); Stormwater websites: rethinkrunoff.org and <https://www.ccrpcvt.org/our-work/environment-natural-resources/water-quality>; and other sources listed below.



2026 **ECOS** Plan website

For an interactive experience, visit the [Infrastructure and Facilities](#) page on the 2026 ECOS Plan website

Drinking Water | The majority of Chittenden County residents get drinking water from Lake Champlain, via two utilities: the Champlain Water District, and the City of Burlington’s DPW Water Division. Both utilities have received Phase III Director’s Awards from the USEPA’s Partnership for Safe Water Program. Champlain Water District was the first in the United States to receive the Phase IV Excellence in Water Treatment Award in 1999, and is one of eleven in the U.S. to have maintained this award status following required annual reviews. In addition, Richmond, Hinesburg, Huntington, Underhill, and Jericho have smaller public water supply utilities, some of which must work to overcome capacity and water quality challenges (e.g. Hinesburg). Ensuring adequate water supply will take on increasing importance, especially in areas reliant on groundwater sources, as Vermont experiences periods of drought and increased development.

Wastewater | Twelve municipal wastewater treatment plants exist in the county. Their combined treatment capacity is 28.54 million gallons per day (MGD); however, other design factors (hydraulics, nutrient removal, septage receiving, and biological oxygen demand) effectively limit the state-permitted treatment capacity to 20.32 MGD. As of 2024, [the average annual flow of wastewater was 11.50 MGD](#).¹³⁹ These figures indicate sufficient sewage treatment capacity to absorb anticipated growth in housing and employment countywide. However, this does not account for location-specific limitations, or limitations based on other environmental reasons (e.g. phosphorus control). There may be a need to increase the capacity of some municipal wastewater treatment plants in the county to accommodate regional and municipal housing targets (see Chapter 8: Housing).

Stormwater | Stormwater management is critically important to maintain and improve water quality throughout the county. Urban and rural areas face a number of challenges related to stormwater treatment. For example: urban areas must retrofit old infrastructure; financing new infrastructure in areas planned for growth is incremental; and many areas must grapple with negative impacts from agriculture and forestry activities that don’t follow best management practices.

Stormwater management occurs at a number of levels, including: the EPA’s National Pollutant Discharge Elimination System (NPDES) permits; the state’s discharge permits, which are structured to address site level development for new or redevelopment projects that disturb more than a half-acre; and additional stormwater regulations and programs that municipalities enact. More information about stormwater management can be found in Chapter 3: Watershed Health.

Broadband and Telecommunications | Information technology is integral to fulfilling the personal, economic, educational, and health services needs in the region, a trend accelerated by the COVID pandemic. Chittenden County is generally well-served with telecommunications services. This includes 5G service by some carriers in urban areas (though many pockets of little to no cell service remain, especially in rural areas). Just over a decade ago, the 2012 ECOS Competitive Assessment Analysis Report identified quality and costs of telecommunications

services as the weakest utility infrastructure based on employer surveys. Many improvements have occurred since then, but the need to upgrade regional infrastructure still remains.

Ideally, all homes and businesses would be served by 100 download Mbps/100 upload Mbps fiber service, as is the goal of the state. As of December 2021, nearly 1% of all residential and non-residential structures are lacking in at least 4/1 Mbps; 3% of all residential and non-residential structures are served by 4/1 Mbps; 71% of all residential and non-residential structures are served by 25/3 Mbps; and 25% of all residential and non-residential structures are served by 100/100 speeds.¹⁴⁰ The current level of service for the majority of structures in the county, 25/3 Mbps, is inadequate, given expected future demands on the system.

Chittenden County must achieve 100/100 Mbps service for all residents and businesses, so as to not fall behind the rest of the state and New England. In 2022, these eight municipalities created the Chittenden County Communications Union District (CCCUD): Essex Town, Essex Junction, Jericho, Shelburne, South Burlington, Underhill, Westford, and Williston. The CCCUD intends to plan, contract, build, and manage the infrastructure that will provide high-speed internet to areas of the county that remain underserved due to costs and/or a lack of financial feasibility. In June 2023, the Vermont Community Broadband Board received \$229 million from the federal government to fund broadband expansion throughout the state, including Chittenden County.

Solid Waste | A sustainable society minimizes the amount and toxicity of waste it generates, reuses materials, recycles, and composts. The Chittenden Solid Waste District (CSWD) is responsible for the management of solid waste in Chittenden County. The system in the county is a combination of public, private, and public/private programs. CSWD has established a range of programs and facilities to manage waste through reduction, diversion, and proper disposal.

Since 2019, the [amount of municipal solid waste](#) (waste from the general public) generated in Chittenden County that is landfilled or incinerated has decreased; however, ¹⁴¹ The amount of materials recycled or composted has increased over time, while rates of recycling have increased, rates of composting have decreased. In 2024, 306,814 tons of materials were generated, with about 60% being recyclable and 40% being landfill-bound. CSWD estimated that of all municipal solid waste sent to the landfill, 8.5% was made up of recyclable materials (including special materials like e-waste), and 26% included organic materials that could be composted.¹⁴² A state law passed in 2012 (Act 148) bans disposal of certain recyclables (effective July 1, 2015), yard debris and clean wood (effective July 1, 2016), and food scraps (phased in over time, and completely in 2020) from disposal. Residents and businesses in CSWD have been required to separate yard debris and recyclables from waste destined for disposal since 1993, and clean wood since 2015. CSWD has also banned non-asbestos asphalt shingles, unpainted/unstained plywood, and unpainted/unstained oriented strand board from disposal (2016). The additional bans on food scraps and construction materials are having a significant impact on waste diversion in Chittenden County. Continued education and new strategies will help maximize use of diversion programs. In 2022, Chittenden County voters approved a new, \$22 million recycling sorting facility for CSWD, to be located in Williston.

CSWD also has identified the need for a regional landfill site. The state currently has only one functioning landfill in Coventry. Solid waste from Chittenden County is now trucked from collection points in Williston to Coventry via VT Route 15 or Interstate 89. This has substantial ramifications for greenhouse gas emissions. The Coventry landfill will close within approximately 20 years when its maximum capacity is reached. A new landfill site to serve Chittenden County has not been identified or permitted.

Municipal Facilities | As shown on the [ECOS Map Viewer](#), the following government/administrative facilities exist in the county: 13 police stations, 21 post offices, 2 courthouses, 18 municipal offices, 29 fire/rescue stations, and 1 state correctional facility. Larger municipalities such as Burlington, Winooski, Colchester, Essex, Essex Junction, Milton, Shelburne, South Burlington, and Williston have a variety of government and school facilities and provide a wide range of municipal services related to planning, zoning, recreation, highways, libraries, water, sewer, fire, rescue and police. In contrast, small rural municipalities such as Bolton, Buel's Gore, and St. George support only a few part-time employees, such as a municipal clerk and a road foreman, and often contract for other services.

Municipal government in the remaining communities commonly consists of a few full-time employees (municipal clerk), an administrative aide for the selectboard, and a highway foreman and small crew, supplemented by part-time or seasonal employees for activities such as recreation programs or the municipal library.

Library facilities are well distributed across the region, and residents benefit from reciprocal agreements among all of libraries in the county, with the exception of Burlington (an additional fee is charged for non-Burlington residents). Three municipalities in the region do not have a library: Bolton, Buel's Gore, and St. George. None of these communities currently have plans to build a library, and residents use libraries in surrounding communities. All libraries in the region offer high speed internet access.

Schools | There are currently 8 supervisory unions or school districts in Chittenden County. The county has 52 public schools, 23 independent schools (6 of which are special education schools), and 6 colleges/universities. (See the ECOS Map Viewer for locations.) Act 73, Vermont Education Reform Act passed by the Legislature in 2025, will be explore potential changes to governance structures of school districts in Vermont in the coming years.

Between 2018 and 2023, K-12 public school enrollment in Chittenden County declined by 6% despite the fact that the number of people aged 18 and under declined by only 2% (from 29,165 to 28,597).¹⁴³ For the 2023 school year, total countywide public school enrollment was 22,206 students, compared to 23,639 students in the 2018 school year.¹⁴⁴ This may indicate that more students are receiving private or at-home education.

SCHOOL DISTRICTS OR UNIONS	# OF SCHOOLS	TOWNS SERVED
Burlington School District	11 Schools	Burlington
Essex-Westford School District	11 Schools	Essex, Westford, Essex Junction
Mount Mansfield Unified Union School District	9 Schools	Bolton, Buel's Gore, Huntington, Jericho, Richmond, Underhill
Champlain Valley Supervisory District	5 Schools	Charlotte, Hinesburg, Shelburne, St George, Williston
Colchester School District	5 Schools	Colchester
Milton School District	3 Schools	Milton
South Burlington School District	5 Schools	South Burlington
Winooski School District	3 Schools	Winooski

FIGURE 36: NUMBER OF SCHOOL DISTRICTS OR UNIONS

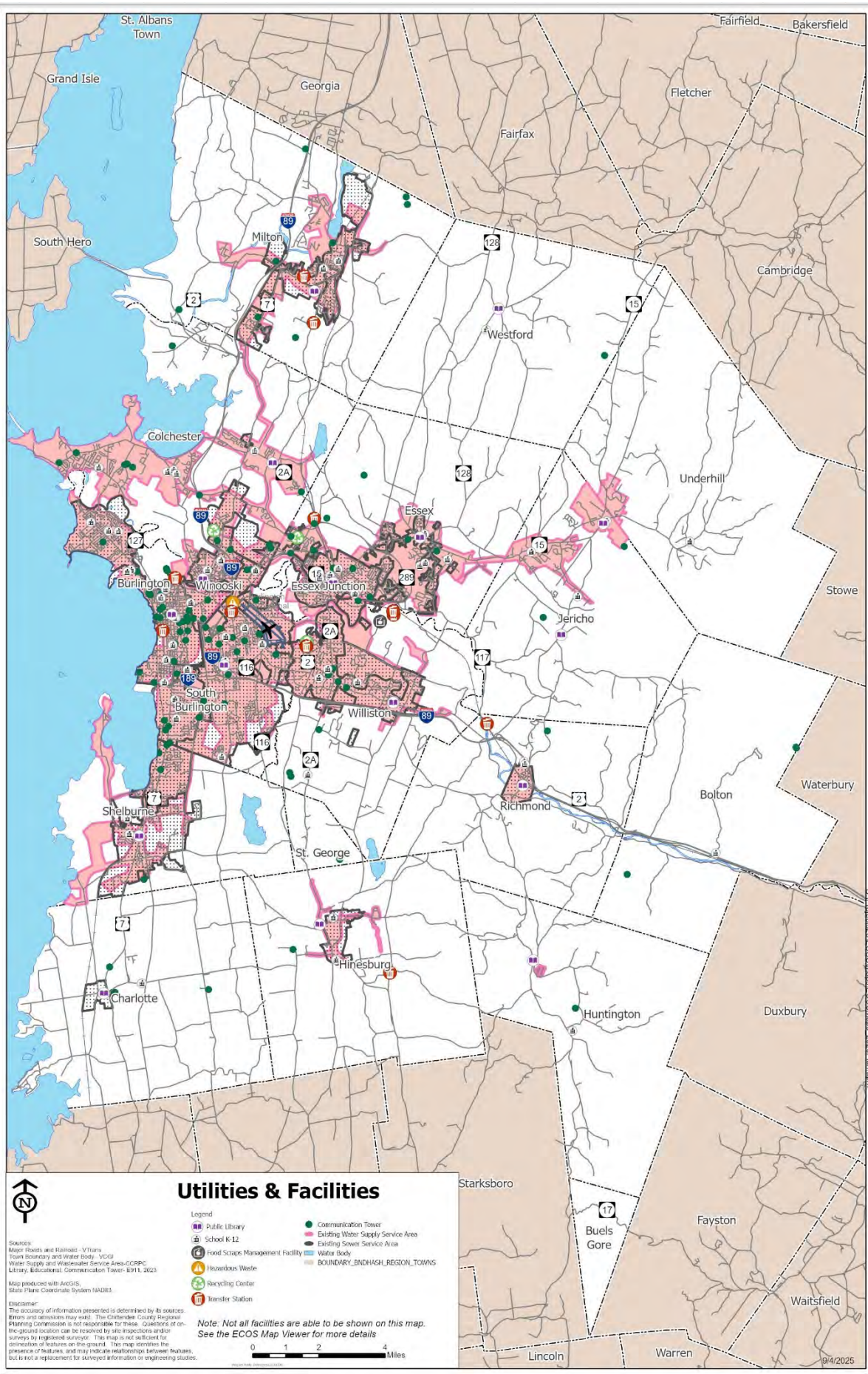
Emergency Services | Almost every municipality has a locally-based fire department, with the exception of Buel's Gore and St. George. Only half of the county's municipalities have police departments, and even fewer have their own emergency medical services. Many of the county's smaller municipalities receive primary police services from the Vermont State Police (VSP) on an "as-needed" basis, but must "rent" traffic enforcement services from the Chittenden County sheriff's office, the VSP, or neighboring communities.

Many municipalities have reciprocal agreements for assistance in fire and rescue services. Most fire and rescue departments rely on volunteers; recruiting and retaining volunteers are challenges. For more information, see the Public Safety, Criminal Justice & Hazard Mitigation section in this Supplement, the All Hazards Mitigation Plan, and its Municipal Annexes and the Local Emergency Management Plans for each municipality. (In particular, Section 5.2 provides the specific services, volunteers and personnel for each operation.) Discussions around consolidation of some municipal services, such as dispatch, continue to achieve results. As referenced in Chapter 12: Emergency Management, six municipalities formed a Public Safety Authority in 2018 and are working together on an emergency communications center that will be responsible for dispatching police, fire, and medical resources. It is unclear when the regional dispatch center is expected to be operational.

Medical Facilities | Chittenden County's community hospital is the University of Vermont Medical Center, which is also Vermont's only academic medical center, serving patients from across the state and the upper northeast corner of New York. The UVM Medical Center provides a full range of inpatient and outpatient services, provides primary care services at 11 Vermont locations, operates the region's only Level I Trauma Center, and is home to the University of Vermont Children's Hospital.

With inpatient facilities that range from 50 to 70 years old, the Medical Center has created a master facilities plan to address the long-term health needs of the region. The plan focuses designing single rooms for inpatients, adding space for providers and equipment they need to provide high quality care, and striving for LEED certification for healthy, efficient, and sustainable building design. In 2019, the Medical Center completed construction on the Miller Building, a new 128 bed inpatient facility.¹⁴⁵ Through the master planning efforts, the Medical Center is looking at all older primary care sites to ensure they are adequately sized and equipped to meet patients' needs. However, due to regulatory and financial pressures, the Medical Center has paused certain planned expansions and transitioned out of providing a few specialized services, including kidney transplant and genomic testing, while continuing to prioritize core hospital and community-based services.

Other health care facilities in Chittenden County include 53 primary care sites; the Community Health Centers of Burlington (the local Federally Qualified Health Center, or FQHC); Howard Center (the local designated agency that provides mental health, developmental, and substance abuse services); 2 home health agencies (Visiting Nurse Association of Chittenden and Grand Isle Counties and Bayada Home Health Care); 6 Nursing Homes; 13 residential care homes; and 4 assisted living facilities.



ACTIONS

1. **Infrastructure and Resilience** | Actively participate in the planning, funding, and construction of infrastructure projects needed to strengthen the regional economy. Projects should support equity, smart growth principles, housing target achievement, and economic resilience in response to climate change and other disasters.
 - a. **Regional Development Corporation (RDC) Priority Project List** | Annually update Regional Priority Project Lists, and seek funding to plan and implement projects.
 - b. **Tax-Increment Financing** | Support the creation of Tax Increment Financing (TIF) Districts within the region, as well as project-specific TIFs.
 - c. **Infrastructure Planning and Construction** | Implement regional infrastructure planning and construction projects that support economic development, and housing in areas planned for growth in order to achieve regional and municipal housing targets, as outlined in Goal 5 of the West Central Vermont CEDS and Chapter 8: Housing, including the following:
 - i. Municipal Water and Wastewater
 - ii. Broadband
 - iii. Transportation
 - iv. Electric Vehicle Charging
 - v. Electric Transmission and Distribution
 - d. **Regional Infrastructure and Resource Mapping** | Build further understanding of infrastructure needs and opportunities by pursuing a regional wastewater study. Pursue research to better understand groundwater resources and constraints.
2. **Solid Waste** | Support the efforts of Chittenden Solid Waste District, and statewide partners, to study, identify, and permit an additional solid waste disposal site(s) that can serve northern Vermont.
 - a. **Plastic** | Encourage and support state and local rules limiting the use of single-use plastics.
3. **Underutilized Sites** | Support partner efforts to develop master redevelopment plans for currently underutilized sites within the region, particularly closed college campuses and public schools, that could support housing, commercial development, or municipal/community uses.
4. **Broadband** | Coordinate with the VT Community Broadband Board, municipalities, and the Chittenden County Communications Union District to ensure all unserved and underserved locations have access to high-speed internet.
5. **Multi-jurisdictional services** | Examine and advance appropriate, efficient, and effective governance structures to deliver improved services, including: Supervisory Unions, Chittenden Solid Waste District, Champlain Water District, Winooski Valley Park District, Green Mountain Transit, Chittenden County Sherriff, Chittenden Unit for Special Investigations, and 911 dispatch.
6. **Public Services** | Support municipal projects to develop and redevelop public facilities and services such as public Wi-Fi, libraries, restrooms, laundromats, etc.



CHAPTER 14

Arts and Culture



GOAL

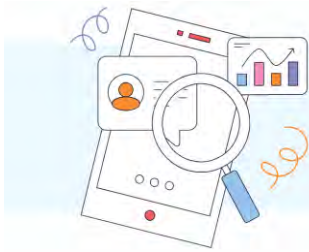
Increase and support access and participation in the arts and cultural opportunities.



KEY ISSUES, TRENDS & INSIGHTS



Data in this section is drawn from the [Vermont Arts Council](#).



2026 **ECOS** Plan website

For an interactive experience, visit the [Arts and Culture](#) page on the 2026 ECOS Plan website 

Use of arts in education is a critical tool for developing critical thinking, math, and science skills, gaining insights on cultural diversity and human experience, and building self-esteem through self-expression. There is a diminishing amount of time in school dedicated to arts and recreation. While after-school programs help fill this gap, they are not accessible to all children due to issues related to transportation, scheduling, program fees, and others.

Programs and events should attract and engage residents from diverse backgrounds, ages, and income levels. To increase participation in arts and cultural activities by underserved populations, organizations need to remove barriers to participation (including transportation, costs, and cultural differences).

Arts and culture are major contributors to the quality of life of residents and visitors. Participation in arts and cultural activities contributes to a strong sense of shared community. Even businesses rely on arts and culture as part of their recruiting or retention strategies.

The Vermont Arts Council's CreateVT 2021 Action Plan focuses on implementing projects to increase access, infrastructure, education, and engagement in the creative sector of the local economy. It includes the following findings:¹⁴⁶

- Employment in creative industries in VT grew 8% from 2010 to 2018. This lags behind the U.S growth (14%).
- Today, 7% of jobs in Vermont are in the creative sector, including 9,793 jobs in Chittenden County. This is higher than the nationwide percentage (5.1%).
- Almost 50% of workers in the creative sector in VT are self-employed or freelance.

ACTIONS

1. **Public Art Programs** | Work with partners to implement public art programs that integrate artistic installations into public spaces, such as parks, streetscapes, and buildings. This can enhance the visual appeal of the region, create opportunities for local artists, and engage the community.
2. **Creative Economy and the Arts** | Support the creative economy by helping implement projects identified in the 2021 CreateVT Action Plan for Vermont's Creative Sector.



CHAPTER 15

Scenic, Recreational, and Historic Resources



GOAL

Conserve and protect valued scenic, recreational, and historic areas and resources.



KEY ISSUES, TRENDS & INSIGHTS



Data for this section is drawn from the ECOS [Natural Systems Analysis Report](#).



2026 **ECOS** Plan website

For an interactive experience, visit the [Scenic, Recreational, and Historic Resources](#) page on the 2026 ECOS Plan website 

Chittenden County's scenic, recreational, and historic resources provide residents with places to relax, play, gather, and learn about nature, conservation, and history. They also provide important ecological functions, such as wildlife habitat, carbon sequestration, and water and air quality protection.

Scenic resources represent an important element of the region's landscape, and contribute directly to sense of place, quality of life, and economic vitality via tourism and attracting new residents and businesses.

Recreational resources, such as Lake Champlain, shared-use paths, on-road bike lanes, and off-road trails connect facilities, areas, and residents with each other and the outdoors. Currently, 85% of the county's population resides within a half mile of parks or publicly accessible natural areas in urban areas and in areas planned for growth, and within one mile in the three rural Future Land Use categories.¹⁴⁷ It is important to protect such resources and increase access to recreation for those who have limited or no access. (Data can be found on the [ECOS Map Viewer](#).)

Many municipalities are planning new facilities, and improvements to existing facilities, to expand access and opportunities for recreation. Bicycle and pedestrian infrastructure has modestly but steadily increased each year (60.8 miles were added between 2011 and 2022). Recreational trails and natural areas in the region are maintained by a diverse collection of municipal, non-profit, and volunteer organizations. There are two downhill ski areas in the region: Bolton Valley Resort and Cochran's Ski Area.

The recreational value of local water bodies (swimming, fishing, boating, etc.) is critically dependent on water quality. E-coli and algal blooms, due primarily to phosphorus pollution from stormwater runoff via non-point sources (such as agriculture and developed lands) lead to beach closures. Invasive species also threaten the native fish populations. These conditions are exacerbated by warming water conditions due to the effects of climate change.

Historic Resources | The economic prosperity and social connectedness of Chittenden County support and depend upon preserving historic sites and following a compact settlement pattern. More than 4,400 designated historic sites (including more than 2,500 in Burlington alone), and 85 designated historic districts exist in Chittenden County (see [ECOS Plan Map Viewer](#)). The original historic surveys which designated these sites and districts go back to the 1970s and early 1980s. These surveys should be updated to reflect current conditions.

As CCRPC and CCRPC partners encourage future development in areas planned for growth, the state's historic settlement pattern of villages, urban centers, and rural countryside must also be maintained. This includes protecting and improving access for residents and visitors to valued scenic, recreation, and historic resources, and incorporating accessible design standards into recreation facility projects.

Eight municipalities (Milton, Colchester, Essex Junction, Winooski, Burlington, South Burlington, Shelburne and Charlotte) are member communities of the Lake Champlain Byway, a state-designated scenic byway that extends from Alburg in the Champlain Islands, through Chittenden County on U.S. 7, and south into several towns in Addison County. Since 2002, these communities have secured competitive grants from the National Scenic Byway Program to improve visitor experience by implementing projects such as wayfinding signage, interpretive panels, brochures,

kiosks, and other amenities. In particular, the byway focuses on improving interpretation and information about municipal and non-profit intrinsic resource sites, such as parks, town forests, natural areas, trails, and smaller museums.

CCRPC strongly encourages municipalities to clearly explain in their municipal plans and development regulations the specific natural and scenic resources they want to protect from the impacts of development. At present, there is misalignment between municipal plan recommendations for natural and scenic resources, and the implementation of those recommendations through development regulations. Further, there are often contradictory goals within municipal plans regarding natural and scenic preservation, and the need for new infrastructure for energy generation and transmission.

Chittenden County's progress in forest conservation is likely due to a variety of reasons, including a purposeful and successful movement toward concentrating new growth in areas planned for growth. Since 2014, 85% of new housing growth, and 98% of new commercial/industrial growth, have occurred in only 15% of the county's land area.

ACTIONS

1. **Tourism** | Cooperate with partners, including the Vermont Convention Bureau, local chambers of commerce and downtown organizations, the Vermont Outdoor Recreation Economic Collaborative, and Lake Champlain Byway to support growth of the tourism industry.
2. **Outdoor Recreation Economy** | Collaborate with the Vermont Outdoor Recreation Economic Collaborative, Vermont Trails and Greenways Council, and regional recreation collaboratives led by the regional planning commissions to further the economic interests of the outdoor recreation economy.
3. **Cultural Resources**
 - a. **Funding** | Work with partners to identify funding to update municipal Historic Sites and Structures Surveys originally completed in the 1970s and 1980s.
 - b. **Preservation** | Work with partners to invest in the preservation of Chittenden County's social history. This may include the creation of a museum or cultural center. Promote the preservation of cultural sites by engaging with diverse communities through culturally humble practices.
 - c. **Cultural Site Documentation and Protection** | Support Indigenous-led documentation and protection of sacred and cultural sites, with respect for community control over sensitive information.
4. **Working Lands** | See Chapter 4: Working Lands.
5. **Public Spaces** | Support the establishment and maintenance of inclusive, accessible, and celebrated public spaces, including green spaces, recreation centers, and public gardens, to improve community health and social connectedness. (See Action 1.a in Health).
6. **Access** | Encourage public and private actions to increase access to land for recreational, educational and cultural activities.



CHAPTER 16

Civic Engagement



GOAL

Foster trust in local and regional government and find ways for Chittenden County community members to have influence in political and non-political decisions that affect their lives, neighborhoods, and communities.



KEY ISSUES, TRENDS & INSIGHTS



2026 **ECOS** Plan website

For an interactive experience and additional data, visit the [Civic Engagement](#) page on the 2026 ECOS Plan website 

Civic engagement consists of political and nonpolitical activities that help identify and address community concerns. Being able to meaningfully participate, express views, and influence decisions that affect one's life, neighborhood, and community are essential for a true democracy. Effective civil and political systems allow communities to be governed in a way that promotes justice and participation, and supports people's quality of life.

Vermont is a Dillon's Rule State, meaning that local governments only have the powers expressly granted to them by the state. However, a culture of strong participation in local government and decision-making processes exists at the municipal level. Many municipalities hold the tradition of "Town Meeting Day," where residents gather in public forums all over the state to hold local elections, approve budgets, and conduct other municipal business.

Despite this tradition of civic engagement, barriers to equal and equitable participation in public engagement forums, meetings, or local voting processes remain. Not everyone has access to participate in civic life. Some lack time, access to transportation, language skills, civic knowledge, safety consideration, and adequate childcare.¹⁴⁸ In 2021, CCRPC hired Creative Discourse Group, an equity consultant, to conduct public outreach in which participants shared specific suggestions to overcome some of the barriers listed above. Proposed solutions included: providing stipends, greater outreach to specific groups, translation services, and creating more ways for people to participate.¹⁴⁹

Community members, including New Americans, U.S.-born people of color, and low-income residents, shared through CCRPC's 2024 ECOS outreach and engagement activities that they want to participate in local decision-making but often face barriers due to unfamiliarity with how local and the regional planning commission function and make decisions. Many described civic processes as feeling extractive—focused more on meeting regulatory or grant requirements than on meaningfully incorporating their input. Participants emphasized the need for accessible civic education that reduces jargon and clearly explains how to engage effectively. They called for consistent, trust-building outreach; transparency; and partnerships with trusted community leaders and organizations. Making participation easier through interpretation, stipends, transportation, convenient meeting times, and accessible locations, along with ongoing dialogue rather than one-time engagement, was reiterated as essential to fostering genuine inclusion. With population growth and demographic changes taking place in Chittenden County, considering how to facilitate equitable civic engagement is particularly important. Regional communities are becoming increasingly ethnically diverse. It is important that ECOS goals and actions demonstrate CCRPC's understanding of how institutions and processes need to evolve to remove barriers that limit people's ability to exercise civic engagement and decision making.

ACTIONS

1. **Civics Training** | Provide accessible and equity-oriented leadership development training for all civic leaders, to increase knowledge about, and encourage service on boards and commissions.
2. **Decrease Barriers** | Decrease barriers that members of marginalized communities face when joining committees, selectboards, and commissions: hold meetings at accessible times and locations; provide organized, easy-to-understand onboarding tools; compensate people for their time; provide childcare, transportation assistance, interpretation and translation, and accounting for other accommodations that may make participation more inclusive and accessible.

3. **Cultural Humility Education** | Support boards and commissions by increasing their knowledge and understanding about diverse populations, and the importance of inclusion and representation.
4. **Voting** | Support increased access to local voting processes.
5. **Education** | Invest in partner organizations that provide civics classes and create connection with civic opportunities, in order to engage more people in local and regional governance.
6. **Accessibility** | Improve accessibility of municipal and regional government processes, key documents, websites, and materials by avoiding the use of technical terms or jargon, providing translations, and communicating information through brief summaries and infographics whenever possible.
7. **Public Meeting Facilitation** | Encourage and support decision-making and advisory bodies to establish systems and practices to effectively facilitate meetings, enable broad public participation and manage conflict using restorative practices.
8. **Communicate** | Encourage partners to implement a comprehensive and inclusive communication strategy that utilizes diverse platforms to ensure all community members are informed, engaged, and able to participate in regional planning processes.



CHAPTER 17

Social Connectedness



GOAL

Foster social connections and supports for all people in their communities.



KEY ISSUES, TRENDS & INSIGHTS



2026 **ECOS** Plan website

For an interactive experience, visit the [Social Connectedness](#) page on the 2026 ECOS Plan website 

Social connectedness is the degree to which people have and perceive a desired number, quality, and diversity of relationships that create a sense of belonging, being cared for, valued, and supported.¹⁵⁰ The concept of community is fundamental to people's overall quality of life and sense of belonging.

Confident, connected communities suffer fewer social problems, are adaptable to challenges, and support social and economic development. There are major health, economic, and environmental benefits in developing opportunities for, and participation in social interactions, recreation, leisure, and arts and cultural activities. Research shows that social connectedness can lead to a longer life, better health, and improved well-being.¹⁵¹

Conversely, social isolation refers to the lack of relationships with others, and little to no social support or contact, even when people don't feel lonely. Social isolation, along with the feeling of loneliness, aloneness, or disconnection, are linked to increased risk for heart disease and stroke, type 2 diabetes, depression and anxiety, addiction, suicidality, dementia, and earlier death.¹⁵² Loneliness and isolation in the United States has reached a level that the US Surgeon General issued an Advisory in 2023.¹⁵³

Research suggests that loneliness disproportionately impacts low-income adults, young adults, older adults, adults living alone, people with chronic diseases and disabilities, immigrants, and individuals who identify as LGBTQ.¹⁵⁴ This may be attributed to factors such as resource access challenges (ex: living in rural areas, limited transportation, language barriers), discrimination, or stress. Approximately 26% of Vermonters aged 65 and older live alone, increasing their risk of loneliness, injury from falls, and cognitive decline¹⁵⁵. Eight percent of all adults and nearly one in ten adults aged 65 and older report lacking social and emotional support, highlighting a need for greater social infrastructure that supports community cohesion and intergenerational connection.¹⁵⁶

Through CCRPC's 2024 ECOS outreach and engagement activities, New Americans, people of color, and English language learners highlighted cultural and structural racism, xenophobia, language barriers, and exclusion from social networks as ongoing threats to their quality of life in Chittenden County. Participants emphasized the need for more inclusive community spaces, programs that foster relationships across cultural and social divides, and events that build empathy and trust. Resident attachment describes the emotional connection residents feel toward a geographic community. Research by the Knight Foundation and Gallup discovered that the main drivers that influence attachment to a place involve how accepting a community is of diversity, its wealth of social offerings, and its aesthetics.¹⁵⁷ Additionally, participation in arts and cultural activities also contribute to a strong sense of shared community.

To promote social connectedness, CCRPC and partners should support access to cultural events and open spaces through involvement in land-use, the built environment, and program support. Informal networks and how people connect with others are important for strong communities and social cohesion. Working with communities to figure out where social connection already happens is critical to enhance, invest in, and protect such spaces. While these spaces might include public parks, libraries, or businesses, community often happens in unexpected places.

ACTIONS

1. **Provide Care** | Assure that older adults and people with disabilities are well cared for. Support organizations and programs that enable aging in community, and provide support to family members who are caregivers (or provide care). Promote access to appropriate services, including transportation, for older adults and people with disabilities who need formal care in their daily living.
2. **Create New Opportunities** | Increase opportunities for residents to come together, interact, and network. Support organizations and businesses that bring diverse people together around myriad themes: arts and cultural events; recreational and leisure activities; civic engagement initiatives; educational workshops; family events; or any other activity that brings people together with a common interest.
3. **Public Spaces** | See Action 5 in Chapter 15: Scenic, Recreation and Historic Resources.
4. **Childcare** | See Action 3 in Chapter 11: Household Finance.
5. **Youth** | Support organizations that offer dynamic and equitable youth community programming.
6. **Social Response** | Support local efforts to establish mutual aid organizations which strengthen social capital and community connections, especially in times of disaster. Enhance emergency management and public safety by integrating trained social workers into crisis responses.



CHAPTER 18

Stewardship, Implementation, and Monitoring





2026 **ECOS** Plan website

For an interactive experience, visit the [Stewardship, Implementation and Monitoring](#) page on the 2026 ECOS Plan website 

The goals outlined in the ECOS Plan are ambitious. The plan is equally ambitious in identifying actions that CCRPC and its partners must take to advance plan goals over the next eight years. The intent of the key issue section of each plan chapter is to clearly outline the desired impacts and outcomes of the actions.

CCRPC plays a dual role as both the Metropolitan Planning Organization (MPO) and the Regional Planning Commission (RPC) for Chittenden County. Because of this unique role, many of the actions in the plan are directly the responsibility of CCRPC, but others actions CCRPC only has influence over and implementation must be carried out in cooperation with municipalities, partner agencies, or organizations. The following implementation plan will ensure that CCRPC (e.g. staff, committees, the Board of Directors), as stewards of the ECOS Plan, can track and communicate substantial progress toward achieving the plan’s goals and actions.

CCRPC created an implementation table to be used to determine the priority actions to be focused on in the following year. It identifies the role CCRPC plans to play in accomplishing or advancing progress toward a specific ECOS action (lead, partner or support), and identifies implementation partners. Many of the partners listed are specific state agencies, but other listed partners are more general categories such as “municipalities” or “community groups.” The listed partners do not include consultants or vendors. If CCRPC is lead on an action, that means that CCRPC staff are responsible for coordinating efforts between partners to advance the action. If CCRPC is a partner, that means CCRPC staff will be actively engaged with the partner organizations listed in the table to collaborate toward advancing an action, but another partner organization will fulfill the role of project manager or project lead. If CCRPC is listed as a support organization, CCRPC staff will support a partner in achieving the action either through technical assistance or funding support.

The implantation table also includes the broad timelines planned to begin making effort toward the actions: “short, medium, long, or continuous.” Short-term is intended to be a 1-2-year timeframe, medium-term a 3-8-year timeframe, and long-term over 8 years. The table aims to align the efforts of multiple partner organizations, including government agencies, community organizations, and private sector entities, toward accomplishing the actions in the ECOS Plan.

CCRPC will review the implementation table annually to add notes, changes, or progress made to each line item in the final column. CCRPC’s Long-Range Planning Committee (LRPC) will meet annually to discuss and document these monitoring efforts and ensure that the plan remains responsive to the evolving needs of the community to facilitate informed decision-making for the community. By reporting on and holding itself accountable to the implementation table, CCRPC’s LRPC will be able to provide information to the CCRPC Board and Unified Planning Work Program Committee (UPWP Committee) that will help them prioritize and sequence the identified projects and initiatives, allocate necessary resources, and monitor progress effectively.

[The Implementation Table will be inserted into a future iteration. It can be viewed [here](#) for now.]

The CCRPC employs various methods to monitor the implementation of its projects and initiatives, all of which work to further goals and actions included in the ECOS Plan. Some of these include:

- **Resource Distribution & Impact Map Viewer:** CCRPC has developed a tool to map CCRPC investments throughout the county to help ensure resources are being distributed equitably. CCRPC will continue to develop this tool to monitor the impacts of CCRPC projects.
- **Annual Progress Reports:** CCRPC provides each member municipality with an annual progress report. These reports share what projects and investments the RPC made within each member municipality for the year. The report includes UPWP funded projects as well as technical assistance requests. The report features a summary of the CCRPC's local and regional efforts and is submitted every September to the Vermont Agency of Commerce and Community Development (ACCD).
- **Title VI Reports and Outreach & Engagement Reports:** CCRPC's Title VI Coordinator submits a Title VI report annually to the Federal Highway Administration (FHWA) and a report to the Federal Transit Administration (FTA) every three years to monitor its efforts and ensure compliance with Title VI. Additionally, CCRPC's Outreach & Engagement Manager creates an internal annual report, benchmarking progress made on actions related to organizational and procedural equity at CCRPC.
- **Data:** Data associated with indicators in the ECOS Plan are updated annually as data is available. These data are located on the [ECOS Plan website](#) and intended to measure relative success in achieving the ECOS goals.
- **Ongoing Engagement:** CCRPC engages in regular community engagement and feedback mechanisms. Seeking input from community members, local governments, and others through public meetings, and other forms of engagement enables CCRPC to gather insights on the plan's implementation. Additional investment in incorporating diverse perspectives and feedback will allow CCRPC to gain a better understanding of the plan's impact, and make informed decisions based on community needs and priorities.

It is important to recognize the importance of adaptability in responding to changing circumstances and evolving community and regional needs. The implementation plan itself will be monitored and evaluated to ensure that initiatives remain on track. Adjustments in capacity and priority can be made as required. CCRPC believes that continuously and collaboratively working toward the ECOS actions will lead to Chittenden County being a healthier, more inclusive, and more prosperous community.

The CCRPC staff, Board and Long-Range Planning Committee have reviewed the goals of 24 VSA 4302 and concluded that this ECOS Plan is consistent with those statutory goals. Implementation of the goals in the ECOS Plan will result in substantial progress toward attainment of the goals established in 24 VSA 4302).

SUPPLEMENTS

Supplement 1: Public Process

Supplement 2: Plan Crosswalk

Supplement 3: Environmental Benefits and Burdens Analysis

Supplement 4: West Central Vermont Comprehensive Economic Development Strategy (CEDS)

Supplement 5: Metropolitan Transportation Plan (MTP)

Supplement 6: Energy Analysis, Targets, and Methodology (Enhanced Energy Plan (EEP))

Supplement 7: Housing Data

Note: These will be live links in the final plan.



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ECOS Plan Implementation Table

Goal 1: Planning Practices - Develop, support, and implement collaborative planning systems that are equitable, accessible, and inclusive; that use taxpayer dollars effectively and efficiently for public benefit; and that assess and address environmental benefits and burdens to advance sustainability and environmental justice.						
		Action		CCRPC Role	Community Partner(s)	Timeframe
1.1		Capacity Building				
	1.1.a	CCRPC Leadership	Establish and support internal leadership to guide and sustain equity work, including a full-time Outreach and Engagement Manager, an internal Equity Leadership Team, and a Community Engagement Advisory Committee. Allocate dedicated time and resources to support these efforts.	Lead	The Creative Discourse Group	Continuous
	1.1.b	Education	Provide ongoing education and collaborative learning opportunities to increase understanding of how systemic inequities intersect with planning. This includes regular staff dialogue, external training, mentorship, and the development of accessible materials to support integration of equity into daily work.	Lead	The Creative Discourse Group, Municipalities	Continuous
	1.1.c	Organizational Policies & Procedures	Implement, and update as needed, relevant organizational policies and procedures to guide cultural and procedural transformation.	Lead	The Creative Discourse Group; Equity Advisory Committee community liaisons; Community organizations working with marginalized communities	Continuous
	1.1.d	Representation	Establish and support diverse community representation within the organization at all levels through strengthening relationships, support community education, and increasing accessibility of committee and board participation.	Lead	Municipalities	Continuous
1.2		Community Engagement				
	1.2.a	Connect	Increase meaningful engagement and mutually beneficial relationships with marginalized and underrepresented communities by increasing CCRPC's presence at public events and in public spaces to enhance awareness about the organization.	Lead	Community Engagement Advisory Committee community liaisons; Community organizations working with marginalized communities	Continuous
	1.2.b	Track	Develop systems to monitor who participates in CCRPC engagement efforts and evaluate the effectiveness and inclusivity of engagement strategies. Use these insights to guide improvements over time.	Lead		Short
	1.2.c	Increase Accountability	Improve transparency and two-way communication with the public by clearly explaining CCRPC's roles, decisions, and impacts. Share progress on projects, policies, and engagement opportunities and outcomes.	Lead	Community Engagement Advisory Committee community liaisons; Vermont Language Justice Project; AALV; Community organizations working with marginalized communities	Short
	1.2.d	Build Relationships	Sustain long-term, mutually beneficial partnerships with community groups by supporting events, providing sponsorships or stipends, collaborating on education and outreach, and exploring community liaison roles.	Lead	Community Engagement Advisory Committee community liaisons; Community organizations working with marginalized communities	Continuous
	1.2.d.i	Indigenous Participation in Land Use Decisions	Connect with indigenous communities and build indigenous representation on local, regional, and state bodies that guide land use planning decisions.	Lead	Local Indigenous Community Memembrs, VCNAA,	Continuous
	1.2.e	Update Engagement Processes	Update methods and processes for community engagement in CCRPC projects to foster meaningful and inclusive engagement from the beginning of the project.	Lead	Community Engagement Advisory Committee community liaisons; Community organizations working with marginalized communities	Short
1.3		Project and Regional Planning Processes				
	1.3.a	Equity Assessment	Integrate an Equity Impact Assessment into CCRPC's project lifecycle to identify and address potential inequities and guide decision-making at the policy, program, and budget level.	Lead		Short
	1.3.b	Equitable Resource Allocation	Regularly monitor how and where CCRPC resources are distributed with respect to EJFP populations. Ensure that resources are distributed equitably, taking into account Supplement 3- the Environmental Benefits and Burdens Analysis.	Lead		Continuous
	1.3.c	Environmental Benefits and Burdens Analysis	Monitor development of State's environmental benefits and burdens analysis. Continue to refine CCRPC's approach to our own environmental benefits and burdens analysis to reflect best practices and qualitative data.	Lead		Short

	1.3.d	Targeted Projects	Target and prioritize positive programs and investments in low opportunity places and areas with Environmental Justice Focus Populations.	Lead		Continuous
	1.3.e	Town Plan Review & Approval	Review and revise CCRPC’s town plan approval processes to ensure alignment with state planning goals and the ECOS Plan. Provide support to municipalities to strengthen plan implementation to address environmental benefits and burdens.	Lead	Municipalities	Short
1.4		Leadership and Collaboration				
	1.4.a	Leadership	Leverage CCRPC’s authority, networks, and resources to lead regional equity efforts. Support staff and partners in engaging with national networks, conferences, and peer-learning opportunities to advance equity in planning practices.	Lead	Vermont League of Cities & Towns; State of Vermont Office of Racial Equity; Municipalities; VTrans	Medium
	1.4.b	Resources	Develop and share tools, training materials, and best practices with municipal and regional partners. Foster collaboration across organizations to align efforts, reduce engagement fatigue, and increase the collective impact of equity work.	Lead	Vermont League of Cities & Towns, State of Vermont Office of Racial Equity, Municipalities, VTrans, Government Alliance of Race and Equity	Continuous
	1.4.c	County Coordination and Alignment	Coordinate with municipalities, state agencies, and community organizations to align policies, investments, and engagement strategies that advance ECOS Plan goals. Collaborate with partners to advance policy changes that address systemic inequities.	Lead	Municipalities, Vermont League of Cities and Towns, State of Vermont Office of Racial Equity, Government Alliance on Race & Equity Resources	Continuous
	1.4.d	Support Indigenous Planning Capacity	Support Indigenous community access to funding, training, and technical support for Indigenous-led planning efforts, aligned with their priorities and knowledge systems.	Lead		Continuous
1.5		Financing and Plan Implementation				
	1.5.a.i	Community Development	Financing Tools. Expand and improve how municipalities implement available financing tools, with particular emphasis on options that level the playing field between greenfield and infill development, and that help direct new investment dollars to strengthen existing neighborhoods. This would include tax increment financing (TIF), local option sales taxes, impact fees, special assessment districts, capital planning and budgeting, and fiscal impact analysis. Explore and develop other financing mechanisms for maintaining and improving infrastructure.	Support	Vermont League of Cities and Towns, Tax Department, DEC, Treasurer's Office, Agency of Commerce and Community Development, Municipalities, Tax Department, Department of Environmental Conservation, Treasurers Office, Vermont Bond Bank	Medium
	1.5.a.ii		Tax Credits. Support downtown and village center tax credits, and additional incentives as part of the State Designation Program.	Support	Agency of Commerce and Community Development, Municipalities	Continuous
	1.5.a.iii		Revolving Loan Funds. Develop revolving loan funds for business to improve access to capital.	Support	Agency of Commerce and Community Development, Economic Development Administration, Vermont Bond Bank, Greater Burlington Industrial Corporation, Municipalities, Environmental Protection Agency, Vermont Municipal Bond Bank	Medium
	1.5.b.i	Monitor State and municipal tax burdens	Efficiency and Cost Management. Identify opportunities for restructuring, streamlining or eliminating programs to increase efficiency, reduce costs and enhance accountability.	Partner	State Agencies, Municipalities	Medium

Goal 2: Ecological Systems - Conserve, protect and improve air quality, water quality and quantity, and the health of native species and habitats.

			Action	CCRPC Role	Community Partner(s)	Timeframe
2.1		Habitat Preservation	Protect forest blocks, wildlife connectivity resources and crossings, surface waters, riparian areas and other significant habitats (e.g. wetlands) from development and fragmentation; and promote vegetative landscaping in urban areas to maintain natural habitats, natural stormwater management, water quality, air quality, carbon sequestration and cultural heritage. This work should focus on the broader concept of the pattern of forest cover, rather than core forest areas to avoid isolating forest blocks and losses in biodiversity.	Support	Agency of Natural Resources, Municipalities, CCRPC	Continuous
2.2		Inventory and Planing	Map 10 provides a starting point for regionally important forest blocks and wildlife habitat, and is the basis for this plan’s compliance with Act 171 of 2016 (Forest Integrity). The map includes Vermont Conservation Design’s highest priority and priority resources defined as two scales: Landscape Scale (e.g. forest blocks and connectivity resources), and Species and Community Scale (e.g. rare, threatened and endangered species and other specific habitat sites). This data and the component layers are located on the Agency of Natural Resources’ BioFinder Map Viewer. Over the coming years, CCRPC will work with municipalities to be compliant with this statutory requirement, as well as the conserved lands inventory and conservation plan currently in development under the Community Resilience and Biodiversity Protection Act of 2023 (Act 59), by taking the following actions:			
	2.2.a	Inventories and Mapping	Assist with surveys, inventories, and mapping of forest blocks, wildlife crossings, natural communities (i.e. special features within forest blocks, surface waters, and riparian areas), and other significant habitats (e.g. wetlands), scenic resources, and locations of invasive species. Consider how to incorporate indigenous knowledge into these processes.	Support	Agency of Natural Resources, and Municipalities	Medium
	2.2.b	Municipal and Regional Plans	Include this data into municipal and regional plan text and maps, and establishing specific policies that address and protect these resources.	Lead	Municipalities	Short
	2.2.c	Maps	Aggregate locally important forest blocks, wildlife habitats, and associated resources into a regionally significant map in order to see these resources across municipal boundaries, and work with local, state, and federal partners to protect them.	Partner	Agency of Natural Resources, and Municipalities	Short
2.3		Municipal Development Review Regulations	Help municipalities create clear development regulations and definitions to protect ecological and habitat resources without having an exclusionary effect on current and future residents. Example measures may involve limiting intrusions to interior forest and connectivity blocks or maintaining vegetative cover and larger culverts around wildlife road crossings.	Lead	Municipalities	Continuous
2.4		Education				
	2.4.a	Professional Education	Educate engineers, developers, real estate professionals, planners, and the public regarding resources and methods for restoration and protection.	Support	Agency of Natural Resources	Continuous
	2.4.b	Public Outreach	Support accessible education efforts, for all demographics, about the impacts of climate change, mitigation efforts and resiliency strategies.	Support	Agency of Natural Resources	Continuous
2.5		Non-regulatory Protection	Support non-regulatory conservation and/or preservation efforts conducted through public and land trust investments in alignment with guidance of conservation targets and plans established under the Community Resilience and Biodiversity Protection Act of 2023.	Support	Agency of Natural Resouces, Municipalities, Vermont Housing and Conservation Board, and Land Trust Partners	Conitnuous

2.6	Invasive Species	Help municipalities establish and implement invasive plant removal management plans and monitor their long-term effectiveness. In addition, help municipalities plan for and manage invasive tree diseases and pests, such as emerald ash borer, that threaten urban and rural forests.	Support	Agency of Natural Resources, and Municipalities	Short
2.7	Development Constraints	To protect significant habitats, development should be located to avoid field-verified state and local known constraints, and to minimize impacts to field-verified state and local possible constraints. See Land Use Action 3(h).	Partner	Agency of Natural Resources, Land Use Review Board, Public Utilities Commission, Municipalities	Continuous
2.8	State and Municipal Collaboration	Collaborate with state and municipal bodies, including the Vermont Agency of Natural Resources’ Climate Action Office to help implement strategies and actions in the Vermont Climate Action Plan, related to natural and working landscapes.	Partner	Agency of Natural Resources	Medium
2.9	Air Quality	Support efforts to improve, maintain, and respond to the overall air quality within the region to protect public health, reduce environmental impact, and comply with national standards.	Support	Agency of Natural Resources	Continuous
2.1	Urban Forest and Native Plants	Work collaboratively with the Vermont Urban & Community Forestry Program to design, fund, and implement programs to support urban forestry and native plantings.	Partner	Agency of Natural Resources and municipalities	Short

Goal 3: Watershed Health - Improve the safety, water quality, and habitat of rivers, streams, wetlands and lakes in each Chittenden County watershed.

		Action		CCRPC Role	Community Partner(s)	Timeframe
3.1		Hazard Protection	Develop and implement adaptation strategies to reduce inundation flooding and fluvial erosion hazards. While supporting planned growth, evaluate growth in terms of preparedness for a changing climate. Chittenden County and its municipalities will: continue efforts to avoid development in vulnerable areas, including floodplains, river corridors, wetlands, lakeshores and steep slopes; protect people, buildings, and facilities in vulnerable areas where development already exists in order to reduce future flooding and erosion risks; plan for and encourage new development in areas that are less vulnerable to future flood and erosion events; and implement stormwater management techniques to slow, spread, and sink floodwater (see the Non-point Source Pollution section below).			
	3.1.a	Mapping and Data	Use mapping and data tools to prioritize and address road erosion issues, including the VTrans Transportation Resilience Planning, VT Culverts, and the Reducing Repeat Damage tools.	Partner	Agency of Transportation	Continuous
	3.1.b	Revise bridge/culvert designs	Help revise municipal public works standards with culvert and bridge design specifications that allow for wildlife passage and movement of floodwater and debris during high intensity events. Implement culvert and bridge designs that produce stable structure in river channels (i.e. fluvial geomorphology).	Support	Municipalities, Agency of Transportation	Continuous
	3.1.c	Continue non-regulatory protection of river corridors	Work with partners as a part of the Clean Water Service Provider Program to conserve and/or preserve vulnerable areas through public and land trust investments, stream re-buffering, river corridor easements on agricultural lands, river corridor restoration and culvert and bridge improvements.	Partner	Agency of Natural Resouces, Agency of Agriculture, Municipalites, and Land Trust Partners, Basin Water Quality Council	Continuous
	3.1.d	Protect river corridors through regulation	Work with municipalities and ANR to improve bylaws to protect floodplains and river corridor areas not currently protected through implementation of the statewide minimum floodplain management standard, state river corridor permit and municipal delegation contemplated in Act 121 of 2025.	Lead	Agency of Natural Resources and Municipalities	Continuous
	3.1.e	Increase flood resilience	Support non-regulatory efforts to reduce damage from future floods. This includes: identifying repetitively damaged structures; providing technical and financial assistance to elevate, relocate, or buy out structures; supporting planning and mitigation in mobile home parks vulnerable to flooding; and identifying where flood storage capacity may be restored and conserved.	Partner	Agency of Natural Resources, and Municipalities	Continuous
	3.1.f	Tactical Basin Planning	Participate in developing and implementing the Lamoille (Basin 7), Winooski (Basin 8), and Northern Lake Champlain Direct Drainages (Basin 5) Tactical Basin Plans. CCRPC will work with the state, municipalities, and other partners to address river hazard protection, flood resiliency, and water quality through these plans, including prioritizing projects for funding.	Partner	Agency of Natural Resources	Continuous
	3.1.g	Avoid Development Constraints	See Land Use Action 3(h).	Partner	Agency of Natural Resoruces	Continuous

3.2		Non Point Source Pollution				
	3.2.a	Assemble data	To implement the Tactical Basin Plans, work from existing data and continue to identify locations that contribute to water pollution via flow, sediment, pathogens, and nutrients. Where needed, conduct on-the-ground inventories of water quality and biological assessments (in-stream), wetlands, sub-watersheds, river corridors (buffered or not), and geomorphology. Map existing and new data on one regional map.	Support	Agency of Natural Resources, Municipalities, Conservation Districts and Watershed Organizations	Short
	3.2.b	Revise Plans and Bylaws	Incorporate the above data into municipal plans and bylaws; establish specific statements that protect these resources; develop clear standards for how to protect these resources within development regulations. Encourage Low Impact Development (LID) policies, Green Stormwater Infrastructure (GSI) techniques, and shared storm water control programs to maximize land development in areas planned for growth. Incentivize best management practices for agricultural uses. Encourage the Agency of Agriculture to better enforce required agricultural practices.	Partner	Agency of Natural Resouces, Agency of Agriculture, and Municipalites	Short
	3.2.c	Implement watershed restoration and non-regulatory approaches	Identify and implement non-regulatory approaches to nutrient, pathogen and sediment pollution management especially projects implemented through the Clean Water Services Provider framework authorized under Act 76. Support the work of watershed organizations.	Lead	Agency of Natural Resources, Municipalities, Conservation Districts and Watershed Organizations	Medium
	3.2.d	Implement permits	Work with municipalities and other partners to implement the Municipal Roads General Permit, Stormwater General Permit 3-9050 for Developed Lands (with three or more acres of impervious surface), and integrate phosphorus reduction into the existing MS4 permit. See Chittenden County’s Work Plan, and the 2022 Chittenden County Multi-Jurisdictional Hazards Mitigation Plan for more details. CCRPC will also advocate for better coordination of municipal and state regulatory oversight and enforcement of individual stormwater permits for private development projects.	Support	Agency of Natural Resources and Municipalities	Continuous
	3.2.e	PFAS and emerging pollutants	Support efforts to assess and minimize the presence and risks associated with contamination from PFAS, pesticides, fertilizers, and other polluting substances in the region.	Support	Agency of Natural Resources	Short
3.3		Clean Water Financing				
	3.3.a	Areas Planned for Growth	Ensure that stormwater regulation and requirements do not financially burden or penalize dense and compact development in areas planned for growth.	Support	Agency of Natural Resources and Municipalities	Continuous
	3.3.b	State Financing Reform	Monitor and participate in state financing reform, which the Agency of Natural Resources is leading, to make recommendations on how to implement and fund the remediation or improvement of water quality.	Support	Agency of Natural Resources	Short
3.4		Wastewater Treatment Plant Upgrades	Work with municipalities to upgrade wastewater treatment plants to comply with the Lake Champlain Phosphorus TMDL Phase I Implementation Plan and decrease impacts of sewage on ecological systems (see Chapter 13 – Infrastructure and Facilities). Support underserved settlements in the county (such as mobile home parks) to develop, and redevelop, wastewater solutions.	Support	Agency of Natural Resources and Municipalities	Medium

Goal 4: Working Lands - Support the growth and vitality of working farms and managed forests by increasing investments these industries and decreasing subdivisions. Minimize and mitigate environmental impacts of industry.

		Action		CCRPC Role	Community Partner(s)	Timeframe
4.1		Working Lands Implementation	Increase investment in and decrease subdivision of working lands and significant wildlife habitats. Protect farmland and forestland and support existing and new operations.			
	4.1.a	Farm to Plate	Cooperate with stakeholders to implement projects identified in the 2021-2030 Vermont Agricultural and Food Systems Strategic Plan (Vermont Farm to Plate) that will support continued growth of the local farm, food, and forestry economy within the region.	Support	Vermont Sustainable Jobs Fund, Agency of Agriculture, and partner organizations	Medium
	4.1.b	Regenerative Farming	Support effort to implement regenerative and biodynamic farming and widespread small-scale food production in urban and small-lot rural residential areas, to help make local food systems more accessible and resilient to climate change. Discourage the use of pesticides and chemical fertilizers.	Support	Agency of Agriculture, Winooski Natural Resource Conservation District, and partner organizations	Long
	4.1.c	Forest Economy	Cooperate with stakeholders to implement projects and actions intended to strengthen the forest economy as identified in the 2017 Vermont Forest Action Plan and the Vermont Forest Sector Systems Analysis.	Support	Agency of Natural Resources and partner organizations	Medium
	4.1.d	Municipal Development Regulations	Help municipalities develop clear development regulations and definitions of working lands to be protected. Maintain access to and scale of working lands to ensure viability after subdivision in the rural landscape This may include protection of log landings of previously logged forested parcels, zoning techniques such as fixed area ratios which separate lot size from residential density, and conservation zoning and homeowners association bylaws that allow for farming on the open space lots and in urban spaces.	Partner	Municipalities	Continuous
	4.1.e	Farmland Access	Work with the Vermont Housing Conservation Board, Vermont Land Trust, Land Access and Opportunity Board, and other similar organizations to increase access to farmland for Black, Indigenous, and people of color.	Support	Vermont Housing and Conservation Board, Vermont Land Trust, Land Access and Opportunity Board, and partner organizations	Medium
	4.1.f	Urban Agriculture	Promote urban agriculture in areas planned for growth to cultivate a land ethic, improve resilience of food systems, and increase food access, particularly in areas of high poverty and food insecurity.	Support	Agency of Natural Resources, Agency of Agriculture, Municipalities	Long
	4.1.g	Biomass Energy Potential	Support the harvesting of biomass in Chittenden County, when sustainably harvested, for uses such as combined heat and power, which will support the viability of the forestry industry and move the region towards the energy goals discussed in the Enhanced Energy Plan.	Support	Agency of Natural Resources, Burlington Electric, and partner organizations	Conituous
	4.1.h	Development Constraints	See Land Use Action 3.h.	Partner	Agency of Natural Resources, Land Use Review Board, Public Utilities Commission Municipalities	Continuous
4.2		Earth Resources Extraction	Mineral extraction and processing facilities, including smaller private extraction operations existing to support agricultural operations, should be planned, constructed, and managed, in accordance with State and local regulations, to:			
	4.2.a	Efficient Extraction	Support the establishment of properly planned and permitted extraction sites in Chittenden County to minimize long-haul transportation, promote the wise and efficient use of Vermont’s natural resources, and preserve the aesthetic quality of the landscape.	Partner	Municipalities, Agency of Transportation	Continuous
	4.2.b	Minimize Land Impacts	Minimize adverse effects on water quality, fish and wildlife habitats, human health, and adjacent land uses.	Support	Municipalities	Continuous
	4.2.c	Reclamation	Plan for their eventual rehabilitation so that slopes are stable, and the surface is revegetated with a variety of native species to support a wide range of biodiversity. Topsoil should not be removed from sites and excavations should stop early enough so that stable slopes can be established on the property.	Support	Municipalities	Long
	4.2.d	Screening	Screen extraction sites to the extent practical if topography and vegetation allow.	Support	Municipalities	Short
4.3		Outdoor Recreation	See Scenic, Recreation and Historical Resources Chapter.			

Goal 5: Land Use - Focus 90% of development in areas planned for growth (Downtown Centers, Village Centers, Planned Growth Areas, Village Areas, and Transition), in order to maintain a settlement pattern of compact centers separated by rural countryside.

		Action		CCRPC Role	Community Partner(s)	Timeframe
5.1		Invest in Areas Planned for Growth				
	5.1.a	Support Centers and Neighborhoods	Invest in wastewater, water, and stormwater infrastructure, energy systems (e.g. transmission, distribution, storage, and generation), urban forestry, brownfields assessment and remediation, and transportation infrastructure (prioritizing bicycles, pedestrians and public transit) in areas currently developed and/or planned for growth. See Chapter 3: Planning Practices.	Partner	Municipalities, Agency of Natural Resources, Agency of Commerce and Community Development, and Agency of Transportation	Medium
	5.1.b	Retrofit Existing Buildings	Retrofit existing buildings to reduce energy use and greenhouse gas emissions, and adaptively reuse historic buildings for housing, economic development, community gathering spaces, or other locally and culturally significant purposes.	Support	Vermont Public Service Department, Vermont Division of Fire Safety, Greater Burlington Industrial Corporation, and Municipalities	Medium
	5.1.c	Improve Walkability, Bikeability, and Streetscape Design	Improve Walkability, Bikeability, and Streetscape Design in areas planned for growth using a complete streets approach.	Partner	Municipalities, Agency of Commerce and Community Development, and Agency of Transportation	Medium
	5.1.d	TOD Overlay	Discuss use of a transit-oriented development (TOD) overlay on the regional future land use map with the LURB, VAPDA, and other partner organizations.	Lead	Land Use Review Board, Vermont Association of Planning and Development Agencies	Short
5.2		Municipal Planning and Zoning	Strengthen and direct development toward areas planned for growth through infill development, adaptive reuse of existing buildings, municipal plan and bylaw revisions, and use of the state designation programs.			
	5.2.a	Municipal Regulatory Reform	Work with municipalities to revise development regulations to develop places with affordable housing, a mix of land uses, jobs, healthcare, opportunities for shared parking, and access to a variety of services (restaurants, grocery stores, parks, entertainment, etc.) via public transit and active transportation modes.	Partner	Municipalities	Medium
	5.2.b	Infrastructure Planning	Integrate capital planning and budgeting in municipal planning efforts. Work with municipalities to develop official maps and other tools to drive infrastructure improvements in the areas planned for growth.	Partner	Municipalities, Vermont League of Cities and Towns, Vermont Bond Bank	Medium
	5.2.c	Education	Empower local officials through trainings and education on strategies to achieve the above through municipal plan and development regulation amendments and implementation. This could include how to effectively analyze development costs and benefits, and how to select appropriate multi-modal congestion mitigation measures.	Lead	Municipalities	Continuous
	5.2.d	Housing Targets	Promote and support planning and zoning modernization efforts that enable and catalyze housing development in areas planned for growth, in order to help reach local and regional housing targets	Partner	Municipalities	Medium

5.3		State / Local Permitting Coordination & Improvement	Support changes to local and state permitting processes to make them more coordinated and effective at addressing state, regional, and local land use goals.			
	5.3.a	Permitting Reform	Collaborate with legislators, state agencies, municipalities, and partner organizations to improve how development review (e.g. municipal permitting, state permitting, and Act 250) is conducted in Vermont. Monitor the effectiveness of recent improvements to Act 250 and other development review processes, including local processes modified by the HOME Act and Act 181.	Partner	Agency of Commerce and Community Development, Land Use Review Board, and municipalities	Continuous
	5.3.b	Plan Review Guidelines	Work with PAC and the Board of Directors to revise the Guidelines and Standards for Confirmation of Municipal Planning Processes and Approval of Municipal Plans. The revised guidelines should directly address how the CCRPC should review municipally proposed changes to areas planned for growth.	Lead	Planning Advosory Committee	Short
	5.3.c	Act 250 and Setcion 248 Review	Review and revise CCRPC’s <i>Guidelines and Standards for Reviewing Act 250 and Section 248 Applications</i> to ensure consistency with the regulatory changes required in Act 181.	Lead		Short
	5.3.d	Vermont Zoning Atlas	Collaborate with stakeholders, including the Vermont Zoning Atlas project, to ensure local and state regulations, bylaws and plans encourage transparency, predictability, equity, and timely review of development applications.	Partner	Agency of Commerce and Community Development, Vermont Center for Geographic Information, Vermont Housing Finance Agency, University of Vermont, and municipalities	Short
	5.3.e	Permit Navigators	Support the establishment of a state position to help housing developers, entrepreneurs and business owners understand and navigate the state’s permitting process.	Support	Agency of Natural Resources	Short
	5.3.f	Transportation Options Assessment	Implement the recommendations of the Transportation Options Project by supporting member municipalities, Act 250 District Commission, VTrans, and the LURB in implementing, and potentially improving, their requirements for land development density and design that support increased transportation mode choice.	Lead	Vermont Agency of Transportation, Land Use Review Board, and municipalities	Short
	5.3.g	Permit Review	Policies and planning studies that are adopted as part of this ECOS Plan and subsequent amendments will guide CCRPC’s position in state permit proceedings.	Lead	Land Use Review Board, Vermont Agency of Transportation, Agency of Natural Resources	Continuous
	5.3.h	Avoid Constraints	Ensure site development, including renewable energy generation, avoids and minimizes impacts to field-verified state and local known constraints, such as floodplains and steep slopes. Renewable energy generation sited on existing structures or parking lots complies with this policy. The list of known constraints and possible constraints is located in the Plan Methodology Section (see Maps) and in Supplement 6 – Enhanced Energy Plan.	Partner	Agency of Natural Resources, Municipalities, Land Use Review Board, Public Utilities	Continuous
5.4		Support Land and Housing Access				
	5.4.a	Indigenous Land Accss	Partner with indigenous communities to restore access to ancestral lands and culturally-significant sites. Use models, like First Light, to ensure our approach centers indigenous priorities and decision-making power in land conservation efforts.	Support		Continuous
	5.4.b	Tradiitonal Land Management and Food Sovereignty	Connect indigenous communities with State and local governments to support Indigenous ways of relating to and caring for the land. This includes ensuring access to land for growing food, gathering traditional plants, and protecting culturally important places, even in areas that are being developed.	Partner		Continuos
	5.4.c	BIPOC Homeownership	See Houisng Action 8.2.d.			Short

Goal 6: Energy - Transform the region’s energy system to meet Vermont’s energy and greenhouse gas reduction goals. In the process, avoid unfair impacts on marginalized groups, and maintain ecological health, economic vitality, and equitable access to affordable energy.

		Action		CCRPC Role	Community Partner(s)	Timeframe
6.1		Municipal Technical Assistance				
	6.1.a	Energy Planning Assistance	Provide technical assistance to municipalities when requested to enhance comprehensive plans consistent with Act 174 standards, and thereby enable municipalities to gain substantial deference in the Certificate of Public Good Section 248 process. This assistance will include working with municipalities to identify natural, cultural, historic, or scenic resources to be protected from all development, and to identify preferred locations for renewable energy generation facilities.	Lead	Municipalities, Department of Public Service	Continuous
	6.1.b	Energy and Climate Action Implementation Assistance	Provide technical assistance to municipalities to implement energy plans, including securing grant funding, and encourage municipalities to lead by example with respect to energy efficiency for buildings, reduction on greenhouse gas emissions in transportation, and the deployment of renewable energy.	Partner	Municipalities, Department of Public Service, Vermont Climate Action Office, State Energy Office, Energy Efficiency Utilities, Vermont Gas Systems, and Electric Utilities	Continuous
	6.1.c	Just Transitions	Support policies that ensure state, regional, and local programs and initiatives intended to build climate resilience and decarbonize do not have an unfair burden on any group, community, or economic sector and equitably distribute environmental benefits. Support the affordability and accessibility of all climate resiliency and mitigation programs (air conditioning, weatherization, transportation/transit programs, etc). Encourage more education, guidance, and financial support for low-income Vermonters to participate in these programs.	Support	Agency of Natural Resources, Public Service Department, and Champlain Valley Office of Economic Opportunity	Continuous
	6.1.d	Off-Road Equipment	Provide technical assistance to municipalities that wish to require fuel switching for off-road equipment, such as lawnmowers, to clean and non-fossil fuels.	Partner	Municipalities, Efficiency Vermont, electric distribution utilities	Continuous
	6.1.e	Land Use and Energy	Provide municipalities with guidance from the CCRPC Climate Change & Land Use guide on how to amend their land use regulations to limit low density sprawl, enable compact walkable neighborhoods, and protect the working and natural landscape to promote climate change resilience and mitigation (See Chapter 5 - Land Use).	Lead	Municipalities	Continuous
6.2		Thermal Sector Partnerships				
	6.2.a	Weatherization	Continue partnerships with VGS, Burlington Electric Department, Efficiency Vermont and the Champlain Valley Office of Economic Opportunity Weatherization Assistance Program to promote weatherization and energy efficiency programs and incentives for homes and businesses.	Partner	Vermont Gas, Champlain Valley Office of Economic Opportunity, electric distribution utilities	Continuous
	6.2.b	Thermal Fuel Switching	Transition the thermal sector away from fossil fuels by working with partners such as Green Mountain Power, VGS, Efficiency Vermont, Burlington Electric Department, and other energy service providers to educate developers, businesses, and homeowners about cold climate heat pumps, heat pump hot water heaters, wood heating, biofuels, and geothermal heating and cooling systems.	Support	Electric distribution utilities, Vermont Gas, and Champlain Valley Office of Economic Opportunity	Long
	6.2.c	Weatherization Workforce Development	Advocate for the state, utilities, and workforce/business development organizations to address weatherization workforce challenges identified in the 2021 Weatherization Workforce Report. Promote the expansion of current workforce training programs that are effective, such as ReSOURCE’s Weatherization and HVAC 101 training programs.	Support	Department of Labor, Department of Public Service, Champlain Valley Office of Economic Opportunity, Greater Burlington Industrial Corporation	Continuous
	6.2.d	Energy Codes	Coordinate with state and local stakeholders on building energy code requirements and compliance to encourage consistency and accelerate net-zero building practices and electric vehicle charging infrastructure. The state must ensure that energy efficient construction is accessible to and does not unfairly burden communities of color and lower income households.	Partner	Department of Public Service, VT Division of Fire Safety, Energy Efficiency Utilities, Burlington Electric Department, Municipalities	Short
	6.2.e	Networked Geothermal	Support VGS and other organizations efforts to install networked geothermal in Chittenden County.	Support	Vermont Gas	Long

6.3		Transportation Sector Partnerships				
	6.3.a	Transportation Fuel Switching	Promote a shift away from gas/diesel vehicles to vehicles powered by lower carbon fuel sources.	Support	Department of Public Service, Drive Electric Vermont, Vermont Agency of Transportation, Vermont Climate Action Office	Long
	6.3.b	Municipal Fleet Electrification	Work with the Clean Cities Coalition and municipalities to encourage municipal fleets to switch to lower emission heavy-duty vehicles and install charging for electric vehicles.	Partner	Vermont Clean Cities Coalition, municipalities, Drive Electric Vermont	Continuous
	6.3.c	Transportation Fuel Infrastructure Planning	Work with municipalities and relevant stakeholders to plan for local renewable transportation refueling networks and infrastructure, such as Level 2 and Level 3 electric vehicle recharging and hydrogen refueling. Ensure that these networks support commuting and regional destinations (e.g., downtowns, villages, resorts, tourist sites, transportation hubs, major employers, and multi-unit housing) and are planned along major regional transportation routes per the National Electric Vehicle Infrastructure (NEVI) Plan.	Partner	Drive Electic Vermont, municipalities	Short
	6.3.d	Electric Vehicle Parking Incentives	Work with local employers, municipalities, and other energy advocates to encourage broader adoption of electric vehicles by providing free or reduced parking costs for EVs and fuel-efficient vehicle owners, and preferential access to parking spaces limited in supply.	Support	Drive Electic Vermont, municipalities, Greater Burlington Industrial Corporation	Medium
	6.3.e	Drive Electric Vermont and Electric Vehicle Use	Promote the Drive Electric Vermont webpage, which connects users to financial incentives, types of available electric vehicles, and charging stations for EVs. Increase awareness of the benefits of and access to EVs and lower emission vehicles, in partnership with Drive Electric Vermont, Vermont Clean Cities Coalitions and other entities. Collaborate with electric utilities to educate and promote incentives to increase EV and hybrid adoption, and build awareness of charging opportunities as part of their strategy for complying with the state’s Renewable Energy Standard.	Support	Drive Electric Vermont, Vermont Clean Cities Coalition	Continuous
	6.3.f	National Electric Vehicle Infrastructure Plan and DC Fast Charging Infrastructure Funding	Seek grants to fund the installation of DC fast-charging infrastructure at strategic locations along major travel corridors, in transit hubs, and along the Interstate 89 Alternative Fuels Corridor (I-89 from New Hampshire to the Canadian border). Collaborate with VTRANS and Drive Electric Vermont to implement the Vermont 2022 State National Electric Vehicle Infrastructure Plan (NEVI).	Partner	Agency of Transportation, Drive Electric Vermont, Agency of Commerce and Community Development, Municipalities	Short
	6.3.g	Local Public EV Charging	Provide technical assistance to municipalities implementing the VT Department of Housing and Community Development Local Electric Vehicle Charging Station Regulation Guide, especially at multi-unit housing properties, businesses, and key public locations.	Partner	Agency of Commerce and Community Development, Drive Electric Vermont, municipalities	Continuous
6.4		Renewable and Resilient Electricity				
	6.4.a	Diversify Electricity Sources	Support a wide variety of renewable energy generation types, including storage, sustainable uses of biomass for heating (see Action 1.f. in Working Lands), passive solar building design, bio-digesters for electricity generation, photovoltaic solar, wind turbines, and optimize the energy potential for existing hydro-electric dams.	Support	Department of Public Service, electric distribution utilities, municipalities	Continuous
	6.4.b	Grid Constraints	Coordinate with transmission and distribution utilities to resolve electric grid constraints to enable the region to achieve Chittenden County’s renewable energy generation target needed for the electrification of the heating and transportation sector.	Partner	Department of Public Service, Vermont Electric Power Company, electric distribution utilities	Continuous
	6.4.c	Transmission Upgrade Funding	Support in-place upgrades of existing facilities, including renewable energy generation, storage, transmission lines, distribution lines, substations, microgrids, and energy storage as needed to reliably serve municipalities and the region with a resilient and low-carbon electric grid that supports a growing renewable electricity economy and low electricity costs. The existing law (30 V.S.A. 218c and PUC Docket 7081) does not sufficiently enable VELCO with the authority needed to effectively plan for grid modernization that meets the state’s energy and climate goals. To plan for the transmission constraints our state and our region face, the state must enable VELCO to design and fund a transmission system to address grid constraints in an equitable and proactive manner.	Support	Department of Public Service, Vermont Electric Power Company, electric distribution utilities, municipalities	Medium
	6.4.d	Battery Storage Siting	Support the placement of utility scale battery storage systems (BESS), to provide grid resiliency and address peak load at times when solar energy is not available, in areas that are safe and that minimize potential risks to people and infrastructure from fire hazards associated with battery storage facilities.	Support	Department of Public Service, Vermont Electric Power Company, electric distribution utilities, municipalities	Medium

6.5		Statewide Renewable Electricity Generation Regulation				
	6.5.a	Renewable Electricity Policy Refroms	Support changes in federal, state, and local policies to achieve the State of Vermont Comprehensive Energy Plan, Climate Action Plan goals, and to shift burdens away from impacted communities while increasing participation by those communities in the renewable energy industry.	Support	Department of Public Service, Agency of Natural Resources	Medium
	6.5.b	In-State Generation	Support changes to the Renewable Energy Standard to prioritize in-state generation over electricity imports to avoid externalizing environmental and societal costs and benefits.	Support	Department of Public Service, Agency of Natural Resources	Medium
	6.5.c	Expand Net-Metering Eligibility	Increase the maximum size of net-metered projects, and establish a tiered system for net-metering rates in which utilities pay a lower rate to facilities over a certain size (such as 500kW), in order to increase net-metering participation and reduce the energy burden for public and non-profit entities. Increase the maximum size of net-metered projects (currently 500kW) for public, non-profit, and community ownership entities, to encourage them to maximize development of renewable energy sources.	Support	Department of Public Service, electric distribution utilities, municipalities	Short
	6.5.d	Wind Generation Sound Rules	Request that the Public Utility Commission to open the rule making process on Rule 5.700, Sound Levels from Wind Generation Facilities, to reassess existing sound standards with the intent of allowing all sizes and scales of wind energy generation possible in Chittenden County.	Partner	Department of Public Service, electric distribution utilities, municipalities	Medium
	6.5.e	Decarbonize	Work with the Department of Public Service to educate the public about and evaluate the existing carbon accounting system.	Support	Department of Public Service, Agency of Natural Resources (Climate Action Office)	Medium
6.6		Renewable Energy Generation Siting and Suitability Policies				
	6.6.a	Renewable Energy Generation Goal	CCRPC supports generating new renewable energy in the county to meet Vermont’s Global Warming Solutions Act requirements, and the Comprehensive Energy Plan’s goal of using 90% renewable energy by 2050, in a manner that is cost effective, respects the natural environment, does not unfairly burden low-income communities with the impact of development, complies with CCRPC’s Siting and Suitability Policies, and is resilient to a changing climate. Specifically, Chittenden County currently generates 606,554 megawatt-hours (MWh) of renewable electricity annually and has 2050 target of 954,833 MWh of electricity generated annually as a part of our renewable energy goal. Meeting this target will require 348,279 MWh more in-region electricity generation (a 57%, increase from 2022). The renewable electricity target is technology neutral and can be met with any mix of technologies.	Support	Department of Public Service, electric distribution utilities, municipalities	Long

Goal 7: Transportation - Provide a transportation system that is safe, efficient, reliable, and resilient; provides for interconnected and sustainable mobility choices for livable, equitable, and healthy communities; supports regional and municipal land use goals; addresses the climate crisis; and strengthens the economy of the region.

	Action		CCRPC Role	Community Partner(s)	Timeframe
7.1	Maintain & Improve	Adequately maintain and improve existing transportation system, including roads, bridges, culverts, rail, transit, walking/biking, park-and-ride facilities, bus shelters, safety and expand transportation demand management (TDM) programs.	Support	Agency of Transportation, GMT, municipalities	Continuous
7.2	Focus on Safety	Invest in the transportation system by addressing safety and localized congestion issues on roadways.	Partner	Municipalities, Agency of Transportation	Continuous
7.3	Ensure Collaboration	Collaborate with federal, state, and local partners to ensure a coordinated approach to improving transportation systems.	Partner	Federal Highway & Transit Administrations, Vermont Agency of Transportation, GMT, municipalities	Continuous
7.4	Explore new sources for transportation funding	Explore new sources for transportation funding to shift from gas tax to more sustainable sources such as a mileage-based fee	Support	Agency of Transportation, Vermont Legislature	Continuous
7.5	Expand the deployment of Intelligent Transportation Systems	Expand the deployment of Intelligent Transportation Systems (ITS) to facilitate efficient flow of traffic on the roadway system, which will improve safety, reduce delays and congestion, decrease transportation energy use, and minimize the need for major roadway expansion projects.	Partner	Agency of Transportation, municipalities, GMT	Continuous
7.6	MTP and TIP Projects	Implement the identified MTP and Transportation Improvement Program (TIP) projects.	Support	Agency of Transportation, municipalities	Continuous
7.7	Update the Regional Transportation Model	Update the Regional Transportation Model as a part of the next MTP update to incorporate the new regional future land use map, and the municipal housing targets, to facilitate alignment of land use, housing, and transportation planning efforts in Chittenden County.	Lead		Short

7.8		Explore future sustainable transportation investments	Explore future sustainable transportation investments to support areas planned for growth and reduce fossil fuel consumption. This will help mitigate climate changing emissions by facilitating a shift away from single occupancy vehicle (SOV) trips by focusing on the following areas and programs:			
	7.8.a	Triple transit ridership by 2050	A FY24 study will explore the feasibility of this strategy. Increase investment in GMT transit services and explore micro-transit opportunities in the county. Actions include: • identify new, sustainable sources to support transit • invest in transit signal priority • maximize ridership for public school buses and minimize use of private vehicles for student transport	Support	Vermont Legislature, Agency of Transportation, GMT, municipalities	Continuous
	7.8.b	Improve Active Transportation	Expand walking and biking infrastructure to support active transportation and improve interconnection with the region’s transit system. Actions include: • Implement the 2022 Chittenden County Active Transportation Plan • Promote updates to municipal road standards to reflect complete streets principles and review projects to ensure these principles are implemented. • Ensure that site plans include adequate bike and pedestrian infrastructure and safety measures, through participation in Act 250. • Assist municipalities with scoping future bike and pedestrian facilities.	Lead	Municipalities, Vermont Agency of Transportation, GMT, Local Motion,	Continuous
	7.8.c	Promote Transportation Demand Management and Car/Bike Sharing programs	Promote Transportation Demand Management and invest in Car/Bike Sharing programs. Actions include: • Promote and support the Go! Vermont program that links travelers to a variety of transportation resources and choices. • Support the continued development of park-and-ride facilities as recommended in the 2022 Regional Park-and-Ride Plan. • Work with the CATMA to support employer programs to encourage telecommuting, carpooling, vanpooling, walking, and biking for employee commute trips. • Support CarShare Vermont’s programs.	Lead	Vermont Agency of Transportation, CATMA, CarShare VT, municipalities	Continuous
	7.8.d	Electric Vehicles	See the Energy Chapter.	Partner		
7.9		Rail Infrastructure	Support and enhance regional rail infrastructure for passenger and freight, and promote the upgrade of the Essex Junction to Burlington line (Winooski branch). Where needed, provide additional rail infrastructure to support safer, more efficient movement, handling, and storage of goods.	Support	Agency of Transportation, New England Central Railroad, Vermont Rail Systems, municipalities	Continuous
7.10		Transportation financing and funding	Encourage municipalities to implement local transportation financing and funding programs, such as TIF, Local Option Sales Taxes, Impact Fees, or Special Assessment Districts as appropriate. Monitor and participate in state and federal transportation financing reform efforts, such as the 2023 Vermont Legislature’s Act 62 study (Statewide Public Transit System), and the Land Use Review Board/VTrans Fair Share Cost Study.	Support	Municipalities, Vermont Legislature, Land Use Review Board, Vermont Agency of Transportation	Continuous

Goal 8: Housing - Strengthen and promote access to affordable, safe, energy efficient, accessible, and fair housing in all neighborhoods in Chittenden County for all people, and plan to accommodate a substantial majority of housing in centers, planned growth areas, and village areas.

		Action		CCRPC Role	Community Partner(s)	Timeframe
8.1		Policy and Regulatory Changes	Support policies that encourage growth and investment in the housing sector, and remove barriers to constructing affordable housing.	Support		
	8.1.a	Reduce regulatory redundancies	End duplication of review between Act 250, state agencies, and municipalities in areas planned for growth.	Support	Land Use Review Board, Agency of Commerce and Community Development, Vermont League of Cities and Towns, municipalities	Short
	8.1.b	Regulatory Reform	Focus efforts on creating conditions to achieve 90% of the regional housing target in areas planned for growth. Improve permitting predictability for well-planned projects in Downtown Centers, Village Centers, Planned Growth Areas, and Village Areas. Eliminate the ability to deny applications for housing development at the municipal level based on the “character of the area” criterion in 24 V.S.A. §4414. Explore ways to improve Vermont’s appeals system to make sure the appeals process for housing is expeditious and fair.	Support	Land Use Review Board, Agency of Commerce and Community Development, municipalities	Medium
	8.1.c	Reduce Permit Fees	At the state and municipal levels, consider fee waivers or other development review process incentives for projects that include affordable housing.	Support	Land Use Review Board, Agency of Natural Resources, municipalities	Short
	8.1.d	Infrastructure Investment	Target government funding to infrastructure that will support housing development and achievement of housing targets in areas planned for growth. Work with municipalities to revise infrastructure requirements with a goal of reducing costs for developers of housing projects. Work with state and municipal partners to plan and implement housing development projects funded via the Community Housing and Infrastructure Program (CHIP).	Support	Agency of Commerce and Community Development, municipalities	Short
	8.1.e	Inclusive Communities	Integrate a variety of housing types for all income levels for new/infill housing projects throughout the county, to provide for different incomes and access to jobs and services. Adopt inclusionary zoning requirements, or other incentive programs, to serve all needs.	Partner	Municipalities	Medium
	8.1.f	Rental Registry	Support a statewide rental housing safety inspection process and rental registry; while retaining existing municipal rental registry programs as is.	Support	Vermont Division of Fire Safety, municipalities	Medium
	8.1.g	Student Housing	Continue to work with the University of Vermont and Champlain College to develop specific plans to increase the percentage of students who reside in dedicated student housing.	Support	University of Vermont, Champlain College, City of Burlington	Medium
	8.1.h	Anti-Displacement	Work with state agencies and municipal partners to study and implement housing replacement policies to reduce gentrification and displacement.	Partner	Agency of Commerce and Community Development, municipalities	Medium

8.2		Increase Capital for Affordable Housing	Maintain or increase local and state resources that fund additional affordable housing, maintain existing affordable housing, and make housing more affordable. These actions include:			
	8.2.a	Federal Funding for Housing	Work with partner organizations and municipalities to secure new federal financial resources to support, convert, and construct new housing. Focus CCRPC use of EPA Brownfields Assessment and Clean-up funding on supporting housing development in Chittenden County.	Support	Vermont Housing and Conservation Board, Agency of Commerce and Community Development, affordable housing partners, municipalities	Short
	8.2.b	State Funding for Housing	The state should fully fund the Vermont Housing and Conservation Board, with funds supporting an increase in Chittenden County’s stock of permanently affordable housing. Sustain state bonding investment for capital and infrastructure investments in service of more housing. Work with institutions, businesses, and philanthropy to invest in housing for families. Finally, create avenues for social investment financing.	Partner	Vermont Housing and Conservation Board, Agency of Commerce and Community Development, affordable housing partners	Short
	8.2.c	Planning Funding	The state should fully fund the Regional Planning Commissions, Municipal Planning Grants, and the Vermont Center for Geographic Information, applying property transfer tax revenue to levels outlined in existing state statute 24 V.S.A. § 4306(2). This can assist toward reaching housing goals, as well as other state planning goals.	Lead	Regional Planning Commissions, Agency of Commerce and Community Development, Vermont Center for Geographic Information	Continuous
	8.2.d	BIPOC and New American Homeownership	Work with partners to create BIPOC and New American-specific financing for homeownership, and/or the creation of a state program to support this type of financing. Support advancement of down payment assistance programs.	Support	Vermont Housing Finance Agency, Vermont Housing and Conservation Board, affordable housing partners	Short
	8.2.e	Housing Trust Funds	Support the creation and use of municipal housing trust funds to assist in the financing of affordable housing. Explore and support inter-municipal collaboration on projects utilizing housing trust funds.	Partner	Vermont Housing Finance Agency, municipalities	Medium
	8.2.f	First-Time Homebuyers	Support financial programs that assist first-time homebuyers. Support advancement of down payment assistance programs.	Support	Vermont Housing Finance Agency	Medium
	8.2.g	Housing Preservation	Take steps to preserve existing affordable housing from being converted to market rate housing and continue to encourage shared equity for new-owner homes. Provide technical assistance to municipalities that choose to regulate short-term rentals. Provide technical assistance and project management to support the preservation of, and reinvestment in, existing mobile home parks. Encourage rehabilitation and maintenance of existing housing stock.	Partner	Vermont Housing Finance Agency, affordable housing partners, municipalities	Short
	8.2.h	Location	Work with partners to have affordable housing available in all neighborhoods that is climate resilient and proximate to amenities. See Action 1 in Land Use.	Support	Affordable housing partners, municipalities	Medium
	8.2.i	Private Funding for Housing	Work with state agencies and housing partners to cooperate with major employers with private capital to invest in housing.	Partner	Agency of Commece and Community Development, Vermont Housing Finance Agency, Vermont Housing and Conservation Board, affordable housing partners	Medium

8.3		Education and Collaboration	Work together to move toward a regional housing market that serves people of all backgrounds and incomes, addresses the persistent low rate of homeownership among Black Vermonters, supports business needs and economic growth, helps people retain their homes, and reduces houselessness. These actions include:			
	8.3.a	Building Homes Together and Regional Housing Targets	Work with partners to facilitate new home construction to achieve the regional housing targets. New homes should be primarily located in areas planned for growth. Build cross-sector and public support for housing development in areas planned for growth.	Partner	Champlain Housing Trust, Evernorth	Continuous
	8.3.b	Housing Needs Assessment and Data	Complete a regional housing needs assessment. Provide the public with the most accurate and up-to-date data to explain the region’s critical needs, expose inequities, and show any measurable progress towards and benefits behind new housing. Collect information about the availability of vacant commercial space in Chittenden County that could be converted into housing as a part of the assessment.	Lead	Vermont Housing Finance Agency, Agency of Commerce and Community Development	Short
	8.3.c	Housing for BIPOC Individuals and Families	Provide educational resources for municipalities, employers, and other stakeholders to assist with increasing housing access to the BIPOC community.	Partner	Champlain Housing Trust, Vermont Housing Finance Agency, Agency of Commerce and Community Development	Short
	8.3.d	Improve Development Outcomes	Train municipal officials and staff, the public, developers, banks, and real estate agents to promote better development practices that achieve a higher level of density with quality design.	Partner	Agency of Commerce and Community Development, municipalities	Continuous
	8.3.e	Tenant Support	Increase capacity for essential tenant supports, such as the CVOEO Vermont Tenants hotline, direct aid, and educational programs for renters.	Support	Vermont Housing Finance Agency, Champlain Valley Office of Economic Opportunity, Vemront Legal Aid	Short
	8.3.f	Media Coverage	Engage the media to ensure continued coverage of the housing crisis.	Partner	Vermont Housing Finance Agency, Champlain Housing Truest, Evernorth	Continuous
	8.3.g	Houselessness	Work with partners to reduce houselessness in the region and investigate best practices for addressing the social, emotional, and heath needs of those experiencing and transitioning out of houselessness into stable housing.	Support	Housing partners, Howard Center, Vermont Department of Health, municipalities	Short
	8.3.h	Resources	Obtain and allocate resources to support municipalities, or community-based organizations, to advance housing development in areas planned for growth, particularly housing solutions and supportive programming for community members facing acute or chronic houselessness. Support pro-housing groups and the development of messaging and other resources to promote housing.	Partner	Housing partners, Howard Center, Vermont Department of Health, municipalities	Continuous
	8.3.i	Municipal Support	Support and encourage municipal efforts to develop locally appropriate planning and implementation strategies that will help achieve local housing targets. Support development of housing choices for all income levels are available in rural, urban, and mixed urban and rural communities across the county.	Lead	Municipalities, Agency of Commerce and Community Development	Continuous
8.4		Living Conditions	Work with private and public partners to make sure that future housing in Chittenden County is designed to prioritize health, safety and inclusivity, taking into account the needs of diverse communities within the county.			
	8.4.a	Health	See Health Chapter.			
	8.4.b	Rental Inspections	Support policy that advances a safe, healthy, and fair rental market with established rules for inspection frequency, coverage of essential health and safety features, and mechanisms for enforcement to address non-compliance and foster accountability among landlords.	Support	Vermont Division of Fire Safety, municipalities	Medium
	8.4.c	Lead Abatement	Improve housing quality, and safeguard public health, by supporting initiatives for lead testing, remediation, and education. Strive for safe and healthy living environments for all residents.	Support	Vermont Division of Fire Safety, municipalities	Medium
	8.4.d	Universal Design	Work with private and public partners to incorporate universal design in Chittenden County in a manner that also accounts for high-quality design, especially in urban areas.	Support	Vermont Division of Fire Safety, housing partners, municipalities	Medium
	8.4.e	Quality	Support the investigation of a state-wide building code with the intent of making sure that the development and redevelopment of housing is high quality, durable, and resilient.	Support	Vermont Division of Fire Safety, housing partners, municipalities	Short

8.5		Fair Housing	Increase compliance with fair housing requirements to better address housing equity in the County, as described in the Vermont Fair Housing Action Plan from 2017 (or as amended) and the Burlington Assessment of Fair Housing.			
	8.5.a	Fair Rental Housing Education	Increase fair housing education and outreach for landlords, property managers, real estate professionals, and anyone involved in the sale, rental, or finance of housing. Work with the Vermont Refugee Resettlement Program, the Association of Africans Living in Vermont, Opportunities Credit Union, and other organizations to develop strategies for new Americans to quickly develop credit history. Create educational materials that encourage landlords to use alternative criteria for new Americans and other groups traditionally excluded from housing opportunities that don't penalize them for a lack of credit or rental history.	Support	Champlain Valley Office of Economic Opportunity, Vermont Legal Aid, Vermont Refugee Resettlement Program, Association of Africans Living in Vermont, housing partners	Short
	8.5.b	Fair Housing and Land Use Planning	Provide fair housing and land use planning training for land use professionals and municipal officials throughout the county.	Lead	Champlain Valley Office of Economic Opportunity, Vermont Legal Aid	Continuous
	8.5.c	Disability Laws	Identify gaps in municipal implementation of State Fair Housing laws and ADA compliance. One known gap (among many) is to ensure that municipal bylaws include language that explicitly permits officials to make reasonable accommodations for people with disabilities without delay or public input.	Partner	Champlain Valley Office of Economic Opportunity, Vermont Legal Aid	Continuous
	8.5.d	Enforcement	Increase enforcement and testing capacity of fair housing organizations, such as Vermont Legal Aid, particularly for classes protected only under Vermont law: marital status, age, sexual orientation, gender identity, receipt of public assistance, and victims of abuse.	Support	Champlain Valley Office of Economic Opportunity, Vermont Legal Aid	Short

Goal 9: Health - Promote preventative care, healthy lifestyles, and community wellness, and improve access to affordable healthcare services, while reducing healthcare disparities for all community members.						
		Action		CCRPC Role	Community Partner(s)	Timeframe
9.1		Invest in living conditions	Provide the basic needs of all people through access to healthy food, safe shelter, education, jobs, affordable housing, livable communities, and public transportation. Provide resources such as healthcare and affordable food in places that are easily accessible to everyone. Focus investment in communities that have been historically excluded from community power and resources.	Support	Municipalities, Vermont Department of Health, housing partners, advocacy/service organizations	Continuous
	9.1.a	Green Spaces	Develop and support projects that combat the urban heat island effect, especially in areas with perpetually affordable housing, such as urban tree plantings and parks.	Support	Agency of Natural Resources, affordable housing partners, municipalities	Continuous
	9.1.b	Food Access	Promote and support initiatives that enhance healthy and local food access (See Action 1.a in Working Lands).	Support	Vermont Sustainable Jobs Fund, Vermont Department of Health, municipalities	Medium
9.2		Health in All Policies	Support and prioritize projects that use the Health in All Policies (HiAP) approach (a collaborative approach to improving the health of all people by including health considerations in all decision-making processes).	Support	Vermont Department of Health, municipalities	Medium
9.3		Conduct Health Impact Assessments	Work with Vermont Department of Health to conduct Health Impact Assessments (HIA). A HIA is a process that helps evaluate the potential health effects of a plan, project, or policy before it is built or implemented. A HIA could identify potential positive and negative public health impacts of new transportation and land use projects. An HIA also identifies whether any populations will be more impacted by a project than others. A HIA provides practical recommendations to increase positive health effects and minimize negative health effects.	Support	Vermont Department of Health, municipalities	Medium
9.4		Create policies that protect against addiction and substance misuse	Reduce youth access and exposure to adult-only products (tobacco, alcohol, cannabis) by passing evidenced-based policies such as restricting retail promotion, preventing retail locations near schools, and designating substance-free outdoor public spaces. Support people in recovery and youth by normalizing and promoting substance-free events. Promote upstream approaches by working with communities to impact risk and protective factors and prevent substance use disorder.	Support	Vermont Department of Health, Northwest Vermont Prevention Network and partners, Municipalities	Continuous
9.5		Healthy Community Design	Create policies and environmental supports that increase access to active transportation, active recreation, and healthy foods.	Partner	Vermont Department of Health, Agency of Transportation, AARP Vermont, Local Motion, Municipalities	Continuous
9.6		Promote community wellness	See Social Connectedness Chapter.			
9.7		Collaborate	Collaborate with public health partners to improve health literacy, especially for marginalized populations, and protect against new emerging health threats (such as increased rates of mental health illnesses and Lyme Disease).	Support	Vermont Department of Health, municipalities	Short

Goal 10: Economy - Retain and support existing employers, grow living wages and high wage employment, and work to attract and sustain a greater diversity of businesses and people in the economy.						
		Action		CCRPC Role	Community Partner(s)	Timeframe
10.1		Attract New Workers and Expand Labor Force	Attract new workers of all skills sets, training, and expertise to the region, and remove existing barriers to workforce participation for existing residents, to combat the state-wide labor shortage due to the impacts of COVID-19, an aging population, and other structural barriers to labor participation. This includes improving the availability of housing.			
	10.1.a	Child Care	See Action 3 in Household Finance Chapter	Support	Department of Children and Families, municipalities	Medium
	10.1.b	Marketing and Support	Seek grant funding to support on-going marketing efforts by project partners and local employers to attract new workers to Chittenden County. Work collaboratively with the Stay to Stay network and other partners to better understand how to specifically market to BIPOC workers.	Support	Economic Development District Partners, Agency of Commerce and Community Development	Short
	10.1.c	Returnship Programs	Work with the Vermont Returnship Program to strengthen and expand programs that help experienced workers transition to new careers that maximize their existing knowledge, transferable skills, and job goals.	Support	Economic Development District Partners, Vermont Returnship Program, Agency of Commerce and Community Development	Short
	10.1.d	Livable Wage	Work with partners to support businesses that offer livable wages and are interested in assessing for wage stagnation, wage inequities, and the changing cost of living.	Support	Economic Development District Partners, Agency of Commerce and Community Development	Medium
10.2		Rules and Practices Restricting Access to Capital	Work with partners behalf of underserved populations to influence federal and state funders to provide flexibility when financing and making grants to underserved business and individuals in the regional community, based on insight gained as a part of the Community Navigator Pilot Program (CNPP). Similarly, CCRPC will work with partners to advance change among financial institutions and equity investor lending and investment to better serve socially and economically disadvantaged individuals (SEDI) and businesses.	Partner	Economic Development District Partners	Short
10.3		BIPOC Business Basics and Support	Work with EDD partners to develop a “business basics” course specifically for BIPOC small business owners in the “start-up” or early stages of developing their business. Work with EDD and state partners to develop and make available a step-by-step guide and a directory of programs, services, and technical assistance.	Support	Economic Development District Partners, Agency of Commerce and Community Development	Short
10.4		Hiring, Workforce Development and Retention	Work with partners to create and/or support trainings to help employers better understand the needs of immigrant and refugee communities and BIPOC workers. Build relationships with employees from underrepresented communities to better understand how to develop ways to meet workforce development needs and retention strategies. Determine ways to remove language barriers to workforce entry.	Support	Economic Development District Partners, Agency of Commerce and Community Development, Refugee Resettlement Program, Association of Africans Living in Vermont, Vermont Professionals of Color Network	Medium
10.5		Women-Owned Business	Collaborate with the Vermont Women’s Fund and other partners to implement projects that address the specific needs of women-owned businesses as identified in the This Way Up! campaign.	Support	Economic Development District Partners, Agency of Commerce and Community Development, Vermont Women's Fund, Center for Women and Enterprise	Medium
10.6		Just Transitions	Work with the Vermont Climate Council to develop public policy and business actions that will ensure the impacts of Vermont’s transition into a low or zero greenhouse gas emitting economy will benefit and support all residents of the state fairly and equitably.	Support	Economic Development District Partners, Agency of Commerce and Community Development, Vermont Climate Council	Short
10.7		Data	Ensure that all data collection conducted by a future WCVT EDD and CCRPC includes information about race and gender to more accurately understand and report on economic development efforts and populations served/impacted. Seek funding to assist with partners’ efforts to track identified CEDS indicators. Advocate for all state and federal economic data to include information about race.	Lead	Economic Development District Partners, United States Economic Development Administration, Agency of Commerce and Community Development	Continuous
10.8		Funding	Prioritize seeking economic development-related grant funding and technical assistance to support the needs of BIPOC and women-owned businesses.	Support	Economic Development District Partners	Continuous

10.9		Job Creation and Business Development	Support job retention and growth at existing high wage employers, expand economic diversification, and create a supportive ecosystem for entrepreneurs to create and grow businesses in the region.	Support	Economic Development District Partners, Lake Champlain Chamber of Commerce	Short
	10.9.a	High wage employers	Add high wage employment, attract businesses, and encourage the growth of those already here, including businesses in the following fields: information technology, communications and media (including information technology, e-commerce, and digital media); advanced manufacturing; higher education; clean tech/green tech; and health care and wellness.	Support	Economic Development District Partners, Agency of Commerce and Community Development, Lake Champlain Chamber of Commerce	Medium
	10.9.b	Economic Gardening	Practice economic gardening (growing the local economy from within, rather than attracting employers from outside the area) as the primary method of economic development. Create jobs by supporting local entrepreneurs and existing companies, especially those with local ownership, including employee ownership, and other connections to the community.	Support	Economic Development District Partners, Agency of Commerce and Community Development, Lake Champlain Chamber of Commerce	Continuous
	10.9.c	Access to Capital	Work with partners to develop and administer programs that provide low-barrier access to capital for start-up small businesses, particularly BIPOC and women-owned small businesses. This may include grants with low match, or no match, requirements. This may also include exploration of a shared-equity program for commercial properties similar to existing residential shared-equity programs in the region.	Support	Economic Development District Partners, Agency of Commerce and Community Development	Medium
	10.9.d	Innovation and Entrepreneurial Development	Work with GBIC to promote and expand support systems for entrepreneurs from every sector, and create a system of resources that is easily navigable at all stages of the innovation and entrepreneurial continuum.	Support	Economic Development District Partners, Agency of Commerce and Community Development	Long
	10.9.e	Regenerative Economy	Support a regenerative economic model that moves towards sustainability (see Working Lands Regenerative Economy Section).	Support	Economic Development District Partners, Agency of Commerce and Community Development	Long
10.1		Workforce Development and Employee Retention	Assist partner organizations (regional development corporations, educational institutions, and nonprofits), implement goals of the CEDS related to employee recruitment and retention, workforce training, and professional development opportunities for career advancement.	Partner	Economic Development District Partners, Agency of Commerce and Community Development	Long
10.11		Brownfields	Continue to seek funding from the EPA to fund brownfield assessment, site planning, and cleanup in Chittenden County and/or the West Central Vermont region.	Lead	Economic Development District Partners	Short
10.12		Underutilized Sites	Support partner efforts to develop master redevelopment plans for currently underutilized sites within the region, particularly closed college campuses and public schools, that could be used to support housing, commercial development, municipal uses, or community uses.	Support	Municipalities	Long
10.13		Tourism	See Scenic Recreational and Historic Resources Chapter.			
10.14		Creative Economy and the Arts	See Arts and Culture Chapter.			
10.15		Economic Development Coordination	Work with the state to implement the 2020 Vermont Comprehensive Economic Development Strategy. Coordinate with West Central Vermont CEDS partner organizations and pursue creation of an Economic Development District (EDD). Cooperate with Northwest Regional Planning Commission on their economic development efforts (due to the proximity and economic ties between regions). Support municipalities in local economic development efforts.	Partner	Economic Development District Partners, Agency of Commerce and Community Development, Municipalities, United States Economic Development Administration	Short

10.16		Industrial Site Locations	There is a limited supply of existing buildings or permitted sites left for high wage industrial or manufacturing businesses in the region. Additional sites need to be identified and carefully planned to meet employers’ needs for expansion or relocation in Chittenden County. The best opportunities for these sites are on vacant portions of land owned by major employers, within close proximity to, or already connected to, existing infrastructure services for long-term efficiency.	Partner	Greater Burlington Industrial Corporation, Municipalities	Medium
	10.16.a	Industrial Park Designations	CCRPC and GBIC will work with ACCD to have business/industrial parks recognized as benefit locations in state designation programs.	Partner	Greater Burlignton Industrial Corporation, Agency of Commerce and Community Development, municipalities	Medium
	10.16.b	Use Existing Industrial Lands	Prioritize industrial development on land that is already zoned for industrial uses, or has been used for industrial processes in the past. This will help concentrate industrial development in areas planned for growth.	Partner	Greater Burlington Industrial Corporation, municipalities	Continuous
	10.16.c	Industrial Land Needs Analysis	Prepare a longevity analysis to project when to add fully serviced and permitted land to the regional inventory.	Partner	Greater Burlington Industrial Corporation, municipalities	Short
10.17		Farm to Plate	See Working Lands Chapter.	Support	Vermont Sustainable Jobs Fund, Agency of Agriculture, and partner organizations	Medium

Goal 11: Household Financial Security- Support multi-pronged efforts that foster economic security so that all households in Chittenden County can not only meet their basic daily needs, but also prepare for the future and achieve a high quality of life.

	Action		CCRPC Role	Community Partner(s)	Timeframe
11.1	High Wage Employers	See Economy Chapter.			
11.2	Access to Capital	See Economy Chapter.			
11.3	Childcare	Support working families by ensuring that their children ages 0 – 5 have adequate access to high quality, affordable early learning and education programs. Work with stakeholders in the childcare field (e.g. Building Bright Futures, existing childcare providers, school districts, etc.) and potential funders (e.g. VCDP, NBRC, and EDA) to identify existing sites that could support childcare facilities (particularly for infant care), and assist with accessing grant/loan funds for costs associated with business start-up, workforce development, and construction. Improve access and funding for pre-kindergarten programs so that children are ready to learn by the time they begin kindergarten. Support early care and education providers as they develop skills and knowledge to care for and educate children. Support increased public investment in childcare and programs designed to provide childcare for students enrolled in post-secondary education (e.g. Child Care Access Means Parents in School Program).	Support	Department of Children and Families, Municipalities, The Family Room, Association of Africans Living in Vermont	Medium
11.4	New American / Refugee Programs	Aid municipalities, and associated non-profits, seeking to establish designated refugee resettlement community programs within the region. These programs provide refugees with direct assistance with securing housing, employment, education/training, and other essential support, like translation, to overcome social, cultural, and economic barriers.	Support	Champlain Valley Office of Economic Opportunity, Vermont Legal Aid, Vermont Refugee Resettlement Program, Association of Africans Living in Vermont, housing partners, municipalities	Long
11.5	Housing Costs	Support affordable housing creation and initiatives including the actions in the housing chapter (See Housing Chapter). Work with municipal and housing partners to explore other housing affordability programs that could help control housing costs. This may include rent control and rent-to-own programs.	Support	Municipalities, housing partners	Short
11.6	Transportation Costs and Access	Support policies that prioritize equitable access to transportation systems by identifying and addressing barriers faced by underserved communities, ensuring all community members, regardless of physical ability and income, have safe, reliable, and affordable transportation options.	Support	Municipalities, Green Mountain Transit, Agency of Transportation, Local Motion, Vermont Center for Independent Living, Vermont Department of Disabilities, Aging, and Independent Living, Vermont Center for Disability Rights	Short

Goal 12: Emergency Management - Protect Chittenden County communities from natural, technological, and societal hazards through prevention, preparedness, response, recovery, and mitigation.						
		Action		CCRPC Role	Community Partner(s)	Timeframe
12.1		Preparedness	Assure all municipalities and social service organizations have well-developed emergency preparedness plans.	Partner	Vermont Emergency Management, municipalities	Continuous
	12.1.a	Coordination	Encourage collaboration and coordination between local, regional, and statewide organizations in preparedness and response.	Partner	Vermont Emergency Management, municipalities	Continuous
	12.1.b	Health Equity	Promote health equity by identifying the most vulnerable communities, assessing their needs, and incorporating them into emergency plans.	Support	Vermont Emergency Management, Vermont Department of Health,municipalities	Long
	12.1.c	Take an all-hazards approach	Take an all-hazards approach that can be used in weather, biological, chemical, radiological, and terrorist emergencies. In addition, municipalities and organizations should develop systems that monitor for impacts of climate change that affect human health or safety and build climate resiliency into all systems.	Partner	Vermont Emergency Management, municipalities	Medium
	12.1.d	LEMPs	Assist with annual updates to municipal Local Emergency Management Plan.	Partner	Vermont Emergency Management, municipalities	Continuous
12.2		Mitigation and Hazard Mitigation Plans	Update the Chittenden County All Hazards Mitigation Plan, and related municipal hazard mitigation plans, as needed.	Partner	Vermont Emergency Management, municipalities	Short
12.3		Response	Continue to support the efforts of our municipal partners to provide high quality and efficient emergency services to Chittenden County.	Support	Vermont Emergency Management, municipalities	Continuous
12.4		Recovery	Continue to assist with staffing State Emergency Operations Center and conducting local liaison reporting during major disasters.	Partner	Vermont Emergency Management, municipalities	Continuous
12.5		Equitable Emergency Management	Work with state and municipal partners to identify communities vulnerable to disasters assess their needs, and ensure planning, mitigation, response and recovery operations center their unique circumstances. Ensure information is conveyed widely and accessibly through multiple channels.	Support	Vermont Emergency Management, municipalities	Medium
12.6		Social Response	See Action 6 in Social Connectedness.	Partner	Vermont Emergency Management, municipalities	Medium

Goal 13: Infrastructure and Facilities - Advance infrastructure and facilities that support centers and planned growth areas while protecting ecological systems.						
		Action		CCRPC Role	Community Partner(s)	Timeframe
13.1		Infrastructure and Resilience	Actively participate in the planning, funding, and construction of infrastructure projects needed to strengthen the regional economy. Projects should support equity, smart growth principles, and economic resilience in response to climate change and other disasters.	Partner	Agency of Commerce and Community Developemnt, Agnecy of Transportation, Greater Burlington Industrial Corporation, Economic Development District Partners, municipalities	Continuous
	13.1.a	Regional Development Corporation (RDC) Priority Project List	Annually update Regional Priority Project Lists, and seek funding to plan and implement projects.	Partner	Agency of Commerce and Community Development, Greater Burlington Industrial Corporation	Continuous
	13.1.b	Tax-Increment Financing	Support the creation of Tax Increment Financing (TIF) Districts within the region, as well as project-specific TIFs.	Partner	Municipalities, Vermont League of Cities and Towns	Short
	13.1.c	Infrastructure Planning and Construction	Implement regional infrastructure planning and construction projects that support economic development, and housing in areas planned for growth in order to achieve regional and municipal housing targets, as outlined in Goal 5 of the West Central Vermont CEDS and Chapter 8 - Housing, including the following: Municipal Water and Wastewater; Broadband, Transportation, Electric Vehicle Charging; Electric Transmission and Distribution.	Partner	Economic Development District Partners, electRICT distribution utilities, Vermont Electric Power Company, municipalities	Short
	13.1.d	Regional Infrastructure and Resource Mapping	Build further understanding of infrastructure needs and opportunities by pursuing a regional wastewater study. Pursue research to better understand groundwater resources and constraints.	Lead		Medium
13.2		Solid Waste	Support the efforts of Chittenden Solid Waste District, and statewide partners, to study, identify, and permit an additional solid waste disposal site(s) that can serve northern Vermont.	Support	Champlain Solid Waste District	Long
	13.2.a	Plastic	Encourage and support state and local rules limiting the use of single-use plastics.	Support	Agency of Natural Resources and municipalities	Short
13.3		Underutilized Sites	Support partner efforts to develop master redevelopment plans for currently underutilized sites within the region, particularly closed college campuses and public schools, that could support housing, commercial development, or municipal/community uses.	Partner	Economic Development District Partners, municipalities	Medium
13.4		Broadband	Coordinate with the VT Community Broadband Board, municipalities, and the Chittenden County Communications Union District to ensure all unserved and underserved locations have access to high-speed internet.	Partner	Chittenden County Communication Union District, municipalities	Continuous
13.5		Multi-jurisdictional services	Examine and advance appropriate, efficient, and effective governance structures to deliver improved services, including: Supervisory Unions, Chittenden Solid Waste District, Champlain Water District, Winooski Valley Park District, Green Mountain Transit, Chittenden County Sherriff, Chittenden Unit for Special Investigations, and 911 dispatch.	Partner	Supervisory Unions, Chittenden Solid Waste District, Champlain Water District, Winooski Park District, Green Mountain Transit, Chittenden County Sherriff, Chittenden Unit for Special Investigations, and 911 dispatch.	Long
13.6		Public Services	Support municipal projects to develop and redevelop public facilities and services such as public wifi, libraries, restrooms, laundromats, etc.	Partner	Municipalities	Short

Goal 14: Arts and Culture - Increase and support access and participation in the arts and cultural opportunities.						
		Action		CCRPC Role	Community Partner(s)	Timeframe
14.1		Public Art Programs	Work with partners to implement public art programs that integrate artistic installations into public spaces, such as parks, streetscapes, and buildings. This can enhance the visual appeal of the region, create opportunities for local artists, and engage the community.	Support	Municipalities, Burlington City Arts, Vermont Arts Council, Agency of Commerce and Community Development	Long
14.2		Creative Economy and the Arts	Support the creative economy by helping implement projects identified in the 2021 CreateVT Action Plan for Vermont’s Creative Sector.	Support	Agency of Commerce and Community Development, Economic Development District Partners, Vermont Arts Council	Medium
Goal 15: Scenic, Recreation and Historic Resources - Conserve and protect valued scenic, recreational, and historic areas and resources.						
		Action		CCRPC Role	Community Partner(s)	Timeframe
15.1		Tourism	Cooperate with partners, including the Vermont Convention Bureau, local chambers of commerce and downtown organizations, the Vermont Outdoor Recreation Economic Collaborative, and Lake Champlain Byway to support growth of the tourism industry.	Support	Vermont Convention Bureau, local chambers of commerce and downtown organizations, the Vermont Outdoor Recreation Economic Collaborative, Lake Champlain Byway, municipalities	Continuous
15.2		Outdoor Recreation	Collaborate with the Vermont Outdoor Recreation Economic Collaborative, Vermont Trails and Greenways Council, and regional recreation collaboratives led by the regional planning commissions to further the economic interests of the outdoor recreation economy.	Support	Vermont Outdoor Recreation Economic Collaborative, Vermont Trails and Greenways Council, municipalities	Continuous
15.3		Cultural Resources				
	15.3.a	Funding	Work with partners to identify funding to update municipal Historic Sites and Structures Surveys originally completed in the 1970s and 1980s.	Support	Vermont Division of Historic Preservation, municipalities	Medium
	15.3.b	Preservation	Work with partners to invest in the preservation of Chittenden County’s social history. This may include the creation of a museum or cultural center. Promote the preservation of cultural sites by engaging with diverse communities through culturally humble practices.	Support	Vermont Division of Historic Preservation, municipalities	Long
	15.3.c	Cultural Site Documentation and Protection	Support Indigenous-led documentation and protection of sacred and cultural sites, with respect for community control over sensitive information.			
15.4		Working Lands	See Working Lands Chapter			
15.5		Public Spaces	Support the establishment and maintenance of inclusive, accessible, and celebrated public spaces, including green spaces, recreation centers, and public gardens, to improve community health and social connectedness. (See Action 1.a in Health).	Support	Municipalities, Winooski Valley Park District	Continuous
15.6		Access	Encourage public and private actions to increase access to land for recreational, educational and cultural activities.	Support	Municipalities, Winooski Valley Park District, Agency of Natural Resources	Short

Goal 16: Civic Engagement - Foster trust in CCRPC, and in local governments, and ensure that Chittenden County community members have influence in political and non-political decisions that affect their lives, neighborhoods, and communities.

	Action		CCRPC Role	Community Partner(s)	Timeframe
16.1	Civics Training	Provide accessible and equity-oriented leadership development training for all civic leaders, to increase knowledge about, and encourage service on boards and commissions.	Partner	Municipalities, Vermont League of Cities and Towns	Continuous
16.2	Decrease barriers	Decrease barriers so that members of marginalized communities face when joining committees, selectboards, and commissions: hold meetings at accessible times and locations; provide organized, easy-to-understand onboarding tools; compensate people for their time; provide childcare, transportation assistance, interpretation and translation, and accounting for other accommodations that may make participation more inclusive and accessible.	Partner	Municipalities, Equity Advisory Committee community liaisons; Community organizations working with marginalized communities; Local restaurants; Association of Africans Living in Vermont	Medium
16.3	Cultural Humility Education	Support boards and commissions by increasing their knowledge and understanding about diverse populations, and the importance of inclusion and representation.	Partner	Municipalities, Equity Advisory Committee community liaisons	Continuous
16.4	Voting	Support increased access to local voting processes.	Support	Municipalities, Vermont Secretary of State, Vermont Public Interest Research Group	Continuous
16.5	Education	Invest in partner organizations that provide civics classes and create connection with civic opportunities, in order to engage more people in local and regional governance.	Support	Municipalities, Civics Organizations	Medium
16.6	Accessibilty	Improve accessibility of municipal and regional government processes, key documents, websites, and materials by avoiding the use of technical terms or jargon, providing translations, and communicating information through brief summaries and infographics whenever possible.	Partner	Municipalities	Continuous
16.7	Public Meeting Facilitation	Encourage and support decision-making and advisory bodies to establish systems and practices to effectively facilitate meetings, enable broad public participation and manage conflict using restorative practices.	Support	Municipalities, Community Justice Centers, The Creative Discourse Group, Facilitation consultants	Medium
16.8	Communicate	Encourage partners to implement a comprehensive and inclusive communication strategy that utilizes diverse platforms to ensure all community members are informed, engaged, and able to participate in regional planning processes.	Support	Municipalities, Equity Advisory Committee Community Liaisons	Medium

Goal 17: Social Connectedness - Foster social connections and supports for all people in their communities.					
	Action		CCRPC Role	Community Partner(s)	Timeframe
17.1	Provide Care	Assure that older adults and people with disabilities are well cared for. Support organizations and programs that enable aging in community, and provide support to family members who are caregivers (or provide care). Promote access to appropriate services, including transportation, for older adults and people with disabilities who need formal care in their daily living.	Support	Housing partners, Special Service Transportation Agency, Municipalities, Vermont Center for Independent Living, Vermont Center for Disability Rights, AARP Vermont, Age Well	Continuous
17.2	Create New Opportunities	Increase opportunities for residents to come together, interact, and network. Support organizations and businesses that bring diverse people together around myriad themes: arts and cultural events; recreational and leisure activities; civic engagement initiatives; educational workshops; family events; or any other activity that brings people together with a common interest.	Support	Municipalities, Community Centers, Community Organizations	Continuous
17.3	Public Spaces	See Action 5 in Scenic, Recreation and Historic Resources Chapter.			
17.4	Childcare	See Action 3 in Household Finance Chapter.			
17.5	Youth	Support organizations that offer dynamic and equitable youth community programming.	Support	Municipalities, supervisory unions, Association of Africans Living in Vermont, Winooski Parents & Students, The Family Room, Public Schools, United Way Prevention Network, Richard Kemp Center	Continuous
17.6	Social Response	Support local efforts to establish mutual aid organizations which strengthen social capital and community connections, especially in times of disaster. Enhance emergency management and public safety by integrating trained social workers into crisis responses.	Support	Municipalities, Vermont Emergency Management, The People's Kitchen	Medium