



CHITTENDEN COUNTY RPC
Communities Planning Together

CCRPC Long Range Planning Committee

AGENDA

DATE: Wednesday, December 9, 2015

TIME: **4:00 p.m. to 6:00 pm**

PLACE: CCRPC Office, 110 West Canal Street, Suite 202, Winooski, VT.

1. Welcome – 5 minutes
2. Approve Minutes from October 14, 2015* - 5 minutes
3. ECOS Plan Amendments – 100 minutes (25 minutes per topic)
 - a. Growth Relative to Adjacent Regions*
 - b. Flood Resiliency*
 - c. Revisions to previously reviewed sections: Earth Extraction, Utilities and Facilities and Child Care*
 - d. TMDL edits – brief discussion on what we may add to the update
4. Next Meetings – 5 minutes
 - Tuesday, January 12, 2016 from 4pm to 6pm**
 - Wednesday, April 13, 2016 from 4pm to 6pm**
5. Adjourn

*=attached to agenda in the meeting packet

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



CHITTENDEN COUNTY RPC

Communities Planning Together

CCRPC Long Range Planning Committee

Minutes

Wednesday, October 14, 2015

4:00 p.m. to 6:00 pm

Location: CCRPC Office, 110 West Canal Street, Suite 202, Winooski, VT.

Attendees: Justin Dextrauder (Chair), Bob Henneberger, Jeannine McCrumb, Edmund Booth, Andrea Morgante, and Heather Danis

CCRPC Staff: Melanie Needle, Emily Nosse-Leirer and Regina Mahony

1. **Welcome and Introductions.** The LRPC introduced themselves and explained their affiliations.
2. **The Task Ahead and ECOS Plan Organization 101.** Regina Mahony gave an explanation of the Regional Plan evaluations that were done state wide, and explained the sections of the ECOS Plan that were found be inadequate: Earth Extraction, Utilities and Facilities, Child Care, Growth Relative to Adjacent Regions and Flood Resiliency. These sections of the Plan need to be amended and adopted by June 2016. Regina Mahony then provided the LRPC with an overview on the organization of the ECOS Plan and explained that many of the suggested edits are within Chapter 2 (goals, trends/issues and indicators) and a few are located in Chapter 3 (strategies and actions).
3. **ECOS Plan Amendments.** Staff review the proposed amendments to the following sections and the LRPC provided comments:
 - a. Earth Extraction – The LRPC provided a number of comments to try to bring this information more up to date than the data we have from a study done in 1993 including taking a look at the Hinesburg Sand and Gravel Co./CSWD lawsuit over the Redmond Road sand pit area and adding Whitcomb stone in Colchester (not just sand and gravel in the County). There was also a suggestion to mention that we have a lot of small grandfathered pits that are lacking reclamation plans. It may also make sense to look at the issue from the perspective of how much sand and gravel municipalities are using on their roads. Regarding action 3.c we should recommend

that reclamation plans include a diversity of plants for revegetation.

- b. Utilities and Facilities – Regarding schools the LRPC suggested that we had some basic numbers about how many supervisory unions, schools and students there are. It may make sense to include how much our schools contribute to employment in the County. It was suggested to simply include a reference to where information on school facility needs can be found rather than including a laundry list in the Plan. Regarding libraries the LRPC recommended that we mention the reciprocal agreements, look at whether Shelburne is another municipality that may need a library expansion or improvement, and ask the three municipalities that don't have libraries if they have plans for one and describe accordingly. Regarding energy the LRPC suggested that the capital project included in the draft text doesn't relate to the paragraph before. Regarding communications infrastructure the LRPC recommending removing the reference to T-1 capability as this is old, broadband is newer and better. No changes were recommended for the solid waste section. The LRPC discussed what to include for the government/administrative facilities – it was recommended that we think about this from an accessibility standpoint (what public buildings are accessible), as well as reciprocal agreements and shared facilities. Staff will look into this further. Regarding recreation facilities the LRPC suggested that we add in some language about the lake, boats and marinas. Regarding hospitals the LRPC recommended that we don't list specific facilities but the numbers of them that exist (i.e. # of primary care providers, # of long-term care facilities) as well as more general descriptions of the other direct care facilities.
 - c. Child Care – This section needs to be cut-down quite a bit. Melanie Needle provided an overview of the Child Care section and the LRPC identified a few other issues that should be mentioned: no child care whatsoever for third shift, not a lot of center based rural programs and home care, lack of quality care (and high licensing requirements), and lack of availability. There was general consensus to make this section more about issues than the data. We can simply refer to Child Care Resources for the data as it changes quite frequently. Also mention generally the importance of locating these facilities in appropriate locations (next to parks, away from busy streets, etc.). The goals should be based on Building Bright Futures top priorities and what correlates appropriately to the ECOS Plan. There were also specific recommendations to combine actions 1, 2 and 5, and delete #3.
4. **Next Meetings.** The following list includes the proposed timeline for the remaining LRPC meetings:
Wednesday, December 9, 2015 from 4 to 6 pm
Tuesday, January 12, 2016 from 4pm to 6pm
Wednesday, April 13, 2016 from 4pm to 6pm
 5. **Adjourn.** The meeting adjourned at 5:45pm.

4.1.3 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 regional planning commissions 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).

Chittenden County is bordered to the north by Grand Isle and Franklin Counties, which are served by the Northwest Regional Planning Commission. The ECOS Plan is compatible with the NRPC 2015 Regional Plan. Most bordering areas are designated as Rural in the ECOS Plan and as Agricultural Resource, Rural or Conservation and Forest Resource in the NRPC 2015 Regional Plan. There are two areas near the border with Franklin County that should be monitored in the future. Any development near around 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 Conservation in Georgia in Franklin County. Development in the future should be monitored to ensure no adverse effects.

Chittenden County is bordered to the east by Lamoille County (served by the Lamoille County Regional Planning Commission) and Washington County (served by the Central Vermont Regional Planning Commission). The ECOS Plan is compatible with the Lamoille County Regional Plan: 2014-2022. The Lamoille County Regional Planning Commission's Future Land Use Map designates the areas bordering Chittenden County as Rural Residential, Forest Conservation or Agricultural Conservation. This is compatible with the ECOS Plan's designation of adjoining municipalities as Rural Planning Areas. The ECOS Plan is also compatible with the 2015 Amendment to the Central Vermont 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 designation of adjoining municipalities as Rural Planning Areas.

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 2011 Regional Plan. The Addison County 2011 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 Planning Areas. There are two possible points of conflicts between future land uses. In Hinesburg, a designated Enterprise Zone is Hinesburg borders a Rural and Agricultural area in Starksboro. In Ferrisburgh, a designated Village and Commercial/Industrial area borders a Rural Planning Area in Charlotte. Development in the future should be monitored to ensure no adverse effects.

Beyond the abutting land designations as described above, it is likely that there is housing pressure on the surrounding regions based on a lack of housing within Chittenden County. This is evidenced by a low vacancy rate in Chittenden County, and the number of commuters from outside of the region. Continued efforts to increase the housing stock within the areas planned for growth in the County will hopefully minimize this pressure on the surrounding regions.

CCRPC has also reviewed the goals of 24 VSA 4302 and concluded that this ECOS Plan is consistent with those goals (that is, implementation of this ECOS Plan will result in substantial progress toward attainment of the goals established in 24 VSA 4302).

Flood Resiliency – INCORPORATE INTO:

Section 2.2.1 – Ecological Systems – River Corridors are already mentioned here, recommend adding a reference to the AHMP and Tactical Basin Plans.

Section 2.3.3 – Public Safety, Criminal Justice & Hazard Mitigation – Recommendation to add Vulnerable Settlements section here.

Section 2.5.4 – Infrastructure & Facilities – Recommendation to add an Upland and Everywhere section here.

Section 3.2.2 – Built environment strategy – Recommendation to add a reference to Safer Areas here.

Section 3.2.3 – Improve safety, water quality and habitats of our waters strategy – Recommendation to add the 4 main Strategies from the draft AHMP here.

I've outlined what we should do regarding flood resiliency in accordance with this document: [Disaster Recovery and Long-Term Resilience Planning in Vermont, August 2013](#). This was the result of the U.S. Environmental Protection Agency (EPA) Office of Sustainable Communities and the Federal Emergency Management Agency (FEMA) partnering with the state of Vermont to provide assistance with requested flood planning and preparation assistance. This document recommends addressing flood resiliency through the following four areas: River Corridors, Vulnerable Settlements, Safer Areas, Uplands and Everywhere.

I've included each section below with existing references in the ECOS Plan, and references to the Draft Chittenden County All Hazard Mitigation Plan strategies (included at the end of this document). The (AHMP) is currently being drafted and will be finalized in August, 2016. This will contain a detailed section on flood hazards as well.

River Corridors: Conserve land and avoid development in particularly vulnerable areas such as floodplains and river corridors. Already listed under 2.2.1, and Strategy 3.2.3, and flood and fluvial erosion hazard areas, and the areas to be protected are mapped on Map 5: Water Quality and Safety. Note: we will need to decide if we need to add the River Corridor to this map or not. At the moment the map is not completely accurate as it does not include the FEH areas, and we'd rather wait until this is incorporated. It is possible this will happen in the next few months.

The EPA guide calls for the following four action steps to address flood resiliency in the river corridor areas:

- Acquire or protect land in flood-prone locations and remove vulnerable structures – these areas should be identified and prioritized in the Tactical Basin Planning program. CCRPC will work with ANR and the municipalities in developing these Plans and prioritizing these areas. And see Strategy #4 below.
- Encourage agricultural and other land owners to implement pre-disaster mitigation measures – This will likely be addressed within the Tactical Basin Planning process. See Strategy #2 below.
- Adopt river corridor/fluvial erosion hazard zoning – The majority of these areas are already protected in Chittenden County. Already listed in Section 3.2.3.1.c. and in Strategy #1.2 and 1.3 below.
- Adopt agricultural or open space zoning – Already listed in Section 3.2.4.

Vulnerable Settlements: Where development already exists in vulnerable areas, protect people, buildings and facilities to reduce future flooding risk. While the AHMP includes much more detail on these hazards, particular issues identified regarding vulnerable settlements include:

- Map X (in the AHMP) maps all structures, including bridges and culverts, in the floodplain. In Chittenden County there are 866 structures (1.5% of total County structures) in flood-prone locations as identified in detail in the AHMP and municipal Annexes. Of these structures, X are considered to be critical facilities. The AHMP also identifies undersized bridges and culverts. **Already in 2.3.3, but should add number of critical facilities.**

The EPA guide calls for the following six action steps to address flood resiliency in the vulnerable settlement areas:

- Finance traditional protection methods – See Strategy #2 below.
- Upgrade zoning regulations to protect structures that are rebuilt - See Strategy #1.2 and 1.3 below.
- Upgrade or adopt building codes to promote safer development – Building codes are probably not realistic throughout the County, but new development is covered by Zoning - See Strategy #1.2 and 1.3 below.
- Create new flood storage capacity through redevelopment – See Strategy #4.2 below.
- Orient buildings and activities towards the river – The majority of our municipalities don't allow new buildings.
- Relocate people and assets to less vulnerable areas – See Strategy #4.1 below.

Safer Areas: Plan for and encourage new development in areas that are less vulnerable to future flooding events. **All of this is already in Strategy 3.2.2 – Growth Strategy**

The EPA guide calls for the following four action steps to address flood resiliency in the safer areas:

- Identify locations suitable for development and redevelopment that are safer from flooding
- Adopt policies to encourage development in safer locations
- Remove zoning and other land use regulatory barriers to development in safer locations
- Target capital improvements to safer locations

Upland and Everywhere: Implement stormwater management techniques to slow, spread and sink floodwater. **Already in 2.2.1 (Ecological Systems), 2.5.4 (Infrastructure & Facilities), and 3.2.2 (Water Quality Strategy).**

The EPA guide calls for the following six action steps to address flood resiliency in the upland and everywhere areas:

- Address the management and regulation of roads, driveways, and parking lots – See new Municipal Roads Permit – Strategy #3.1 below.
- Explore watershed-wide stormwater management – Strategy #1.4 below.
 - Adopt stormwater management regulations that include green infrastructure techniques – Strategy #1.3 below.
 - Adopt tree canopy protection measures – **Already in Strategy 3.2.4.1.**
 - Adopt stream setback requirements and vegetated buffer requirements – See #1.2 below.

I recommend adding the following to 3.2.3 – Safety and Water Quality Strategy:

4. Flood Resiliency - Avoid new development in floodplains, fluvial erosion hazard areas, and land adjacent to streams, wetlands, and upland forests; eliminate the exacerbation of flooding and fluvial erosion; encourage protection and restoration of these areas; and plan for flood

emergency preparedness and response. With #'s 1 – 4 of the Draft AHMP Strategies (listed below) and a reference to the AHMP for more details.

Draft AHMP Strategies:

#1 Assist municipalities with development of plans, policies and zoning regulations that mitigate the following Hazards: Severe Thunderstorm, Flooding, Fluvial Erosion and Water Pollution.

1. Flood Resilience Planning: Provide assistance with drafting of required Flood Resiliency chapters in municipal plans including language and maps regarding fluvial erosion/river corridors and flooding, and references to the All Hazard Mitigation Plans and Tactical Basin Plans.
2. River Corridor Protection: As requested, provide assistance with mapping and development of regulatory language to preclude or minimize development within mapped River Corridors or fluvial erosion hazard areas.
3. Water Quality Bylaws: Provide outreach, mapping and technical assistance to municipalities concerning adoption of zoning bylaws and other measures to improve water quality. Promote the use of Low Impact Development principles and Green Stormwater Infrastructure techniques in municipal Land Development Regulations to restore or maintain pre-development ecological and hydrological function through the protection, enhancement, or mimicry of natural processes.
4. Stormwater Management Master Planning: Outreach and education to municipalities on benefits of stormwater master planning, and assistance in securing grants for this planning, in concert with Tactical Basin Planning.
5. Private Green Infrastructure: Provide information to assist property owners in incorporation of Green Stormwater Infrastructure techniques. Delivery primarily via websites and programming of Chittenden County Regional Stormwater Education Program / Chittenden County Stream Team.

#2 Promote municipal and public participation in development and implementation of Tactical Basin Plans to mitigate the following Hazards: Severe Thunderstorm, Flooding, Fluvial Erosion and Water Pollution.

1. Project Prioritization and Mapping Tool: Review the relevant transportation and river management data/plans for a watershed (or sub-watershed depending on size), and then geo-reference the data to help municipalities, VTtrans, and ANR in prioritizing investments that address transportation, environmental and hazard mitigation needs concurrently, in concert with Tactical Basin Planning.
2. Project Prioritization Process: CCRPC will assist in prioritizing Basin Plan projects in conjunction with ANR and municipalities in concert with Tactical Basin Planning.
3. The CCRPC may assist in creation of a “shovel ready projects” database. The CCRPC shall provide information such as project name, location, type, and results of criteria evaluation, for incorporation into the tactical basin plan implementation table.

#3 Assist municipalities to develop infrastructure projects that mitigate the following Hazards: Severe Thunderstorm, Flooding, Fluvial Erosion and Water Pollution.

1. **Municipal Roads General Permit:** Assist municipalities with compiling existing inventories of stormwater infrastructure, stream geomorphic information, culvert inventories, road erosion inventories and capital budgets, and Road Erosion Risk Analysis maps to assist in developing implementation priorities under the municipal roads general permit.
2. **Transportation Infrastructure Mitigation Project Scoping:** Assist with finding funds to develop conceptual design & construction cost estimates for transportation infrastructure upgrade or replacement such as culverts, bridges, ditches, grading, etc. to reduce damages from hazard events.

#4 Assist municipalities in protecting people, buildings and facilities where development already exists in vulnerable areas.

1. **Reduce Future Flooding Risk for Existing Development:** Assist municipalities with identifying vulnerable and/or repetitively damaged structures and provide assistance in securing assistance or funding to either a) elevate properties above BFE, b) relocate structures or c) buying out structures.
2. **Create New Flood Storage Capacity:** Assist municipalities in identifying and planning for locations where new flood storage capacity may be created. These opportunities could include: creating parks and other open space in vulnerable locations, replacing a vertical wall along a river bank with a more gradual slope to create more room in the river channel for rising water, creating a shallow depression in the lawn that can accommodate inundation, or redesigning buildings to enable the first floor or basement to flood rather than armoring the buildings to repel rising waters (*Vermont SGIA Guidance Document*).

Earth Resource Extraction Deficiency

Proposed Amendments to [2.4.3 Working Lands & Land Based Industries](#):

Chittenden County contains two major zones of bedrock geology: Sedimentary Zone – Rocks 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 – Rocks formed by metamorphic processes located predominantly in the uplands on the eastern side of the County. No major geologic threats (such as major active fault lines, seismic disturbances, areas prone to sinkholes or subsidence) or opportunities (such as major deposits of valuable minerals) exist in the County. The only earth resources in Chittenden County that currently are commercially viable are sand, stone and gravel. These nonrenewable resources are used to produce building materials (such as concrete and railroad ballast), to use as landscaping materials, and to build new and maintain roads. Chittenden County contained 3 primary producing construction sand and gravel areas, and a total of 10 producing mines within those areas, as well as 5 producers of crushed stone ([Vermont Geological Survey/U.S. Geological Survey, 2010-2011](#) and [USGS Mineral Resource Data System, 2015](#)). While these resources are limited, they play an important role in our land development practices and economy and it is important to manage them carefully.

Proposed Addition to [Strategy 3.2.4: Increase investment in and decrease subdivision of working lands and significant habitats, and support local food systems](#):

3. 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 conjunction with State and local regulations, to:

- a. Not place an excessive or uneconomic burden on local and state highways and bridges – including but not limited to a burden 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; and
- b. Minimize any adverse affects-effects on water quality, fish and wildlife habitats, and adjacent land uses; and
- c. Plan for their eventual rehabilitation so that slopes are stable and the surface is revegetated with a variety of species to support a wide range of biodiversity. To that end, topsoil should not be removed from sites and excavations should stop early enough so that stable slopes can be established on the property; and
- d. Extraction sites should be screened to the extent practical if topography and vegetation allow.

Utility & Facilities Deficiencies

Proposed Amendments to [2.3.1 Education, Knowledge and Skills](#):

School Facilities: identified as “an extremely limited description and assessment”. While more than adequate coverage is included in the ECOS Plan regarding education, it is true that we don’t have very much information regarding school facilities and capacity. Therefore, we suggest the following addition to Section 2.3.1 Education, Knowledge and Skills:

Overall School Enrollment Growth/Decline. Although some schools are seeing an increase in enrollment (So. Burlington being an example), the majority of schools in Chittenden County are facing declining enrollment. From the 2002-2003 school year to the 2011-2012 school year Chittenden County **PUBLIC/PUBLIC & PRIVATE** schools experienced a decline in the ten year compounded annual growth rates (CAGR), 27% of Chittenden County schools experienced an increase in the ten year CAGR, and this figure was not available for 13% of the schools. NOTE: CAGR is used to measure enrollment growth or decline in Vermont. The formula looks at the first and last years’ enrollment values and compares them over the number of years in the specified time frame to determine a rate of change. The CAGR is different from a percent change which does not consider the number of years over which a change occurs. There were 22,229 students enrolled in Chittenden County in the 2011-2012 school year, a decrease of 4.9% from the 23,387 students enrolled in the 2003-2004 school year. See the [Vermont Department of Education’s Public School Enrollment Report for the 2011-2012 School Year](#) for more information.

Regarding facilities, there are 8 Supervisory Unions, 51 public schools, XX private schools, and 6 colleges/universities in the County (see the ECOS Map Viewer for locations). Furthering efficiency and consistency in the education system (as described in ECOS Strategy 3.2.6.4), there have been two supervisory union consolidations: In November 2014 residents in Bolton, Richmond, Jericho and Underhill voted in favor of merging seven of the eight school districts into one, which will begin operation in July 2015; and In November 2015 residents in Essex and Westford voted in favor of a school district unification - this new district will be known as the Essex Westford Educational Community Unified Union School District, and will begin operations on July 1st of 2017. See the municipal and school capital plans for school facility improvement needs.

~~Will add more on specific school facility improvement needs.~~

Libraries: identified as “an extremely limited description and assessment” and we agree with this assessment. Therefore, we suggest the following addition to Section 2.3.1 Education, Knowledge and Skills:

Library facilities are well distributed across the region. Only three municipalities in the region do not have a library: Bolton, Buel’s Gore and St. George. These communities do not have any current plans to build a library, and the residents use the libraries in surrounding communities. All libraries in the region offer high speed internet access. Both South Burlington and Milton employ bookmobiles within their communities. See [Vermont Department of Libraries, Vermont Public Library Statistics](#) for more information. Current library expansion and improvements are needed in South Burlington, Essex Town, Colchester, Jericho as identified in the CEDS Project list (see the list in Section 4.2.6 for cost estimates, funding sources and proposed timelines for these projects).

Proposed Amendments to [2.5.5 Energy](#):

Energy Infrastructure: identified as “only mentioned in passing”, however it appears this topic is well covered in Section 2.5.5 Energy and Section 3.2.2 Concentrated Growth Strategy. Therefore, I recommend the following minor amendments to Section 2.5.5 (or make these additions to Section 3.2.2):

~~Chittenden County has a long history of electrical and natural gas energy efficiency programs, dating back to 1990, which have provided significant energy savings and economic benefits to the state and County. These programs along with improvements in federal standards have led to a reduction in per household and per employee energy consumption of electricity and natural gas. Reduction in energy consumption directly results in a reduction in energy bills.~~

Vermont’s rural nature offers challenges for the transmission and distribution of energy. It is important to maintain and develop an energy production, transmission, and distribution infrastructure in Chittenden County that is efficient, reliable, cost-effective, and environmentally responsible. Current energy distribution projects include: Extension of 3-phase power in south Hinesburg along VT116 by Green Mountain Power; Extension of natural gas service in Hinesburg up Richmond Road by VT Gas; and Extension of natural gas service to St. George village center. In addition, Burlington’s plan to recapture “waste heat” from the McNeil power plant and distribute it to the Old North End of Burlington and install heated greenhouses at the Intervale is a thermal energy project with a more efficient distribution of a previously wasted energy source. See the CEDS Project list in Section 4.2.6 for cost estimates, funding sources and proposed timelines for these projects.

Proposed Amendments to [2.5.4 Infrastructure & Facilities](#):

Communications Infrastructure: identified as “only mentioned in passing”. The ECOS Plan already includes a section on broadband, but we suggest the following edits to clarify the assessment and needs:

Information technology is integral to fulfilling the economic needs of residents and businesses in the region. Telecommunications is the communication of information through various media. The ECOS Competitive Assessment Analysis Report identifies quality and costs of telecommunications services as the weakest utility infrastructure based on the Employer Survey. While broadband technology is widely available throughout Chittenden County: as of December 2011, approximately 99% of Chittenden County residents and 99.5% of non-residential structures (analysis included commercial, industrial, municipal structures) have access to Broadband, the defined broadband speeds are quite slow (768 kbps download/200 kbps upload speeds) and will need to improve. It will be imperative to ensure that we are on par with other urban areas in the realm of number of service providers, service tiers, and affordability as the technology is constantly improving and we must keep up.

Solid Waste – identified as “only mentioned in passing” however, this is discussed in great detail in Section 2.5.4 Infrastructure & Facilities. There are also quite a number of CSWD facilities projects listed in the CEDS project list. Therefore, I recommend the following minor amendment to Section 2.5.4 Infrastructure & Facilities:

A sustainable society minimizes the amount and toxicity of the 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. CSWD also has identified the need for and is in the process of developing a regional landfill site (See the CEDS Project list in Section 4.2.6 for cost estimates, funding sources and proposed timeline for CSWD landfill design and construction projects). The tons of refuse disposed in Chittenden County have been declining over the last 5 years, while the amount of recycled materials has increased. While those trends are positive, there is room for improvement. It is estimated that 27% of the municipal solid waste sent to the landfill is comprised of recyclable materials and 32% is comprised of organic materials that could be composted (Source: CSWD Estimate of the Components of Solid Waste Disposed for FY 2012). 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) from disposal. Residents and businesses in CSWD have been required to separate yard debris and recyclables from waste destined for disposal since 1993. The additional bans on food scraps and clean wood will have a significant impact on waste diversion in Chittenden County.

Government/Administrative Facilities: identified as “an extremely limited description and assessment”

Will provide recommended edits on this at a later date. We'll have to figure out what exactly to add, while keeping this brief. As can be seen on the ECOS Map Viewer, there are the following government/administrative facilities in the County: 13 police stations, 21 post offices, 2 courthouses, 18 municipal offices, and 27 fire/rescue stations.

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 such as planning and zoning, recreation, highways, libraries, water, sewer, fire, rescue and police. In contrast, small rural municipalities such as Bolton, Buels Gore, and St. George support only a few part-time employees such as a municipal clerk and road foreman, and often contract for other services. Municipal government in the remaining communities commonly consist of a few full-time employees such as a 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.

This variation is particularly apparent in regards to Emergency Services. Almost every municipality has a locally-based fire department (with the exception of Buel's Gore, Huntington, and St. George), half have police departments, and fewer have their own emergency medical services. Many of the 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 or from the VSP. Many of the municipalities have reciprocal agreements for assistance in fire and rescue services. Discussions around consolidation of some municipal services, such as dispatch, continue in an effort to achieve greater efficiency.

Proposed Amendment to [Section 2.2.2 Scenic, Recreational and Historic Resources](#):

Recreation Facilities – identified as “only mentioned in passing”. However, these facilities are discussed in Section 2.2.2 Scenic, Recreational and Historic Resources, and Section 2.3.5 Arts, Culture & Recreation, including an indicator in each. The facilities themselves are listed on the ECOS online map as referenced in the Plan. There are also quite a number of recreation facilities listed in the

CEDS project list. Therefore, I recommend the following minor amendment to Section 2.2.2 Scenic, Recreational and Historic Resources:

Chittenden County is rooted in its scenic, recreational, and historic resources. These provide residents a place to relax, play, gather, and learn about nature, conservation, and our heritage. They also provide important ecological functions including wildlife habitat, and water and air quality protection. These are supplemented by indoor and outdoor recreation facilities. In addition to the many recreational opportunities associated with Lake Champlain (swimming, boating, fishing, etc.), aAn extensive system of shared-use paths, on-road bike lanes, and off-road trails connect the County's recreational facilities and areas (this data can be found under the Natural Systems section of the online map located here: <http://maps.ccrpcvt.org/ChittendenCountyVT/>). In addition, municipalities are planning for new facilities and improvements to existing facilities to improve access and opportunities for recreation. See the CEDS Project list in Section 4.2.6 for cost estimates, funding sources and proposed timelines for fourteen recreation related projects throughout the County.

Proposed Amendment to [Section 2.3.2 Health](#):

Hospitals: identified as “an extremely limited description and assessment”. While the ECOS Plan includes quite an extensive account of public health issues, it does not include information on health care related facilities and service centers. Therefore, I recommend the following addition to Section **2.5.4 Infrastructure & Facilities:**

Chittenden County's community hospital is the University of Vermont Medical Center, ~~—~~also Vermont's only academic medical center, serving in this role for patients from across the state and the upper northeast corner of New York. The UVM Medical Center provides a full range of tertiary-level inpatient and outpatient services, provides primary care services at 10 Vermont locations, operates the region's only Level I Trauma Center, and is home to the University of Vermont Children's Hospital. ~~They are also a safety-net provider of critically important services to our region's most vulnerable populations.~~ As some of the inpatient facilities are 50 to 70 years old, the Medical Center has a Master Facilities Plan to address the long-term health needs of our region, ~~—~~focusing on single rooms for inpatients and more space for providers and the equipment they need to provide high quality health care, ~~—~~while striving for LEED certification for healthy and efficient building design. Other health care direct care service facilities in Chittenden County include 53 primary care sites; the Community Health Centers of Burlington (the local Federally Qualified Health Center, or FQHC dedicated to providing exceptional care and with a commitment to serving people who have a limited ability to pay); Howard Center (the local designated agency that provides mental health, developmental, and substance abuse services ~~A private non-profit organization committed to providing effective treatment for people with mental illness, developmental disabilities, emotional crises and substance abuse. Howard Center was founded in 1873 and serves more than 15,000 individuals and families every year.~~); two home health agencies (Visiting Nurse Association of Chittenden and Grand Isle Counties ~~(home care and hospice providers)~~; and Bayada Home Health Care); and six Nursing Homes (Arbors Nursing Home, Birchwood Terrace Healthcare, Burlington Health and Rehab Center, Green Mountain Nursing Home, Starr Farm Nursing Center, and Wake Robin-Linden Nursing Center); 13 residential care homes; and 4 assisted living facilities ~~Green Mountain Nursing Home, Burlington Health & Rehab, Kindred Transitional Care and Rehabilitation, Staff Farm Nursing Center, Pillsbury Manor, Ethen Allen Residence, others?~~).

Child Care Deficiency

Proposed Amendments to [2.3.1 Education](#):

Commented [CB1]: Is there an opportunity to link/cross reference in economic development as well?

Key issues/Trends/Insights

[Childcare is a significant issue for the majority of Vermont parents who rely on out-of-home-care for their youngest children. In 2014, there were 8,668 children under age 5 in Chittenden County and 76% of families with all parents in the workforce. However, as of July 2014, Child Care Resource \(CCR\) reports there were 5,970 slots to serve children ages 5 and under. Thus demonstrating the need is greater than current capacity to care for our region's children. The number of childcare spots is limited due to a variety of reasons concerning affordability of care, licensing for providers, and childcare workers' wages. The types of childcare providers is also lacking; especially for parents that work the third shift or have non-traditional erratic hours, like farmers. Even if families find care, affording it is challenging. According to the 2015 Building Bright Futures report, *How Are Vermont's Young Children and Families?*, child care costs equate to 28-40% of household income for two-parent two-child families with incomes between \\$47,700 \(200% federal poverty level\) and the state median family income of \\$82,047. Middle income Vermont families with two parents and two young children are spending up to 40% of their income on child care. That's over \\$19,000 a year—more than the cost of full-time, in-state tuition at a Vermont State College. Other challenges include the childcare profession being a hard profession to stay in because the average annual income is only \\$24,070, according to Let's Grow Kids.](#)

Key Indicators

- Building Bright Futures and Let's Grow Kids is working on developing county-specific data in coordination with several partners, including the Child Development Division and Vermont Insights, but the information won't be ready until the new year. I am inclined to not include any key indicators on until then. We can add them to the scorecard as they come available.

Proposed Amendments to [ECOS Strategy 3.2.6 Equip our residents with the education and skills that they need to thrive.](#)

8. Ensure that children ages (0-5) have adequate access to high quality and affordable early learning and education programs by integrating child care issues into the planning process, including child care financing, infrastructure, business assistance for child care providers, and child care workforce development.

~~1. Encourage municipalities to negotiate with developers and to offer incentives to provide space for childcare in all types of projects, residential, office, mixed use, and commercial, including new construction and reuse.~~

~~2.1. Work with municipalities periodically should to review land-use and development regulations to identify needed amendments to authorize quality child-care services in appropriate locations convenient to households, employment centers, accessible~~

via transit, and near recreation facilities, including at home occupations.
Amendments could include incentives to provide space for childcare in all types of projects.

~~3.~~ Employers, schools, and community organizations should collaborate to ensure that affordable, quality child care services are available to meet the different needs of households, especially low and medium income families, working parents, and those with limited transportation.

~~4-2.~~ Work with regional partners to ensure that training and education for childcare professionals are available and well-funded, and that childcare workers earn a living wage.

~~5-3.~~ Connect the business community with the recommendations of the Vermont's Blue Ribbon Commission on Financing High Quality, Affordable Child Care (currently under development) Click [here](#) to access a short video on this initiative.

Commented [MN2]: Include these in strategy 1