

DRAFT FOR DISCUSSION

Rural Resilience & Adaptation Subcommittee

Charge

(1) The Rural Resilience and Adaptation Subcommittee shall focus on the pressures that climate change adaptation will impose on rural transportation, electricity, housing, emergency services, and communications infrastructure, and the difficulty of rural communities in meeting the needs of its citizens. The Subcommittee shall:

- (A) develop a municipal vulnerability index to include factors measuring a municipality's population, average age, employment, and grand list trends; active public and civic organizations; and distance from emergency services and shelter;
- (B) develop best practice recommendations specific to rural communities for reducing municipal, school district, and residential fossil fuel consumption; fortifying critical transportation, electricity, and community infrastructure; and creating a distributed, redundant, storage-supported local electrical system;
- (C) recommend a means of securely sharing self-identified vulnerable residents' information with State and local emergency responders and utilities;
- (D) recommend tools for municipalities to assess their climate emergency preparedness, evaluate their financial capacity to address infrastructure resilience, and prioritize investment in that infrastructure; and
- (E) utilize Vermont Emergency Management biennial reports to recommend program, policy, and legislative changes that will enhance municipal resilience to increased hazards presented by climate change.

The Vermont Climate Plan is also required to include specific initiatives, programs, and strategies that will:

- (1) reduce greenhouse gas emissions from the transportation, building, regulated utility, industrial, commercial, and agricultural sectors;
- (2) encourage smart growth and related strategies;

Pathway

Nothing has had a greater impact on today's energy sector, greenhouse gas emissions, transportation, electricity, housing, emergency services, and communications than how and where Vermont builds. Not only are these key determinants of housing and transportation emissions, but household affordability, and social connections and supports, too. When daily destinations are closer together, it saves time, saves community capital, saves energy, and reduces emissions compared to dispersed patterns. Continued and increased dispersal is likely to make Vermont less affordable and more vulnerable to climate change.

Achieving resilience will require Vermont to mitigate existing patterns of development and adapt future development patterns to become more resilient. [Growing Cooler](#) and [Moving Cooler](#), 2008 studies published by the Urban Land Institute and partially funded by EPA, concluded that compact growth

combined with smart transportation investments can significantly reduce vehicle miles traveled and carbon emissions compared to dispersed development.

State Designation Reform

Reform State Designations to encourage more compact, convenient, and cost-effective development will help Vermont reduce its emissions as it grows and develops.

The village center, downtown, neighborhood development area, new town center and growth center designation were created at a different time for different purposes. Over 250 communities are designated and there has never been a better time to modernize the programs that support growth and development-ready places to make Vermont stronger, wealthier, and more resilient.

Funding is needed to hire a consultant to lead a process to combine and simplify the programs to designate Vermont's settlement areas, ensure communities adopt local policies, and have access to programs that provide a mix of housing choices to rent or buy, are equitable and vital, and take action to reduce emissions and become more resilient.

Smart Growth Housing & Jobs

Meet the incredible demand for more housing in locations where people are less reliant on a personal vehicle for every trip is one of the best ways to reduce emissions—while also addressing the Vermont labor shortages and our affordable housing crisis.

Transportation is a prerequisite for participating in Vermont's economy and many people spend many hours driving to work or to meet their daily needs because it's unsafe, inconvenient, or impossible by any other means. At the same time, employers are struggling to attract workers due to the quality of housing stock, limited housing supply and high cost of both rental and ownership.

Once in a lifetime state and federal funding can be deployed to create affordable housing in places with good access to jobs and services. The following recommendations would help make Vermont more affordable, grow the economy and allow more Vermonters replace longer car trips with shorter ones, or meet their needs by walking or biking or transit.

Cross-Agency & Intergovernmental Strategies

Create interrelated strategies including enhanced community engagement, education and outreach, improved municipal, regional and state planning, data collection and analysis to track outcomes, state agency coordination and collaboration, regulatory reforms, leadership and funding.

- **Tax Credit Increase.** Relieve large forest block and working lands from parcelization pressures by increasing the tax credits to revitalize neighborhood housing in and around settled areas (S.101 proposed a \$1.75M expansion of the tax credits to NDAs)
- **Infill Missing Middle Housing Design.** Design and build more infill middle housing in downtowns and villages centers (\$3M Sen Leahy Proposal with VLCT, DHCD, VHFA, and RPCs)
- **Manufactured Housing Tax Credit.** Increase manufactured housing tax credits to replace older and inefficient homes (also included S.101)
- **Accessory Dwelling Unit Production Study.** Investigate how to increase the number of accessory dwelling units (Sen ED, AARP, ACCD)

- **Priority Housing Projects Unit Increase.** Support rural housing production by removing the population-based caps on the Act 250 exemption for priority housing projects (ANR, NRB, ACCD, housing advocates)
- **Agricultural Soil Mitigation Fees & Smart Growth Locations.** Reduce the cost of housing by eliminating agricultural soil mitigation fees in areas served by municipal sewer and water
- **Multi-Modal Hub Housing Development.** Prioritize funding for mixed-use developments near transit hubs in regional and rural centers (ACCD, VHFA, VHCB)
- **Complete Streets.** Build safer, complete streets that allow more people to shift from driving to walking, bicycling, and transit – as well as increase the value and livability of real estate adjacent to busier streets. Work would include updates to street design standards, reform complete street statute, and funding for scoping and construction (VTrans, ACCD), and reform state statutes that treat multimodal transportation differently than roads and bridges and disadvantage rural communities and communities with fewer resources. Reward communities that adopt complete streets policies and practices.
- **Electric Vehicle Charging Equipment.** Continue investment and the siting EVSE in smart growth locations: large institutions, downtown and village centers, major employment sites, and multi-family housing.
- **E-Bike & Last-Mile Rideshare Incentives.** Create an e-bike and local ride-share incentives program for ‘last-mile’ transit in rural areas
- **Land Value Taxation.** Pilot a land value taxation study in five communities to evaluate grand list shifts and incentivize smart growth as taxes are levied based only on the value of the underlying land and not on the value of any buildings or other improvements to the site. More info [here](#) (ACCD, Tax)
- **Gray Infrastructure.** Develop a long-term strategy for funding and financing infrastructure -- many communities around the state do not have the necessary infrastructure, (wastewater, water and stormwater infrastructure in particular) to support compact development. This should be a priority state-led planning, design, engineering, and scoping effort that is not reliant upon towns taking the initiative.
- **Fix It First Investments.** Adopt a “fix it first” policy for state financed infrastructure investments; strengthened and consistent state policy across agencies (ANR, VTrans, BGS, ACCD)
- **Stormwater & Green Infrastructure.** Increase investment in stormwater systems and green infrastructure to better manage heavier storm flows and reduce the amount of runoff; adopt a statewide grading code and inspection and permitting system (ANR, ACCD)
- **Building & Construction Workforce.** Provide workforce training and development to create an apprentice program to create more homegrown, rural builders (VDOL, state colleges)
- **Weatherization for High Need Communities.** Enhance location efficiency by targeting Efficiency Vermont and weatherization investments to buildings in energy cost-burdened communities and communities with greater concentrations of older structures, rental property, and low and moderate incomes (ACCD, EVT)
- **Redevelopment Authority.** Create a sitewide redevelopment authority to bank land, underwrite acceptable risk address blight, tackle vacancy, brownfields, improve building flood resilience, and plan for new neighborhood infrastructure/development (based on program in Maine)
- **Open Remote Meetings & Online Collaboration.** require remote meeting options (at minimum, call-in option) for all meetings of public bodies; allow fully virtual meetings of public bodies with guidelines similar to the state of emergency; evaluate options for online collaboration in preparation for a meeting that can be done with transparency.

Choices & Futures

Fund research by consultants to model development choices that can help Vermonters see how individual decisions can reduce emissions, improve our resilience, economy, affordability, diversity, and quality of life.

Behavioral changes to support Vermont's traditional, compact development patterns are critical to tackling climate change. However, our inability to think rationally about the consequences of our development choices leaves us grossly underprepared for when bad things happen (like flooding). A study with publicly accessible data, infographs to support an education/marketing campaign get Vermonters thinking about the connection between land use and emissions; land use and affordability; land use and equity, the economy, quality of life, etc.

State, Regional and Municipal Planning and Regulation

Modernize planning governance and strategic investments.

Land use decisions in Vermont are largely implemented at the local level by approximately 8,000 volunteers, with very few resources and tools to support them. Local plans, failure to plan for and implement infrastructure necessary to develop housing at a meaningful level, and regulations can make it difficult create new housing options. Many of the regulations are outdated and, if implemented, would not result in smart growth development pattern and could further exacerbate risks posed by flooding and fluvial erosion. New development, even in smart growth locations, is often built at densities lower than allowed by regulations because of concerns of neighbors or local development boards as well as the absence of infrastructure to support development that local planning might otherwise allow. Additional investment is needed to

- **Local & Regional Planning.** Increase funding for local and regional planning- volunteers cannot be expected to do this alone.
- **Training & Continuing Education.** Establish training and mandatory continuing education requirements for chairs and members of planning commissions, development review boards, zoning and floodplain administrators, and others involved in the planning and zoning process.
- **Development-Ready Atlas.** Create a development ready zoning atlas to determine what can be built where, promote housing equity and affordability, promote efficient locations for new commercial and mixed-use growth and prepare the state for climate migrants (A similar project is [here](#))
- **Zoning Modernization.** Modernize zoning to create more housing choices and improve community resilience
- **Data Center.** Develop a 'data center' where information can be deposited, accessed and shared
- **Flood Resilience Toolkit.** Create a tool kit to promote regulatory and non-regulatory options to protect and restore flood plains, flood ways, and river corridors
- **Improved Regulatory Coordination.** Improve the predictability and timeliness of state permitting by creating a regulatory coordination platform (see Colorado's Office of Regulating Agencies) that looks at permitting from the customer and policy perspective and resolves regulations working at counter-purposes
- **Floodplain & River Corridor Administration.** move floodplain and river corridor policy and policy administration to the state, with local options for more rigorous policies and implementation. Life/safety policy should not be a municipal planning option.
- **Location Efficiency Recognition in Energy Code.** Update building energy codes to recognize location efficiency, the total energy cost of housing, and incentivize smart growth (ACCD, PSD)

- **Integrated Building Codes.** Houses are organized around integrated building systems; the state should adopt building codes for structures, grading, plumbing/gas, electrical, and efficiency and an inspection and permitting system to support professional building trades, and to better ensure safe and quality homes for all.
- **Participation & Equity.** Engage rural, under-resourced, and marginalized populations in climate action plan processes
- **Social Cohesion.** build social cohesion needed to limit economic and health inequities of climate change
- **Research-Led Goal Attainment.** Improve the state climate action plan with further study and the adoption of specific goals
- **Best Practice Policies.** Develop specific implementation policies to strengthen community resilience and adaption implement regional and local mitigation and adaption projects
- **Energy Siting Regulations.** Update Title 24, Chapter 117 to incorporate basic energy and siting standards into local regulations.
- **Strengthen Planning & Infrastructure Investment.** Coordinate related planning efforts and public investments in infrastructure
- **Planning & Development Act Reform.** Reform Chapter 117 by hiring a consultant to engage stakeholders in a conversation about state land use laws that enable shorter and more accessible regional and local plans, statewide requirements on housing density in areas with sewer and water capacity, excellence in site design, and extended permit validity periods prior to construction starts.

Definitions

(1) **“Adaptation”** means reducing vulnerability and advancing resilience through planned and implemented enhancements to, or avoiding degradation of, natural and built systems and structures.

(3) **“Mitigation”** means reduction of anthropogenic greenhouse gas emissions, and preservation and enhancement of natural systems to sequester and store carbon, in order to stabilize and reduce greenhouse gases in the atmosphere.

(4) **“Resilience”** means the capacity of individuals, communities, and natural and built systems to withstand and recover from climatic events, trends, and disruptions.