Planning Advisory Committee  
Wednesday, March 9, 2016  
2:30pm to 4:30pm  
CCRPC Main Conference Room, 110 West Canal Street, Winooski

Agenda

2:30    Welcome and Introductions, Joss Besse

2:35    Approval of January 13, 2016 Minutes

2:50    ECOS Plan Update*, Regina Mahony  
The Long Range Planning Committee has been drafting amendments to the ECOS Plan, in response to ACCD and VAPDA’s Regional Plan review. The ECOS Plan amendments must be adopted by June, 2016. The Board will be holding a public hearing on March 16, 2016, and would appreciate comments from the PAC on the amendments.

3:05    Statewide Parcel Mapping*, Pam Brangan  
Attached you will find a presentation regarding a statewide parcel mapping proposal. While this legislation may not gain traction this year, we’d like to make you aware of it and get a sense of whether this is something that would be beneficial to you.

3:25    Discussion of a Planning Commission Workshop, Lee Krohn  
Last spring we held a DRB, ZBA and development review Planning Commissioners Summit where members from our municipalities were able to participate in a facilitated, open round table discussion on practices and procedures. It was a successful peer exchange. We are planning to do something similar this spring for the Planning Commissioners. Please come prepared with thoughts and agenda topics so we can begin to prepare for the Planning Commission Summit.

3:45    Shelburne Town Plan Amendment*, Emily Nosse-Leirer  
   a. Review Staff Summary  
   b. Questions and Comments  
   c. Recommendation to the CCRPC Board

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

4:20    Other Business  
   a. PAC Training Topics* – see attached summary of responses. Please come prepared with additional input if you have not yet weighed in.

In accordance with provisions of the Americans with Disabilities Act (ADA) of 1990, the CCRPC will ensure public meeting sites are accessible to all people. Requests for free interpretive or translation services, assistive devices, or other requested accommodations, should be made to Emma Vaughn, CCRPC Title VI Coordinator, at 802-846-4490 ext 21 or elong@ccrpcvt.org, no later than 3 business days prior to the meeting for which services are requested.
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DATE:  Wednesday, November 18, 2015
TIME:  2:30 p.m. to 3:30 p.m.
PLACE: CCRPC Offices, 110 West Canal Street, Suite 202, Winooski, VT

1. Welcome and Introductions
Joss Besse called the meeting to order at 2:30 p.m.

2. Approval of September 9, 2015 Minutes
Alex Weinhagen made a motion, seconded by Ken Belliveau to approve the September 9, 2015 minutes. No further discussion. MOTION PASSED.

3. Water Quality Program
Regina gave an overview of the Lake Champlain TMDL municipal requirements (see attachment); and CCRPC’s Contract with ANR for Vermont Clean Water Act outreach and basin planning. Regina explained that the contract with ANR is for municipal outreach and education, data assistance and assistance with development of the Tactical Basin Plans and prioritization of projects – and particularly to help coordinate with the municipalities on these Plans. Alex Weinhagen suggested that CCRPC help facilitate conversations with municipalities if trading phosphorus becomes available for wastewater treatment plants. Regina Mahony explained that we would be certainly be helpful in this facilitation if needed or requested.

4. CCRPC’s Unified Plan Work Program (UPWP) Solicitation
Bryan Davis provided an overview of the UPWP, program areas and the application. This presentation is attached to these minutes.

5. Jericho Comprehensive Town Plan Review and Public Hearing
Joss Besse opened the public hearing. No one from the public was in attendance. The public comment period was closed.

Emily Nosse-Leirer, summarized the Staff comments and explained that the comments have already been addressed. Katherine explained the process they went through in updating their Plan, including a public input survey. The Plan is mostly updated without any major changes in direction. The transportation and natural resource chapters are totally new. The Science to Action project was incorporated into the natural resource chapter and identified three tiers of natural resources for protection. The PC will be moving forward on getting this incorporated into the Zoning Regulations. Katherine explained that they’ve included some additional text to try to help participation in the PSB process. Alex asked about the number of implementation tasks. There are certainly quite a bit and they are thinking of ways to prioritize them. Melissa Manka explained that in Westford the PC has set up joint meetings with responsible parties for the implementation tasks as identified in the Plan for the first year.

Everett Marshall made a motion, seconded by Melissa Manka, that the PAC finds the draft 2016 Jericho Comprehensive Town Plan, as submitted, meets all statutory requirements for CCRPC approval, and that the
municipality's planning process meets all statutory requirements for CCRPC confirmation. Upon notification that the Plan has been adopted by the municipality, CCRPC staff will review the plan, and any information relevant to the confirmation process, for changes. If staff determines that changes are substantive, those changes will be forwarded to the PAC for review. Otherwise the PAC recommends that the Plan, and the municipal planning process, should be forwarded to the CCRPC Board for approval. No discussion.

MOTION PASSED. Katherine Sonnick abstained.

6. Regional Act 250/Section 248 Projects in the Horizon

- Burlington – redevelopment of the Burlington Town Center. The Applicant is figuring out if they need to go to Act 250. It is a designated downtown so the threshold is larger, but it is unclear how they will count the hotel rooms. The next Plan will be presented in January.

- South Burlington – Pillsbury Manor Williston Road Senior Living Center looking to infill. Larkin Terrace Apartments near the movie theater is looking to redevelop (there are affordable housing units there now. It is a high density district and don’t know if they will ask for a density bonus and trigger new affordable housing requirements). Spear Meadows additional units proposed somewhere between 40 to 70 units, and uses TDR.

- Huntington – nothing at this time


- Bolton – nothing at this time

- Essex – Rick Bove project on Essex Way – big mixed use project (55 units). The Town is working with them on building design.

- Underhill – nothing at this time

- Jericho – Jericho Market stalled in Act 250, not quite sure what is holding it up.

- Williston – Section 248 permit coming around for cell tower collocated in silo – pretty small. Potential amendments – Finney Crossing. Finney Crossing fills up within a month of being built; the absorption rate is very fast. Commonwood Crossing in early stages - originally approved 7 to 8 years ago, former driving range, 173 dwellings plus 80,000 sq.ft. of retail.

- Westford – nothing at this time

- Hinesburg – big projects in Environmental Court (Hannaford project and north of Village). Minor amendment on a Town application for a new tenant in the old police station.

7. Other Business

a. Special PAC meeting on December 9th meeting at 2pm (1.5 hours max) to learn about the draft proposed changes in what constitutes a Required Agricultural Practice, and changes in the definition of farm structure and potential expanded regulatory authority for municipalities. NOTE: We will start at 2pm, not 2:30pm as my original email stated.

b. Permit Tracking Software Memo – CCRPC research is complete and reported in the attached memo. Lee Krohn provided a brief overview of his research.

c. VPA Fall Conference Friday, December 11th – WATER

d. Jim Ryan will be coming to present to the TAC and CWAC on December 1st at 10:15am on the Municipal Roads Permit if anyone is interested.

7. Adjourn

The meeting adjourned at 4:15 p.m.

Respectfully submitted, Regina Mahony
Requirements for Municipalities

**WASTEWATER**

**Wastewater Treatment Facilities**

Of the 59 Vermont wastewater treatment facilities in the Lake Champlain Basin, 25 will receive new reduced phosphorus limits according to a permit reissuance schedule that is based on DEC's five-year tactical basin planning schedule. Flexible options to meet the TMDL include:

- Require new or upgrade treatment facilities only when the current phosphorus discharge exceeds 80% of the facility’s annual phosphorus allocation.
- Employ annual average phosphorus loading rates (rather than concentration limits) to set TMDL-based discharge permit limits in order to allow operational flexibility in attaining the limits.

- Establish compliance schedules that couple phosphorus upgrades with other planned facility construction projects to enhance cost-effectiveness.
- Support opportunities to reallocate (i.e., trading) phosphorus limits for facilities within the same lake segment watershed as long as total permitted phosphorus discharge remains the same. Discharges in the Main Lake, Burlington Bay, and Shelburne Bay watersheds will be considered to be discharges to the same lake segment for reallocation purposes.

**STORMWATER**

**Municipal Roads General Permit**

The new general permit for all municipal roads will go into effect before January 2018, with all municipalities signed up no later than 2021. Municipalities will be “credited” for projects implemented before the permit goes into effect. The general permit will require:

- Practices to reduce erosion and stormwater discharges being generated from roads and drainage systems. New roads will likely continue to be permitted as they are now. All practices will be consistent with the VTrans Road and Bridge standards.

- A management plan to oversee implementation and bring roads up to standards over several years. The general permit will not require separate approval for every maintenance activity or upgrade.

- Application fee: $400; annual operating fee: $2,000.

**Municipal Separate Storm Sewer System (MS4) General Permit**

Municipalities that have municipal separate storm sewer system (MS4) permits will require a new MS4 general permit. New components to the permit include:

- Long-range phosphorus control plans similar to the “flow restoration plan” requirements for municipalities with stormwater-impaired waters. Municipal road management requirements will be incorporated into the MS4 permit; separate permit coverage will not be required.

- Application fee: $2,400; annual operating fee: $10 per acre of impervious surface.

The reissuance process for the MS4 permit will start within 3 months of the issuance of the TMDL. Regulated MS4s will be notified and included in the stakeholder process.

**Municipally Owned Developed Land Permit**

What’s required?

- All municipal sites with 3 or more acres of impervious surface, including municipal properties, will require a new developed land permit.
- If a site does not have a stormwater system designed to 2002 or more current standards, it will need to implement stormwater management practices.

- Smaller sites may be subject to the same requirement if necessary to implement the Lake Champlain TMDL, or stormwater TMDLs.
- Application fee: $860 per acre of impervious surface; annual operating fee: $160 per acre impervious surface.

The developed land general permit must go into effect before January 2018, with all projects in the Champlain basin under a permit by 2023, and the rest of the state under a permit by 2028.
NEW PROJECTS

New Municipal Projects Construction Standards

The permitting standards for new projects have not yet changed. However, by January 2016 DEC will report to legislature on the prospect of lowering the threshold for requiring a post-construction stormwater permit for new projects to ½-acre of impervious surface (it is currently 1 acre). The Department will also be revising its Stormwater Manual and Stormwater Rules over the coming year. The Manual and Stormwater Rules revisions will both go through the formal APA rulemaking process and municipalities will be invited to participate in rulemaking meetings and public comment processes.

Timeline for Municipalities

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>MUNICIPAL OBLIGATIONS</th>
<th>TIMELINE</th>
</tr>
</thead>
<tbody>
<tr>
<td>WASTEWATER</td>
<td>Wastewater Treatment Facilities (WWTFs)</td>
<td>Reductions from currently permitted phosphorus loads at 25 of 59 facilities in the Lake Champlain Basin.</td>
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<tr>
<td>STORMWATER</td>
<td>Municipal Roads General Permit <a href="http://www.watershedmanagement.vt.gov/stormwater/hm/sw_municipalroads.htm">www.watershedmanagement.vt.gov/stormwater/hm/sw_municipalroads.htm</a></td>
<td>Implementation of practices to reduce erosion and stormwater discharged generated from roads and drainage systems.</td>
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<tr>
<td></td>
<td>Municipal Separate Storm Sewer System (MS4) Permit</td>
<td>MS4 municipalities will develop long-range phosphorus control plans following the reissuance of this permit.</td>
</tr>
<tr>
<td></td>
<td>Stormwater Permits for Municipally Owned Developed Land</td>
<td>VT DEC’s Stormwater Program will develop a general permit applicable to all sites with 3 or more acres of impervious surface, including municipal properties.</td>
</tr>
<tr>
<td>NEW PROJECTS</td>
<td>Stormwater Permits for New Municipal Projects</td>
<td>No change. Report to Legislature by January 15, 2016 on whether to lower the threshold for new projects from 1 acre to ½-acre of impervious surface.</td>
</tr>
<tr>
<td></td>
<td>Stormwater Planning <a href="http://www.watershedmanagement.vt.gov/erp/docs/erp_SWMPFinal2-18-14.pdf">www.watershedmanagement.vt.gov/erp/docs/erp_SWMPFinal2-18-14.pdf</a></td>
<td>No change. Towns are encouraged to seek funding for stormwater planning, which can be used in tactical basin plans.</td>
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Providing Time, Flexibility and Support to Meet Requirements of the TMDL
FY2017 Unified Planning Work Program (UPWP)

http://www.ccrpcvt.org/workplan/
The UPWP:

- summarizes the planning activities and deliverables for the next year (July 1 - June 30)
- is the mechanism to implement the strategies for our region outlined in the ECOS Plan (www.ecosproject.com)
- helps municipalities fulfill their local plans
Funding Sources

• Vermont Agency of Commerce & Community Development
• Vermont Agency of Transportation
• Vermont Agency of Natural Resources
• Vermont Division of Emergency Management & Homeland Security
• US Department of Transportation
• Federal Highway Administration
• Federal Transit Administration
Eligible Applicants

- CCRPC member municipalities
- Agencies
- Partner non-profit organizations (including but not limited to CATMA, CCTA, CarShare Vermont, Local Motion, VEIC, United Way, UVM TRC, AARP VT)
Eligible Initiatives

Transportation, Land Use, and Stormwater Planning

The usual suspects (scoping, corridors, multimodal, etc.) but also:

- Transportation-related stormwater planning (Municipal Roads General Permit planning, inventory, analysis and prioritization, including Better Backroad Program grants)
- Water quality/river corridor plans or bylaws
- Other, including Health Impact Assessments as part of any of the previous bullets
Eligible Initiatives

Major Technical Assistance

- Build-out analysis
- Transportation modeling
- Signal optimization
- Data development
- Demographics
- Interactive web mapping
Eligible Initiatives

Minor Technical Assistance

- Traffic counts
- Infrastructure inventories
- Transportation safety
- Speed studies
- Stop warrants
- GIS/data/mapping assistance
- *NEW:* Erosion inventories

Non-Municipal Partner Program Assistance
Ineligible Initiatives

• Cover the cost of municipal employees
• Right-of-way acquisition
• Detailed design and engineering
• Surveying
• Stormwater/sewer system design
• Construction of transportation system facilities
• Capital-oriented implementation actions
UPWP Funding History

<table>
<thead>
<tr>
<th></th>
<th>Municipal Projects</th>
<th>Partner Projects</th>
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<tr>
<td>FY2014</td>
<td>$558,000</td>
<td>$44,000</td>
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<tr>
<td>FY2015</td>
<td>$557,000</td>
<td>$316,000</td>
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<tr>
<td>FY2016</td>
<td>$533,000</td>
<td>$330,000</td>
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</table>

We anticipate about $850,000 available in FY17. Some funds may be committed to additional phases of current projects.
Match Requirement

Transportation, Land Use, and Stormwater Planning
- Transportation projects – 20% non-federal cash match.
- Non-transportation projects (including plan and bylaws) – 20% non-federal cash match.
- No match for regionally significant projects.

Major or Minor Technical Assistance
- Transportation projects – no match required.
- Non-transportation projects – no match required for projects requiring less than 12 hours of CCRPC staff time. Projects over 12 hours will be charged a rate of $50 per hour.

Non-Municipal Partner Program Assistance
- 20% match required.
Match Requirement

• Letter of support from governing body/organizational director to document match availability and staff time commitment.

• Additional consideration for local staff services or overmatch.

• Incorporate direct expenses when developing budgets (publishing fees for legal notices, food for meetings, translation services, child care, printing, supplies, etc.)
Community Need and Public Meeting Requirement

- Applications and amounts must be presented to and approved by the governing body by March 2016.
- Why? Inform the community about the project, solicit public comments, confirm the availability/commitment of local match.
- For non-municipal partners: public meeting not required but need approval by a Board or similar governing body.
Contracting and Project Management

- Projects may be implemented using CCRPC staff resources, private consultants, or a combination.
- Consultants will be under direct contract with the CCRPC.
- Monthly invoices and progress reports are expected.
Evaluation Criteria

- No significant changes from FY16.
- Project requests will be screened for consistency with the ECOS Plan (specifically the 8 strategies).
UPWP Schedule

November  
FY17 UPWP applications released

November/December  
CCRPC staff available to meet with municipalities

January 20  
CCRPC public forum for UPWP input

January 22  
**FY17 UPWP application deadline**

January to March  
UPWP Committee meetings

March/April  
Present draft UPWP to TAC and PAC

April 15  
Present draft UPWP to CCRPC Board/warn public hearing

May 20  
Public hearing/ CCRPC Board votes on FY17 UPWP

July 1  
FY17 UPWP takes effect
All forms available at http://www.ccrpcvt.org/workplan/

Deadline is 4:30 p.m., Friday, January 22, 2016. Please email completed forms in Word format to bdavis@ccrpcvt.org.

Questions?

Lee Krohn
2013 Chittenden County ECOS Plan

For a healthy, inclusive, and prosperous community

Adopted 6/19/2013
AMENDED ?/?/2016

This plan is the Regional Plan, Metropolitan Transportation Plan, and Comprehensive Economic Development Strategy in one.

This plan can be found online at:
www.ecosproject.com/plan
2.2.2 SCENIC, RECREATIONAL, AND HISTORIC RESOURCES

Scenic and Recreational Resources Goal: Conserve, protect and improve valued scenic, recreational, and historic resources and opportunities.

Key Issues/Trends/Insights
[Data for this section drawn from Natural Systems Analysis Report]

- 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.), an 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.

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

- Historic resources include buildings, structures, landscapes, and archeological sites, both on land and under water. There are over 4,400 designated historic sites in Chittenden County and over 80 designated historic districts (this data can be found under the Natural Systems section of the online map located here: http://maps.ccrpcvt.org/ChittendenCountyVT/).

- The recreational value of our water bodies (swimming, fishing, boating, etc.) is critically dependent on water quality. E-coli and algal blooms lead to beach closures, while invasive species threaten our native fish populations. Events and encroachments such as these are exacerbated by the effects of climate change.

- As we work toward encouraging future development in areas planned for growth to maintain VT’s historic settlement pattern of villages and urban centers, surrounded by rural countryside, access to valued scenic, recreation and historic resources should also be maintained and improved for all residents and visitors. In addition, accessible design standards should be incorporated into recreation facility projects.

- Eight of the County’s 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 the 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.
There is low compatibility between municipal plan recommendations for natural and scenic resources and the implementation of those recommendations through zoning bylaws and subdivision regulation. Further, there are often contradictory goals within municipal plans regarding natural and scenic preservation and new infrastructure for energy generation and transmission. Reconciliation of these is necessary to meet community visions and bring predictability to the development process.
Key Indicators

➢ **50,789 acres or 15% of Chittenden County’s land area is protected from development.** Source: UVM SAL Conserved Land Database and municipalities.

➢ **56,450 acres or 17% of Chittenden County’s land area is available for recreation in the form of town & state parks, athletic fields, and natural areas.** Source: CCRPC

➢ **Local Zoning Lags behind Plans** (Source: ECOS Natural Resources Analysis Report, Landworks). Municipal Zoning Regulations vary.
  - 16% of towns provide specific standards and guidelines for protecting identified scenic resources.
  - 68% of towns provide general recommendations for protecting scenic resources (e.g., views and landscapes along scenic roads should be protected).
  - 16% of towns reference scenic resources but provide no goals, standards, guidelines, or recommendations.
  - 57% of scenic resources identified are of roads or views from roads.
  - The majority (74%) of towns reference scenic resources in relation to their value as open space.
  - 42% of towns recognize that woodlands provide scenic as well as ecological values.
  - About 40% of towns consider historic structures and settlement patterns a scenic resource.
  - 21% of towns have a scenic overlay/preservation district.
2.3.1 EDUCATION, KNOWLEDGE AND SKILLS

Education, Knowledge, and Skills Goal: All Chittenden County children and adults have the education, skills and opportunities necessary to meet their full economic and social potential and well-being.

Key Issues/Trends/Insights
[Data for this section drawn from Education Analysis Report and references as incorporated below.]

- Chittenden County requires a well-educated workforce and well-educated individuals to attract good employers and livable wage jobs, to engage in civic affairs and the arts, and to take responsibility for the welfare of ourselves, each other and the natural environment we cherish. Our region’s economic, social and intellectual well-being depends on educational attainment through a continuum of accessible and affordable educational opportunities from the early years through adulthood.

- The first five years of life are critical to a child’s lifelong development. Young children’s earliest experiences and environments set the stage for future development and success in school and life. Children from families that are economically secure and have healthy relationships are more likely to get a good start in kindergarten and maintain that advantage as they progress through school. The larger the gap at school entry, the harder it is to close. (National School Readiness Indicators Initiative)

- 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. (National School Readiness Indicators Initiative)

- While Vermont can boast of a solid K-12 system which benefits from strong community support, small class sizes and high graduation rates (2nd in nation), it ranks 48th in its college-going rate. (Nation’s Report Card, 2009)

- Though the educational level of Chittenden County residents 25 and older with four year bachelor’s degree or higher exceeds state (32.6%) and national (27.5%) levels at 42%, of every 100 high school 9th graders, only 26 will complete a college program within 150% of normal time. (6 years for a 4-year degree and 3 years for a 2-year degree) (New England Board of Higher Education, 2006 data)

- Student achievement measures show clear performance gaps for low-income and students of color. If we are to remain an economically and socially viable community, all of our youth need the skills and education to participate as they are the future drivers of our region. A high quality public education can be the “great equalizer,” ensuring the democratic ideal of equal opportunity. The Vermont PreK-16 Council and the Lake Champlain Regional Chamber of Commerce have identified goals to close the achievement gaps and create a seamless PreK-16 student-centered, performance-based learning system framed by rigorous standards and high expectations for all students, regardless of racial/ethnic background or socioeconomic status. The system will provide not just content learning but — 21st century skills. These include (1) information and technology skills, (2) life and career skills, and (3) learning and innovation skills such as critical thinking, collaboration, and creativity. Ensuring for equity so that all members of our community can reach their fullest potential is assuring for a more inclusive, prosperous and sustainable region.
- We need to close the lingering achievement gaps and work to create a seamless PreK-16 education system framed by rigorous standards and high expectations for all students.

- About 45% of matriculated first-year students at the Community College of Vermont (CCV) are taking non-credit remedial classes in writing or mathematics. At other Vermont State Colleges, the number ranges from 5%-45%, with an overall average of 22% taking remedial courses. (VT PreK-16 Council, 2012)

- 38 of Vermont’s 50 fastest-growing occupations — including six of the 10 fastest-growing jobs — require significant postsecondary education. (Vermont Business Roundtable)

- 30% of employers (largely within the skilled machine trades) report that they have training needs that are not met by local resources. (WDGT Chittenden Employer Survey, 2011)

- Childcare costs and availability are significant issues for the majority of Vermont parents who rely on out-of-home-care for their youngest children. According to the 2015 Building Bright Futures report, How Are Vermont's Young Children and Families?, child care costs for two-parent two-child families is over $19,000 a year—more than the cost of full-time, in-state tuition at a Vermont State College. This equates 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. Even if families can afford care, finding availability is challenging. The need is greater than current capacity to care for our region's 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. Childcare availability is especially lacking for parents that work the third shift or have non-traditional erratic hours, like farmers. Challenges for the child care providers include very low salaries. According to Let’s Grow Kids the average annual income is only $24,070. Vermont has established a Blue Ribbon Commission on Financing High Quality, Affordable Child Care to help understand and address these challenges. Addressing these challenges is imperative so that we can properly prepare our young children for school, and enable parents to work in a time when our workforce population is declining.

- 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 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 independent school enrollment, there were 1,778 students enrolled in independent K-12 schools in Chittenden County in the 2015-2016 school year (NOTE: include 2011-2012 school year as a comparison to public school enrollment).

- There has been a significant effort to further efficiency and consistency in the education system through voluntary unification of school governance structures. The VT Legislature passed Act 46 of 2015 which provided a number of voluntary options with associated incentives to unify.
Mount Mansfield Modified Union School District is now the main board which oversees 8 schools as of July 2015 (Bolton, Richmond, Jericho and Underhill voters approved this consolidation in November 2014). Huntington residents also took a vote on this matter but it did not pass. Also residents from the towns of Essex, Essex Junction, and Westford voted to streamline their governance structure, forming one unified district to serve 10 schools in the three communities – will begin operation in July 2017 (https://www.cctv.org/watch-tv/programs/education-bill-act-46). These unifications reduce the number of school boards and aim to bring greater consistency across the curriculums – a direct implementation of ECOS Strategy 3.2.6.4. See the municipal and school capital plans for school facility improvement needs.

- There are currently 19 school governing bodies operating either as or under the 3 Supervisory Unions and 6 School Districts, 51 public schools, 18 independent schools (reported for SY16), and 6 colleges/universities in the County (see the ECOS Map Viewer for locations).

<table>
<thead>
<tr>
<th>School Districts or Unions</th>
<th># of Governing Boards</th>
<th># of Schools</th>
<th>Towns Served</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burlington School District</td>
<td>1 Board</td>
<td>10 Schools</td>
<td>Burlington</td>
</tr>
<tr>
<td>Chittenden Central Supervisory Union</td>
<td>4 Boards</td>
<td>7 Schools</td>
<td>Westford, Essex and Essex Junction</td>
</tr>
<tr>
<td>Essex Town Supervisory District</td>
<td>1 Board</td>
<td>3 Schools</td>
<td>Essex</td>
</tr>
<tr>
<td>Chittenden East Supervisory Union</td>
<td>2 Boards</td>
<td>9 Schools</td>
<td>Bolton, Buel’s Gore, Huntington, Jericho, Richmond, Underhill</td>
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<td>Chittenden South Supervisory Union</td>
<td>7 Boards</td>
<td>6 Schools</td>
<td>Charlotte, Hinesburg, Shelburne, St. George, Williston</td>
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</tr>
<tr>
<td>Milton School District</td>
<td>1 Board</td>
<td>3 Schools</td>
<td>Milton</td>
</tr>
<tr>
<td>South Burlington School District</td>
<td>1 Board</td>
<td>5 Schools</td>
<td>South Burlington</td>
</tr>
<tr>
<td>Winooski School District</td>
<td>1 Board</td>
<td>3 Schools</td>
<td>Winooski</td>
</tr>
</tbody>
</table>

Library facilities are well distributed across the region, and residents benefit from reciprocal agreements among all of the libraries in the County with the exception of Burlington (an additional fee is charged for non-Burlington residents). 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. 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, and 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).

Key Indicators
% of children entering kindergarten school ready according to developmental domains
(Source: Statewide Assessment of Kindergarten Readiness across 5 domains - AHS, United Way)

| State of Vermont | 2009 | 66% | 61% | 81% | 67% | n/a |
| Colchester (2007 data; 2009 not available) | 2008 | 81% | 64% | 91% | 67% | 86% |
| Milton | 2009 | 67% | 73% | 81% | 77% | n/a |
| Chittenden East | 2009 | 75% | 67% | 88% | 77% | n/a |
| Chittenden Central | 2009 | 62% | 70% | 84% | 55% | n/a |
| Chittenden South | 2009 | 75% | 74% | 90% | 83% | n/a |
| Burlington | 2009 | 70% | 66% | 82% | 75% | n/a |
| South Burlington | 2009 | 71% | 61% | 82% | 70% | n/a |
| Winooski | 2009 | 32% | 50% | 51% | 49% | n/a |
| Essex Town | 2009 | 70% | 61% | 86% | 72% | n/a |

Percent of Chittenden County’s students scoring proficient or above on 2011-2012 state assessments

<table>
<thead>
<tr>
<th>SUBJECT</th>
<th>GRADE</th>
<th>READING</th>
<th>MATH</th>
<th>SCIENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4</td>
<td>11</td>
<td>8</td>
<td>11</td>
</tr>
<tr>
<td>All Students</td>
<td>78%</td>
<td>76%</td>
<td>69%</td>
<td>43%</td>
</tr>
<tr>
<td>Female</td>
<td>83%</td>
<td>83%</td>
<td>68%</td>
<td>42%</td>
</tr>
<tr>
<td>Male</td>
<td>72%</td>
<td>69%</td>
<td>70%</td>
<td>44%</td>
</tr>
<tr>
<td>Hispanic or Latino</td>
<td>85%</td>
<td>75%</td>
<td>68%</td>
<td>32%</td>
</tr>
<tr>
<td>American Indian or Alaskan Native</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Asian</td>
<td>65%</td>
<td>61%</td>
<td>59%</td>
<td>45%</td>
</tr>
<tr>
<td>Black or African American</td>
<td>59%</td>
<td>33%</td>
<td>29%</td>
<td>7%</td>
</tr>
<tr>
<td>Native Hawaiian or other Pacific Islander</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>White</td>
<td>80%</td>
<td>79%</td>
<td>72%</td>
<td>45%</td>
</tr>
<tr>
<td>Not FRL</td>
<td>87%</td>
<td>84%</td>
<td>79%</td>
<td>51%</td>
</tr>
<tr>
<td>FRL</td>
<td>57%</td>
<td>44%</td>
<td>39%</td>
<td>16%</td>
</tr>
<tr>
<td>ELL</td>
<td>20%</td>
<td>9%</td>
<td>8%</td>
<td>7%</td>
</tr>
<tr>
<td>Not ELL</td>
<td>80%</td>
<td>79%</td>
<td>72%</td>
<td>45%</td>
</tr>
</tbody>
</table>

Based on 2011-2012 testing year. Reading and Math tests evaluate prior year’s learning.
* = data suppressed because of an N<11
- **Cohort Drop Out Rates - % of students who do not complete high school**

<table>
<thead>
<tr>
<th>School</th>
<th>Four-year Drop Out Rate</th>
<th>Five-year Drop Out Rate</th>
<th>Six-year Drop Out Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burlington Senior High School</td>
<td>13.0%</td>
<td>13.5%</td>
<td>9.0%</td>
</tr>
<tr>
<td>Champlain Valley UHS #15</td>
<td>7.2%</td>
<td>2.9%</td>
<td>1.8%</td>
</tr>
<tr>
<td>Colchester High School</td>
<td>6.9%</td>
<td>3.9%</td>
<td>6.5%</td>
</tr>
<tr>
<td>Essex High School</td>
<td>10.4%</td>
<td>6.8%</td>
<td>4.3%</td>
</tr>
<tr>
<td>Milton High School</td>
<td>9.9%</td>
<td>4.5%</td>
<td>5.0%</td>
</tr>
<tr>
<td>Mt. Mansfield US #17</td>
<td>2.9%</td>
<td>6.0%</td>
<td>5.8%</td>
</tr>
<tr>
<td>South Burlington High School</td>
<td>7.4%</td>
<td>4.6%</td>
<td>4.4%</td>
</tr>
<tr>
<td>Winooski High School</td>
<td>37.8%</td>
<td>29.0%</td>
<td>29.2%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>9.5%</strong></td>
<td><strong>7.1%</strong></td>
<td><strong>6.0%</strong></td>
</tr>
</tbody>
</table>

**FIGURE 21 - COHORT DROP-OUT RATE**

Note: Cohort dropout rates track individual students who enrolled for the first time in ninth grade in 2008 for the four-year rate, 2007 for the five-year rate, and 2006 for the six-year rate. Students are considered dropouts if they left high school permanently at any time during the four-year, five-year, or six-year period prior to receiving a regular diploma, GED or other completion certificate. Source: VT Dept. of Education

- **Highest level of education attained for those 25 and over.**

<table>
<thead>
<tr>
<th></th>
<th>Vermont</th>
<th>Chittenden County</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent high school graduate or higher</td>
<td>91.3%</td>
<td>93.6%</td>
</tr>
<tr>
<td>Percent bachelor's degree or higher</td>
<td>34.0%</td>
<td>46.1%</td>
</tr>
</tbody>
</table>

**FIGURE 22 - HIGHEST LEVEL OF EDUCATION ATTAINED (25+)**

Source: 2011 ACS 3-year

- **# of internship grants from the State of Vermont Department of Labor offered in Chittenden County (7/1/09-6/30/10)**
Child Care 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. This data will be added to the ECOS Scorecard as they become available.
2.3.3 PUBLIC SAFETY, CRIMINAL JUSTICE & HAZARD MITIGATION

**Public Safety, Criminal Justice Goal:** Improve the safety of the public including the loss of life and property from natural and manmade hazards.

**Key Issues/Trends/Insights**
[Data for this section drawn from 2011 Chittenden County Multi-Jurisdictional All Hazards Mitigation Plan.] This Plan will be updated in 2016.

- Feeling safe and secure in our homes, communities and urban areas is key to overall health in the community. Safety and perceptions of safety feature highly in people’s view of their living environment, their sense of well-being and quality of life. As urban areas grow, the need for safe social and physical environments, where people are able to participate fully in their communities, becomes an increasing challenge.
- The cost of emergency response and multiple law enforcement agencies is a challenge to municipalities.
- The lack of volunteers for volunteer fire departments is causing concerns about the ability and timeliness of response and is resulting in the need to hire firefighters.
- As identified by the 2011 Chittenden County Multi-Jurisdictional All Hazards Mitigation Plan (AHMP), the highest ranked county-wide hazards are severe winter storm, flooding, telecommunications failure, power loss, major transportation incident, fluvial erosion and epidemic. Three of the top hazards are natural hazards, three are technological hazards, and one is a societal hazard.
- Flooding and fluvial erosion can damage or destroy homes, businesses and transportation infrastructure. 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. Chittenden County experienced damage from five FEMA-Declared Natural Disasters between 2010 and 2014 (severe storm, flood, tropical storm), more declarations than occurred in the four previous 5-year periods. Additional data, including non-declared events, will be updated in the 2016 AHMP.
- Winter storms, flooding, transportation incidents and epidemics can cause human injury, illnesses and even death.
- Winter storms, telecommunications failure, power loss and transportation incidents can cause serious disruption of public safety services.
- Flooding, fluvial erosion and possibly epidemics may be made worse by projected climate changes. While Incident Command System training has continuously been offered throughout the state, post-Irene analysis has shown that previous ICS training was positively correlated with increased ability to respond to the challenges posed by Irene. This increase was due to the ability to organize a unified command structure within the town and work more efficiently.
- Emergency Management Planning of all types needs to be kept up to date to best be able to respond, recover, and mitigate disasters. These plans include Basic Emergency Operations Plans (BEOP) for each municipality, implementing improvement plans from exercises, and hazard mitigation plans.
Key Indicators

- **Violent Crime Rate**

![Chittenden County Per Capita Violent Crime Rate](image)

**FIGURE 26 - VIOLENT CRIME RATE PER CAPITA**

- **Rate of adult abuse and neglect victims** (AHS list) - The data needed for this indicator is not yet available, the intent is to include this information in the Annual Indicator Reports.

- **Incarceration rates by race compared to general population** (Source: Dept of Corrections). “The largest proportion of both male and female inmates were prosecuted in the largest District Court (Chittenden county) with the fewest inmates from the smallest counties. But on a per capita basis, Chittenden was close to average in its use of incarceration bedspace; only Bennington (176%) significantly exceeded expectations for use of prison/jail based on its population” (Source: DOC Fact and Figures FY2011, Page 38). “Although the residents of Vermont are predominantly characterized by race as “white”, on a per capita basis, the utilization of DOC services by “black” residents is about 7 times higher for incarceration and 2.5 times higher utilization of DOC services by “black” residents for field supervision. Native Americans and Asians use DOC resources at about half the rate of “whites”” (Source: DOC Fact and Figures FY2011, Page 38).

- **Emergency Incidents - 2011**

<table>
<thead>
<tr>
<th>Service Good Intent</th>
<th>False Alarm</th>
<th>Hazard Cond</th>
<th>Structure Fire</th>
<th>Cancelled</th>
<th>Wildland</th>
<th>Other</th>
<th>Outside</th>
<th>Vehicle</th>
<th>Other Fire</th>
<th>Explosion</th>
<th>Grand Total Fire</th>
<th>EMS Call</th>
<th>Medical Assist</th>
<th>Motor Vehicle Accident</th>
<th>Extrications</th>
<th>Water Rescues</th>
<th>Other</th>
<th>Search</th>
<th>Electrical</th>
<th>Grand Total EMS</th>
<th>Grand Total Fire and EMS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1779</td>
<td>1938</td>
<td>855</td>
<td>321</td>
<td>252</td>
<td>63</td>
<td>145</td>
<td>54</td>
<td>37</td>
<td>17</td>
<td>30</td>
<td>5491</td>
<td>5586</td>
<td>509</td>
<td>595</td>
<td>153</td>
<td>26</td>
<td>14</td>
<td>6</td>
<td>0</td>
<td>6889</td>
</tr>
</tbody>
</table>

**FIGURE 27 - 2011 EMERGENCY INCIDENTS**

Source: [Division of Fire Safety Annual Report](#)
% and number of structures in special flood hazard areas in Chittenden County (based on GIS analysis, Source: CCRPC and/or State NFIP.) 1.5% of structures or 866 structures out of 58,598 structures are within the Special Flood Hazard Area and Fluvial Erosion Hazard Area in 2012.

Vaccination rates (Source: Vermont Immunization Registry) – There is a clear increase in the % of children receiving influenza immunizations from 2010 to 2012. Younger children have better influenza immunization coverage than teens – which do not see their providers as regularly as the young ones. Coverage in all groups needs to be improved. Note that actual rates may be higher than indicated since the use of the registry is not universal among practitioners.

Proportion of Chittenden County children by age immunized against influenza per year, 2010-2012

American Red Cross # of incidents and persons where shelter was needed - The data needed for this indicator is not yet available, the intent is to include this information in the Annual Indicator Reports.

EMS aging calls (Health Dept) - The data needed for this indicator is not yet available, the intent is to include this information in the Annual Indicator Reports.
2.4.3 WORKING LANDS & LAND BASED INDUSTRIES

**Working Lands Goal:** Support the growth and vitality of working farms and managed forests; and sustainably manage sand and gravel extraction operations.

**Key Issues/Trends/Insights**
[Data for this section drawn from Natural Systems Analysis Report; Farm to Plate Annual Reporting; Informing Land Use Planning and Forestland Conservation Through Subdivision and Parcelization Trend Information – Vermont Natural Resources Council, September 2010; The Action Plan of the VT Working Landscape Partnership.]

- Working lands and resource extraction industries are critical components of a self-reliant and diverse economy, making a region less vulnerable to market crises. Local food and fuel production is preferred since the transportation to import these products consumes tremendous amounts of energy and generates pollution. In addition, when food is imported from far-away places, nutrient value is reduced during the transport time.

- Working lands and resource extraction industries are economically viable within the constraints of our natural landscape. Sustainably managed farmland and forest land means less developed land, fewer impervious surfaces, and thus a greater presence of the natural ecosystem’s features and functions. Conversely, high quality food and productive forests are dependent upon clean water and clean, nutrient-rich soils. It is imperative that we maintain high quality water and soils for healthy and viable food and forest product industries.

- A major challenge to forest and farm businesses is the value of the land in these industries versus the value of the land for development. Often when these industries are no longer economically viable, the land is sold and developed, resulting in forest fragmentation and increased parceling of land. The number of parcels has gone up, while their size has gone down, diminishing their economic viability and the ecological services they provide. This situation has far-reaching potential consequences for the future of Vermont’s local economies, including tourism.

- Markets for forest products are necessary to ensure that landowners can afford to hold and manage their forest land (Vermont Forest Resource Plan, page 57). Unfortunately, the Vermont forest products industry is in slow and unheralded decline which has resulted in dramatic reductions in wood processing and manufacturing (Action Plan of the Vermont Working Landscape Partnership, page 14)). In the face of increasing gas prices and international trade, the importance of local products and processing cannot be overstated. Markets for forest products are often influenced on regional scales beyond the county level, though support of opportunities to develop and take advantage of markets must occur at the local scale.

- In recent decades, farm enterprises in the County have been employing new forms of business ownership, engaging in non-farm employment, limiting the size of farm operations to control the growth of farm production expenses, producing different types of farm products, producing more farm-related products, and engaging in more direct sales to consumers. These trends present a new set of challenges for farmers and communities, including access to markets and access to affordable land. Difficulties acquiring the proper equipment, or accessing to a certified processing facility are also a common problem for some new farmers. We will need to adjust our regulations and programs to ensure that we are not unnecessarily prohibiting agricultural enterprises from diversifying as well as continue efforts to ensure that agricultural enterprises remain economically viable. It is not just about growing more or different things – it is also about
creating higher value products from what is grown. An example is helping dairy farms by increasing production of yogurt, ice cream, artisanal cheeses, and other dairy based products.

- **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. In Chittenden County, the extraction of sand, stone and gravel are currently commercially viable. These resources play an important role in our land development practices and economy. While it is important to manage the environmental impacts of these operations, it is also important to manage these finite resources because a reduction of these locally available products will likely have an impact on construction costs. Extraction industries are associated with different land management issues than farms and forests; these are included here for lack of a better location at this time. These nonrenewable resources are used to produce building materials (such as concrete and railroad ballast), to use as landscaping materials, and to build and maintain public and private roads and buildingsand to maintain roads. The earth resources in Chittenden County that currently are commercially viable are sand (over two billion cubic yards available) and gravel (430 million cubic yards available).—Chittenden County contained 3 primary producing construction sand and gravel areas, and a total of 10 producing mines within those areas ([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.

**Key Indicators**

- **Use Value Appraisal (UVA) Enrollment:** UVA is a State program allowing land to be taxed based on its income producing potential from agriculture or forestry, rather than its – typically higher - fair market (development) value. (Source: UVA program and the USGS National Land Cover Data)
  - In 2010, 66,411 acres and 789 parcels of UVA Forest Land enrollment.
  - In 2010, 16,895 acres and 311 parcels of UVA Agricultural Land enrollment.
  - From 2001 to 2006, 514 acres or 1% of agricultural land was converted to development; and 140 acres or .07% of forest land was converted to development.

- **The number of farms has increased, while the acreage of farmland has decreased.**
The average property taxes per acre for farms in Chittenden County increased 82 percent (adjusted for inflation) from 1987 to 2007, from $18.60 to $33.86. (Source: U.S. Census of Agriculture)

The net farm income per acre for farms in Chittenden County increased from $102.49 in 2002 (adjusted for inflation) to $110.17 in 2007 (compared with Vermont’s increase from $93.93 to $129.20). However the income trends vary depending on the product: there were decreases in the value of “dairy, cattle and calves” and “all other farm products” and increases (in some cases dramatic) in the value of other types of farm products (farm income from products made on the farm such as cheese or for services provided on the farm such as farm equipment repair). (Source: U.S. Census of Agriculture)
2.5.2 HOUSING

**Housing Goal:** Increase the opportunities for safe, decent, energy efficient, affordable, accessible and fair housing for all types of households in all neighborhoods.

**Key Issues/Trends/Insights**

- Adequate and affordable housing is central to a sustainable community. A healthy community is made up of households with a variety of incomes and affordable housing is needed to satisfy residents’ wide range of needs. Lack of affordable housing contributes to many social stresses, including homelessness. **Housing diversity supports the workforce and helps ensure that residents of all ages are continuously present in the community.**

- The financial burden of paying a mortgage, homeowner’s insurance, property taxes, utility expenses and other housing fees is unaffordable when these costs consume more than 30% of the household’s income. Further, paying more than half of income on housing expenses creates a severe strain on a household’s budget. These households are at much higher risk of foreclosure, eviction, homelessness, and frequent moving—all of which harm residents and the community. Approximately 4,000 owner households and 6,000 renter households living in Chittenden County pay more than half of their incomes for housing expenses. Cost burdens are highest for the lowest income residents, especially those living on fixed incomes or public assistance and those working at low-wage jobs.

- Approximately 500 people in Chittenden County were homeless during the January 2011 one-night count, clearly demonstrating gaps in the access to the types of housing options and services that could have kept these people housed.

- Some Chittenden County residents do not have equal access to housing opportunities. Members of the County’s growing population of non-White residents, residents with disabilities, and single-parent families are more likely to experience poverty and less likely to become homeowners than other types of households. Insufficient housing options for all residents, regardless of their race, disability status, or membership in other protected classes, help prevent those residents from reaching their potential as contributing community members.

- Nearly 60% of the County’s housing stock was built before 1980—when lead-based paint was widely used, when most home insulating/heating/energy technology was inefficient, and when building and accessibility codes did not yet accommodate all types of residents. (Note: Lead was banned from paint in 1978.)

- More than 11% of Chittenden County residents commute 25 or more miles to work—with potential adverse effects on both the health of the driver and the environment. In addition, with the exception of some neighborhoods in Burlington and Winooski and a few other Census blocks in the County, the vast majority of the County’s working residents pay more than 45% of their income for the combined cost of housing and transportation.

- The County’s population is expected to continue growing, albeit at a slower pace than in the past decade. Between 2010 and 2015, demand for additional owner homes is likely to be lower than prior levels of home building in the County. However, demand for renter homes is predicted to increase. Tools to ensure adequate housing supply for renters include renovation and
conversion of existing buildings as well as new construction. Looking further out roughly 4,000 additional housing units (rental and ownership combined) will be needed from 2010 to 2020.

- There are many needs for permanent supportive housing in the County, including housing for those transitioning out of a correctional facility. There are 69 beds in Chittenden County Transitional Housing Programs (FY2016 Department of Corrections). While this is certainly meeting a need, these are not permanent housing solutions, and not all inmates are able to transition to these houses. The statewide inmate population held in a correctional facility beyond their mandated sentence due to a lack of housing decreased by half between 2015 to 2016. However, as of February 2016, approximately 120 people statewide (28 in Chittenden County) remain in a correctional facility for this reason. Finding housing that will work for those that remain has proven challenging, due to the circumstances and needs of those inmates. For example, some of them previously violated rules in transitional housing locations.

Key Indicators

- % households spending over 30% of income on housing expenses (owners and renters).

![Figure 43 - Percent of Households Spending 30% of Income on Housing Expenses](source: US Census-ACS downloaded from [www.housingdata.org](http://www.housingdata.org))

- # of new housing units in 2010 by Municipality. This data will be collected going forward.
- Metro and non-metro vacancy rate for renters. A healthy vacancy rate needs to be based on local circumstances, and long-term local averages (setting a national standard is not effective). The target for Chittenden County may be somewhere between 3% and 5%, though more analysis would need to be done to find a more accurate target. In Burlington
and Winooski the average rental housing vacancy rate has been well below this, at 1.5% from 2004 to 2011 (Source: VHFA Allen and Brook report). For the suburban areas the average rental housing vacancy rate from 2004 to 2011 is 2.6% - still lower than a healthy rate but not as low as Burlington and Winooski (Source: VHFA Allen and Brook report).

- **Months of inventory for Condos and Single Family Homes.** A healthy housing market is one in which housing units for ownership are on the market for no more than 6 months. The average for condos from 2004 to 2010 has been 4.4 months; and the average for single-family homes from 1998 to 2010 has been 5.1 months. However, in 2008 (at the beginning of the recession) the single-family housing units were on the market for 9.6 months. More recently, this trend has corrected itself. (Source: VHFA Allen and Brook report)

- **Homeless at point in time, 3 year average.** Average from 2008 to 2011 is 497. Source: Chittenden County Continuum of Care (Burlington CEDO 2011)

- **Increased inventory of affordable rental housing.** As of 10/22/2012 there were 120 properties and 4,520 subsidized units. Source: Vermont Directory of Affordable Rental Housing (www.housingdata.org/doarh).
2.5.4 INFRASTRUCTURE & FACILITIES

Infrastructure & Facilities Goal: Ensure adequate infrastructure and facilities (i.e. water supply, wastewater treatment, stormwater treatment, broadband coverage and solid waste recovery and recycling) to support areas planned for growth while conserving resources.

Key Issues/Trends/Insights
[Data for this section and more information can be found in the: Section 2.2.1 Ecological Systems Topic for water quality; Broadband Action Plan; Stormwater websites: http://www.ccrpcvt.org/stormwater/ and www.smartwaterways.org; and other sources listed below.]

- The majority of the residents in the County get their drinking water from Lake Champlain, via two utilities: the Champlain Water District and the City of Burlington’s DPW Water Division. Both Champlain Water District and the City of Burlington’s DPW Water Division utilities have received Phase III Director’s Awards from the USEPA’s Partnership for Safe Water Program; and 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 11 in the US to presently maintain this award status following required annual reviews. In addition, Richmond, Hinesburg, Underhill and Jericho have smaller public water supply utilities – some of which are facing capacity and water quality challenges (Hinesburg for example).

- Currently, there are 12 municipal wastewater treatment plants in the County; together they have a treatment capacity of 21 million gallons per day (MGD) (Source: State of Vermont Wastewater Management Division). As of 2010, CCRPC estimated an aggregate reserve capacity of 9 MGD (this does not account for unconnected committed capacity and capacity limitations of individual facilities.). The estimated future demand for wastewater capacity in 2035 is 7 MGD. While these figures indicate that there is sufficient sewage treatment capacity to absorb anticipated growth in housing and employment county-wide, this does not account for location specific limitations. Colchester, Essex Junction, Huntington, Hinesburg, Westford, and Williston were among the municipalities in need of more wastewater capacity.

- Management of our storm water is critically important to maintaining and improving water quality throughout the County. Stormwater treatment is challenging in both urban and rural areas of the County for a variety of reasons: existing urban areas need to retrofit old infrastructure, financing new infrastructure in areas planned for growth when development is incremental, and impacts from agriculture and forestry practices that don’t follow best management practices. Stormwater is managed at a variety of levels including EPA’s National Pollutant Discharge Elimination System (NPDES) permits; VT’s discharge permits; and some municipalities have additional stormwater regulations and programs. VT’s discharge permits are structured to address site level development for projects over 1 acre of disturbance; therefore, incremental and cumulative impact of development is not addressed through this program. The municipalities are facing the challenges of dealing with the cumulative impact – and most are regulating stormwater through local regulations. In addition, nine municipalities and three public entities are subject to MS4 permitting (a NPDES program) in Chittenden County: Burlington, Colchester, Essex, Essex Junction, Milton, Shelburne, South Burlington, Williston, Winooski, Burlington International Airport, UVM and VTrans. A new MS4 permit was issued by the State in December 2012. There are two additional requirements: each permittee/municipality must develop and implement a Flow Restoration Plan (FRP) for the stormwater impaired waters within their jurisdiction (current estimates for restoration of individual impaired streams ranges in the millions); and each permittee/municipality must now pay for the annual operation of stream flow gauges (formally funded by the State/UVM/USGS).
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. The federal definition of broadband is 768 kbps download/200 kbps upload speeds. It will be important 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. Specifically, the defined broadband speeds are quite slow and will need to improve.

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.

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, 27 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 such as planning and 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 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. The majority of these fire and rescue departments rely on volunteers; and recruitment and retention of these volunteers is a challenge. For more information see Section 2.3.3 of this Plan, the All Hazard Mitigation Plan and Annexes and the Local Emergency Operations Plans for each municipality (particularly Section 5.2 provides the specific services, volunteers and personnel for each operation). Discussions around consolidation of some municipal services, such as dispatch, continue in an effort to achieve greater efficiency. As an example of creative solutions, Essex and Essex Junction have consolidated a number of services since July 2013. Specifically, in accordance with the FY2014 (NOTE: update when FY2015 Town Report is released) Town of Essex Annual Report: a shared manager has successfully administered both Town and Village municipalities, a joint stormwater policy committee has been appointed and begun planning Town and Village stormwater permit activity, one tax bill now exists for the Village taxpayers, and one Town-wide collection system has been successfully implemented.

- 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. 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. The UVM Medical Center continues to focus on becoming fully permitted to construct a new inpatient building with 128 replacement beds on the main campus. They are looking at all older primary care sites to ensure they are adequately sized and equipped to meet all our patients’ needs. The UVM Medical Center is not currently planning changes to other outpatient facilities. 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); two 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.

- It is important to consider the shift in our demographics when analyzing what facilities and services are needed. According to the 2015-2020 Chittenden County Housing Needs Assessment (Bowen National Research) between 2015 and 2020, the number of households between the ages of 65 and 74 will increase the most, adding 1,085 households during this time. Overall, Chittenden County will add a projected 3,345 households age 55 and older between 2015 and 2020.” Also, according to the State of Vermont Population Projects – 2010 to 2030 (VT Agency of Commerce and Community Development August, 2013) we are expecting a significant population increase in all age cohorts 60 years old and older. In 2010, 17% of the Chittenden County population was 60 years old and older. According to these projections, this age cohort will grow to 23% of the population in 2020, and 28% of the population in 2030. Changes in specific age cohorts is shown here:
Not only is this a major demographic change, the needs of people within these age cohorts have changed with greater desire on aging in place and emphasis on providing home based care. The State has shown progress in the Choices for Care program and are currently serving those that qualify (long-term care program that assists with care and support for older Vermonters and people with physical disabilities whether they are at home, an enhanced residential care setting, or a nursing facility. Participants in Choices for Care must qualify for Level II nursing home placement and meet financial eligibility criteria). However, there are many that don’t qualify for this Medicaid program, but have wide ranging needs from counseling on insurance issues, meal preparation, transportation, social activities, medical services, housing, etc., at the same time that we have a decrease in the workforce population. Expansion of the Vermont Respite House and use of technology in medical services (i.e. the Visiting Nursing Association of Vermont has tele-monitors to conduct daily in-home check-ins with patients remotely) are two examples of how Vermont is responding to these growing and changing needs. We still have a long way to go as the demand on these service providers is expected to increase. NOTE: will add more info from VNA, CCVA and Cathedral Square when received.

Key Indicators

- **Current Water Capacity and Reserve for Large Water Utilities** The reserve capacity below equates to 39,000 new homes (as a comparison there are 65,722 housing units in Chittenden County in 2010).

<table>
<thead>
<tr>
<th>Utility</th>
<th>Capacity</th>
<th>Reserve</th>
</tr>
</thead>
<tbody>
<tr>
<td>Champlain Water District</td>
<td>20 mgd</td>
<td>6.5 mgd</td>
</tr>
<tr>
<td>City of Burlington</td>
<td>7.5 mgd</td>
<td>1.3 mgd</td>
</tr>
<tr>
<td>Total</td>
<td>27.5 mgd</td>
<td>7.8 mgd</td>
</tr>
</tbody>
</table>

**FIGURE 47 - CURRENT WATER CAPACITY AND RESERVE FOR LARGE WATER UTILITIES**
Current Wastewater Capacity v. Capacity Needed for Growth Projections in Areas Planned for Growth Source: ANR and CCRPC Municipal Growth Projections. Chittenden County has the capacity to treat an additional 7 million gallons per day of wastewater. In 2035, it is estimated that the anticipated demand will be 7 MGD which is adequate capacity to accommodate 80% of the future development within the various sewer service areas. However, capacity varies for each treatment plant and some facilities may have a narrow margin of additional capacity.

16.9% of impervious area is under storm water management through operational stormwater permits countywide. Source: ANR VTDEC Stormwater Permit database, ANR’s 2008 NDVI Impervious Surface Layer. 52% of the impervious area in Chittenden County is covered by the Municipal Separate Storm Sewer System Permit (MS4). Source: MS4 Boundary, ANR’s 2008 Impervious Surface Layer.

Pounds of Waste Disposed/Capita/Day for MSW (Municipal Solid Waste) and C&D (Construction Debris).

![Graph of Pounds of Waste Disposed/Capita/Day for MSW (Municipal Solid Waste) and C&D (Construction Debris).](Image)
2.5.5 ENERGY

**Energy Goal:** Reduce Chittenden County's consumption of energy and reliance on non-renewable, energy. Improve the cost-effectiveness, efficiency and reliability of the energy production, transmission, and distribution system.

**Key Issues/Trends/Insights**

[Data for this section drawn from: Energy Analysis Report and Climate Change Trends and Impacts Report].

- Chittenden County citizens, businesses, and industries spent about $617 million on energy in 2009 (25% of Vermont's total). Much of this money leaves the County and state immediately. This outflow of energy dollars acts as a drain on the local economy.
- The price of energy is forecasted to continue increasing in the future, which will result in an additional burden on the County's residents and businesses, unless energy consumption can be reduced.
- 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.
- While efficiency programs targeting electricity and natural gas have been largely successful, there is an urgent need to fund and develop similar programs for non-regulated thermal fuels and for the transportation sector.
- Fossil fuel combustion increases the atmospheric concentration of carbon dioxide and other greenhouse gases, which are the causes of global climate change. Climate change will have profound impacts on the environment, public health, infrastructure, and economy of Chittenden County.
- Vermont, and the County, relies heavily on fuel oil for building heat and on gasoline and diesel for transportation. Gasoline consumption has increased as more residents drive to and from work, run errands, and consume for goods.
- 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 heat 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.
- The cost of electricity is related to the distance it travels. When electricity is transmitted over long distances, a significant amount of electricity is lost. Improving line efficiency or encouraging distributed generation (such as locally sited small scale renewable projects) reduces losses and could result in more cost effective rates.
- Every three years, Vermont Systems Planning Committee (VSPC) launches a process to update and identify constrained areas and reliability needs for the electric transmission grid. Chittenden County has areas identified as needing improvement.
Electric efficiency programs have always worked to reduce electrical demand especially during peak periods but the development of the Smart Grid will provide a powerful tool to address this issue. Smart Grid coupled with education, behavior change, and load control technologies can help reduce peak demand and defer substation upgrades which can result in substantial cost saving.

Chittenden County has many non-fossil fuel based, renewable energy production sites owned by utilities, private parties, and municipalities. Reliable, cost effective, and environmentally sustainable energy availability is critical to support the economy and natural resources of Chittenden County.

The more widespread adoption of electric vehicles should reduce the total energy consumption in the County, due to better efficiency (an EV gets the equivalent of 100 miles/gallon). To prepare for widespread adoption of electric vehicles, charging infrastructure should be developed. In addition, policies and pricing structures to encourage off peak charging need to be considered to mitigate grid constraints.

Chittenden County is home to an international airport and a National Guard base, therefore the transportation fuel consumption in the County not only includes gasoline, diesel, and compressed natural gas, but also aviation gasoline and jet fuel.

Key Indicators

- Energy Consumption Estimates and Population Trend in Chittenden County

![Energy Consumption and Population Trend](image-url)
- **2009/2010 Total energy consumption per person (per household for the residential sector) and by sector (transportation, residential, commercial, and industrial).** Reduction in consumption will lead to a reduction in energy bills, relative to what they would be without that reduction in consumption.

<table>
<thead>
<tr>
<th></th>
<th>Total Energy (MMBTU)</th>
<th>Gallons of Gas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential Energy per Household</td>
<td>89</td>
<td></td>
</tr>
<tr>
<td>Commercial and Industrial Energy per Employee</td>
<td>120</td>
<td></td>
</tr>
<tr>
<td>Transportation Energy per Person</td>
<td>420</td>
<td></td>
</tr>
</tbody>
</table>


- **Percent of natural gas saved in 2010 from building weatherization and heating equipment upgrades.**

<table>
<thead>
<tr>
<th>Natural Gas (McF)</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumed</td>
<td>6,363,760</td>
</tr>
<tr>
<td>Savings</td>
<td>82,151</td>
</tr>
<tr>
<td>% Efficiency Savings</td>
<td>1%</td>
</tr>
</tbody>
</table>

Source: VT GAS, 2010

- **Electricity Efficiency Savings as a percent of total electricity consumed.**
According to the Vermont Energy Atlas, in 2009, .06% of electricity consumed in Chittenden County is from privately owned renewable energy sources. Utility renewable energy generation is excluded because utility energy generated may not be used in Chittenden County.

Number and capacity of renewable energy production sites in the County (Source: VT Energy Atlas, Oct. 12, 2011)

<table>
<thead>
<tr>
<th># of sites</th>
<th>Capacity (kW)</th>
<th>MWh</th>
<th>Capacity (Thousand Btu)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solar Photovoltaic</td>
<td>297</td>
<td>6,101</td>
<td></td>
</tr>
<tr>
<td>Solar Thermal</td>
<td>42</td>
<td></td>
<td>2,975</td>
</tr>
<tr>
<td>Combined systems</td>
<td>12</td>
<td>86</td>
<td>588</td>
</tr>
<tr>
<td>Wind</td>
<td>28</td>
<td>491</td>
<td></td>
</tr>
<tr>
<td>Hydro¹</td>
<td>6</td>
<td></td>
<td>152,000</td>
</tr>
<tr>
<td>Wood Thermal</td>
<td>9</td>
<td></td>
<td>3,900</td>
</tr>
<tr>
<td>Wood Electric</td>
<td>1</td>
<td>50,000</td>
<td>665,760</td>
</tr>
</tbody>
</table>

¹-Six utility owned hydro stations generate electricity for Chittenden County and surrounding area. 2-Thermal capacity not recorded, only tons of wood consumed as a proxy for system size is available. 3-McNeil Power.
3.2.2 STRIVE FOR 80% OF NEW DEVELOPMENT IN AREAS PLANNED FOR GROWTH, WHICH AMOUNTS TO 15% OF OUR LAND AREA.

The areas planned for growth are defined as the Center, Metro, Suburban, Village, and Enterprise Planning Areas (all but Rural) as displayed on the Future Land Use Map. CCRPC is committed to annually monitoring the quantity and location of development to measure our progress on concentrating 80% of new growth in these Planning Areas at a regional scale (not each municipality). This goal mimics the development patterns we’ve seen in the recent past (see Section 2.5.1 Indicators for more detail). CCRPC will monitor this through annual updates of its housing, employment, and commercial/industrial square footage databases and also by the State of Vermont’s e911 locational database. The databases identify when a structure was built, number of dwelling units, employees, and square footage at a specific location. The major source of information for updating these databases will be gathered from CCRPC’s member municipalities.

Increasing investment in denser, mixed use growth areas will improve economic opportunities, housing options, transportation options and improve community health. Focusing growth in the appropriate planning areas is also a cost effective approach to increasing the supply of affordable housing, reducing energy consumption and using existing infrastructure efficiently.

Actions

1. **Invest in Areas Planned for Growth**
   - a. Establish wastewater, water infrastructure and public transit in areas currently developed and/or planned for growth.
   - b. Target reuse, rehabilitation, redevelopment, infill, and brownfield investments to the non-rural Planning Areas.
   - c. Retrofit existing buildings to reduce energy use and greenhouse gas emissions.
   - d. Improve design quality of high density areas, and allow flexibility for creative solutions.

2. **Municipal Planning and Zoning**
   - Strengthen and direct development toward areas planned for growth through infill development and adaptive reuse of existing buildings through municipal plan and bylaw revisions and state designation programs.
   - a. Municipal Development Review Regulations should be revised to improve the mix of uses, shared parking, support for transit, access to a variety of services (for example restaurants, grocery stores, parks, entertainment) via active transportation, energy efficiency, renewable energy and the affordability of housing. A particular emphasis is needed on providing for affordable rental housing.
      - FUNDED VITAL PROJECT - South Burlington’s Pathway to Sustainability – The overall project includes a series of initiatives to support, develop, and create a community that will be a leader in sustainable food production, housing, transportation, energy efficiency, natural resource protection, transit oriented development, residential quality of life and economic growth. Specifically, ECOS funding is supporting an overhaul of the City’s Land Development Regulations, with a special focus on Form Based Codes, to implement the goals of ECOS and the City’s Path to Sustainability.
• FUNDED VITAL PROJECT – PlanBTV Form Based Code. Burlington will develop and adopt form based code zoning for their Downtown and Waterfront districts consistent with PlanBTV.

• FUNDED VITAL PROJECT – Shelburne Road, Shelburne Form Based Code. Shelburne will develop and adopt form based code zoning for the Shelburne Road corridor north of the Village.

• FUNDED VITAL PROJECT – Winooski Gateway Development Regulations. Winooski will develop and adopt updated zoning for their gateway districts.

b. Integrate capital planning and budgeting in planning efforts to provide the right mix of infrastructure over time. Official maps can also be a useful tool to drive infrastructure improvements in the areas planned for growth.

c. Health Impact Assessments (HIA) provide a tool to use at the regional, municipal, agency, and organizational level to assure that planning decisions maintain or improve the public health. Access can be improved by co-locating public facilities, in particular, medical and mental health facilities in areas with easy access via active transportation and public transit. Town health officers should be encouraged to participate in community planning efforts.

d. Empower local officials through trainings and education on strategies to achieve the above plan and bylaw amendments, and implementation of them during development review. This could include how to effectively analyze development costs and benefits, and select appropriate multi-modal congestion mitigation measures.

3. Affordable Housing – Producing more affordable housing helps meet basic needs, creates jobs and 50-year hard assets. This is a critical part of the infrastructure of the community and the economy.

   a. Implement incentives that encourage more housing construction that is lower cost including, but not limited to, affordable and supportive housing. This housing should be integrated within our communities throughout the County to provide a mix of housing for different incomes and access to jobs and services. These actions include:
      i. Chittenden County Regional Planning Commission and its partners should study the current and projected shortage of affordable housing units by type (rental, owner, multi-family, single family).
      ii. Increase density in areas planned for growth considering community character and design.
      iii. Revise infrastructure requirements with a goal of reducing costs for developers.
      iv. Consider fee waivers or other development review process incentives.
      v. Continue to work with the University of Vermont, Champlain College and Burlington College to develop specific plans to increase the percentage of students who reside in dedicated student housing.

   • FUNDED PROJECT – VHFA is working with South Burlington, Williston, and Essex Junction to analyze their local needs and suggest improved bylaws and programs to create more affordable housing and increase housing choice.

b. Maintain or increase local and state resources that fund additional affordable housing, make housing more affordable, and/or maintain existing affordable housing. These actions include:
   i. The state should fully fund the Vermont Housing and Conservation Board with 50% of property transfer tax revenues. This funding should be used to increase the stock of permanently affordable housing in Chittenden County.
ii. Review and amend (if necessary) local ordinances impacting the maintenance and use of existing buildings to ensure they’re encouraging maintenance and retrofits of existing housing stock without adding undue cost.

iii. Advocate for more Tax Increment Financing (TIF) districts to help fund infrastructure improvements. Encourage the use of municipal housing trust funds to assist in the financing of affordable housing.

iv. Take steps to preserve existing affordable housing (including protecting subsidized housing and ensuring perpetual affordability through shared equity programs) from being converted to market rate housing; and continue to encourage shared equity for new owner homes.

c. Engagement and education efforts should continue and be improved. These actions include:

i. 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 that don’t penalize them for a lack of credit or rental history.

ii. Provide fair housing and land use planning training for land use professionals and municipal officials throughout the County.

iii. Train municipal officials and staff, the public, and developers to promote better development practices that achieve a higher level of density with quality design.

d. Increase efforts to comply with fair housing requirements. These actions include:

i. Identify gaps in municipal implementation of State Fair Housing laws and ADA compliance (including but not limited to municipal bylaws should include language that explicitly permits officials to make reasonable accommodations to accommodate the needs of people with disabilities without delay or public input).

ii. The Vermont legislature should enact legislation that limits security deposits to no more than one month’s rent with no more than one-half month’s rent and no more than $200 for pet deposits (excluding assistance animals for persons with disabilities). For tenants with rent subsidized through public programs, security deposit amounts should be based on the tenant's share of the rent before the application of any utility allowance. These limits do not apply to service deposits for residential care/assisted living settings.

iii. Implement the recommendations (as best as possible within current resource capacities) of the 2010 Burlington Analysis of Impediments and the 2012 State Analysis of Impediments. This includes tracking zoning variances, local permit applications, adjusted residential permit application and denials to identify disparities and trends.

e. Increase enforcement and testing capacity of fair housing organizations such as Vermont Legal Aid. Currently, Vermont Legal Aid is only funded to test the protected classes included in federal fair housing law. Seek funding sources that would allow Vermont Legal Aid to test and enforce state protected classes (Age, marital status, sexual orientation, gender identity, receipt of public assistance).

4. Energy
a. Reduce Energy Consumption - Education and outreach to key sectors regarding weatherization, life cycle fuel costs, and behavioral adjustments will be essential elements for reducing energy use and costs over time.

b. Decrease greenhouse gas emissions, to support the State’s goal of reducing greenhouse gas emissions 50% from 1990 levels by 2028.
   i. Encourage individual homes and businesses to include electric and thermal energy efficiency in building and/or retrofitting. Weatherization should be promoted and executed as a first step to reduce overall energy consumption before investing in renewable energy systems. There is a need for focused study to determine solutions for vermiculite removal as it relates to weatherization, in particular low income weatherization. Vermiculite was used as an insulator for decades (1960-1990) – and was mined with asbestos thus any home with vermiculite is assumed to be contaminated.
   ii. Provide alternatives to fossil fuels for heating.
   iii. Reduce fossil fuel consumption in the transportation sector.
   iv. Increase resilience to potential interruptions of grid power, especially for maintaining essential services (including water supply and sewage disposal) without electrical power. Such services need, in the short term, backup power with at least a week’s supply of stored fuel. In the long term, redesign these services in a more resilient way.

c. Increase Renewable Energy Generation, to support the State’s goal of 90% renewable energy by 2050.
   i. Determine appropriate sites for community-level renewable energy generation. Recent work on this topic has included the Legislature’s Solar Siting Task Force Committee in 2015; and three Regional Planning Commissions have received Department of Energy grants. CCRPC has not yet received these funds, but will benefit from the work of the other three RPC’s – and will hopefully be able to build on that work if CCRPC receives its own grant to work on this task further.
   ii. Encourage individual homes and businesses to include renewable energy options in building and/or retrofitting.

5. State/Local Permitting Coordination & Improvement

a. Support changes to the local and state permitting process to make the two more coordinated and effective. Participate in the Agency of Commerce and Community Development’s (ACCD) process to improve the State’s designation programs designed to encourage development in appropriately planned places and discourage development outside of those areas. This program could be improved with regulatory and/or fiscal incentives. These could include expedited permitting processes for projects in areas that are: a) designated for growth; and, b) where a community has a robust plan, regulations and staff capacity; and reduction of redundancies such as delegation of permitting for certain local and state reviews (such as exemption from Act 250). In conjunction with delegation it may be appropriate to develop more stringent standards and thresholds for development review in rural areas.

b. Collaborate with stakeholders to ensure local and state regulations, bylaws and plans encourage transparency, predictability and timely review of sustainable and environmentally sound development applications.

c. Develop a transportation assessment process that supports existing and planned land use densities and patterns in Center, Metro, Suburban, Village, and Enterprise Planning.
Areas to allow for more congestion and greater mode choice than allowed by current standards. The CCRPC will collaborate with the Vermont Agency of Transportation (VTrans), the Natural Resources Board, and other state and local stakeholders to develop a process that evaluates the transportation impact from a multi-modal perspective rather than just a traffic flow standpoint.

- Policies and planning studies that are adopted as part of this ECOS Plan and subsequent amendments will guide CCRPC’s position in permit proceedings.

6. **Metropolitan Transportation Plan Investments**

   a. Adequately fund the maintenance and preservation of our existing transportation assets including roads, bridges, rail, transit, walking/biking facilities, and transportation demand management (TDM) programs and facilities.

   b. New transportation system investment should focus on the highest priority transportation projects as detailed in the ECOS/Metropolitan Transportation Plan (MTP) Project List. In the next five years, these projects will primarily be those that are included in the Transportation Improvement Program (TIP), as may be amended. The TIP projects are considered FUNDED VITAL PROJECTS for the purposes of the Comprehensive Economic Development Strategy (CEDS).

   c. Future project investments and specific focal areas for targeted implementation impact include:
      
      i. For transportation planning studies that have been adopted as part of this ECOS Plan, the specific recommendations for project, policy, and program investments will guide CCRPC investment priorities.

      ii. Expand Intelligent Transportation Systems (ITS) for the roadway network, and traffic and transit operations, to improve safety and reduce congestion;

      iii. Expand the Go! Chittenden County Transportation Demand Management (TDM) program (including park and ride facility development) to reduce single occupancy vehicle (SOV) trips

      iv. Increase investment in CCTA transit services to increase user accessibility

      v. Expand walking and biking infrastructure to support active transportation and to provide interconnection with the region’s transit system

      vi. Develop a regional network of electric vehicle charging stations to accommodate the growth in low emissions, low energy costs electric vehicles and support the expanded adoption of natural gas vehicles for heavy duty fleets.
3.2.3 IMPROVE THE SAFETY, WATER QUALITY, AND HABITAT OF OUR RIVERS, STREAMS, WETLANDS AND LAKES IN EACH WATERSHED.

While striving toward all of these ECOS strategies, and particularly Strategy #2 – 80% of growth in 15% of our land area, it is essential to do so in such a way that we do not impair our essential water resources (including potable water) and that we prepare ourselves for the impacts of a changing climate.

1. **River Hazard Protection** – Develop and implement adaptation strategies to reduce flooding and fluvial erosion hazards. While supporting planned growth, ensure that growth is evaluated in terms of preparedness for a changing climate – particularly wetlands, rivers, lakeshore, and other areas where extreme weather can cause flooding. Chittenden County will continue its efforts, along with the municipalities, to avoid development in particularly vulnerable areas such as floodplains, river corridors, wetlands, lakeshore and steep slopes; protect people, buildings and facilities where development already exists in vulnerable areas to reduce future flooding risk (see the Vulnerable Settlements section below); plan for and encourage new development in areas that are less vulnerable to future flood events (see Section 3.2.2); and implement stormwater management techniques to slow, spread and sink floodwater (see the Non-Point Source Pollution section below).
   a. Identify problem locations - Conduct on the ground inventories and map flow and sediment attenuation locations and problematic infrastructure (undersized culverts, eroding roadways, "vulnerable infrastructure" - infrastructure subject to repeat damage and replacement, etc.).
   b. Revise bridge/culvert designs - Revise public works 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. Protect river corridors & ensure enforcement – Existing bylaws protect the majority of Fluvial Erosion Hazard (FEH) areas with stream setbacks and floodplain regulations; improve bylaws to protect the FEH hazard zones not currently protected and enforce these bylaws. Continue protection of river corridors including non-regulatory protection measures such as stream re-buffering and culvert and bridge replacements.
   d. Support non-regulatory conservation and/or preservation of vulnerable areas through public and land trust investments, including identification of repetitively damaged structures and provide assistance to elevate, relocate or buy out structures, and identify where new flood storage capacity may be located and conserved.
   d.e. Participate in the development and implementation of the Lamoille, Winooski and Direct to Lake 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.

2. **Non-point Source Pollution** - While we have addressed point sources of pollution, non-point sources are still contributing pollutants to our water bodies.
   a. Assemble data – Work from existing data collected and further identify the locations that are contributing to water quality pollution such as flow, sediment, pathogen and nutrient. 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 the existing and new data on one regional map.

b. Revise Plans and Bylaws and Ensure Enforcement -- Incorporate the above data into municipal plans; establish specific statements that protect these resources; develop clear standards for how to protect these resources within zoning regulations; and initiate on-going enforcement of the regulations. Encourage low impact development techniques, and shared storm water control programs to maximize land development in areas planned for growth. Incentivize best management practices for agricultural uses; and encourage the Agency of Agriculture to better enforce their accepted-required agricultural practices. In addition, EPA’s DRAFT Lake Champlain Total Maximum Daily Load (TMDL) for phosphorus, Vermont’s Phase 1 TMDL Implementation Plan, and the Vermont Clean Water Act (2015 Act 64) have established a variety of regulatory programs to address phosphorus reduction. CCRPC will work with the municipalities and other partners to implement these programs: Municipal Roads General Permit, Phosphorus reduction integration into the existing MS4 permit, and Developed Lands (3 or more acres of impervious). See Chittenden County’s Work Plan and the 2016 All Hazard Mitigation Plan (in development) for more detail on these actions.

c. Implement Non-regulatory approaches - Identify and implement non-regulatory approaches to nutrient, pathogen and sediment pollution management. Under new MS4 permit requirements, municipalities will be developing flow restoration plans to achieve the total maximum daily load requirements for impaired streams, rivers, and Lake Champlain. These plans may require additional public investment in storm water facilities or investments or actions by individual property owners. Support watershed organizations.

- FUNDED PROJECT - Connecting the Drops: A Water Story –Winooski Natural Resources Conservation District (WNRCD) aims to continue public awareness of water quality issues with a call to action in the 2013 summer season. The project includes a public art and education display in downtown Burlington where art, public participation, science education, and environmental stewardship will highlight stormwater’s impact on Lake health and steps each of us can take to improve it.

3. Wastewater Treatment Plant Upgrades – The non-point sources have been identified as the largest contributors of phosphorus to Lake Champlain, and therefore Vermont’s August 2015 Draft Lake Champlain Phosphorus TMDL Phase I Implementation Plan, does not allocate any additional phosphorus reductions to wastewater treatment plants in the Lake Champlain basin. However, EPA’s Draft Phosphorus TMDLs for Vermont Segments of Lake Champlain, dated August 14, 2015, does include reductions at some of the County’s wastewater treatment plants as identified in Table 9 of that document. These treatment plants are listed in the ECOS Project List (see Section 4.2.6). To provide further context to the treatment plants on this list, here is further information from EPA’s Phosphorus TMDL:

*The currently permitted WWTF [wastewater treatment facility] contributions in [the Main Lake, Shelburne Bay and Burlington Bay] segments ranges from 16 to 97% of the total segment base load and should be reduced. EPA has made WWTF waste load allocations [WLA] equivalent to setting the phosphorus limit at 0.2 mg/l at design flow for the 17 facilities
with flows greater than 0.20 MGD. Those facilities [in Chittenden County] are: Burlington East, Burlington Main, Burlington North, Essex Junction, Hinesburg, Global Foundries, Shelburne #1 and #2, Richmond, South Burlington Airport Parkway, South Burlington Bartletts Bay, and Winooski. [Some] of these facilities have recently made upgrades or have the ability to make process improvements that would enable them to meet permit limits consistent with the new allocations without major construction upgrades. [Within Chittenden County] these include, Essex Junction, South Burlington Airport Parkway, Shelburne #1 and #2, and South Burlington Bartlett Bay….There are two exceptions to this general approach. The 2002 WLAs for Weed Fish Culture Station and Burlington Electric were lower than a limit equivalent to 0.2 mg/l at design flow. The more stringent 2002 allocations have been retained and are already reflected in the permit limits for these facilities.” EPA’s Phosphorus TMDLs for Vermont Segments of Lake Champlain August 14, 2015, page 31.

3.4. Support and promote the use of more holistic, less chemical dependent and less energy intensive effluent management efforts whenever possible (for example, composting toilets, localized grey water systems, passive grey water and black water septic systems, rain water harvesting and storage, etc.)
3.2.4 INCREASE INVESTMENT IN AND DECREASE SUBDIVISION OF WORKING LANDS AND SIGNIFICANT HABITATS, AND SUPPORT LOCAL FOOD SYSTEMS.

1. **Habitat Preservation** - Protect forests, wetlands and agricultural lands from development, and promote vegetative landscaping in urban areas in order to maintain natural habitats, natural storm water management and carbon sequestration. This will keep people and infrastructure out of harm’s way and allow for natural flood attenuation areas.
   a. **Inventory** - Conduct on the ground surveys and inventories of significant habitats (include wetlands), connectivity corridors, scenic resources and locations of invasive species and map this information. Incorporate this data into municipal and regional plan text and maps and establish specific policies that address and protect these resources.
   
   - FUNDED PROJECT - Forests, Wildlife & Communities: Science to Action – Town of Richmond with Towns of Bolton, Jericho, Huntington, Vermont Natural Resources Council, Arrowood Environmental, Vermont Fish & Wildlife Department, VT Forests, Parks & Recreation Department, and CCRPC. This project is a comprehensive four-town natural resource inventory of wildlife habitat, wetlands, uplands, natural communities and working lands; technical assistance in the development of bylaws and non-regulatory conservation tools tailored to our communities’ needs to provide permitting predictability, protect, restore and enhance critical habitat, and advance the goals specified in each town’s plan; and engagement of property owners and other citizens in all aspects of the project.
   
   b. **Municipal Development Review Regulations** - Develop clear definitions of the resources to be protected and establish standards to describe how to protect these resources within zoning and subdivision regulations.
   
   c. **Education** - Educate engineers, developers, real estate professionals, planners and the public regarding resources and methods for restoration and protection.
   
   d. **Non-regulatory Protection** - Support non-regulatory conservation and/or preservation through public and land trust investments. Establish invasive plant removal management plans, implement the plans and include long-term monitoring.

2. **Working Lands Implementation** – To preserve the soul of Vermont, as well as move forward into the future with resiliency, Vermont needs to protect the farmland and forestland we have and support existing and new operations (including, but not limited to, un-intensive urban and suburban home gardens and mini-homesteads). Support implementation of the Farm to Plate Strategic Plan and the VT Working Landscape Partnership Action Plan.
   a. **Municipal Development Review Regulations** - Develop clear definitions of working lands to be protected and establish zoning and subdivision standards to describe how to protect these areas from development so that they may be retained and accessible as “working” lands. Maintain access and scale of working lands to ensure viability after subdivision in the rural landscape (including but not limited to protection of log landings of previously logged forested parcels, zoning techniques such as fixed area ratio zoning to separate lot size from density, conservation zoning and homeowners association bylaws that allow for farming on the open space lots, etc.);
while promoting urban agriculture in areas planned for growth. While farming is generally exempt from municipal zoning, some structures such as farm houses, processing facilities, the generation of energy for on-farm use, and on-farm retail and related enterprises may be regulated. The economic viability of farm enterprises can often depend on these facilities so municipal regulation should not impede reasonable farm related improvements.

b. Infrastructure & Systems – support establishment of food processing industries, value-added product markets, workforce training, etc to help support the viability of these industries.

- FUNDED PROJECT - New American Food – Association of Africans Living in Vermont, Inc. is leading this revenue-generating, culinary job skills training project. It will prepare unemployed refugee Reach Up (Temporary Assistance for Needy Families) recipients, with limited English proficiency, for jobs in the food preparation and food processing industries through the 120-hour, 10-week FRESH food course. The AALV Employment Counselor places graduates into employment opportunities that result in movement off welfare. In addition, there will be an increase in sales by refugee farmers of organic, locally grown crops.

c. Support non-regulatory conservation and/or preservation through public and land trust investments (including but not limited to municipal land conservation funds).

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 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 native 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.
a. Support organizations and businesses that bring diverse people together around a myriad of 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. Encourage organizations of all kinds to offer and/or support free arts and leisure opportunities so that everyone, regardless of location or social/economic status, can experience the benefits of cultural events and participate in civic engagement.

3.2.6 EQUIP OUR RESIDENTS WITH THE EDUCATION AND SKILLS THAT THEY NEED TO THRIVE.

During 2012, several efforts were concurrently conducted with a focus of improving education outcomes. The actions below summarize the result of that work. These efforts include the Lake Champlain Regional Chamber of Commerce/GBIC Education Task Force, the Vermont Superintendents Education Quality Framework, and the ECOS Education Subcommittee.

Vermont is home to a public education system that has provided a significant economic benefit to students, businesses and the broader community. There is vital connection between a strong education system, the attractiveness of our region, and a healthy economy. Nonetheless, like much of the nation, Vermont faces challenges. We have an aging workforce, an increasing number of jobs that require a post-secondary degree, entrants to the workforce and college who lack the basic skills necessary to be successful and a lingering achievement gap that is tied to income and race across the state. In an environment with fewer students in the system to enter the workforce, it is an economic and community imperative that our schools help a higher percentage of all students achieve college and career readiness than ever before. Investment in public education is vital for our success as a community and a society – though the costs of education can be exceptionally high. Education financing along with other public costs need to be balanced and evaluated as suggested in 3.2.7.6.

1. Coordinate Efforts - Establish a Chittenden County regional initiative of all interested stakeholders to undertake the action steps below drawing upon successful nationally recognized programs in other states. (e.g. STRIVE in Cincinnati, OH)

2. Elementary Readiness and Comprehensive Student Needs – Students need to begin kindergarten and every school day after that ready to learn.
   a. Improve access and funding for pre-kindergarten programs so that children are ready to learn by the time they begin kindergarten.
   b. Ensure that our young children are nurtured by knowledgeable and capable caregivers by: increasing the capacity, knowledge and skills of parents to nurture their young children; providing families access to high quality early care and education settings; and, supporting the ability of early care and education providers to develop the skills and knowledge needed to care for children.
   c. Provide adequate meals to students who need them.
   d. Quantify the financial realities of the human service cost shift and integrate the social, health and nutritional services that schools currently provide.

3. Student-centered, Proficiency-based, Flexible Pathways to Graduation
a. Adopt the Smarter Balanced assessments, which are administered on-line and based on the Common Core Standards. These assessments provide teachers with rapid results, allowing for timely adjustments.

b. Develop a comprehensive advisory system within schools that includes a sustained relationship with an advisor throughout a student’s career, and a personal learning plan tied to proficiency expectations for graduation rather than Carnegie units of credit. These plans may rely on traditional course-work, school choice, college courses through dual enrollment, internships for credit, on-line courses, community-based work, and service learning.

c. Expand the use of on-line resources and technology such as the Vermont Virtual Learning Cooperative (which only one third of Vermont high schools have signed on to) and the Learning Network of Vermont (real time interactive video technology in 130 Vermont school sites).

4. **Consistency Across the System** - Make the changes to governance necessary to improve consistency and equity across the state.

   a. Explore the impacts and outcomes of adopting a common statewide school calendar or targeted and personalized summer program opportunities with the overall goal of deterring summer learning loss.

   b. Adopt a common, statewide daily schedule to allow for distance learning, flexible pathways and the ability to access courses outside of a home school district.

   c. Adopt a statewide teacher’s contract, with allowance for regional cost-of-living disparities, and acknowledgment for innovation.

   d. Set a state deadline for voluntary consolidation to achieve a target number of supervisory unions and districts. If the necessary consolidation is not achieved voluntarily, the Legislature should appoint an independent panel to draft a statewide slate of consolidations. Ask districts and supervisory unions (SUs) to describe what unique circumstances prevent their reorganization to serve an average of 1,500 students. Grass roots, community-driven consolidation is the healthiest and most viable course. However, reducing the number of SUs and school districts presents an opportunity to use cost savings to support innovation, improve programs and reduce unnecessary and duplicate spending as well as property taxes.

5. **Career Awareness/Skill Alignment**

   a. Develop a community needs advisory system that embeds current and anticipated career information from employers into each district and SU. Expand early career exposure and awareness that is based on local employer feedback and that begins in middle school or earlier. It should assist families and students with career awareness, goal-setting and the link to relevant learning, training and career opportunities.

   b. Strengthen programming and delivery of math curriculum.

   c. Allow Career and Technical Education Centers to be accessible either full or part-time starting in the 9th grade.

   d. Offer credit-bearing, structured, 40-hour internships subsequent to a 20-hour pre-employment skills segment, and tied to a high school learning outcome (e.g., the Linking Learning to Life TIPS (Training Interns & Partnering for Success) model for structured internships).

   e. Provide training and support for people who are leaving incarceration.
f. To develop creative and collaboration skills, make sure there are opportunities for students to come together, interact, and network. Bring diverse people together around arts, music, cultural events, recreation, and sports activities.

6. Teacher Preparation and Ongoing Professional Development
   a. Support innovation in teacher preparation, training and ongoing professional development. Twenty-first century teachers are facilitators, coaches and guides who will measure student learning through proficiency, instead of serving as the exclusive distributors of classroom and course content.
   b. Allow for greater flexibility in licensing to accommodate transitions from career to classroom.
   c. Improve the numeracy skills and confidence of educators through content-specific professional development and adoption of strong math benchmarks based on the Common Core.

7. Postsecondary aspiration, continuation, retention and completion - Public higher education in Vermont is chronically underfunded relative to the rest of the nation. In the near term, additional state investment should be targeted to desired performance: enrollment of Vermonters and successful degree completion.
   a. Adopt a loan forgiveness program tied to the timely completion of a degree, in which a student or his/her parents are provided with an economic incentive to be staggered over five years which forgives the equivalent of one year’s tuition at a four-year public college.
   b. For students who demonstrate college or career readiness before they would otherwise finish high school, use the state’s commitment to their education through age eighteen to support an additional year of learning. This funding might be applied to an apprenticeship, an experience in entrepreneurship, a certificate program, a year in college, an internship, or community service.

8. Child Care - 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.
   a. Work with municipalities 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. Amendments could include incentives to provide space for childcare in all types of projects.
   b. Work with municipalities to consider waiving impact fees for new child care businesses.
   b. Review the recommendations of the Vermont Blue Ribbon Commission on Financing High Quality, Affordable Child Care when complete, to determine how our partners may help advance these efforts.
• CCRPC’s Executive Committee considers whether an applicant’s proposal is in conformance with the Regional Plan, with specific attention given to the Planning Areas of this Plan (for the same reasons described above for the SRI definition), and the criteria dealing with traffic and other criteria within CCRPC’s expertise.

• Staff initially reviews each Act 250 application (with specific attention given to those applications going to a hearing as the FY13 CCRPC contract with the Agency of Commerce and Community Development requires that the CCRPC review and comment on Act 250 and Section 248 applications if a hearing is held).

• CCRPC staff will discuss potential Act 250 and Section 248 projects with Planning and Zoning staff and members of the Planning Advisory Committee to identify emerging development proposals to assess their conformance with the Regional Plan. The intent is that this proactive, collaborative approach attempts to work out any concerns about Act 250 and Section 248 applications prior to their submission.

The Planning Advisory Committee may recommend to the CCRPC revised procedures for participation in Act 250 and Section 248 proceedings in order to better achieve the goals of this Chittenden County 2013 ECOS Plan. These revisions will be established through formal amendments to the Guidelines and Standards for Reviewing Act 250 and Section 248 Applications, and if appropriate, as amendments to this Plan as well. Changes in the review of transportation impacts and CCRPC policies will be coordinated with VTrans and the District Environmental Commission as appropriate to seek consistency in Act 250 reviews.

Subsequent to Plan adoption, the CCRPC anticipates a change to the measures and thresholds used to evaluate allowable congestion in Planning Areas Designated for Growth:

• Currently, Level of Service (LOS) is the predominant measure used to quantify traffic congestion of the transportation system and often determines whether or not mitigation is required for specific development proposals. LOS measures quality of service of a transportation facility from a driver’s perspective. Alternatively, LOS will not be used as the predominant measure of congestion when reviewing overall intersection performance in traffic impact studies as part of Act 250 applications. For Planning Areas Designated for Growth (excludes Rural Planning Areas), the CCRPC will use both LOS and volume-to-capacity (v/c) measures to evaluate congestion. Rather than focusing on incremental and often inconsequential changes between different levels of service, the v/c measure provides information on whether capacity of an intersection is being fully utilized. Applying both LOS and v/c measures will more effectively assist in reaching the land use and transportation goals of the region. The CCRPC will work with VTrans and other stakeholders to develop LOS and v/c thresholds that will allow for higher levels of congestion within non-Rural CCRPC defined Planning Areas than currently defined in the VTrans LOS Policy.

4.1.3 STATEMENT OF COMPATI BILITY 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.

<table>
<thead>
<tr>
<th>County</th>
<th>Percent of Primary Jobs held by County Residents located in Chittenden County (2013)</th>
<th>Number of Primary Jobs held by County Residents located in Chittenden County (2013)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grand Isle County</td>
<td>57.50%</td>
<td>2,009</td>
</tr>
<tr>
<td>Franklin County</td>
<td>42.30%</td>
<td>9,538</td>
</tr>
<tr>
<td>Lamoille County</td>
<td>19.80%</td>
<td>2,279</td>
</tr>
<tr>
<td>Washington County</td>
<td>16.20%</td>
<td>4,105</td>
</tr>
<tr>
<td>Addison County</td>
<td>26.90%</td>
<td>4,160</td>
</tr>
</tbody>
</table>

Source: http://onthemap.ces.census.gov/
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.
Due to the amount of commuting traffic from the surrounding regions into Chittenden County, there is a demand for transportation services and infrastructure to get residents to their places of work and home again. All four regional plans include a similar sentiment as this one from the Northwest Regional Plan: “As this demand increases, efforts to combine infrastructure capacity improvements with increased public transportation services should be examined at every possible opportunity.” A recent example of this type of improvement, selected by the Circ Alternatives Task Force, is the CCTA Jeffersonville Commuter bus route on Route 15. The Plans are consistent in calling for access management, and concentrated development to maintain these arterial corridors for mobility and preservation of character. Concentrated development of jobs and housing that is affordable in the areas planned for growth is a major tenant of the ECOS Plan and a critical component in addressing some of the cross regional pressures on transportation networks. Particular roadway improvements and corridor plan recommendations identified in the surrounding regional plans are consistent with the ECOS Plan.

Also, hazard mitigation and emergency services are regional issues as responders cross municipal and county boundaries. All four regional plans include a similar sentiment as this one from the Addison County Regional Plan: “To maintain a strong and effective response system that is built on the concept of cooperation and mutual aid.”

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).

**Municipal Plan Review & Compatibility**

In determining whether the Municipal Plans are compatible with this Regional Plan (upon request by the Municipality and in accordance with VT Statute 24 VSA 4350b), the CCRPC will refer to the Planning Areas depicted on the Future Land Use Map, the goals in Chapter 2 and the strategies in Chapter 3. In conducting these reviews and determining compatibility CCRPC’s Planning Advisory Committee will use the Guidelines and Standards for Confirmation of Municipal Planning Processes and Approval of Municipal Plans and when needed seek guidance from community partners with expertise in subject areas outside of CCRPC’s realm.

Municipalities may also find it useful to consult the ECOS Criteria included in Appendix B. The ECOS Criteria were established to prioritize transportation projects (for the MTP), and the ECOS implementation grants in order to ensure that limited financial resources will go to the projects that will have a high rate of return and move many ECOS goals in the right direction. In addition, the MTP sections of this plan, particularly the corridor improvement sections, may be helpful to the municipalities in planning for future land use and transportation improvements.

Decisions for how we create denser mixed use communities are made at the local municipal level of government. Therefore, municipalities are encouraged to apply ECOS strategies in their development decision making process. Specific implementation of the ECOS strategies will vary throughout the County as municipalities consider their own unique needs and relationship to the region as a whole.
8. A section identifying economic clusters within the Region, focusing on those that are growing or in decline. (See Strategic Industry Sector Analysis at http://ecosproject.com/analysis);

9. A plan of action to implement the goals and objectives of the CEDS, including:
   (i) Promoting economic development and opportunity;
   (ii) Fostering effective transportation access;
   (iii) Enhancing and protecting the environment;
   (iv) Maximizing effective development and use of the workforce consistent with any applicable State or local workforce investment strategy;
   (v) Promoting the use of technology in economic development, including access to high-speed telecommunications;
   (vi) Balancing resources through sound management of physical development; and
   (vii) Obtaining and utilizing adequate funds and other resources Investments.
   (See Section 3.2 in general);

(9) A list of performance measures used to evaluate the Planning Organization’s successful development and implementation of the CEDS, including but not limited to the following:
   (i) Number of jobs created after implementation of the CEDS;
   (ii) Number and types of investments undertaken in the Region;
   (iii) Number of jobs retained in the Region;
   (iv) Amount of private sector investment in the Region after implementation of the CEDS; and
   (v) Changes in the economic environment of the Region.
   (See indicators in Chapter 2, specifically 2.4.1 for jobs and 2.5.2 for private property investment. See Section 3.3 for Annual Indicator and Progress Report);

10. A section outlining the methodology for cooperating and integrating the CEDS with State’s economic development priorities. (See Section 3.2.1.8.)

4.2.6 CEDS PROJECTS

ECOS Partners have identified projects that they hope to implement in the next few years. Many of these projects will require state or federal assistance to accomplish. The list is incorporated into this Plan and can be found on the following pages. Three processes were collectively used to prioritize projects in the ECOS/CEDS Project List. The first process focused more on economic development, the second more on transportation, and the third more on land use changes.

Economic prioritization - To determine vital projects for the purposes of job creation and economic development, the ECOS criteria (see Appendix B at http://ecosproject.com/plan) were used to prioritize projects and reviewed with the ECOS Steering Committee and GBIC/CEDS Committee during the summer of 2012. These projects were then reviewed and approved for funding by the ECOS Steering Committee in October 2012 and funded with ECOS implementation grants and/or by ECOS Partners. These projects are included in ECOS Strategies 3.2.1 and identified as “FUNDED VITAL PROJECTS.” Additional ECOS funded projects were also prioritized with the ECOS criteria, but those additional projects were not prioritized by the GBIC/CEDS Committee.

Transportation prioritization – The transportation investments that are considered VITAL PROJECTS were determined by going through a prioritization process within VTrans and then through the CCRPC Transportation Advisory Committee and finally the CCRPC Board. These VITAL PROJECTS are on the current Transportation Improvement Program (TIP) list and can be found here: http://www.ccrpcvt.org/tip/. The TIP is updated on an annual basis. The projects that are in the TIP are
considered VITAL PROJECTS for the purposes of economic development because these investments are necessary for job retention and growth in our region. The designation as VITAL PROJECTS is also noted above in ECOS Strategy 3.2.2.6.b.

Land use prioritization - The land use changes that are considered VITAL PROJECTS are noted in ECOS Strategy 3.2.2.2.a. These projects were developed through CCRPC’s Unified Planning Work Program process. They were determined to be VITAL PROJECTS because these zoning changes are necessary for creating economic development opportunities including job retention and growth in our region.

All of the projects that are considered priorities for Chittenden County municipalities are included in the full ECOS/CEDS and ECOS/MTP Project Lists on pages 134 & 200 (respectively). Only the VITAL PROJECTS are noted in Chapter 3. These lists include specific projects proposed for implementation. The ECOS/CEDS Project List includes details regarding the Lead Partner, other partners, expected start date, estimated costs, estimated jobs beyond construction, and funding sources. These implementation projects are sorted according to the ECOS Strategy number and priority. The EDA Goals listed below are also referenced by number in the list.

ECOS Strategies:

3.2.1 – Improve and strengthen the economic systems of our region to increase opportunities for Vermont employers and employees.

3.2.2 – Strive for 80% of new development in areas planned for growth, which amounts to 15% of our land area.

3.2.3 – Improve the safety, water quality, and habitat of our rivers, streams, wetlands and lakes in each watershed.

3.2.4 – Increase investment in, and decrease subdivision of, working lands and significant habitats, and support local food systems.

3.2.5 – Increase opportunity for every person in our community to achieve optimal health and personal safety.

3.2.6 – Equip our residents with the education and skills that they need to thrive.

3.2.7 – Develop financing and governance systems to make the most efficient use of taxpayer dollars and reduce costs.

3.2.8 – Ensure that the projects and actions in all ECOS strategies assess equity impacts, and that the design and development of programs are inclusive of all and engage under-represented populations.

EDA Goals:

1. Promoting economic development and opportunity;
2. Fostering effective transportation access;
3. Enhancing and protecting the environment;
4. Maximizing effective development and use of the workforce consistent with any applicable State or local workforce investment strategy;

5. Promoting the use of technology in economic development, including access to high-speed telecommunications;

6. Balancing resources through sound management of physical development; and

7. Obtaining and utilizing adequate funds and other resources Investments.

The CEDS Project list follows on the pages below:
<table>
<thead>
<tr>
<th>#</th>
<th>ECOS Strategy</th>
<th>EDA goal</th>
<th>Municipality/ Sponsor</th>
<th>Project Name (Champion or Partner)</th>
<th>Description/Comments</th>
<th>Estimated Cost</th>
<th>Expected Job Creation (post construction)</th>
<th>Fully Funded Y/N</th>
<th>Priority VITAL/ H/V/A/</th>
<th>50% Local Match Source(s)</th>
<th>Possible Start Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3.2.1</td>
<td>4.2.5.8.i</td>
<td>GBIC</td>
<td>Industrial Infill Sites (IBM)</td>
<td>Master planning and preliminary approval of new industrial sites, part of an existing industrial campus, to accommodate future job growth of value added employers. Also keep an inventory of available sites.</td>
<td>$100,000</td>
<td>1,000</td>
<td>N</td>
<td>Vital</td>
<td>GBIC funds</td>
<td>Completed</td>
</tr>
<tr>
<td>2</td>
<td>3.2.1</td>
<td>4.2.5.8.iv</td>
<td>Lake Champlain Regional Chamber of Commerce</td>
<td>Chittenden County After School Aspirations Program/ASAP (GBIC, Lake Champlain Workforce Investment Board, Boys and Girls Club of Burlington, Linking Learning to Life, Sara Holbrook Community Center, King Street Center, Community College of Vermont, and many businesses)</td>
<td>The project partners will design and implement a replicable and sustainable after-school curriculum for at-risk youth in grades 8-12 that will assess their interests and skill levels, raise post secondary education aspirations, expose them to the fields of science, technology, engineering, and math (STEM), and prepare them for viable careers in Chittenden County.</td>
<td>$45,279</td>
<td>0</td>
<td>Y</td>
<td>Vital</td>
<td>GBIC funds</td>
<td>Completed</td>
</tr>
<tr>
<td>3</td>
<td>3.2.1</td>
<td>4.2.5.8.iv</td>
<td>GBIC</td>
<td>Innovate Vermont</td>
<td>GBIC is working with the State of Vermont, the University of Vermont, and the Vermont Technology Council to produce a virtual front door for entrepreneurs called &quot;Innovate Vermont.&quot; The intent is to create an online portal for entrepreneurs and innovators to find programs, resources, and services across many different needs and throughout Vermont.</td>
<td>$25,000</td>
<td>TBD</td>
<td>Y</td>
<td>Vital</td>
<td>GBIC funds</td>
<td>Ongoing</td>
</tr>
<tr>
<td>4</td>
<td>3.2.1</td>
<td>4.2.5.8.i</td>
<td>Burlington</td>
<td>Redevelopment of King Street Dock Site / Ferry Yard (CEDO)</td>
<td>Redevelopment of King Street dock site and ferry terminal - mixed use development</td>
<td>$60-85,000,000</td>
<td>75-200</td>
<td>N</td>
<td>Vital/ public/private partnership</td>
<td>2014</td>
<td>In progress</td>
</tr>
<tr>
<td>5</td>
<td>3.2.1</td>
<td>4.2.5.8.i</td>
<td>Burlington</td>
<td>Pine Street Corridor Redevelopment (CEDO)</td>
<td>Ongoing work with businesses along Pine St (Sondik, Noyes, Champ. Choc., Dealer and others). Individual Projects may be funded by private businesses. Complete street improvements would be publicly funded.</td>
<td>TBD for private projects, $10,000,000 for complete streets</td>
<td>250</td>
<td>Y</td>
<td>H</td>
<td>Municipal</td>
<td>Ongoing</td>
</tr>
<tr>
<td>6</td>
<td>3.2.1</td>
<td>4.2.5.8.i</td>
<td>Burlington</td>
<td>Town Center Mall Redevelopment</td>
<td>Mixed use redevelopment</td>
<td>$60-80,000,000</td>
<td>20-200</td>
<td>N</td>
<td>H</td>
<td>TIF, public/private partnership</td>
<td>In progress</td>
</tr>
<tr>
<td>7</td>
<td>3.2.1</td>
<td>4.2.5.8.i</td>
<td>Colchester</td>
<td>&quot;Branding&quot; Colchester</td>
<td>PL Priority for Town</td>
<td>$50,000</td>
<td>0</td>
<td>Y</td>
<td>H</td>
<td>100%</td>
<td>In progress</td>
</tr>
<tr>
<td>8</td>
<td>3.2.1</td>
<td>4.2.5.8.i</td>
<td>Colchester</td>
<td>Colchester Strategic Economic Development Plan Implementation</td>
<td>Implement recommendations of the 2012 Colchester Economic Development Plan</td>
<td>$10,000</td>
<td>0</td>
<td>Y</td>
<td>H</td>
<td>100%</td>
<td>In progress</td>
</tr>
<tr>
<td>9</td>
<td>3.2.1</td>
<td>4.2.5.8.i</td>
<td>GBIC</td>
<td>Chittenden County Economic Resource Center (GBIC)</td>
<td>A non-profit economic and planning support resources center anchored by GBIC with co-location by CCRPC, CCMPO, LCRC, VT SBDC, VMAC, VEDA, and other related non-profits.</td>
<td>$4,000,000</td>
<td>TBD</td>
<td>N</td>
<td>H</td>
<td>Cynosure</td>
<td>Ongoing</td>
</tr>
<tr>
<td>10</td>
<td>3.2.1</td>
<td>4.2.5.8.iv</td>
<td>GBIC</td>
<td>Chittenden County Career Fair (7Days, UVM, VSC)</td>
<td>Explore developing an annual, county-wide Career Fair that expands on Tech Jam work. Expose High School Freshmen and Sophomores to the jobs available in the County at all major employers, salaries of those jobs, skills needed to obtain those jobs, and classes needed to obtain those skills. An intention of this Career Fair should be to demonstrate to the region's future workforce that there are good jobs available paying good wages.</td>
<td>$60,000</td>
<td>60</td>
<td>Y</td>
<td>H</td>
<td>GBIC Funds; local businesses; business organizations</td>
<td>2013</td>
</tr>
<tr>
<td>11</td>
<td>3.2.1</td>
<td>4.2.5.8.i</td>
<td>Colchester</td>
<td>Biotechnology Research Park/Incubator</td>
<td>Ext 16 center of UVM life science research center, VT Health Dept Laboratory, and Albany College of Pharmacy also a research facility</td>
<td>$10,000,000</td>
<td>Depends of company - from 10 to 100</td>
<td>N</td>
<td>M</td>
<td>No funding yet. Will seek grants for emerging technologies being developed.</td>
<td>TBD</td>
</tr>
<tr>
<td>12</td>
<td>3.2.2</td>
<td>4.2.5.8.v</td>
<td>Hinesburg</td>
<td>New water service</td>
<td>Two new wells on the Warner property located off of Shelburne Falls Road, along with the first municipal non-recreational treatment system in Vermont. To address current needs and water quality concerns. Another source still needed for projected demand.</td>
<td>$1,175,000</td>
<td>TBD</td>
<td>Y</td>
<td>Vital</td>
<td>Municipal Water Enterprise Fund</td>
<td>In Progress - construction start December 2015</td>
</tr>
<tr>
<td>13</td>
<td>3.2.2</td>
<td>4.2.5.8.v</td>
<td>Burlington</td>
<td>Railyard Enterprise District (CEDO)</td>
<td>Develop and build out new street grid including bike/ped, mixed use, greenspace and connections to the lake and lake path.</td>
<td>$10-16,000,000</td>
<td>TBD</td>
<td>Y</td>
<td>for planning phase</td>
<td>Vital/ Local Match</td>
<td>Various options</td>
</tr>
<tr>
<td>14</td>
<td>3.2.2</td>
<td>4.2.5.8.v</td>
<td>Burlington</td>
<td>Marina Expansion and Long-term Improvements (Parks)</td>
<td>In conjunction with Plan BTV, the Parks Master Plan, and an assessment of the existing Boathouse, opportunities to improve/renovate/replace the Boathouse, increase transient boater slips, and improve land side amenities should be considered.</td>
<td>$2-3,500,000</td>
<td>10</td>
<td>N</td>
<td>Vital</td>
<td>TIF</td>
<td>2014</td>
</tr>
<tr>
<td>15</td>
<td>3.2.2</td>
<td>4.2.5.8.v</td>
<td>Burlington</td>
<td>Redevelopment of 453 Pine St</td>
<td>Redevelop Brownfield at 453 Pine St to allow growth in the South End. Possible inclusion of solar array</td>
<td>$6-12,000,000</td>
<td>100-300</td>
<td>N</td>
<td>Vital</td>
<td>Private equity</td>
<td>2013</td>
</tr>
<tr>
<td>16</td>
<td>3.2.2</td>
<td>4.2.5.8.v</td>
<td>Shelburne</td>
<td>Farm-based code on Shelburne Road</td>
<td>North of the Village</td>
<td>$70,000</td>
<td>0</td>
<td>Y</td>
<td>Vital</td>
<td>State, CCRPC, Local</td>
<td>In progress</td>
</tr>
<tr>
<td>#</td>
<td>ECOS Strategy</td>
<td>EDA goal</td>
<td>Municipality/ Sponsor</td>
<td>Project Name (Champion or Partner)</td>
<td>Description/Comments</td>
<td>Estimated Cost</td>
<td>Expected Job Creation (post construction)</td>
<td>Fully Funded Y/N</td>
<td>Priority VITAL/ HUD/A</td>
<td>% Local Match Source(s)</td>
<td>Possible Start Date</td>
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<tr>
<td>17</td>
<td>3.2.2</td>
<td>4.2.5.8.i</td>
<td>South Burlington</td>
<td>Pathway to Sustainability (Chamberlin School, Pomerleau Real Estate, Green Mountain Power, Encore Redevelopment, Efficiency Vermont, South Burlington Realty, Donut Street Associates, LLC., Llewellyn Howley Incorporated, Hayes Avenue Homeowner Associations, and the Farm at South Village)</td>
<td>The overall project includes a series of initiatives to support, develop, and create a community that will be a leader in sustainable food production, housing, transportation, energy efficiency, natural resource protection, transit oriented development, residential quality of life and economic growth. Specifically, ECOs funding is supporting an overhaul of the City’s Land Development Regulations, with a special focus on Form Based Codes, to implement the goals of ECOS and the City’s Path to Sustainability.</td>
<td>$202,000</td>
<td>0</td>
<td>Y</td>
<td>VITAL</td>
<td>$50,000 ECOS grant, City funding</td>
<td>In Progress</td>
</tr>
<tr>
<td>18</td>
<td>3.2.2</td>
<td>4.2.5.8.i</td>
<td>VTtrans, CCRPC</td>
<td>Transportation projects</td>
<td>Federally eligible transportation investments are included by reference in this list and can be found in the MTP section 4.3.6, TIP Projects are VITAL.</td>
<td>$50,000,000 annually</td>
<td>125</td>
<td>Y</td>
<td>VITAL</td>
<td>FHWA, FTA, VTtrans, Muni</td>
<td>2013</td>
</tr>
<tr>
<td>19</td>
<td>3.2.2</td>
<td>4.2.5.8.i</td>
<td>Essex Junction</td>
<td>Sewer Treatment Plant Refurbishment</td>
<td>Plant is $15M and pump station $1.3 million in grants, TIF Redevelopment</td>
<td>$16,300,000</td>
<td>1</td>
<td>Y</td>
<td>H</td>
<td>State Rebuilding Loan fund eligible</td>
<td>completed</td>
</tr>
<tr>
<td>20</td>
<td>3.2.2</td>
<td>4.2.5.8.i</td>
<td>Hinesburg</td>
<td>Extension of 3-phase power</td>
<td>to South Hinesburg along VT118 by Green Mountain Power. Job creation possibly substantial, service extension to existing industrial district with ample build out potential.</td>
<td>TBD</td>
<td>TBD</td>
<td>N</td>
<td>H</td>
<td>From Utility Provider (GMP) and destination Industrial District Businesses</td>
<td>TBD</td>
</tr>
<tr>
<td>21</td>
<td>3.2.2</td>
<td>4.2.5.8.i</td>
<td>Burlington</td>
<td>Burlington Bikeway (Parks and CEDO)</td>
<td>Reconstruct and enhance 7.5 mile bike path</td>
<td>$17,000,000</td>
<td>25 to 50</td>
<td>N</td>
<td>H</td>
<td>$2.7M TIF, EDA, Municipal, Other TBD</td>
<td>In Progress</td>
</tr>
<tr>
<td>22</td>
<td>3.2.2</td>
<td>4.2.5.8.i</td>
<td>Burlington</td>
<td>Cherry Street Streetscape - Phase 1</td>
<td>Creating walkable environment and links between the waterfront and Church Street Marketplace</td>
<td>$1,500,000</td>
<td>0</td>
<td>N</td>
<td>H</td>
<td>TIF, CCTA</td>
<td>2015</td>
</tr>
<tr>
<td>23</td>
<td>3.2.2</td>
<td>4.2.5.8.i</td>
<td>Burlington</td>
<td>Lake Streets Project (CEDO)</td>
<td>Expand amensities of CSMP to more of the downtown district. Add connectivity to waterfront from CSMP. Stimulate downtown business growth.</td>
<td>$18,000,000</td>
<td>TBD</td>
<td>N</td>
<td>H</td>
<td>TIF and other grants, BID</td>
<td>2013-25</td>
</tr>
<tr>
<td>24</td>
<td>3.2.2</td>
<td>4.2.5.8.i</td>
<td>Burlington</td>
<td>Urban Reserve Planning and Redevelopment (CEDO)</td>
<td>Develop new conservation map that includes a land use/land cover analysis.</td>
<td>TBD</td>
<td>TBD</td>
<td>N</td>
<td>H</td>
<td>TIF, Conservation Legacy Fund</td>
<td>2013</td>
</tr>
<tr>
<td>25</td>
<td>3.2.2</td>
<td>4.2.5.8.i</td>
<td>Burlington</td>
<td>General utility upgrades in waterfront district</td>
<td>Water, sewer, lighting, electrical, conduit, telecommunications upgrades to prepare sites for development and enhanced public space.</td>
<td>$6,500,000</td>
<td>0</td>
<td>N</td>
<td>H</td>
<td>TIF</td>
<td>2014</td>
</tr>
<tr>
<td>26</td>
<td>3.2.2</td>
<td>4.2.5.8.i</td>
<td>Burlington</td>
<td>North Beach Access Road Improvement (Parks)</td>
<td>Reconstruction of roadway to better accommodate emergency vehicle access to North Beach Campground</td>
<td>$300,000</td>
<td>0</td>
<td>N</td>
<td>H</td>
<td>TBD</td>
<td>TBD</td>
</tr>
<tr>
<td>27</td>
<td>3.2.2</td>
<td>4.2.5.8.i</td>
<td>Burlington</td>
<td>Gateway Block Redevelopment (CEDO)</td>
<td>Redevelopment of the Gateway Block at Main and North Winooski. Properties include Memorial Auditorium, Municipal surface list, motel and firehouse.</td>
<td>$10,000,000,100</td>
<td>N</td>
<td>H</td>
<td>private/public partnership, TIF Investment</td>
<td>2014</td>
<td></td>
</tr>
<tr>
<td>28</td>
<td>3.2.2</td>
<td>4.2.5.8.i</td>
<td>Burlington</td>
<td>Housing renovation and construction (CEDO)</td>
<td>Dinging through HMER funds, Lead Program and other initiatives.</td>
<td>$10,000,000</td>
<td>20-100</td>
<td>N</td>
<td>H</td>
<td>TIF, private/public partnership</td>
<td>Ongoing</td>
</tr>
<tr>
<td>29</td>
<td>3.2.2</td>
<td>4.2.5.8.i</td>
<td>Burlington</td>
<td>District Heating Plan (CEDO)</td>
<td>Plan to recapture ‘waste heat’ from the McNeil power plant and distribute it to the Old North End of Burlington, a densely populated area within the City.</td>
<td>Feasibility study underway, TBD</td>
<td>5-50</td>
<td>N</td>
<td>H</td>
<td>$440,000 grant and in-kind to pay for study</td>
<td>2012</td>
</tr>
<tr>
<td>30</td>
<td>3.2.2</td>
<td>4.2.5.8.i</td>
<td>Burlington</td>
<td>Moran Plant/Waterfront Redevelopment (CEEDO)</td>
<td>To redevelop one of the last parcels/vacant buildings on the shores of Lake Champlain in downtown Burlington. The Moran plant has been vacant for decades and the city is now working to develop a private/public partnership to renovate the facility.</td>
<td>$21,000,000</td>
<td>60-80</td>
<td>N</td>
<td>H</td>
<td>$2M Section 108 Loan; $1.3 Million in Historic Tax Credits; $1.5 Million in Grants, TIF</td>
<td>2013-14</td>
</tr>
<tr>
<td>31</td>
<td>3.2.2</td>
<td>4.2.5.8.i</td>
<td>Burlington</td>
<td>Grocery Store site in South End, (CEEDO)</td>
<td>Working with brokers and local grocery store to find a suitable location in the south end of the city. Discussions are currently underway.</td>
<td>$3-10,000,000</td>
<td>100</td>
<td>N</td>
<td>H</td>
<td>Private equity</td>
<td>In progress</td>
</tr>
<tr>
<td>32</td>
<td>3.2.2</td>
<td>4.2.5.8.i</td>
<td>Burlington School District</td>
<td>Burlington High School Renovations</td>
<td>To meet 21st century learning needs, such as electrical outlets and capacity, wireless infrastructure, smart boards and projectors.</td>
<td>$5 million to start basic upgrades; $80 million for complete renovation.</td>
<td>0</td>
<td>N</td>
<td>H</td>
<td>Local</td>
<td>2014</td>
</tr>
<tr>
<td>33</td>
<td>3.2.2</td>
<td>4.2.5.8.i</td>
<td>Burlington, South Burlington</td>
<td>Airport Improvements - South End Development PHASE 6</td>
<td>Taxiway G Extention, Taxiway B rehabilitation.</td>
<td>$9,780,000</td>
<td>0</td>
<td>Beyond Construction</td>
<td>N</td>
<td>Dependent on FAA reauthorization</td>
<td>H</td>
</tr>
<tr>
<td>34</td>
<td>3.2.2</td>
<td>4.2.5.8.i</td>
<td>Burlington, South Burlington</td>
<td>Airport Improvements - South End Development Engineering Design</td>
<td>General Aviation/Corporate Taxiway &amp; Apron</td>
<td>$330,000</td>
<td>0</td>
<td>N</td>
<td>Dependent on FAA reauthorization</td>
<td>H</td>
<td>Anticipated 10% Local/State Match Dependent on FAA reauthorization</td>
</tr>
<tr>
<td>35</td>
<td>3.2.2</td>
<td>4.2.5.8.i</td>
<td>Burlington, South Burlington</td>
<td>Airport Improvements - Noise Compatibility Program</td>
<td>Noise study and authorisation of possible mitigation measures.</td>
<td>$330,000</td>
<td>0</td>
<td>N</td>
<td>Dependent on FAA reauthorization</td>
<td>H</td>
<td>Anticipated 10% Local/State Match Dependent on FAA reauthorization</td>
</tr>
<tr>
<td>#</td>
<td>ECOS Strategy</td>
<td>EDA goal</td>
<td>Municipality/ Sponsor</td>
<td>Project Name (Champion or Partner)</td>
<td>Description/Comments</td>
<td>Estimated Cost</td>
<td>Expected Job Creation (post construction)</td>
<td>Fully Funded Y/N</td>
<td>Priority YTTA/ H/H/A</td>
<td>50% Local Match Source(s)</td>
<td>Possible Start Date</td>
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<tr>
<td>36</td>
<td>3.2.2</td>
<td>4.2.5.xii</td>
<td>CCORPC</td>
<td>State/local permitting process and bylaw improvements</td>
<td>Work with municipalities, state agencies and the legislature to encourage development in areas planned for growth.</td>
<td>$5,000</td>
<td>0 Y H</td>
<td>municipal match funds</td>
<td>Ongoing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>37</td>
<td>3.2.2</td>
<td>4.2.5.xii</td>
<td>Charlotte</td>
<td>Alberts Way affordable housing units</td>
<td>Habitat for Humanity, 1 single family homes and 1 duplex = 5 units total.</td>
<td>$825,000</td>
<td>50 N H</td>
<td>$528,000</td>
<td>completed</td>
<td></td>
<td></td>
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<tr>
<td>38</td>
<td>3.2.2</td>
<td>4.2.5.xii</td>
<td>Colchester</td>
<td>Community Broadband Wireless Technology Access</td>
<td>TDB</td>
<td>$500,000</td>
<td>TBD N H</td>
<td>N/A</td>
<td>In progress</td>
<td></td>
<td></td>
</tr>
<tr>
<td>39</td>
<td>3.2.2</td>
<td>4.2.5.xii</td>
<td>Colchester</td>
<td>Fiber optic Redundancy in Colchester’s 3 economic zones</td>
<td>Private sector initiative - redundancy in place for R15 and Exit 16.</td>
<td>TBD</td>
<td>TBD N H</td>
<td>N/A</td>
<td>Underway</td>
<td></td>
<td></td>
</tr>
<tr>
<td>40</td>
<td>3.2.2</td>
<td>4.2.5.xii</td>
<td>Colchester</td>
<td>Water Storage Capacity Addition &amp; Expanded Distribution System</td>
<td>Provide necessary fire storage capacity for growth center.</td>
<td>TBD</td>
<td>$1,500,000</td>
<td>100%</td>
<td>In progress</td>
<td></td>
<td></td>
</tr>
<tr>
<td>41</td>
<td>3.2.2</td>
<td>4.2.5.xii</td>
<td>Essex Town</td>
<td>New Police Station, permits design and construction</td>
<td>Construct new Police Station off Maple Street.</td>
<td>TBD</td>
<td>TBD N H</td>
<td>Capital Funds and Long term debt</td>
<td>completed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>42</td>
<td>3.2.2</td>
<td>4.2.5.xii</td>
<td>Essex Town</td>
<td>Renovate Municipal Office Building at 81 Main Street - planning, design and construction</td>
<td>Expand municipal offices into area vacated by Police and refurbish.</td>
<td>TBD</td>
<td>TBD N H</td>
<td>Capital Budget and existing Capital Funds</td>
<td>Underway - expected completion Feb. 2016</td>
<td></td>
<td></td>
</tr>
<tr>
<td>43</td>
<td>3.2.2</td>
<td>4.2.5.xii</td>
<td>Jericho</td>
<td>Village water/ wastewater preliminary engineering study to develop options for creating water/sewer infrastructure in Jericho’s 3 Designated Village Centers.</td>
<td>TBD</td>
<td>TBD N H</td>
<td>TBD</td>
<td>2013</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>44</td>
<td>3.2.2</td>
<td>4.2.5.xii</td>
<td>Jericho</td>
<td>Library improvements</td>
<td>Improve to be ADA compliant and add community center.</td>
<td>TBD</td>
<td>TBD N H</td>
<td>TBD</td>
<td>In progress</td>
<td></td>
<td></td>
</tr>
<tr>
<td>45</td>
<td>3.2.2</td>
<td>4.2.5.xii</td>
<td>Milton</td>
<td>Milton 4D Streetscape improvements: Defining Downtown from the Diner to the Dam</td>
<td>this project involves in lighting, street trees, sidewalk improvements, and wayfinding/placemaking signage along US Route 7 in the Town Core.</td>
<td>TBD</td>
<td>TBD N H</td>
<td>TBD</td>
<td>ongoing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>46</td>
<td>3.2.2</td>
<td>4.2.5.xii</td>
<td>Richmond</td>
<td>New Water Tower</td>
<td>The steel water storage tank built in 1969 is deteriorating and requires replacement. This is the sole water storage tank for the Richmond water system. Additionally the needs of the water system have changed requiring a larger tank with more elevation.</td>
<td>TBD</td>
<td>TBD N H</td>
<td>State and Local</td>
<td>completed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>47</td>
<td>3.2.2</td>
<td>4.2.5.xii</td>
<td>South Burlington</td>
<td>City Center Development</td>
<td>Ensure there is an adequate inventory of &quot;develop-able&quot; sites with the necessary infrastructure to promote retention and expansion of existing firms and the recruitment of new startup operations in strategic business clusters in the region and workforce housing.</td>
<td>TBD</td>
<td>TBD N H</td>
<td>TBD</td>
<td>2013</td>
<td></td>
<td></td>
</tr>
<tr>
<td>48</td>
<td>3.2.2</td>
<td>4.2.5.xii</td>
<td>South Burlington</td>
<td>Market Street</td>
<td>Ensure there is an adequate inventory of &quot;develop-able&quot; sites with the necessary infrastructure to promote retention and expansion of existing firms and the recruitment of new startup operations in strategic business clusters in the region and workforce housing.</td>
<td>TBD</td>
<td>TBD N H</td>
<td>TBD</td>
<td>2013</td>
<td></td>
<td></td>
</tr>
<tr>
<td>49</td>
<td>3.2.2</td>
<td>4.2.5.xii</td>
<td>South Burlington</td>
<td>Community Center</td>
<td>Expanded facility to meet community planning needs.</td>
<td>TBD</td>
<td>TBD N H</td>
<td>TBD</td>
<td>2013</td>
<td></td>
<td></td>
</tr>
<tr>
<td>50</td>
<td>3.2.2</td>
<td>4.2.5.xii</td>
<td>St. George</td>
<td>New Town Center Designation/Master Planning/Coordination System</td>
<td>Village center master planning is in nascent stage in conjunction w/ ongoing development applications; no funding or professional assistance yet acquired.</td>
<td>TBD</td>
<td>TBD N H</td>
<td>municipal funds and grants</td>
<td>2015</td>
<td></td>
<td></td>
</tr>
<tr>
<td>51</td>
<td>3.2.2</td>
<td>4.2.5.xii</td>
<td>St. George</td>
<td>Expansion of Village Center Municipal Septic System</td>
<td>to enable concentrated growth center. Town has funded feasibility study; construction costs are undetermined (To be based on final design).</td>
<td>TBD</td>
<td>TBD N H</td>
<td>municipal funds and grants</td>
<td>2015</td>
<td></td>
<td></td>
</tr>
<tr>
<td>52</td>
<td>3.2.2</td>
<td>4.2.5.xii</td>
<td>VHA</td>
<td>Affordable housing program</td>
<td>Assist municipalities with to develop improved bylaws and programs to create more affordable housing.</td>
<td>TBD</td>
<td>TBD N H</td>
<td>TBD</td>
<td>2013</td>
<td></td>
<td></td>
</tr>
<tr>
<td>53</td>
<td>3.2.2</td>
<td>4.2.5.xii</td>
<td>Westford</td>
<td>Upgrade/Expand Municipal parking lot</td>
<td>provide an adequate number of parking spaces to serve the town office.</td>
<td>TBD</td>
<td>TBD N H</td>
<td>Local</td>
<td>in progress - 1/17 completed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>54</td>
<td>3.2.2</td>
<td>4.2.5.xii</td>
<td>Westford</td>
<td>Form-based code</td>
<td>for the Village center.</td>
<td>TBD</td>
<td>TBD N H</td>
<td>Local</td>
<td>In progress</td>
<td></td>
<td></td>
</tr>
<tr>
<td>55</td>
<td>3.2.2</td>
<td>4.2.5.xii</td>
<td>CSWD, Burlington, Hinesburg, South Burlington</td>
<td>Relocate Burlington, Colchester and Hinesburg Drop-Off Centers</td>
<td>Build New Drop-Off Centers.</td>
<td>TBD</td>
<td>TBD N H</td>
<td>TBD</td>
<td>2015 and ongoing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>56</td>
<td>3.2.2</td>
<td>4.2.5.xii</td>
<td>Essex Junction WWTF</td>
<td>Combined Heat and Power</td>
<td>Design and construct improvements to the Essex Junction Wastewater Treatment Facility combined heat and power generation system.</td>
<td>TBD</td>
<td>TBD N H</td>
<td>TBD</td>
<td>2013 and ongoing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>57</td>
<td>3.2.2</td>
<td>4.2.5.xii</td>
<td>CSWD</td>
<td>Develop Business and Location Plan for Drop-Off Center</td>
<td>Future Drop-Off Planning. Will likely be performed in-house with limited survey and CADD assistance from consultants</td>
<td>TBD</td>
<td>TBD N H</td>
<td>TBD</td>
<td>2014</td>
<td></td>
<td></td>
</tr>
<tr>
<td>#</td>
<td>ECOS Strategy</td>
<td>EDA goal</td>
<td>Municipality/ Sponsor</td>
<td>Project Name (Champion or Partners)</td>
<td>Description/Comments</td>
<td>Estimated Cost</td>
<td>Expected Job Creation (post construction)</td>
<td>Fully Funded Y/N</td>
<td>Priority VFP / VHA (N/A)</td>
<td>SDG Local Match Source(s)</td>
<td>Possible Start Date</td>
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<tr>
<td>58</td>
<td>3.2.2</td>
<td>4.2.5.8.vi</td>
<td>CSWD</td>
<td>Study Consolidated Collections - Design System, Develop RFP and Contracts</td>
<td>Consolidated Collections Study.</td>
<td>$150,000</td>
<td>2 N H</td>
<td>N</td>
<td>H</td>
<td>TBD</td>
<td>TBD</td>
</tr>
<tr>
<td>59</td>
<td>3.2.2</td>
<td>4.2.5.8.vi</td>
<td>CSWD</td>
<td>Extension of Natural Gas Service</td>
<td>In Hinesburg up Richmond Road by Vermont Gas.</td>
<td>TBD</td>
<td>0 N M</td>
<td>M</td>
<td>From Utility Provider (VT Gas)</td>
<td>TBD</td>
<td>TBD</td>
</tr>
<tr>
<td>60</td>
<td>3.2.2</td>
<td>4.2.5.8.vi</td>
<td>CSWD</td>
<td>Analysis of Alternative Waste Management Systems</td>
<td>Waste Conversion Study.</td>
<td>$100,000</td>
<td>0 N M</td>
<td>N</td>
<td>M</td>
<td>completed</td>
<td>TBD</td>
</tr>
<tr>
<td>61</td>
<td>3.2.2</td>
<td>4.2.5.8.vi</td>
<td>CSWD</td>
<td>Design &amp; Permitting of Regional Landfill</td>
<td>New Regional Landfill in Williston, design presently on hold indefinitely.</td>
<td>TBD</td>
<td>0 N M</td>
<td>N</td>
<td>TBD</td>
<td>TBD</td>
<td>TBD</td>
</tr>
<tr>
<td>62</td>
<td>3.2.2</td>
<td>4.2.5.8.vi</td>
<td>CSWD</td>
<td>Design for HHW Facility - Future processes and needs</td>
<td>HHF Facility.</td>
<td>$25,000</td>
<td>0 N H</td>
<td>N</td>
<td>H</td>
<td>TBD</td>
<td>TBD</td>
</tr>
<tr>
<td>63</td>
<td>3.2.2</td>
<td>4.2.5.8.vi</td>
<td>CSWD</td>
<td>Construction for HHF Facility Upgrades</td>
<td>HHF Facility-upgrades construction.</td>
<td>TBD</td>
<td>0 N H</td>
<td>N</td>
<td>H</td>
<td>2016</td>
<td>TBD</td>
</tr>
<tr>
<td>64</td>
<td>3.2.2</td>
<td>4.2.5.8.vi</td>
<td>CSWD</td>
<td>Construction of Regional Landfill</td>
<td>New Regional Landfill in Williston, design presently on hold indefinitely.</td>
<td>TBD</td>
<td>0 N M</td>
<td>M</td>
<td>TBD</td>
<td>TBD</td>
<td>TBD</td>
</tr>
<tr>
<td>65</td>
<td>3.2.2</td>
<td>4.2.5.8.vi</td>
<td>CSWD</td>
<td>Construction of Special Waste Management System</td>
<td>Special Waste &amp; C&amp;D Facility.</td>
<td>TBD</td>
<td>0 N M</td>
<td>N</td>
<td>TBD</td>
<td>TBD</td>
<td>TBD</td>
</tr>
<tr>
<td>66</td>
<td>3.2.2</td>
<td>4.2.5.8.vi</td>
<td>CSWD</td>
<td>Study Residential Organics for Future Planning</td>
<td>Residential Curbside Organics Study. Results used in planning curbside collection.</td>
<td>TBD</td>
<td>0 N H</td>
<td>completed</td>
<td>completed</td>
<td>completed</td>
<td>TBD</td>
</tr>
<tr>
<td>67</td>
<td>3.2.2</td>
<td>4.2.5.8.vi</td>
<td>CSWD</td>
<td>Study Biosolids for Future Planning</td>
<td>Biosolids Study 10% Complete. Preliminary results being used for evaluating next step.</td>
<td>TBD</td>
<td>0 N M</td>
<td>In progress</td>
<td>In progress</td>
<td>TBD</td>
<td>TBD</td>
</tr>
<tr>
<td>68</td>
<td>3.2.2</td>
<td>4.2.5.8.vi</td>
<td>CSWD</td>
<td>Undergrounding Downtown Parking Garages on the campus of Edmonds for the construction of Champlain College and the community (BSD)</td>
<td>Creating links from Battery Street at foot of Cherry Street down to Lake Street.</td>
<td>TBD</td>
<td>0 N M</td>
<td>BSD with partners</td>
<td>TBD</td>
<td>TBD</td>
<td>TBD</td>
</tr>
<tr>
<td>69</td>
<td>3.2.2</td>
<td>4.2.5.8.vi</td>
<td>Burlington</td>
<td>Cherry St Streetscape Phase 2</td>
<td>Realigning the roads to facilitate better, safer traffic connections.</td>
<td>TBD</td>
<td>0-10 N M</td>
<td>TIF, public/private partnership</td>
<td>TBD</td>
<td>TBD</td>
<td>TBD</td>
</tr>
<tr>
<td>70</td>
<td>3.2.2</td>
<td>4.2.5.8.vi</td>
<td>Burlington</td>
<td>Transient Mooring Upgrades (Parks)</td>
<td>Existing mooring field requires upgrades. Expands waterfront economic activity.</td>
<td>TBD</td>
<td>0 Y M</td>
<td>N/A</td>
<td>Completed</td>
<td>Completed</td>
<td>TBD</td>
</tr>
<tr>
<td>71</td>
<td>3.2.2</td>
<td>4.2.5.8.vi</td>
<td>Burlington</td>
<td>Perkins Sea Wall Repair</td>
<td>Existing wall failed in late summer 2012. Need for reconstruction.</td>
<td>TBD</td>
<td>0 N M</td>
<td>Penny for Parks (PPP)</td>
<td>Completed</td>
<td>Completed</td>
<td>TBD</td>
</tr>
<tr>
<td>72</td>
<td>3.2.2</td>
<td>4.2.5.8.vi</td>
<td>Burlington</td>
<td>Parks Signage Improvements (Parks)</td>
<td>Installation of improved entry signs &amp; kiosks.</td>
<td>TBD</td>
<td>0 Y M</td>
<td>Penny for Parks (PPP)</td>
<td>Completed</td>
<td>Completed</td>
<td>TBD</td>
</tr>
<tr>
<td>73</td>
<td>3.2.2</td>
<td>4.2.5.8.vi</td>
<td>Burlington</td>
<td>Galahan Athletic Field Renovations (Parks)</td>
<td>Soil improvement and field improvement to middle athletic fields.</td>
<td>TBD</td>
<td>0 N M</td>
<td>Penny for Parks (PPP)</td>
<td>Completed</td>
<td>Completed</td>
<td>TBD</td>
</tr>
<tr>
<td>74</td>
<td>3.2.2</td>
<td>4.2.5.8.vi</td>
<td>Burlington</td>
<td>Parks System Master Plan</td>
<td>Development of a comprehensive parks master plan: inventory, assessment, community outreach, strategic plan.</td>
<td>TBD</td>
<td>0 Y M</td>
<td>Penny for Parks (PPP)</td>
<td>Completed</td>
<td>Completed</td>
<td>TBD</td>
</tr>
<tr>
<td>75</td>
<td>3.2.2</td>
<td>4.2.5.8.vi</td>
<td>Burlington</td>
<td>Leddy Arena Renovations (Parks)</td>
<td>Includes renovation of public restrooms, kitchen &amp; snack shop improvements, ventilation &amp; electrical upgrades.</td>
<td>TBD</td>
<td>0 TBD M</td>
<td>Capital Improvement Program (CIP)</td>
<td>Completed</td>
<td>Completed</td>
<td>TBD</td>
</tr>
<tr>
<td>76</td>
<td>3.2.2</td>
<td>4.2.5.8.vi</td>
<td>Burlington</td>
<td>Leddy Arena Parking Lot Renovation (Parks)</td>
<td>Existing parking lot deteriorating and in need of major reconstruction.</td>
<td>TBD</td>
<td>0 TBD M</td>
<td>TBD</td>
<td>TBD</td>
<td>TBD</td>
<td>TBD</td>
</tr>
<tr>
<td>77</td>
<td>3.2.2</td>
<td>4.2.5.8.vi</td>
<td>Burlington</td>
<td>Waterfront North (CEDO)</td>
<td>Providing modern infrastructure to support the northern end of Burlington's waterfront including new road surfaces, sidewalks, streetlighting (increasing multi-modal access and public safety), stormwater, parking, skatepark and undergrounding of overhead utilities.</td>
<td>TBD</td>
<td>0 Y M</td>
<td>$2,000,000 TIF, other small grants and local resources.</td>
<td>TBD</td>
<td>TBD</td>
<td>TBD</td>
</tr>
<tr>
<td>78</td>
<td>3.2.2</td>
<td>4.2.5.8.vi</td>
<td>Burlington</td>
<td>Public/Private lighting standards and implementation (CEDO)</td>
<td>Develop lighting standards for energy efficiency, cost effectiveness and decrease light pollution. Costs for implementation TBD.</td>
<td>TBD</td>
<td>0 N M</td>
<td>BED and other grants.</td>
<td>2013-25</td>
<td>2013-25</td>
<td>TBD</td>
</tr>
<tr>
<td>79</td>
<td>3.2.2</td>
<td>4.2.5.8.vi</td>
<td>Burlington</td>
<td>Champlain Parkway Related Development (CEDO)</td>
<td>Identify appropriate development/revitalization opportunities along Parkway route.</td>
<td>TBD</td>
<td>0-200 N M</td>
<td>Private/public partnerships</td>
<td>2013-16</td>
<td>2013-16</td>
<td>TBD</td>
</tr>
<tr>
<td>80</td>
<td>3.2.2</td>
<td>4.2.5.8.vi</td>
<td>Burlington</td>
<td>Intercity Heated Greenhouse (CEDO)</td>
<td>Build greenhouses on intervale land heated by excess heat from the McNeil Plant.</td>
<td>TBD</td>
<td>40 N M</td>
<td>Farm investment</td>
<td>2015</td>
<td>2015</td>
<td>TBD</td>
</tr>
<tr>
<td>81</td>
<td>3.2.2</td>
<td>4.2.5.8.vi</td>
<td>Burlington</td>
<td>Pumpkin Smart Growth Center Phase III (CEDO)</td>
<td>Expansion of Pumpkin smart growth center.</td>
<td>TBD</td>
<td>100-500 N M</td>
<td>Private/public partnerships</td>
<td>2015</td>
<td>2015</td>
<td>TBD</td>
</tr>
<tr>
<td>82</td>
<td>3.2.2</td>
<td>4.2.5.8.vi</td>
<td>Burlington</td>
<td>TNCA screen</td>
<td>Reevaluation of current site.</td>
<td>TBD</td>
<td>0 Y M</td>
<td>Capital campaigns and donations</td>
<td>Ongoing</td>
<td>Ongoing</td>
<td>TBD</td>
</tr>
<tr>
<td>83</td>
<td>3.2.2</td>
<td>4.2.5.8.vi</td>
<td>Burlington</td>
<td>Community waterway for Charlotte Village</td>
<td>Examine feasibility.</td>
<td>TBD</td>
<td>TBD N M</td>
<td>TBD</td>
<td>TBD</td>
<td>TBD</td>
<td>TBD</td>
</tr>
<tr>
<td>84</td>
<td>3.2.2</td>
<td>4.2.5.8.vi</td>
<td>Essex Town</td>
<td>New Waterline to feed Sussex Wilson Road, planning, design and construction</td>
<td>New connection with increased pipe size needed to provide adequate fire flows and pressures.</td>
<td>TBD</td>
<td>0 N M</td>
<td>Water user fees and bond vote</td>
<td>Study completed, will pursue in future or TBD</td>
<td>TBD</td>
<td>TBD</td>
</tr>
<tr>
<td>#</td>
<td>ECOS Strategy</td>
<td>EDA goal</td>
<td>Municipality/ Sponsor</td>
<td>Project Name (Champion or Partner)</td>
<td>Description/Comments</td>
<td>Estimated Cost</td>
<td>Expected Job Creation (post construction)</td>
<td>Fully Funded Y/N</td>
<td>Priority VITAL/ VHA/L</td>
<td>50% Local Match Source(s)</td>
<td>Possible Start Date</td>
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</tr>
<tr>
<td>85</td>
<td>3.2.2</td>
<td>4.2.5.8.vi</td>
<td>Essex Town</td>
<td>Sandhill Road Watershed Improvements</td>
<td>Planning, design and construction</td>
<td>Increase waterline with 8 inch pipe to replace section of 3 inch piping and add pressure reducing valves.</td>
<td>$200,000</td>
<td>0</td>
<td>N</td>
<td>M</td>
<td>Water user fees and bond vote</td>
</tr>
<tr>
<td>86</td>
<td>3.2.2</td>
<td>4.2.5.8.vi</td>
<td>Huntington</td>
<td>Village wastewater service</td>
<td>study has been completed.</td>
<td>TBD</td>
<td>TBD</td>
<td>N</td>
<td>M</td>
<td>TBD</td>
<td>TBD</td>
</tr>
<tr>
<td>87</td>
<td>3.2.2</td>
<td>4.2.5.8.vi</td>
<td>Richmond</td>
<td>Village Subsurface Project</td>
<td>Improve water and sewer services on E Main and Bridge St.</td>
<td>$2,100,000</td>
<td>0</td>
<td>N</td>
<td>M</td>
<td>Local; State, Federal Transportation Funding</td>
<td>2017</td>
</tr>
<tr>
<td>88</td>
<td>3.2.2</td>
<td>4.2.5.8.vi</td>
<td>South Burlington</td>
<td>City Center Parking Decks</td>
<td>Construct 500' spaces to provide necessary infrastructure to facilitate business and residential development.</td>
<td>$12,000,000</td>
<td>190</td>
<td>N</td>
<td>M</td>
<td>TBD</td>
<td>Private</td>
</tr>
<tr>
<td>89</td>
<td>3.2.2</td>
<td>4.2.5.8.vi</td>
<td>Westford</td>
<td>Town Salt &amp; Salted Sand Shad</td>
<td>protect water resources from salt contamination</td>
<td>$250,000</td>
<td>0</td>
<td>N</td>
<td>M</td>
<td>Local</td>
<td>TBD</td>
</tr>
<tr>
<td>90</td>
<td>3.2.2</td>
<td>4.2.5.8.vi</td>
<td>Westford</td>
<td>Westford Community Wastewater (large scale)</td>
<td>To serve the Village center. Follow-up to 2008 wastewater feasibility study.</td>
<td>$2,200,000</td>
<td>0</td>
<td>N</td>
<td>M</td>
<td>First/State/Local</td>
<td>TBD</td>
</tr>
<tr>
<td>91</td>
<td>3.2.2</td>
<td>4.2.5.8.vi</td>
<td>Burlington</td>
<td>Miller Community Recreation Center Sidewalk Improvements</td>
<td>Parks</td>
<td>Previous concrete was improperly installed at time of 2009 facility renovation. The previous concrete has failed, does not drain, and is crumbling. Need for removal and installation of standard concrete.</td>
<td>TBD</td>
<td>25 to 50</td>
<td>N</td>
<td>L</td>
<td>TBD</td>
</tr>
<tr>
<td>92</td>
<td>3.2.2</td>
<td>4.2.5.8.vi</td>
<td>Burlington</td>
<td>Boat House Public Restroom Renovation</td>
<td>Parks</td>
<td>Significant leaking has deteriorated existing facilities. Need for renovation.</td>
<td>TBD</td>
<td>TBD</td>
<td>Y</td>
<td>L</td>
<td>Penny for Parks (PPP)</td>
</tr>
<tr>
<td>93</td>
<td>3.2.2</td>
<td>4.2.5.8.vi</td>
<td>Burlington</td>
<td>Waterfront Electric Distribution Design</td>
<td>Parks</td>
<td>Improvements needed to support waterfront events.</td>
<td>$15,000</td>
<td>0</td>
<td>Y</td>
<td>L</td>
<td>TBD</td>
</tr>
<tr>
<td>94</td>
<td>3.2.2</td>
<td>4.2.5.8.i</td>
<td>Burlington, South Burlington</td>
<td>Airport Improvements - South End Development PHASE 5</td>
<td>Construction of New Cargo Area.</td>
<td>$5,250,000</td>
<td>TBD</td>
<td>N</td>
<td>Depends on FAA reauthorization.</td>
<td>L</td>
<td>Anticipated 10% Local/State Match</td>
</tr>
<tr>
<td>95</td>
<td>3.2.2</td>
<td>4.2.5.8.i</td>
<td>Burlington, South Burlington</td>
<td>Airport Improvements - South End Development PHASE 7</td>
<td>General Aviation/Corporate Taxiway &amp; Apron.</td>
<td>$5,000,000</td>
<td>0</td>
<td>Beyond Construction</td>
<td>N</td>
<td>Depends on FAA reauthorization.</td>
<td>L</td>
</tr>
<tr>
<td>96</td>
<td>3.2.2</td>
<td>4.2.5.8.vi</td>
<td>Colchester</td>
<td>Burnham Memorial Library - Expansion and Renovation, Planning, design and construction</td>
<td>The current public community library has outgrown its space and is limited to what it can and should potentially offer to the public. Serving 60,000+ patrons.</td>
<td>$5,000,000</td>
<td>3</td>
<td>N</td>
<td>L</td>
<td>Friends of the Library &amp; Library Trustees primary fundraising source</td>
<td>2020</td>
</tr>
<tr>
<td>97</td>
<td>3.2.2</td>
<td>4.2.5.8.vi</td>
<td>Colchester</td>
<td>Multi-Generational Community Recreation Center</td>
<td></td>
<td>Land secured; funding needed to build.</td>
<td>$5,000,000</td>
<td>20</td>
<td>N</td>
<td>L</td>
<td>TBD</td>
</tr>
<tr>
<td>98</td>
<td>3.2.2</td>
<td>4.2.5.8.vi</td>
<td>Essex Town</td>
<td>Highway Garage planning, design and construction</td>
<td></td>
<td>Expand existing space to accommodate all vehicles and repair activities.</td>
<td>$360,000</td>
<td>0</td>
<td>N</td>
<td>L</td>
<td>Capital Budget and existing Capital Funds</td>
</tr>
<tr>
<td>99</td>
<td>3.2.2</td>
<td>4.2.5.8.vi</td>
<td>Essex Town</td>
<td>Library Expansion and Renovation, Planning, design and construction</td>
<td></td>
<td>Expand existing space to meet current needs.</td>
<td>$103,000</td>
<td>0</td>
<td>N</td>
<td>L</td>
<td>Capital Budget and existing Capital Funds</td>
</tr>
<tr>
<td>100</td>
<td>3.2.2</td>
<td>4.2.5.8.vi</td>
<td>Essex Town</td>
<td>Peachtree area sewers, construction</td>
<td></td>
<td>Install municipal sewers on Pinemeadow Drive, Bluer, portions of Pioneer and Ira Allen.</td>
<td>$700,000</td>
<td>0</td>
<td>N</td>
<td>L</td>
<td>Bond vote and local users</td>
</tr>
<tr>
<td>101</td>
<td>3.2.2</td>
<td>4.2.5.8.vi</td>
<td>Essex Town</td>
<td>Indoor Recreation Space study only</td>
<td></td>
<td>Prepare study on feasibility, cost, layout and location.</td>
<td>$30,000</td>
<td>0</td>
<td>N</td>
<td>L</td>
<td>Capital Budget and existing Capital Funds</td>
</tr>
<tr>
<td>102</td>
<td>3.2.2</td>
<td>4.2.5.8.vi</td>
<td>Essex Town</td>
<td>Historic Structure repairs, construction</td>
<td></td>
<td>Fort Ethan Allen Water Tower requires funds for preservation of structure.</td>
<td>$100,000</td>
<td>0</td>
<td>N</td>
<td>L</td>
<td>Existing Capital Funds and grants</td>
</tr>
<tr>
<td>103</td>
<td>3.2.2</td>
<td>4.2.5.8.i</td>
<td>Huntington</td>
<td>Village form-based code</td>
<td></td>
<td>drafted has been completed.</td>
<td>TBD</td>
<td>TBD</td>
<td>N</td>
<td>L</td>
<td>TBD</td>
</tr>
<tr>
<td>104</td>
<td>3.2.2</td>
<td>4.2.5.8.i</td>
<td>South Burlington</td>
<td>New City Hall</td>
<td></td>
<td>Expanded facility to meet community needs for municipal services and municipal meeting space.</td>
<td>$6,300,000</td>
<td>7</td>
<td>N</td>
<td>L</td>
<td>Property Taxes</td>
</tr>
<tr>
<td>105</td>
<td>3.2.2</td>
<td>4.2.5.8.i</td>
<td>South Burlington</td>
<td>Library</td>
<td></td>
<td>Recreation facility serving community.</td>
<td>$6,900,000</td>
<td>12</td>
<td>N</td>
<td>L</td>
<td>Local</td>
</tr>
<tr>
<td>106</td>
<td>3.2.2</td>
<td>4.2.5.8.vi</td>
<td>Colchester</td>
<td>Waste Water Treatment &amp; Service</td>
<td></td>
<td>For Mallets Bay and Exit 17 area - add one sentence description</td>
<td>$10,000,000</td>
<td>TBD</td>
<td>N</td>
<td>TBD</td>
<td>TBD</td>
</tr>
<tr>
<td>107</td>
<td>3.2.2</td>
<td>4.2.5.8.vi</td>
<td>Williston</td>
<td>Taft Corner Grid Streets</td>
<td></td>
<td>construct local streets in Taft Corner area for improved circulation.</td>
<td>$5,900,000</td>
<td>TBD</td>
<td>N</td>
<td>TBD</td>
<td>Local impact fees, private funds, grants</td>
</tr>
<tr>
<td>108</td>
<td>3.2.2</td>
<td>4.2.5.8.vi</td>
<td>Williston</td>
<td>Water Storage Tank Expansion</td>
<td></td>
<td>Tank on Tower Lane needs to be replaced to a new location and brought up to standards.</td>
<td>$870,000</td>
<td>TBD</td>
<td>N</td>
<td>TBD</td>
<td>$400,000 &amp; borrowing $470,000</td>
</tr>
<tr>
<td>109</td>
<td>3.2.2</td>
<td>4.2.5.8.vi</td>
<td>Williston</td>
<td>Williston Entry-Level Housing</td>
<td></td>
<td>Potentially develop a housing trust fund and/or projects with Champlain Housing Trust and Affordable Housing Task Force</td>
<td>$3,500,000</td>
<td>TBD</td>
<td>N</td>
<td>TBD</td>
<td>Buyer mortgages, VT Community Development Program; VT Housing &amp; Conservation Trust Fund; Habitat for Humanity</td>
</tr>
<tr>
<td>110</td>
<td>3.2.2</td>
<td>4.2.5.8.vi</td>
<td>Winooski</td>
<td>Winooski Westend Revitalization</td>
<td></td>
<td>Assist with homeownership and literacy</td>
<td>TBD</td>
<td>TBD</td>
<td>N</td>
<td>M</td>
<td>TBD</td>
</tr>
<tr>
<td>111</td>
<td>3.2.2</td>
<td>4.2.5.8.vi</td>
<td>Winooski</td>
<td>City Plan Update</td>
<td></td>
<td>update Plan to reflect revised principles</td>
<td>$20,000</td>
<td>0</td>
<td>N</td>
<td>H</td>
<td>MFG and municipal funds</td>
</tr>
<tr>
<td>112</td>
<td>3.2.2</td>
<td>4.2.5.8.vi</td>
<td>Winooski</td>
<td>Bylaw updates</td>
<td></td>
<td>make updates as appropriate for each district</td>
<td>$50,000</td>
<td>0</td>
<td>N</td>
<td>H</td>
<td>CCRPL, MFG and municipal funds</td>
</tr>
<tr>
<td>113</td>
<td>3.2.2</td>
<td>4.2.5.8.vi</td>
<td>Winooski School District</td>
<td>Winooski School District Renovations and Upgrades</td>
<td></td>
<td></td>
<td>$591,000</td>
<td>TBD</td>
<td>TBD</td>
<td>TBD</td>
<td>Municipal Funds</td>
</tr>
<tr>
<td>#</td>
<td>ECOS Strategy</td>
<td>Municipality/ Sponsor</td>
<td>Project Name (Champion or Partner)</td>
<td>Description/Comments</td>
<td>Estimated Cost</td>
<td>Expected Job Creation (post construction)</td>
<td>Fully Funded Y/N</td>
<td>Priority VITAL/ H/VA/ L/</td>
<td>% SDS Local Match Source(s)</td>
<td>Possible Start Date</td>
<td></td>
</tr>
<tr>
<td>----</td>
<td>---------------</td>
<td>-----------------------</td>
<td>------------------------------------</td>
<td>-----------------------</td>
<td>---------------</td>
<td>--------------------------------------------</td>
<td>----------------</td>
<td>--------------------------</td>
<td>-------------------------</td>
<td>------------------</td>
<td></td>
</tr>
<tr>
<td>114</td>
<td>3.2.2</td>
<td>4.2.5.8.iii</td>
<td>Burlington</td>
<td>Miller Community Recreation Center/Roof Renovation (Parks)</td>
<td>Facility currently experiences serious, extensive leaking throughout building, repair/replacement of roof; removal chimney.</td>
<td>TBD</td>
<td>0</td>
<td>TBD</td>
<td>TBD</td>
<td>TBD</td>
<td>TBD</td>
</tr>
<tr>
<td>115</td>
<td>3.2.2</td>
<td>4.2.5.8.iii</td>
<td>Burlington</td>
<td>Ledyard Park Softball Renovation (Parks)</td>
<td>Existing facility has poor and limited drainage. Project includes installation of new drainage systems and field renovations.</td>
<td>$100,000</td>
<td>0</td>
<td>TBD</td>
<td>TBD</td>
<td>TBD</td>
<td>Penny for Parks (PFP)</td>
</tr>
<tr>
<td>116</td>
<td>3.2.2</td>
<td>4.2.5.8.iii</td>
<td>CVE, Essex Junction</td>
<td>Champlem Valley Exposition (CVE) music pavilion/landscaped</td>
<td>Renovation &amp; expansion</td>
<td>$6,000,000</td>
<td>TBD</td>
<td>TBD</td>
<td>TBD</td>
<td>TBD</td>
<td>TBD</td>
</tr>
<tr>
<td>117</td>
<td>3.2.2</td>
<td>4.2.5.8.iii</td>
<td>St. George/VTGas</td>
<td>Vermont Gas service</td>
<td>To enable concentrated growth center</td>
<td>TBD</td>
<td>TBD</td>
<td>TBD</td>
<td>TBD</td>
<td>TBD</td>
<td>Vermont Gas</td>
</tr>
<tr>
<td>118</td>
<td>3.2.2</td>
<td>4.2.5.8.iii</td>
<td>Underhill</td>
<td>Village designation for Underhill Center</td>
<td>To enable concentrated growth center</td>
<td>TBD</td>
<td>N/A</td>
<td>N/A</td>
<td>TBD</td>
<td>TBD</td>
<td>TBD</td>
</tr>
<tr>
<td>119</td>
<td>3.2.2</td>
<td>4.2.5.8.iii</td>
<td>Underhill</td>
<td>Rezoning of Underhill Flats, including the Jacobs parcel</td>
<td>In process via MGP. Rezoning voted down at Town Meeting. PC to determine pursuit.</td>
<td>$8,200</td>
<td>N/A</td>
<td>Y</td>
<td>TBD</td>
<td>N/A</td>
<td>TBD</td>
</tr>
<tr>
<td>120</td>
<td>3.2.2</td>
<td>4.2.5.8.iii</td>
<td>Underhill</td>
<td>Rezoning of Underhill Center</td>
<td>In process via MGP. Will also need water system. Rezoning voted down at Town Meeting. PC to determine pursuit.</td>
<td>$8,200</td>
<td>N/A</td>
<td>Y</td>
<td>TBD</td>
<td>N/A</td>
<td>TBD</td>
</tr>
<tr>
<td>121</td>
<td>3.2.3</td>
<td>4.2.5.8.iii</td>
<td>CCRPC</td>
<td>Comprehensive Transportation Hazard Mitigation and Water Quality Program</td>
<td>Infrastructure protection and hazard mitigation, water quality planning through FEH BMP equivalent tracking to ANR, culvert mitigation and AOF planning</td>
<td>$90,000</td>
<td>0</td>
<td>Y</td>
<td>H</td>
<td>municipal match funds</td>
<td>ongoing</td>
</tr>
<tr>
<td>122</td>
<td>3.2.3</td>
<td>4.2.5.8.iii</td>
<td>CCRPC</td>
<td>Green Infrastructure Grant</td>
<td>Lead statewide effort to communicate green infrastructure techniques to municipalities through RPCs</td>
<td>$100,000</td>
<td>0</td>
<td>Y</td>
<td>H</td>
<td>regional planning and municipal match funds</td>
<td>completed</td>
</tr>
<tr>
<td>123</td>
<td>3.2.3</td>
<td>4.2.5.8.iii</td>
<td>Essex Town</td>
<td>Stormwater projects - planning, design and construction</td>
<td>Construct stormwater projects to meet MS4 permit and Flow Restoration Plans</td>
<td>$1,000,000</td>
<td>0</td>
<td>N</td>
<td>H</td>
<td>Existing Capital Funds and bond vote</td>
<td>2015 and beyond</td>
</tr>
<tr>
<td>124</td>
<td>3.2.3</td>
<td>4.2.5.8.iii</td>
<td>Westford</td>
<td>Stannley Road culvert</td>
<td>replace culvert</td>
<td>$110,000</td>
<td>0</td>
<td>N</td>
<td>H</td>
<td>Fed/State/Local</td>
<td>completed</td>
</tr>
<tr>
<td>125</td>
<td>3.2.3</td>
<td>4.2.5.8.iii</td>
<td>Winnisooki Natural Resources Conservation District</td>
<td>Connecting the Dots: A Water Story (ECHO Lake Aquarium and Science Center, Church St. Marketplace, and Acts4Bot)</td>
<td>The project includes a public art and education display in downtown Burlington where art, public participation, science education, and environmental stewardship will highlight stormwater’s impact on Lake health and steps each of us can take to improve it.</td>
<td>$46,000</td>
<td>0</td>
<td>Y</td>
<td>H</td>
<td>$40,000 ECOS Grant, local funding</td>
<td>completed and ongoing by Stream Team</td>
</tr>
<tr>
<td>126</td>
<td>3.2.3</td>
<td>4.2.5.8.iii</td>
<td>Essex Junction</td>
<td>Storm water Improvements</td>
<td>Monitor pervious</td>
<td>TBD</td>
<td>0</td>
<td>N</td>
<td>L</td>
<td>TBD</td>
<td>TBD</td>
</tr>
<tr>
<td>127</td>
<td>3.2.3</td>
<td>4.2.5.8.iii</td>
<td>South Burlington</td>
<td>Storm water Improvements</td>
<td>Continue to comply with State Standards Prepare for the implementation of the MS-4 Permits.</td>
<td>$10,000,000</td>
<td>0</td>
<td>N</td>
<td>H</td>
<td>Federal/State/Local</td>
<td>Ongoing</td>
</tr>
<tr>
<td>128</td>
<td>3.2.3</td>
<td>4.2.5.8.iii</td>
<td>Burlington</td>
<td>Oakledge Drainage &amp; Paving Improvements (Parks)</td>
<td>Renovation of entrance roadway to improve deteriorating infrastructure and support recent stormwater drainage improvements</td>
<td>$10,000</td>
<td>0</td>
<td>TBD</td>
<td>TBD</td>
<td>Penny for Parks (PFP)</td>
<td>TBD</td>
</tr>
<tr>
<td>129</td>
<td>3.2.4</td>
<td>4.2.5.8.iii</td>
<td>Association of Africans Living in Vermont, Inc.</td>
<td>New American Food (Burlington School District – Food Services, Vermont Works for Women, Union Street Media, The Skinny Pancake, and The Intervale Center)</td>
<td>It will prepare unaccompanied refugee Youth Up (TANF) recipients, with limited English proficiency, for jobs in the food preparation and food processing industries through the 120-hour, 10-week FRESH food course. The AALV Employment Counselor job places graduates into employment opportunities that result in movement off welfare. In addition, there will be an increase in sales by refugee farmers of organic, locally grown crops.</td>
<td>$98,475</td>
<td>0</td>
<td>Y</td>
<td>H</td>
<td>VITAL</td>
<td>$50,000 ECOS grant, local funding</td>
</tr>
<tr>
<td>130</td>
<td>3.2.4</td>
<td>4.2.5.8.iii</td>
<td>Burlington</td>
<td>Breastwater planning and construction</td>
<td>Breastwater to protect harbor from north and south winds</td>
<td>$7-10,000,000</td>
<td>0</td>
<td>N</td>
<td>H</td>
<td>TIF</td>
<td>TBD</td>
</tr>
<tr>
<td>131</td>
<td>3.2.4</td>
<td>4.2.5.8.iii</td>
<td>Richmond</td>
<td>Forests, Wildlife &amp; Communities: Science to Action (Towns of Bolton, Jericho, Huntington, Vermont Natural Resources Council, Arrowwood Environmental, Vermont Fish &amp; Wildlife Department, VT Forests, Parks &amp; Recreation Department, and CCRPC)</td>
<td>This project is a comprehensive four-town natural resource inventory of wildlife habitat, wetlands, uplands, natural communities and working lands; technical assistance in the development of bylaws and non-regulatory conservation tools tailored to our communities’ needs to provide permitting predictability, protect, restore and enhance critical habitat, and advance the goals specified in each town’s plan; and engagement of property owners and other citizens in all aspects of the project.</td>
<td>$98,800</td>
<td>0</td>
<td>Y</td>
<td>H</td>
<td>$40,000 ECOS Grant, State, local</td>
<td>completed</td>
</tr>
<tr>
<td>132</td>
<td>3.2.4</td>
<td>4.2.5.8.iii</td>
<td>Burlington</td>
<td>Stormwater outfall at foot of College Street improvements</td>
<td>Extending the outfall further into the lake to diminish the creation of silt build up and scouring that clouds the harbor</td>
<td>$200,000</td>
<td>0</td>
<td>N</td>
<td>M</td>
<td>TIF</td>
<td>2015</td>
</tr>
<tr>
<td>133</td>
<td>3.2.4</td>
<td>4.2.5.8.iii</td>
<td>Burlington</td>
<td>Burlington Food Enterprise Center (CEDO)</td>
<td>Finalize Environmental remediation of the site (CAP) and possibly sell property to Intervale Center for future redevelopment.</td>
<td>$4,300,000</td>
<td>0</td>
<td>N</td>
<td>M</td>
<td>Public/private partnerships, City</td>
<td>2015</td>
</tr>
<tr>
<td>134</td>
<td>3.2.4</td>
<td>4.2.5.8.iii</td>
<td>Essex Town</td>
<td>Study for use of Buildings and grounds at the Tree Farm</td>
<td>Investigate alternative uses for the property and associated costs</td>
<td>$15,000</td>
<td>0</td>
<td>N</td>
<td>M</td>
<td>Capital funds and planning grant</td>
<td>TBD</td>
</tr>
<tr>
<td>135</td>
<td>3.2.4</td>
<td>4.2.5.8.iii</td>
<td>CVE, Essex Junction</td>
<td>Champlem Valley Exposition Agricultural Center</td>
<td>Create an agricultural center</td>
<td>$6,000,000</td>
<td>TBD</td>
<td>TBD</td>
<td>TBD</td>
<td>TBD</td>
<td>TBD</td>
</tr>
<tr>
<td>#</td>
<td>ECOS Strategy</td>
<td>EDA Goal</td>
<td>Municipality/ Sponsor</td>
<td>Project Name (Champion or Partner)</td>
<td>Description/Comments</td>
<td>Estimated Cost</td>
<td>Expected Job Creation (post construction)</td>
<td>Fully Funded Y/N</td>
<td>Priority VITAL/ HY/M/ SDSL Local Match Source(s)</td>
<td>Possible Start Date</td>
<td></td>
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<tr>
<td>136</td>
<td>3.2.5</td>
<td>n/a</td>
<td>United Way</td>
<td>Community Driven Transportation</td>
<td>The program will create a community-driven transportation service model that provides low-cost transportation services to medical appointments and non-medical rides for seniors and adults with disabilities, especially those with no other means of transportation.</td>
<td>$80,000</td>
<td>1 N VITAL</td>
<td>$20,000 ECOS Grant, Local</td>
<td>completed and ongoing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>137</td>
<td>3.2.5</td>
<td>n/a</td>
<td>all coalitions (see list below)</td>
<td>OBESITY, SUBSTANCE ABUSE, TOBACCO</td>
<td>Chrysler mix of policy, systems, and environmental strategies in schools and community centers.</td>
<td>n/a</td>
<td>Y H VDH</td>
<td></td>
<td>ongoing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>138</td>
<td>3.2.5</td>
<td>BPHC</td>
<td></td>
<td>OBESITY-Enhance mixed use development</td>
<td>Complete assessment in contract with Local Motion to identify factors that limit mixed use development, present assessment results to the community.</td>
<td>BPHC $40,000, CY $10,000, MCYC $20,000, WCSPC $12,165</td>
<td>n/a</td>
<td>Y H VDH</td>
<td></td>
<td>completed</td>
<td></td>
</tr>
<tr>
<td>139</td>
<td>3.2.5</td>
<td>BPHC</td>
<td></td>
<td>OBESITY-Improve access to parks,</td>
<td>Complete assessment in contract with Local Motion to determine town support for and resident access to local parks, recreation facilities, and open spaces, present assessment results to the community.</td>
<td>n/a</td>
<td>Y H VDH</td>
<td></td>
<td>completed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>140</td>
<td>3.2.5</td>
<td>BPHC, WCSPC, CHIPS</td>
<td>TOBACCO-Provide education</td>
<td>Work with community leaders to promote evidence based practices in their community concerning tobacco retail outlets.</td>
<td>Work with community leaders to promote evidence based practices in their community concerning tobacco retail outlets.</td>
<td>n/a</td>
<td>Y H VDH</td>
<td></td>
<td>ongoing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>141</td>
<td>3.2.5</td>
<td>BPHC, CY</td>
<td></td>
<td>OBESITY-Reduce second hand smoke</td>
<td>Provide education about various smoke-free policies for post-secondary campuses, public events, and public parks, beaches, and other open air spaces. Example: Breathe Easy Campaign in Burlington.</td>
<td>n/a</td>
<td>Y H VDH</td>
<td></td>
<td>ongoing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>142</td>
<td>3.2.5</td>
<td>BPHC, CY, MCYC, WCSPC</td>
<td>OBESITY-Improve access to</td>
<td>Conduct assessments identifying barriers to access to healthy foods, present assessment results to the community.</td>
<td>Total Alcohol Prevention Award FY13: BPHC $40,000, CY $40,000</td>
<td>n/a</td>
<td>Y H VDH</td>
<td></td>
<td>ongoing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>143</td>
<td>3.2.5</td>
<td>BPHC, CY, MCYC</td>
<td>OBESITY, SUBSTANCE ABUSE-</td>
<td>Support local convenience stores to make small changes to promote healthy foods and limit tobacco and alcohol advertising.</td>
<td>Total Healthy Retailer Awards FY13: BPHC $40,000, CY $10,000, MCYC $20,000</td>
<td>n/a</td>
<td>Y H VDH</td>
<td></td>
<td>completed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>144</td>
<td>3.2.5</td>
<td>BPHC, CY, MCYC, CHIPS, WCSPC</td>
<td>OBESITY-Reduce second hand smoke</td>
<td>Provide education about various smoke-free policies for post-secondary campuses, public events, and public parks, beaches, and other open air spaces. Example: Breathe Easy Campaign in Burlington.</td>
<td>n/a</td>
<td>Y H VDH</td>
<td></td>
<td>ongoing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>145</td>
<td>3.2.5</td>
<td>BPHC, MCYC</td>
<td>OBESITY-Increase pedestrian and bicycle friendly communities</td>
<td>Complete walkability and bikability assessments, present assessment results to the community.</td>
<td>Total Grant Award FY13: $40,000</td>
<td>n/a</td>
<td>Y H VDH</td>
<td></td>
<td>ongoing partially complete</td>
<td></td>
<td></td>
</tr>
<tr>
<td>146</td>
<td>3.2.5</td>
<td>Burlington Partnership for a Healthy Community</td>
<td>OBESITY, SUBSTANCE ABUSE, TOBACCO</td>
<td>Provide education about tobacco product placement.</td>
<td>Total Grant Award FY13: $40,000</td>
<td>n/a</td>
<td>Y H VDH</td>
<td></td>
<td>ongoing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>147</td>
<td>3.2.5</td>
<td>Burlington School District</td>
<td>OBESITY, SUBSTANCE ABUSE, TOBACCO</td>
<td>Student Assistance Program funding to provide substance abuse prevention, treatment, and referral.</td>
<td>Total Grant Award FY13: $40,000</td>
<td>n/a</td>
<td>Y H VDH</td>
<td></td>
<td>ongoing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>148</td>
<td>3.2.5</td>
<td>Hunger Free Vermont</td>
<td>OBESITY, SUBSTANCE ABUSE, TOBACCO</td>
<td>Provide education about tobacco product placement.</td>
<td>Total Grant Award FY13: $40,000</td>
<td>n/a</td>
<td>Y H VDH</td>
<td></td>
<td>ongoing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>149</td>
<td>3.2.5</td>
<td>n/a</td>
<td>n/a</td>
<td>SUBSTANCE ABUSE</td>
<td>Law enforcement START activity (Stop Teen Alcohol Risk Team)</td>
<td>$20,000</td>
<td>0 Y H</td>
<td>$75,000 ECOS Grant, Local</td>
<td>completed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>150</td>
<td>3.2.5</td>
<td>n/a</td>
<td>n/a</td>
<td>SUBSTANCE ABUSE, TOBACCO</td>
<td>Law enforcement START activity (Stop Teen Alcohol Risk Team)</td>
<td>other funding</td>
<td></td>
<td></td>
<td>ongoing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>151</td>
<td>3.2.5</td>
<td>n/a</td>
<td>n/a</td>
<td>FAMILY-support parents/youth</td>
<td>Safe Home Initiative/Parent Up VT, field trips, mentors.</td>
<td>other funding</td>
<td></td>
<td></td>
<td>ongoing</td>
<td></td>
<td></td>
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<tr>
<td>#</td>
<td>ECOS/CELO Strategy</td>
<td>Municipality/ Sponsor</td>
<td>Project Name (Champion or Sponsor)</td>
<td>Description/Comments</td>
<td>Estimated Cost</td>
<td>Expected Job Creation (post construction)</td>
<td>Fully Funded Y/N</td>
<td>Priority VITAL/H/MA/L</td>
<td>SDR Local Match Sources(s)</td>
<td>Possible Start Date</td>
<td></td>
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<tr>
<td>152</td>
<td>4.2.5.8.vii</td>
<td>n/a</td>
<td>Public School Districts and Supervisory Unions</td>
<td>MEDICAL/DENTAL/MENTAL HEALTH- Early Periodic Screening Diagnostic and Treatment: Medicaid Administrative Claiming Reimbursements</td>
<td>$375,000</td>
<td>n/a</td>
<td>Y</td>
<td>H</td>
<td>VDH</td>
<td>2013</td>
<td></td>
</tr>
<tr>
<td>153</td>
<td>4.2.5.8.vii</td>
<td>n/a</td>
<td>Various Public Schools (e.g., school districts, libraries)</td>
<td>Tobacco-VAT/TOVA School-based youth tobacco prevention programs</td>
<td>$525,000</td>
<td>n/a</td>
<td>Y</td>
<td>H</td>
<td>VDH</td>
<td>ongoing</td>
<td></td>
</tr>
<tr>
<td>154</td>
<td>4.2.5.8.vii</td>
<td>n/a</td>
<td>Westford</td>
<td>Emergency shelter at Westford School</td>
<td>TBD</td>
<td>0</td>
<td>Y</td>
<td>H</td>
<td>Local</td>
<td>completed</td>
<td></td>
</tr>
<tr>
<td>155</td>
<td>4.2.5.8.viii</td>
<td>Burlington, Vermont</td>
<td>Aviation Center (EDDO)</td>
<td>Working with VTC, Heritage Aviation and the Airport to establish a facility housing the Burlington Aviation Tech Program, Vermont Flight Academy and allowing room for VTC to expand its future aviation program offerings</td>
<td>$8,300,000</td>
<td>25-30</td>
<td>N</td>
<td>H</td>
<td>TBD</td>
<td>In progress</td>
<td></td>
</tr>
<tr>
<td>156</td>
<td>4.2.5.8.viii</td>
<td>Champlain College</td>
<td>Health Information Technology Program</td>
<td>Development funds are being sought by Champlain College to offset tuition and/or for additional curriculum development to support the growing needs of the healthcare industry.</td>
<td>$300,000</td>
<td>0</td>
<td>N</td>
<td>H</td>
<td>Champlain College</td>
<td>TBD</td>
<td></td>
</tr>
<tr>
<td>157</td>
<td>4.2.5.8.viii</td>
<td>CEDPC</td>
<td>Annual Indicator Report (IIR)</td>
<td>Lead partnership in producing an Annual Report on ECOS Plan implementation.</td>
<td>TBD</td>
<td>0</td>
<td>N</td>
<td>H</td>
<td>reg/1 pg, MPO, muni</td>
<td>ongoing</td>
<td></td>
</tr>
<tr>
<td>158</td>
<td>4.2.5.8.viii</td>
<td>Colchester, Vermont</td>
<td>24/7 Municipal Government</td>
<td>with capacity to issue permits and collect taxes and fees on line</td>
<td>$200,000</td>
<td>0</td>
<td>Y</td>
<td>H</td>
<td>Municipal</td>
<td>In progress</td>
<td></td>
</tr>
<tr>
<td>159</td>
<td>4.2.5.8.viii</td>
<td>Colchester, Essex, Milton (e.g., municipalities, school districts)</td>
<td>Partnership Revolving Loan Fund Capitalization</td>
<td>Business loans for small start-up businesses that are unable to secure capital from other sources.</td>
<td>$490,000</td>
<td>1 to 30</td>
<td>Y</td>
<td>H</td>
<td>VT Community Development Program</td>
<td>In progress</td>
<td></td>
</tr>
<tr>
<td>160</td>
<td>4.2.5.8.viii</td>
<td>Burlington, Vermont</td>
<td>Fire station consolidation (EDDO)</td>
<td>This is an ongoing conversation related to Gateway Block Redevelopment.</td>
<td>TBD</td>
<td>0-50</td>
<td>N</td>
<td>M</td>
<td>TIF</td>
<td>TBD</td>
<td></td>
</tr>
<tr>
<td>161</td>
<td>4.2.5.8.i</td>
<td>Essex Town, Essex Village, Williston, GBIC, CCRPC</td>
<td>Infrastructure utilization, access or acquisition plan</td>
<td>The creation of a plan to examine the future utilization, access, or acquisition of the already existing infrastructure on the BMV Vermont Campus. Infrastructure to include, but not be limited to: water, wastewater, road, bridge, electric transmission, etc.</td>
<td>$100,000</td>
<td>N</td>
<td>VITAL</td>
<td>CEDS, State</td>
<td>TBD</td>
<td>TBD</td>
<td></td>
</tr>
<tr>
<td>162</td>
<td>4.2.5.8.i</td>
<td>GBIC</td>
<td>Chittenden County workforce development needs</td>
<td>Work with area employers, higher education institutions, and workforce development professionals to create programs and curriculum to meet the needs of manufacturing, technology, and value-adding employer workforce needs.</td>
<td>$10,000</td>
<td>TBD</td>
<td>N</td>
<td>H</td>
<td>GBIC Funds; local businesses; business organizations</td>
<td>In Progress</td>
<td></td>
</tr>
<tr>
<td>163</td>
<td>4.2.5.8.i</td>
<td>Burlington, CEDO</td>
<td>Downtown mall Redevelopment</td>
<td>To revitalize the downtown mall to include significant residential infrastructure and parking to complement new commercial opportunities. Design planning has begun.</td>
<td>$200,000,000</td>
<td>TBD</td>
<td>N</td>
<td>H</td>
<td>TBD</td>
<td>2016</td>
<td></td>
</tr>
<tr>
<td>164</td>
<td>4.2.5.8.i</td>
<td>University of Vermont</td>
<td>UVM STEM Building</td>
<td>Development of a University building designed to meet the specific needs of classes to teach Science, Technology, Engineering, and Mathematics related courses. Under construction.</td>
<td>$106,000,000</td>
<td>TBD</td>
<td>N</td>
<td>H</td>
<td>TBD</td>
<td>In Progress</td>
<td></td>
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<tr>
<td>165</td>
<td>4.2.5.8.i</td>
<td>University of Vermont (University of Vermont Medical Center)</td>
<td>UVM Medical Center Inpatient Facility</td>
<td>Development of a new inpatient facility to serve the population of Northwest Vermont. Design completed, in permit process.</td>
<td>$187,000,000</td>
<td>TBD</td>
<td>N</td>
<td>H</td>
<td>TBD</td>
<td>2016</td>
<td></td>
</tr>
<tr>
<td>166</td>
<td>4.2.5.8.i</td>
<td>Milton</td>
<td>Milton Hourglass Intersection</td>
<td>This project involves in an area planned for growth and would address a high accident intersection at US7, Middle and Railroad street by creating a hourglass-shape intersection scoped by the RPC.</td>
<td>TBD</td>
<td>N</td>
<td>H</td>
<td>TBD</td>
<td>In Progress</td>
<td></td>
<td></td>
</tr>
<tr>
<td>167</td>
<td>4.2.5.8.i</td>
<td>Westford, Vermont</td>
<td>Conserve Working Lands</td>
<td>draft land-use and development regulations to conserve working lands</td>
<td>TBD</td>
<td>0</td>
<td>Y</td>
<td>H</td>
<td>TBD</td>
<td>In Progress</td>
<td></td>
</tr>
<tr>
<td>168</td>
<td>4.2.5.8.i</td>
<td>Westford, Vermont</td>
<td>Westford Community Wastewater (small scale)</td>
<td>To serve municipal &amp; community facilities. Follow up to 2024 site-specific wastewater feasibility study.</td>
<td>$60,000</td>
<td>V</td>
<td>TBD</td>
<td>N</td>
<td>TBD</td>
<td>In Progress</td>
<td></td>
</tr>
<tr>
<td>169</td>
<td>4.2.5.8.i</td>
<td>Westford, Vermont</td>
<td>Formalize on-street parking in front of brick meeting house</td>
<td>upgrade, pave and strip parking are in front of bank</td>
<td>TBD</td>
<td>N</td>
<td>H</td>
<td>TBD</td>
<td>2020</td>
<td></td>
<td></td>
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<tr>
<td>170</td>
<td>4.2.5.8.i</td>
<td>Westford, Vermont</td>
<td>Pedestrian infrastructure</td>
<td>construct sidewalks connecting public facilities (library, town office, post office, school, meeting house, etc.)</td>
<td>$250,000</td>
<td>0</td>
<td>Y</td>
<td>H</td>
<td>TBD</td>
<td>2017</td>
<td></td>
</tr>
<tr>
<td>171</td>
<td>4.2.5.8.i</td>
<td>Westford, Vermont</td>
<td>preserve significant natural resources after conducting a natural resource inventory, draft regulations to preserve significant natural resources through forestry districts and/or conditional use review.</td>
<td>TBD</td>
<td>n/a</td>
<td>N</td>
<td>H</td>
<td>TBD</td>
<td>2017</td>
<td></td>
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<tr>
<td>#</td>
<td>ECOS Strategy</td>
<td>EDA goal</td>
<td>Municipality/ Sponsor</td>
<td>Project Name (Champion or Partners)</td>
<td>Description/Comments</td>
<td>Estimated Cost</td>
<td>Expected Job Creation (post construction)</td>
<td>Fully Funded Y/N</td>
<td>Priority VTTAL/ H/M/L</td>
<td>50% Local Match Source(s)</td>
<td>Possible Start Date</td>
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<tr>
<td>572</td>
<td>3.2.4</td>
<td>3.2.5</td>
<td>Westford</td>
<td>Westford-milton rd recreation</td>
<td>identify the recreation potential/possibilities of the westford milton road property and utilize property accordingly</td>
<td>TBD</td>
<td>TBD</td>
<td>Y</td>
<td>H</td>
<td>local/state</td>
<td>Completed 2015</td>
</tr>
<tr>
<td>573</td>
<td>3.2.5</td>
<td></td>
<td>Westford</td>
<td>common to school river path</td>
<td>create a path from the common to the school along the Browns River.</td>
<td>$10,000</td>
<td>n/a</td>
<td>Y</td>
<td>H</td>
<td>local/state</td>
<td>In progress</td>
</tr>
<tr>
<td>574</td>
<td>3.2.2</td>
<td></td>
<td>Hinesburg</td>
<td>Highway/Garage</td>
<td>planning, design and construction</td>
<td>TBD</td>
<td>TBD</td>
<td>Y</td>
<td></td>
<td>local/state</td>
<td>In Progress</td>
</tr>
<tr>
<td>575</td>
<td>3.2.2</td>
<td></td>
<td>Hinesburg</td>
<td>zoning bylaw update</td>
<td>zoning rewrite to make them shorter, simpler and easier to understand</td>
<td>$35,000</td>
<td>n/a</td>
<td>Y</td>
<td>H</td>
<td>local/state</td>
<td>2016</td>
</tr>
<tr>
<td>576</td>
<td>3.2.5</td>
<td></td>
<td>VDH - Burlington</td>
<td>VDH - Burlington</td>
<td>assessment potential positive and negative effects of transportation and other projects or policies on the health of residents.</td>
<td>n/a</td>
<td>n/a</td>
<td>Y</td>
<td>H</td>
<td>Completed 2016</td>
<td></td>
</tr>
<tr>
<td>577</td>
<td>3.2.2</td>
<td></td>
<td>Jericho</td>
<td>Jericho Corners pedestrian connection - scoping study</td>
<td>Approved scoping study will evaluate alternatives for creating a safe pedestrian connection between several residential developments along Lee River Rd and Jericho Corners VCTR on Route 15. Will likely request TA from CCRPC working with our trails committee</td>
<td>TBD</td>
<td>TBD</td>
<td>n/a</td>
<td>n/a</td>
<td>Bike/Ped Grant Program</td>
<td>In Progress</td>
</tr>
<tr>
<td>578</td>
<td>3.2.2</td>
<td></td>
<td>Jericho</td>
<td>Jericho Commercial District access management</td>
<td>Hire consultant to conduct outreach and provide access management recommendations that could be employed in the Commercial District to reduce the appearance of sprawl, improve public safety, and integrate this district with the adjacent Riverside designated Village Center District</td>
<td>$20K</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>Fall 2015</td>
<td></td>
</tr>
<tr>
<td>579</td>
<td>3.2.2</td>
<td></td>
<td>Jericho</td>
<td>Jericho Master Plan and Form-based Code</td>
<td>Created a Master Plan and Form-based Code for the Riverside/Lincoln Hills Flat Village Center, creating a template for future commercial and residential growth in this designated VCTR</td>
<td>$70,000</td>
<td>n/a</td>
<td>Y</td>
<td></td>
<td>Completed 2016</td>
<td></td>
</tr>
<tr>
<td>580</td>
<td>3.2.4</td>
<td></td>
<td>Jericho</td>
<td>Jericho Natural Resources Regulatory and Town Plan updates</td>
<td>Conservation Commission and Planning Commission are working collaboratively to incorporate new inventory data from the ECOS S2A project into new overlay and district regulations. This data includes new maps resources, protections for wildlife corridors, and norms for reducing forest fragmentation</td>
<td>TBD</td>
<td>TBD</td>
<td>Y</td>
<td></td>
<td>In progress</td>
<td></td>
</tr>
<tr>
<td>581</td>
<td>3.2.4</td>
<td></td>
<td>Jericho</td>
<td>Jericho Jericho Wetlands Map</td>
<td>Conservation Commission would like to create a Jericho Wetlands Map of previously unmapped wetlands and vernal pools, for reference in the Town Plan and Regulations. This data was collected during the ECOS S2A project, and needs to be put into map form.</td>
<td>TBD</td>
<td>TBD</td>
<td>Y</td>
<td></td>
<td>2015</td>
<td></td>
</tr>
<tr>
<td>582</td>
<td>3.2.2</td>
<td></td>
<td>Richmond</td>
<td>Jolina Court interim zoning</td>
<td>Interim Zoning adopted for the area around the abandoned Creamery building to increase redevelopment flexibility.</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>In Progress</td>
<td></td>
</tr>
<tr>
<td>583</td>
<td>3.2.2</td>
<td></td>
<td>Richmond</td>
<td>New Town Plan</td>
<td>The process of developing a new town plan will start soon, with the recent announcement of MPG funding. One component of the process will include a specific density/village growth workshop, flood resiliency workshop, etc.</td>
<td>$15,000</td>
<td>n/a</td>
<td>Y</td>
<td>VTTAL</td>
<td>State, Local</td>
<td>In Progress</td>
</tr>
<tr>
<td>584</td>
<td>3.2.2</td>
<td></td>
<td>Richmond</td>
<td>Streamline municipal permit process</td>
<td>Increase coordination of process of issuing local approvals and increase awareness of state permit requirements for applicants.</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>TBD</td>
<td></td>
</tr>
<tr>
<td>585</td>
<td>3.2.3</td>
<td></td>
<td>Richmond</td>
<td>Richmond Draft Flood Hazard Overlay District Regulations and Post Flood Procedures</td>
<td>Draft guidance document to assist in the administration of the flood regulations and includes a post-flood procedure to guide the Administrator in communicating permit requirements to flood-damaged property owners. Document includes copies of &quot;how to&quot; guides to help property owners make buildings less susceptible to flood damages and increase predevelopment.</td>
<td>n/a</td>
<td>n/a</td>
<td>Y</td>
<td></td>
<td>M</td>
<td></td>
</tr>
<tr>
<td>586</td>
<td>3.2.2</td>
<td></td>
<td>Richmond</td>
<td>Richmond Property Assessed Urban Energy</td>
<td>Created PACE District, implemented in August 2015</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>In progress</td>
<td></td>
</tr>
<tr>
<td>587</td>
<td>3.2.2</td>
<td></td>
<td>CCRPC and Richmond</td>
<td>VT-72 Bicycle and Pedestrian Scoping Report</td>
<td>Develop a plan to link the village center to transit stop at the State-owned Park and Ride at I-89 Exit 11 by way of multi-use path</td>
<td>$40,000/$5,000</td>
<td>n/a</td>
<td>Y</td>
<td></td>
<td>Federal, State, Local, PACE</td>
<td>In progress</td>
</tr>
<tr>
<td>588</td>
<td>3.2.2</td>
<td></td>
<td>South Burlington</td>
<td>Public-private partnerships including UVM Medical Center facilities</td>
<td>Coordinate with major employers such as UVM Medical Center and provide multimodal transportation</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>Fed, State, Local, PACE</td>
<td>In progress</td>
</tr>
<tr>
<td>589</td>
<td>3.2.2</td>
<td></td>
<td>South Burlington</td>
<td>Williston-Road Network Assessment Ph I &amp; II</td>
<td>Transportation network analysis for the City Center / Exits 14 area</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>Local, CCRPC</td>
<td>In progress</td>
</tr>
</tbody>
</table>
### 2015 ECOS/CEDS Project List

<table>
<thead>
<tr>
<th>#</th>
<th>ECOS Strategy</th>
<th>EDA goal</th>
<th>Municipality/ Sponsor</th>
<th>Project Name (Champion or Partners)</th>
<th>Description/Comments</th>
<th>Estimated Cost</th>
<th>Expected Job Creation (post construction)</th>
<th>Fully Funded Y/N</th>
<th>Priority VYAL/H/M/L</th>
<th>50% Local Match Source(s)</th>
<th>Possible Start Date</th>
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</thead>
<tbody>
<tr>
<td>390</td>
<td>3.2.2</td>
<td>South Burlington</td>
<td>South Burlington</td>
<td>Burlington East WWTP upgrade*</td>
<td>Possible upgrade needed to meet TMDL targets. TMDL lists currently at 202% of phosphorus load.</td>
<td>$5,540,220</td>
<td>N</td>
<td>TBD</td>
<td></td>
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<td></td>
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<tr>
<td>391</td>
<td>3.2.2</td>
<td>South Burlington</td>
<td>South Burlington</td>
<td>Burlington North WWTP Upgrade*</td>
<td>Possible upgrade needed to meet TMDL targets. TMDL lists currently at 106% of phosphorus load.</td>
<td>$5,540,220</td>
<td>N</td>
<td>TBD</td>
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<tr>
<td>392</td>
<td>3.2.2</td>
<td>South Burlington</td>
<td>South Burlington</td>
<td>Burlington Main WWTP Upgrade*</td>
<td>Possible upgrade needed to meet TMDL targets. TMDL lists currently at 137% of phosphorus load.</td>
<td>$24,030,227</td>
<td>N</td>
<td>TBD</td>
<td></td>
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<tr>
<td>393</td>
<td>3.2.3</td>
<td>South Burlington</td>
<td>Essex Junction</td>
<td>Essex Junction WWTP Upgrade*</td>
<td>Recent upgrade already sufficient to meet TMDL targets? TMDL current list includes 145% of load.</td>
<td>$1,000,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>394</td>
<td>3.2.3</td>
<td>Global Foundaries</td>
<td>Global Foundaries</td>
<td>Global Foundaries WWTP Upgrade*</td>
<td>Possible upgrade needed to meet TMDL targets. TMDL lists currently at 95% of phosphorus load, though no cost estimate included.</td>
<td>$4,110,000</td>
<td></td>
<td>TBD</td>
<td></td>
<td></td>
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<tr>
<td>395</td>
<td>3.2.3</td>
<td>Richmond</td>
<td>Richmond</td>
<td>Richmond WWTP Upgrade*</td>
<td>Possible upgrade needed to meet TMDL targets, though currently at 17% of phosphorus load on TMDL list. TMDL still lists a potentially long-term cost.</td>
<td>$1,620,150</td>
<td></td>
<td>TBD</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>396</td>
<td>3.2.3</td>
<td>South Burlington</td>
<td>South Burlington</td>
<td>South Burlington Airport Park*</td>
<td>Possible upgrade needed to meet TMDL targets. TMDL lists currently at 120% of phosphorus load.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>397</td>
<td>3.2.3</td>
<td>Winooski</td>
<td>Winooski</td>
<td>Winooski WWTP Upgrade*</td>
<td>Possible upgrade needed to meet TMDL targets. TMDL lists currently at 105% of phosphorus load.</td>
<td>$7,052,897</td>
<td>N</td>
<td>TBD</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>398</td>
<td>3.2.3</td>
<td>Hinesburg</td>
<td>Hinesburg</td>
<td>Hinesburg WWTP Upgrade*</td>
<td>Possible upgrade needed to meet TMDL targets, though currently at 70% of phosphorus load on TMDL list. TMDL lists a potential long-term cost.</td>
<td>$7,800,000</td>
<td>N</td>
<td>TBD</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>399</td>
<td>3.2.3</td>
<td>Shelburne</td>
<td>Shelburne #1 WWTP Upgrade*</td>
<td>Possible upgrade needed to meet TMDL targets. TMDL lists currently at 78% of phosphorus load, though no cost estimate included.</td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>400</td>
<td>3.2.3</td>
<td>Shelburne</td>
<td>Shelburne #2 WWTP Upgrade*</td>
<td>Possible upgrade needed to meet TMDL targets. TMDL lists currently at 79% of phosphorus load, though no cost estimate included.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>401</td>
<td>3.2.3</td>
<td>South Burlington</td>
<td>South Burlington</td>
<td>South Burlington Bartlett Bay WWTP Upgrade*</td>
<td>Possible upgrade needed to meet TMDL targets. TMDL lists currently at 80% of phosphorus load, though no cost estimate included.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* = As identified in Table II of EPA’s Draft TMDL Region 09 (Vermont Segments of Lake Champlain), dated August 17, 2015.
DRAFT LEGISLATION FOR A STATEWIDE PARCEL MAPPING PROGRAM

The statewide parcel mapping program’s mission is to:

- Serve as the state’s data steward for statewide parcel data.
- Ensure regular data maintenance including data updates.
- Make parcel data available to the state, towns and the public.

Requirements for a statewide parcel mapping program:

- The establishment of an interagency governing board that defines the roles and responsibilities of the program staff.

- At a minimum an annual update of each town’s digital property parcels.

- The program shall have the authority to enter into agreements that designate responsibility for parcel mapping.

- Data updates shall follow the VGIS standards pursuant to Title 10: Conservation And Development, Chapter 8: Geographic Information § 123 Powers and duties. *

- To provide the program with a means to validate and maintain parcel information every transfer of deed must have a property transfer return completed and accompanied with a copy of the deed. For any transfer that includes a change in boundary lines, or is for a property transferring for the first time from a parent parcel following a subdivision, a plat or a survey filed with the deed must also be submitted if available.

Thoughts on: Statewide Parcel Data maintenance fund: a fee of $10 shall be assessed on every property tax return filed in accordance with 32 V.S.A. § 9606.

*Data gathered shall follow the VGIS standards pursuant to Title 10: Conservation And Development, Chapter 8: Geographic Information § 123. Powers and duties refers to:

(c) Within the limits of available resources, the Center shall operate a program of standards development, data dissemination, and quality assurance, and shall perform the following duties: (3) Develop, publish, maintain, and implement such VGIS standards as are necessary to assure that data are compatible with, useful to, and shared with all users of VGIS data, including geographic data standards relating to scale, accuracy, coding, documentation, data format, and physical media.

(5) For all geographic data that are or may be useful to the Center’s users, and that have been collected by any part of State government or generated with State support, ensure that such data: (A) Are developed and maintained so as to conform to VGIS standards.

(C) Are stored and distributed in a manner which will limit the disclosure of data containing individual identifiers to disclosure consented to by the individuals in the data.
<table>
<thead>
<tr>
<th>NEED</th>
<th>CURRENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Updated annually at a minimum</td>
<td>1990 - current</td>
</tr>
<tr>
<td>All towns have data</td>
<td>Last data update ranges from</td>
</tr>
<tr>
<td>Through GIS mapping</td>
<td>Not all towns have data</td>
</tr>
<tr>
<td>Easy visualization with other datasets</td>
<td>Unable to link full dataset to</td>
</tr>
<tr>
<td>100% towns meet VT Parcel Data Standard</td>
<td>15% towns meet VT Parcel Data</td>
</tr>
<tr>
<td>Consistent</td>
<td>Inconsistent</td>
</tr>
</tbody>
</table>

Status of statewide digital parcel data
Matrix of Sectors and Associated Strategies & Parcel Data Uses

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
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<th></th>
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</thead>
<tbody>
<tr>
<td>Water Quality Program</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<tr>
<td>Land Surveying</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<td>X</td>
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<td>X</td>
<td>X</td>
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<tr>
<td>Transportation</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
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</tr>
<tr>
<td>Stormwater</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Forestry</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<td>X</td>
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<td>X</td>
<td>X</td>
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</tr>
<tr>
<td>Economic Development</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Net Benefit for 5 years</td>
<td>$2.4 million</td>
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<td></td>
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<td></td>
<td></td>
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</tr>
<tr>
<td>Estimated Cost for 5 years</td>
<td>$2.4 million</td>
<td></td>
<td></td>
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<td></td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>(High: $12.915,000, Low: $6,004,000)</td>
<td></td>
<td></td>
<td></td>
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<td>ROI Calculation</td>
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<tr>
<td>4% discount rate</td>
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</tbody>
</table>

The ROI ratio range is based on a range of 1.58 to 4.55.
<table>
<thead>
<tr>
<th>Phase</th>
<th>Year</th>
<th>State FTE</th>
<th>Development</th>
<th>Maintenance</th>
<th>Total</th>
</tr>
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<tbody>
<tr>
<td>Phase 1</td>
<td>2020</td>
<td>$42,292</td>
<td>$5,757</td>
<td>$583,666</td>
<td>$643,828</td>
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<tr>
<td>Phase 2</td>
<td>2021</td>
<td>$214,267</td>
<td>$125,058</td>
<td>$800,214</td>
<td>$1,140,339</td>
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<tr>
<td></td>
<td>2022</td>
<td>$214,267</td>
<td>$74,937</td>
<td>$800,214</td>
<td>$1,099,428</td>
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<tr>
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<td>2023</td>
<td>$214,267</td>
<td>$n/a</td>
<td>$800,214</td>
<td>$1,099,428</td>
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<tr>
<td></td>
<td>2024</td>
<td>$214,267</td>
<td>$n/a</td>
<td>$800,214</td>
<td>$1,099,428</td>
</tr>
<tr>
<td></td>
<td>Total Over 5 Years</td>
<td></td>
<td></td>
<td></td>
<td>$2,357,804</td>
</tr>
</tbody>
</table>

**Funding**

**Data Creation**

To bring all towns up to standard parcel mapping companies/RPCS competitive grant program to

**Maintenance**

**Data Ongoing**
submitted if available.

Time from a parent parcel following a subdivision, a plat or a survey filed with the deed must also be
any transfer that includes a change in boundary lines, or is for a property transferring for the first
dead must have a property transfer return completed and accompanied with a copy of the deed. For

To provide the program with a means to validate and maintain parcel information every transfer of

Chapter 8: Geographic Information § 123 Powers and duties.

data updates shall follow the VGIS standards pursuant to Title 10: Conservation and Development

parcel mapping.

The program shall have the authority to enter into agreements that designate responsibility for

At a minimum an annual update of each town’s digital property parcels.

The program shall have the authority to enter into agreements that designate responsibility for

Requirements for a statewide parcel mapping program:

Make parcel data available to the state, towns, and the public.

Ensure regular data maintenance including data updates.

Serve as the state's data steward for statewide parcel data.

The statewide parcel mapping program's mission is to:

Proposed Legislation
Other partners: VCGL, VLCI, TAX, ANR, AOA...

- Spreading the word
- Legislative support
- VAPDA

Program development support
- Parcel Mapping Workshop
- Facilitate Private Sector Investment
- Project Stakeholder
- ACCD

Funds for Data Development
- Overall Project Management/Contract Admin
- VTRANS

Partners Road Show
**Statewide Property Parcel Mapping Program**

Sec. A. LEGISLATIVE FINDINGS

(a) The General Assembly finds that the State has an interest in creating a statewide property parcel data layer. The data layer will include all property parcels in each Vermont municipality in a standard format and integrate all municipal property parcel maps into one property parcel map for the State.

(b) The General Assembly further finds that a statewide property parcel data layer will be useful to the Agency for the following applications:

1. mapping highway centerlines that end at property boundaries;
2. enabling the Agency to evaluate properties for alternative energy and other possible uses;
3. providing right-of-way data to analyze Transportation Separate Storm Sewer System (TS4) assessments;
4. streamlining title searches during the project development phase of transportation projects;
5. providing linkages between grand list and property parcel data in order to enable the identification of all public land;
6. locating encroachments on highways and providing notice to adjoining landowners;
7. mapping the locations of surplus and excess property;
8. assisting in the appraisal of land and acquisition of rights for transportation projects;
9. improving emergency response capabilities;
10. identifying encroachments on State-owned railroads and providing notice to adjoining landowners;
evaluating applications for highway access under 19 V.S.A. § 1111, including utility
installations and driveways; and

improving the State’s ability to identify its assets by accurately cataloguing the
location and extent of State-owned rights-of-way.

Sec. B. 19 V.S.A. § 10 is amended to read:

§ 10. DUTIES

The Agency shall, except where otherwise specifically provided by law:

* * *

(17) Administer the Statewide Property Parcel Mapping Program.

Sec. C. 19 V.S.A. § 44 is added to read:

§ 44. STATEWIDE PROPERTY PARCEL MAPPING PROGRAM

(a) Purpose. The purpose of the Statewide Property Parcel Mapping Program is to:

(1) develop a statewide property parcel data layer;

(2) ensure regular maintenance, including updates, of the data layer, and

(3) make property parcel data available to State agencies and departments, municipalities,

and the public.

(b) Property Parcel Data Interagency Advisory Board. A Property Parcel Data
Interagency Advisory Board (Board) is created for the purpose of monitoring the Statewide
Property Parcel Mapping Program and making recommendations to the Agency of how the
Program can be improved to enhance the usefulness of statewide property parcel data for State
agencies and departments, municipalities, and the public. The Board shall comprise:

(1) the Secretary of Transportation or designee, who shall serve as chair;

(2) the Secretary of Natural Resources or designee;
(3) the Secretary of Commerce and Community Development or designee;

(4) the Commissioner of Taxes or designee; and

(5) a representative of the Vermont Association of Planning and Development Agencies.

(c) Meetings of Board. The Board shall meet at the call of the Chair or at the request of a majority of its members. The Agency shall provide administrative assistance to the Board and such other assistance as the Board may require to carry out its duties.

(d) Standards. The Agency shall update the statewide property parcel data layer in accordance with the standards of the Vermont Geographic Information System (VGIS), as specified in 10 V.S.A. § 123 (powers and duties of Vermont Center for Geographic Information).
The Town of Shelburne has requested, per 24 V.S.A §4350, that the Chittenden County Regional Planning Commission (1) approve amendments to its 2014 Comprehensive Plan; and (2) confirm its planning process.

The Town of Shelburne has undergone amendments to its 2014 Comprehensive Plan for the purposes of meeting the Act 59 requirements. These requirements include adding a description of how Shelburne’s designated Village Center and designated Vermont Neighborhood support the community’s goals and adding maps showing the designated Village Center and Designated Neighborhood boundaries, in order to apply for Village Center designation renewals. Because Shelburne’s Village Center and Vermont Neighborhood will need to be renewed in October 2016, this amendment needs to be completed prior to the next scheduled Comprehensive Plan update in 2019. The Shelburne Planning Commission will hold its public hearing on March 10, 2016. The Selectboard hearing has not yet been scheduled.

Since the Shelburne 2014 Comprehensive Plan was confirmed by the CCRPC, the requirement to include a section on flood resiliency in Town Plans has become effective. The 2014 Comprehensive Plan was approved by the CCRPC on June 18 and flood resilience requirements became effective on July 1. Because there are no other new requirements, or other updates to this Plan, CCRPC Staff has only reviewed the Flood Resiliency sections of the Plan and the amended text relating to the designated Village Center and Vermont Neighborhood, as well as the amended Bicycle and Pedestrian Infrastructure Development Plan map.

Following the Chittenden County Regional Planning Commission’s (CCRPC’s) Guidelines and Standards for Confirmation of Municipal Planning Processes and Approval of Municipal Plans (2013) and the statutory requirements of 24 V.S.A. Chapter 117, I have reviewed the amendments to the Shelburne Comprehensive Plan to determine whether it is:

- Consistent with the general goals of §4302;
- Consistent with the specific goals of §4302;
- Contains the required elements of §4382;
- Compatible with the 2013 Chittenden County Regional Plan, entitled the 2013 Chittenden County ECOS Plan (per §4350); and
- Compatible with approved plans of other municipalities (per §4350).

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

Staff Review Findings and Comments

1. Shelburne’s Comprehensive Plan amendments are consistent with all of the general goals of §4302. Appendix A will be completed by Shelburne Staff and reviewed by CCRPC Staff, and describes how the Plan amendments are consistent with the goals associated with the amendments. CCRPC Staff further finds that based on the 2014 Comprehensive Plan review and approval the Comprehensive Plan in its entirety is consistent with all of the general goals of §4302.
2. Shelburne’s Comprehensive Plan amendments are consistent with the specific goals of §4302. Appendix A will be completed by Shelburne Staff and reviewed by CCRPC Staff, and describes how the Plan amendments are consistent with the goals associated with the amendments. CCRPC Staff further finds that based on the 2014 Comprehensive Plan review and approval the Comprehensive Plan in its entirety is consistent with all of the specific goals of §4302. Because flood resiliency was not reviewed by CCRPC staff during the review of the 2014 plan, staff reviewed it for consistency during this amendment process:

a. Though CCRPC did not review the 2014 Comprehensive Plan for flood resiliency in 2014, the plan’s existing language meets this standard. The Plan includes language on the need to maintain water quality and protect wetlands and steep slopes to prevent flooding and erosion. It includes language and maps identifying flood hazard areas and goals and objectives preventing development in flood hazard areas. The plan includes a map showing fluvial erosion areas and goals and actions calling for education about fluvial erosion hazards and preventing development in fluvial erosion hazard areas. When the plan is updated in 2019, the flood resiliency element could be strengthened by adding text about fluvial erosion and river corridors, as well as by adding references to the Shelburne All Hazard Mitigation Plan. However, the existing and proposed text together is found to be consistent with the specific flood resiliency goal and contains the required flood resiliency element.

3. Shelburne’s Comprehensive Plan amendments contain the required elements of §4382. Appendix A will be completed by Shelburne Staff and reviewed by CCRPC Staff, and describes how the Plan amendments are compliant with the required elements associated with the amendments. CCRPC Staff further finds that based on the 2014 Comprehensive Plan review and approval the Comprehensive Plan in its entirety is compliant with the required elements of §4382. Because flood resiliency is a new element requirement since the 2014 Town was approved, CCRPC reviewed the Plan and amendments for these elements:

a. Regarding the flood resiliency element, see section 2.a. above for a description of how this element is met.

4. Shelburne’s Comprehensive Plan amendments are generally compatible with the planning areas, goals and strategies of the 2013 Chittenden County Regional Plan, entitled the 2013 Chittenden County ECOS Plan.

5. Shelburne’s Comprehensive Plan amendments are compatible with the municipal plans for Hinesburg (adopted in 2013); Charlotte (adopted in 2013); St. George (adopted in 2012); and Williston (adopted in 2011). South Burlington adopted a new Comprehensive Plan on February 1, 2016. Both municipalities have similar uses planned for bordering areas. Shelburne’s Mixed Use Growth and Residential Growth sub-areas align with South Burlington’s Medium to Higher Intensity Mixed Use areas along the Shelburne Road corridor. The rest of the bordering areas are planned for Lower Intensity Principally Residential or Very Low Intensity Principally Open Space in South Burlington and as Rural areas in Shelburne.

6. Shelburne has a planning process in place that is likely to result in an approved plan. In addition Shelburne will provide information about their planning budget. Given past budgets, CCRPC expects to find that Shelburne is maintaining its efforts to provide local funds for municipal and regional planning.

Additional Comments/Questions:
While Staff does not find that any amendments are necessary for approval and confirmation of the process by the CCRPC, the following recommendation is for the next full Plan update:
1. CCRPC Staff suggests additional flood resiliency language in the text of the plan, such as text about fluvial erosion and river corridors and references to the Shelburne All Hazard Mitigation Plan.

Proposed Motion & Next Steps:
PROPOSED MOTION: The PAC finds that the amendments to the 2014 Shelburne Comprehensive Plan, as submitted, meets all statutory requirements for CCRPC approval, and that the municipality's planning process meets all statutory requirements for CCRPC confirmation.

Upon notification that the Plan has been adopted by the municipality, CCRPC staff will review the plan, and any information relevant to the confirmation process, for changes. If staff determines that changes are substantive, those changes will be forwarded to the PAC for review. Otherwise the PAC recommends that the Plan, and the municipal planning process, should be forwarded to the CCRPC Board for approval.
MEMORANDUM

TO: RECIPIENTS
FR: DEAN PIERCE
RE: PUBLIC HEARING ON CHANGES TO COMPREHENSIVE PLAN
DA: JANUARY 27, 2016

For many months the Planning Commission has contemplated moving forward with a proposal to modify portions of the Town’s Comprehensive Plan. On Thursday, January 14, the Planning Commission voted to warn a public hearing on such changes, with the hearing set to occur on March 10, 2016. The proposed changes, which have two main components, are detailed below and in the materials attached.

Materials responding to statutory requirements governing designated village centers

The first component would add text and map responding to statutory requirements governing designated village centers and designated neighborhoods. The Planning Commission hosted a presentation by John Adams (of the Vermont Department of Housing and Community Development) on this topic in late 2014. The proposal would modify the Future Land Use section of Volume I as follows:

- **Growth Area 1: Shelburne Village Goal** 1 (explanatory text)
- **Growth Area 1: Recommended Actions** (new action 14)
- **Land Use Summary** (new text)
  - Maps (new map 6, Boundaries of Designated Village Center and Vermont Neighborhood in Relationship to Planning Areas)

Further, the Plan’s Map Volume would be modified through the addition of a larger format-version of Map 6 in the Volume 1 Section of the Volume.

Materials responding to Request by Bike and Pedestrian Paths Committee

The second component would replace and rename the existing Priority Paths and Sidewalks map (Map 24 in the Map Volume of the Plan) with a new version prepared by the Bike and Pedestrian Paths Committee. The Planning Commission has agreed to warn these amendments as a courtesy to the Bike and Pedestrian Paths Committee.

Proposed Edits

The proposed changes to the text of the Plan are shown in the attached document using a common convention. Unchanged text remains in black standard text. Text proposed for deletion is depicted in red, with strikethrough as shown here. Text proposed to be added is depicted in red, with underscore, as shown here.
Land Use in Shelburne

Introduction:
Land use is a critical reflection of a community’s planning efforts. The over-riding intention in Shelburne is that the pattern of land uses should create and/or reinforce a compact and prominent village center first surrounded by residential neighborhoods, and then by lower-density development and a diverse mixture of open lands and natural areas.

Reflecting this fundamental vision, the Land Use section of this Town Plan is divided into three basic areas: 1) Shelburne Village (Growth Area 1), which is the center of the Town’s Growth Area; 2) The Growth Area Beyond Shelburne Village (Growth Area 2); and 3) the surrounding Rural Areas.

The Planning Areas Map (Map 1) shows how the Town is divided into these three basic land use areas.

The Town’s Growth Area, into which a major portion of future growth is directed, is defined as the area that is currently designated to be served by the municipal sewer system under the Town’s Sewer Allocation Ordinance. The Growth Area is divided into two sections: Growth Area 1—encompassing Shelburne Village and Growth Area 2—encompassing portions of the sewer service area beyond the Village. It is the Town’s position that in this Growth Area, and particularly in the Village segment of it, compact development is to be encouraged, but not without due regard to conservation of exceptional natural resources.

The next part of this section of the Town Plan presents Goals, Objectives and Recommended Actions to achieve the vision of a compact and prominent village center, i.e., Growth Area 1. Subsequent parts will address the remainder of the Town’s Growth Area, i.e. Growth Area 2, and then the outlying rural areas.
Growth Area 1: Shelburne Village

Shelburne Village is the social and functional center of the Town, and contains the area delineated on the Village Planning Sub-Areas Map (Map 2) on the following page.

GOAL: TO ENSURE THAT SHELBURNE VILLAGE CENTER CONTINUES TO FUNCTION AS A CENTER OF ECONOMIC, SOCIAL, AND CULTURAL VITALITY, CONTAINING A DIVERSE MIXTURE OF RESIDENCES, BUSINESS ESTABLISHMENTS, CULTURAL AND RELIGIOUS FACILITIES, AND SUPPORTING GOVERNMENT OFFICES THAT IS LASTING AND DOES NOT LIMIT FUTURE OPPORTUNITIES.

The 1988 Shelburne Village Plan (Research and Evaluation Specialists of Vermont, Inc., Alexander-Truex-De Groot, Inc.) and the June 2006 Update of the Shelburne Village Plan (ORW Landscape Architects and Planners) provide the foundation for many of the objectives and recommended actions in this Section, and are incorporated into this Plan by reference.

The 1988 Village Plan identified five distinct sections of the Village Area. Careful review of existing conditions has resulted in a slight modification of the delineation of the five sections of the Village Area. These sections are also shown on Map 2, and are briefly identified below.

- The Village Center is the dense, mixed use area surrounding the Shelburne Road/Harbor Road/Falls Road intersection, and contains most of the Village Area businesses, the triangular Village green, the parade ground, and many of the Town’s public buildings.

- The Institutional/Museum sub-area is located west of Shelburne Road, south of Church Street and is primarily made up of the Shelburne Museum.

- The Village Residential sub-area is a predominantly residential area, mostly to the south of the Village Center, and extending east on both sides of Falls Road. There is also a section of the Village Residential area west of the railroad tracks, along Harbor Road.

- The Shelburne Falls sub-area, the original village center, is the historic cluster of dwellings and small businesses on both sides of the LaPlatte River bridge.

- The Village Conservation sub-area consists of a protected strip of land along the east side of Falls Road, part of the LaPlatte River Nature Park, and other conserved lands such as the former Elkins property.
Map 2.

Village Planning Sub-Areas

- VILLAGE PLANNING AREA BOUNDARY
- Village Center Sub-Area
- Village Residential Sub-Area
- Shelburne Falls Sub-Area
- Institutional/Museum Sub-Area
- Village Conservation Sub-Area

Roads
Railroad

September 20, 2011
In addition to the above delineated sub areas, Shelburne Village also includes a Designated Village Center (DVC) and a Vermont Neighborhood (VN), both of which are recognized by the State of Vermont. The specific boundaries of the DVC and VN are discussed below.

Designation of the DVC supports community goals by giving the community priority consideration for state grants and other resources. Specific benefits of DVC designation include 10% Historic Tax Credits, 25% Facade Improvement Tax Credits, 50% Code Improvement Tax Credits, Priority Consideration For HUD, CDBG and Municipal Planning Grants, Priority Consideration By State Building And General Services (BGS), and Special Assessment Districts. (Also known as special benefits district or business improvement district, a Special Assessment District may be used to raise funds for both operating costs and capital expenses to support specific projects in the designated village center.) DVC benefits helped the redevelopers of the Shelburne Inn property realize the potential of that site.

Similarly, designation of the VN supports community goals by providing special permit and tax incentives for communities and developers that commit to building mixed-income housing within and adjacent to designated downtowns, village centers, new town centers, and growth centers. Specific benefits of VN designation include the following: Qualified “mixed income” projects are exempt from Act 250 regulations; Act 250 projects not qualifying for the exemption receive a 50% discount on application fees; Agency of Natural Resources fees for wastewater review are capped at $50.00 for projects that have received sewer allocation from an approved municipal system; and Exemption from the land gains tax. VN benefits helped the developers of the Harrington Village project realize the potential of that site.

OBJECTIVES:

1. Reinforce the Village Center area around the Shelburne Road/Falls Road/Harbor Road intersection as the commercial, civic and social center of Shelburne village. Preserve and enhance the mixture of uses in this area including residential, commercial, office, and public uses. Encourage a mixture of housing types (detached and attached).

2. Enhance Shelburne Road as the “Main Street” of the Village by maintaining the visual qualities and residential character of development along it. Shelburne Road shall remain two lanes as it passes through the Village Area. The visual qualities will be addressed, in part, by landscaping, by the spacing and setback of structures, and by the presence of stately street trees.

3. Encourage a variety of appropriately scaled commercial, residential, and mixed use development and redevelopment in the Village, including development that enhances the attractiveness of the Village as a destination for commerce and an informal gathering place for town residents, while maintaining its character and compatibility with surrounding buildings.
4. Encourage continued private investment in the Village through thoughtful and timely public investments in infra-structure (streets, parking, utilities, etc.) and amenities (landscaping, streetscape, streetlights, etc.)

5. Maintain and enhance pedestrian accessibility in and to the Village. The scale and design of buildings and street amenities (landscaping, pavements, enhanced pedestrian crossings, benches, signs, street lights, etc.) shall enhance the experience of pedestrians in the Village area. To the greatest degree possible, there shall be various pedestrian routes within the Village and connecting the Village to surrounding areas and/or facilities.

6. Street intersections shall contain marked crosswalks at all sidewalk crossings. Signalized intersections shall contain pedestrian activated walk phases. A typical conceptual design for signalized intersections should be developed that specifies cantilevered signal poles, exposed aggregate ramps at sidewalk crossings, the location of pedestrian signal poles, landscaping, pedestrian scaled lighting, etc.

7. Using features such as street design, landscaping, and building design, create attractive and clearly identifiable entrances to the Village. The entrances should clearly differentiate the Village from surrounding areas.

8. Continue to preserve and protect the historic structures and patterns located in the Village.

9. Consistent with the 1995 Village Green and Parade Ground Landscape Master Plan (and subsequent updates), refine and reorganize the triangular Village Green as a visual focal point for the Village. It should be closely linked to civic and commercial areas and should be an integral part of the pedestrian circulation system.

10. Consistent with the 1995 Village Green and Parade Ground Landscape Master Plan (and subsequent updates), reinforce the Parade Ground north of Church Street as an active open space in the Village. It must be protected from infringement. And it should be retained as an open area suitable for a variety of activities such as craft shows, farm markets, field games, ice rinks, garden shows, etc., and be connected to the pedestrian/bicycle path network.

11. Link the cluster of Town buildings on the west side of Shelburne Road to the rest of the Village by pedestrian ways, visual features such as landscaping, streetlight design, and signage.

12. Integrate the Shelburne Museum into the Village, both visually and functionally, using features such as sidewalks.

13. The Shelburne Falls area, a distinct historic area, shall be reinforced as a compact, mixed use neighborhood and linked to the rest of the Village by pedestrian ways and pedestrian friendly streets.
14. The Village Conservation area provides informal recreation opportunities and visual and functional access to the LaPlatte River Nature Park. This must be retained as an important undeveloped Village feature. In addition, pedestrian and bicycle access to this area should be preserved and enhanced. Limited parking in this area along Falls Road should be created and carefully delineated. The Town should continue to manage this area in accordance with the 2011 “Management Plan for La Platte Nature Park”. Limited additional parking should be created for users of the La Platte Nature Park.

RECOMMENDED ACTIONS:

The goals and objectives set forth above will be implemented by a long term, coordinated, set of decisions by both public (i.e. the Town) and private parties. Private decisions will be influenced directly by Town Zoning requirements, and indirectly by Town investments in the Village area. Recommended Actions intended to achieve the goals and objectives are presented below.

1. **Zoning:** Periodically revisit the provisions of the Town’s Zoning Bylaws that pertain to the Village Area to ensure that they encourage and facilitate the pattern and types of development envisioned for each of the five sub-parts of the Village, and that they promote the visual qualities appropriate to a compact, pedestrian oriented center. Residential densities in the Village generally speaking should be higher than in other parts of town. Within the Village, densities should be highest in the Village Center, next highest in the Shelburne Falls section, and next highest in the residential areas. Specific issues to be addressed by zoning include preservation of historic structures, the proper mix of uses, and the appropriate design of buildings, streetscapes, and parking areas. Specific tools to be considered (some of which already exist) are overlay districts, design review districts, additional landscape requirements under Site Plan Review, and/or special Planned Unit/Planned Residential Development provisions. The Zoning Ordinance shall be revised as needed. The Planning Commission should investigate whether use of a Form Based Code and/or Transit Oriented development zoning would be appropriate in the Village Area.”

2. **Support existing establishments and facilitate additional appropriately scaled commercial development in the Village Center.** The following specific steps should be implemented.
   - Encourage the improvement of accessibility to the area north of the current shopping park.
   - Redesign and reconstruct upper Falls Road, Route 7 along the triangular Village green, and Church Street, as described in the 2006 Village Plan Update and the Streetscape improvement plans created to implement the Village Plan update.

3. **Work with the Shelburne Museum to better integrate the Museum into the Village Area.** Actions to be considered include:
FUTURE LAND USE

- As described in the 2006 Village Plan update, establishing a pedestrian connection between the Museum grounds and the Village center.

- Joint promotion between the Museum and Village businesses.

4. Continue to work with CCTA on the installation of pedestrian friendly bus stops throughout the Village. Bus stops should include shelters, should be located to provide convenient access to village activities as well as for easy connection to the pedestrian/bicycle path network, and should be funded by grant sources whenever possible.

5. Based on the concepts set forth in the 1988 Shelburne Village Plan and in the 2006 Village Plan Update, continue to make improvements to the pedestrian circulation system in the Village Center. A specified set of projects could include new walkways and lighting, reconstructed walkways with lighting, and lighting of existing walkways. In particular, pedestrian improvements associated with the high priorities specified in the Village Plan Update, should be implemented as soon as possible.

6. Landscaping: In order to achieve the visual qualities and pedestrian orientation described in the Goals and Objectives and the 1988 Shelburne Village Plan and in the 2006 Village Plan Update, a comprehensive multi-year landscaping program should be initiated. The assistance of a qualified landscape designer may be helpful.

   - Initiate a long-term street tree planting program consistent with recommendations contained within the Shelburne Village Plan Update. This program will involve filling gaps in existing street trees, anticipating the death and removal of existing street trees, and establishing street trees where none currently exist. Appropriate professionals (e.g., landscape architects and/or arborists) should be consulted during the development and implementation of this program.

   - Develop and implement a design for landscaping the triangular Village green as a focal point in the Village, consistent with recommendations contained within the 2006 Village Plan Update and the Village Green and Parade Ground Landscape Master Plan (and subsequent updates). This may involve connecting it visually to other areas of the Village, and functionally to the pedestrian walkway network.

   - Develop and implement designs for landscaping the principal entrances to the Village, consistent with recommendations contained within the 2006 Village Plan Update. The intent is to visually differentiate the Village from the surrounding areas, as well as to announce arrival into the Village.

7. Develop a design for Shelburne Road as it passes through the Village, consistent with recommendations contained within the 2006 Village Plan Update. The design should be limited to two lanes, must incorporate pedestrian amenities, and must be sensitive to the
visual qualities of Shelburne Village. Also, the undergrounding of overhead utility lines should be a feature of the design.

8. Street lighting: The Town should install street lighting where appropriate. This determination shall recognize different needs for different areas such as along Shelburne Road, along other streets in the Village, and along pedestrian walkways. Fixtures should clearly differentiate the Village from surrounding areas, and create a relaxed, inviting, and pedestrian scaled atmosphere.

9. “Way Finding”: The Town should implement a unified design for a “way finding” system for the Village that incorporates directional and informational signs and identifies routes to various attractions (paths, trails, facilities, commercial establishments, cultural facilities, etc.) both within and outside of the Village.

10. Parking: Update the 2000 study\(^1\) of current parking usage and anticipated parking needs in the Village. The new study should include an overall concept for meeting anticipated parking needs in the Village. If needed, additional parking shall be constructed, at developers’ expense, on schedule to be available when new development opens.

11. Utility Lines: The Town shall explore the possibility of placing existing overhead utility wires (both transmission and distribution lines) in the Village underground. At the very least, overhead street crossings should be moved underground to reduce visual clutter. Other options include moving overhead utility lines away from street rights-of-way to mid-block locations. In addition, the Town shall strongly encourage the undergrounding of utility lines along parcels undergoing development or redevelopment.

12. Conduct research on the potential benefits and impacts of an Official Map. The Official Map is a tool set forth in 24 V.S.A., Chapter 117, by which a municipality may designate locations for future public facilities and claim the right to purchase the sites if development is proposed on them.


To facilitate the public improvements suggested above, it is recommended that they be incorporated into the Town’s on-going Capital Budget and Program as described in Vermont Statute (24 V.S.A., Chapter 117).

Growth Area 2: Beyond the Village

As noted above and shown in Map 1, the Shelburne Growth Area includes Shelburne Village (Growth Area 1) and the area beyond the Village (Growth Area 2) that is currently designated to be served by the municipal sewer system under the Town’s Sewer Service Allocation Ordinance. It is Growth Area 2 that is to contain the majority of Shelburne’s residential neighborhoods, along with commercial and industrial activities that do not fit into the Village Center but are well suited for other locations within the Sewer Service Area.

GOAL: TO CREATE AN AREA SURROUNDING THE VILLAGE THAT CONTAINS PLEASANT, MODEST DENSITY NEIGHBORHOODS, AND THAT WILL ACCOMMODATE APPROPRIATE LEVELS OF SUB-REGIONAL COMMERCIAL AND INDUSTRIAL ACTIVITIES.

Growth Area 2 is entirely served by the municipal sewer system and can accommodate densities that are higher than in the Rural Area but lower than in the Village Area. Significant portions of Growth Area 2 will be residential, and thus accommodate much of the anticipated residential growth. In addition, this area will contain most of the Town’s industrial establishments and some large, region-serving commercial establishments. There are four components to Growth Area 2.

- **The Residential Area:** In acreage terms, most of the growth area will be residential and comprised of pleasant neighborhoods with a mixture of attached and detached dwellings. Some of these residential areas abut rural lands while a portion fronts on Lake Champlain.

- **The LaPlatte River Conservation Corridor:** Threading through the growth area and the Village is a series of conserved parcels along the LaPlatte River. Most of these have been conserved or are Town owned. These areas contain significant natural features and have been identified on the LaPlatte River Greenway Map.

- **The Commercial/Industrial Areas:** Immediately north of Shelburne Village, on the west side of Shelburne Road, is a small cluster of industrial establishments, and further west, vacant land designated for industrial use. A second cluster is located immediately south of Shelburne Village on the east side of Shelburne Road. A third area is located on the east side of Shelburne Road in the vicinity of Executive Drive.

- **The Mixed Use Area:** Along Shelburne Road north of Shelburne Village is a corridor which will contain a mixture of residential and commercial uses. This Mixed Use corridor may be broken up into clusters, separated by intervening areas of open land or public amenities. This area was the focus of Sustainable Development Assessment Team (SDAT) report prepared by a group sponsored by the American Institute of Architects, as well as a Pilot Project completed by William Dennis of B. Dennis Town & Building Design. In the Mixed Use area, these qualities may be enhanced through the development of a Form Based Code.

The Growth Area with Sub-Areas Map (Map 3) shows these components of Growth Area 2.
OBJECTIVES:

1. Encourage non-residential development that is not suitable for the Village Area (Growth Area 1) but is well suited for other portions of the Town to locate in appropriate sections of Growth Area 2.

2. In the Commercial/Industrial Area, promote policies that will encourage developers to build using form-based solutions that enhance the community.

3. Clearly distinguish the points at which the Village Area begins. These Village entries are found on Shelburne Road north of the LaPlatte River bridge and south of Bostwick Road, on Harbor Road near the Shelburne Community School, and on Irish Hill Road just east of the LaPlatte River bridge.

4. Create a true mixture of residential and commercial development in the Mixed Use Area along Shelburne Road north of the Village Area. This should range from apartments above commercial uses to various types of residential structures linked with and integrated into the commercial developments. Commercial uses should be oriented towards local and sub-regional markets (e.g. drug stores, hardware stores, neighborhood stores). More specifically, the following objectives should be achieved in the Mixed Use Area:

   - Encourage clustered development in the Mixed Use Area, with buildings sited in groups with varying setbacks and well landscaped areas between structures and the road. Manage the intensity and siting of development so that it does not overwhelm the capacity of Shelburne Road.

   - Ensure that the Mixed Use Area does not become a suburban strip. Encourage developers to build using physical forms and architectural styles that enhance the community. Identify appropriate breaks in development for open spaces and/or mini-parks. Require appropriate front set-backs along Shelburne Road. Continue to promote shared driveways, and the location of parking away from areas immediately adjacent to the Shelburne Road right of way. A mixture of one and two story buildings can provide variation in roof lines. A secondary access road, parallel to Shelburne Road, may provide local access to both commercial and residential development.

   - If and until such time as comprehensive, physical form-based regulations are enacted in the district, continue to require that development on parcels of three acres or more be treated as Planned Developments, with design standards to achieve the desired mixed use neighborhoods.

   - Work to develop north-south pedestrian connections, off of Shelburne Road, to connect the various neighborhoods north of the Village and encourage vehicular connections between the boundaries of future residential developments.
• Ensure that Shelburne Road and development in the mixed use corridor is well served by pedestrian and bicycle amenities and that the area is designed and landscaped with amenities appropriate to slow moving travelers.

• Integrate transit stops into the pattern of mixed uses in order to serve both the residential and commercial developments.

5. Direct most of the Town’s anticipated residential growth to Growth Area 2. Ensure that zoning regulations for this area are consistent with accommodating that growth.

6. In the residential parts of Growth Area 2, encourage development of pleasant, compact neighborhoods. Require that development of parcels of three acres or more be treated as Planned Developments with design standards to encourage the following characteristics.

   • A mixture of housing types (detached and attached).
   • Encourage compact patterns of development with a range of residential lot sizes.
   • Narrow streets with street trees on both sides and sidewalks on at least one side.
   • Convenient access to transit stops.
   • Bicycle/pedestrian paths that connect residential neighborhoods to each other, to transit stops, to the Village and to other attractions.
   • Streets connecting future neighborhoods to eliminate the need to go onto collectors.
   • Neighborhood design should reflect and protect natural landforms.
   • Overall residential density in Growth Area 2 should be lower than in the Village Residential areas but higher than in the Rural Areas.

7. Where natural features justify it, design residential neighborhoods to preserve open spaces and natural features.

8. Protect streams and waterways with appropriate buffers and stormwater management systems.

9. Look for opportunities to provide further connections for non-motorized travel between Spear Street and Shelburne Road.
RECOMMENDED ACTIONS:

The following actions are recommended to achieve the above goals and objectives:

1. **Zoning:** Revise the Zoning to periodically re-examine uses, dimensional requirements, and access requirements for the Residential, Commercial/Industrial and Mixed Use areas.

2. Undertake a design/build-out study of the Mixed Use Corridor to identify the visual qualities needed to ensure that development in this area achieves the above objectives and accommodates mixed use development while becoming an attractive prelude to the Village. One option available to complete this task is to supplement the Sustainable Development Assessment Team (SDAT) report prepared by the American Institute of Architects and the ‘Pilot Project’ report completed by William Dennis of B.Dennis Town & Building Design.

3. Using recommendations contained in the SDAT and Pilot Project reports improve the design review process guiding development in the Mixed Use Corridor. In addition to visual characteristics, the development review process should also consider such things as signage, circulation, impacts on Shelburne Road and its intersections, and alternative modes of transportation.

4. Building on the recommendations contained in the SDAT and Pilot Project reports, actively explore the development of a Form Based Code for the Shelburne Road corridor, starting with the completion of a multi-day design charrette involving property owners, residents, and a range of design professionals.

5. **Subdivision Regulations:** Revise Subdivision standards to encourage compact neighborhoods with street trees, narrow streets, sidewalks, and bicycle/pedestrian paths. Regulations should encourage provision of open spaces and bicycle/pedestrian paths that connect between subdivisions. Such regulations should also specify that subdivision designs will accommodate significant natural features and access to the public where appropriate.

6. Re-examine the Town’s Public Works Standards to ensure that roads in the residential areas are no wider than necessary to provide safe residential and emergency vehicle access.

7. Establish connections for non-motorized travel between Spear Street and Shelburne Road. One possibility is to utilize the existing sewer line right-of-way. Non-motorized connections to surrounding neighborhoods shall also be created.

8. Using state guidelines as a minimum, review and if necessary update regulations establishing appropriate buffers of streams and other water bodies, and to require necessary treatment and management of stormwater.
9. Prohibit development and ensure the protection of the LaPlatte Nature Park and Shelburne Bay Park by implementing (updating as needed) the 2011 “Management Plan for Shelburne Bay Park: and 2011 “Management Plan for LaPlatte Nature Park”. In addition, develop and implement management plans for other conserved lands along the LaPlatte River.

10. Continue to pursue construction of the path network linking the Village Area and the residential neighborhoods north of Webster Road.

11. To the maximum extent allowed by law, require those proposing development or redevelopment in this Area to subscribe to the foregoing design and conservation principles.

The Rural Area: Outside of the Growth Area

The area outside of Shelburne’s Growth Area is designated as the Rural Area. It is the Town’s policy to discourage development in the rural area in favor of development in the Growth Area. This is consistent with the Vision statement which reads: “The Town will feature a compact and prominent village center first surrounded by residential neighborhoods, and then by lower-density development and a diverse mixture of open lands and natural areas.” In addition, the Town will continue to actively protect the scenic and natural resources found in the outlying areas. The Town recognizes that these scenic and natural resources represent opportunities to our community for both traditional forms of recreation (hunting, fishing, snow-mobiling, and cross-country skiing) as well as more recently emerging activities (biking, hiking and jogging).

GOAL: TO PRESERVE AND MAINTAIN THE AGRICULTURAL, ECONOMIC, ENVIRONMENTAL, RECREATIONAL, AND AESTHETIC BENEFITS PROVIDED BY SHELBURNE’S RURAL LANDS WHILE AT THE SAME TIME BALANCING THE TOWN’S NEED FOR GROWTH AND SUCCESSFUL INTEGRATION OF THE TOWN INTO THE LARGER REGIONAL COMMUNITY.

The area defined as the Rural Area, i.e. the area outside of the Growth Area, is shown on the Rural Area with Sub-Areas Map (Map 4). The maps of scenic and natural resources (See in particular Maps 5, 7, 8, 9, 10, 11, 12, 13, and 16 in Volume 2 of this Plan) demonstrate that the Rural Area contains a diverse mix of farm land, forest land, open land, wildlife habitat, wetlands, and ponds.

Much of this area has already been conserved by the Town and/or various non-profit organizations. Some of the Rural Area has experienced residential development that is not consistent with the overall rural character. It is the Town’s policy that these residential areas shall not be expanded and that additional development within them be limited in order to minimize the infringement on the rural qualities of the Town.
While some development is anticipated in the Rural Area, it should be limited, of low density, and should give very high priority to identifying and preventing undue adverse impacts to the area’s scenic and natural features and resources.

The density and intensity of uses in the Rural Area shall be distinctly lower than in the Growth Area, described above.

OBJECTIVES:

1. Identify and establish mechanisms to prevent undue adverse impacts on important scenic and natural resources and features in the Rural Area, including but not limited to productive agricultural and forestry soils, significant natural areas, critical wildlife habitat and corridors, wetlands, aquifer recharge areas, important views, ridgelines, and shorelines.

2. Identify and exclude from development locations that present significant constraints or hazards to sound development, including wet or unstable soils, flood hazard areas, and steep slopes. Undevelopable land area, such as wetlands, steep slopes, floodplains shall not be counted in determining density.

3. Conserve those resources identified on the Agricultural Potential of Soils Map (Map 5), LaPlatte River Greenway Map (Map 7), Wildlife Habitat and Associated Areas Map (Map 9), Natural Heritage Sites and Biological Natural Areas Map (Map 10), Public and Conserved Lands Map (Map 11), Surface Waters and Watercourses Map (Map 12), Wetlands and Hydric Soils Map (Map 13), and Significant Views Map (Map 16), all of which are contained in the Map Volume of this Plan.

4. Where development does occur in the Rural Area, encourage a clustered pattern that preserves the rural character, conserves open land for uses such as agriculture and passive recreation, and is sensitive to the land form and other natural features.

5. Strongly encourage land uses in the Rural Area that are resource based (such as forestry, agriculture, and horticulture) and that are comprised of small scale economic units that conserve the rural landscape. Uses shall be compatible with the scale and nature of the Rural Area.

6. Ensure that future residential development in the Rural Area is low density and designed to preserve and protect the scenic and natural resources and features of the area.
Map 4.
Rural Area, With Sub-Areas

- Rural Area Boundary
- Rural Sub-Area
- Conservation Sub-Area
- Growth Area 2
- Village
- Roads
- Shelburne Pond

September 20, 2011
Map 5.
Composite Future Land Use

- Village Center Area
- Village Residential Area
- Institutional/Museum Area
- Shelburne Falls Area
- Mixed Use Area
- Commercial/Industrial Area
- Growth Area 2 Residential
- Rural Area
- Conservation Area
- Roads
- Shelburne Pond

September 20, 2011
FUTURE LAND USE

RECOMMENDED ACTIONS:

1. Revise the Zoning Regulations to implement the above goal and objectives. Such revisions shall include:
   
   - On ongoing basis, consider the need to revise zoning district boundaries and descriptions, and update maps, as appropriate.
   
   - Add provisions to require the development of appropriate land management plans for lands being preserved or conserved.
   
   - Allow uses of farm structures which allow economic benefits while retaining the visual characteristics and agricultural utility of farm structures. Such uses might include storage facilities, forestry and wood products related uses, nursery businesses, maple sugaring, or wine making, small equipment repair, and appropriate associated activities.
   
   - Add provisions to ensure that adequate buffers are provided between residential and agricultural uses. Lot layouts and other design considerations should be used to minimize conflicts between these uses. Right-To-Farm deed language, which acknowledges the presence of and right to continue agricultural uses, may be required in these situations.

2. Amend the Town’s Subdivision Regulations to reinforce the development objectives of the Rural Area. This may include:
   
   - Amend the Planning Standards to require that the natural and scenic resources and features identified in the Agricultural Potential of Soils Map (Map 5), LaPlatte River Greenway Map (Map 7), Wildlife Habitat and Associated Areas Map (Map 9), Natural Heritage Sites and Biological Natural Areas Map (Map 10), Public and Conserved Lands Map (Map 11), Surface Waters and Watercourses Map (Map 12), Wetlands and Hydric Soils Map (Map 13), and Significant Views Map (Map 16) (all contained in Map Volume of this Plan) be considered as appropriate in a manner consistent with the Vermont Supreme Court’s “JAM Golf” decision.
   
   - Specify a subdivision design process that begins by identifying scenic and natural features and resources to be protected, including but not limited to those identified in the maps described in the bullet above, and then looks for ways that development might fit in around those features and resources.

3. Continue the Town’s policy of not extending sewer lines beyond the boundaries of the current sewer service area.

4. Continue to provide information to landowners about conservation options for rural land.
5. Continue to support the Town’s Conservation Fund and use that fund to conserve lands containing the natural and scenic features and resources described in this section and elsewhere in this Comprehensive Plan. If appropriate, amend the guidelines for use of the Conservation Fund to include the development and implementation of management plans for conserved lands.

6. Work to ensure that utility lines are located (and relocated if possible) underground whenever possible, with consideration given to cost and whether the project giving rise to utility work involves new construction, renovation, and municipal activity.

7. To the maximum extent allowed by law, require those proposing development or redevelopment in the Rural Area to subscribe to the foregoing design and conservation principles.

**Land Use Summary**

The discussion of the three land use areas can be combined to create a Future Land Use Map for Shelburne as shown in the Composite Future Land Use Map (Map 5). This map contains a total of nine designated areas. Of these:

- Two are described as areas for non-residential development (The Commercial/Industrial Area, and the Institutional/Museum Area),
- Three are described as areas for a mix of residential and non-residential uses (The Village Center Area, The Mixed Use Area, and The Shelburne Falls Area),
- Two are for residential development of varying densities (the Village Residential Area and the residential area in Growth Area 2),
- One is the Rural Area, and
- One is the Conservation Area.

The Village Center is expected to be the dominant location for retail and office uses, followed by the Mixed use Area.

The six areas that are intended to accommodate residential development will demonstrate a hierarchy of residential densities, as follows:

- Highest residential Density: Village Center Area
- Next Highest residential density: Mixed Use Area
- Third Highest residential density: Village Residential Areas and Shelburne Falls Area
- Next to lowest residential density: Residential Areas in Growth Area 2
- Lowest residential density: Rural Area
The large Rural Area is intended to convey the image of open lands, and, in conjunction with the Conservation Area, is where much of the Town’s conservation efforts are to be focused.

The Village Center portion of Growth Area One also contains the vast majority of Shelburne’s Designated Village Center and Vermont Neighborhood (Neighborhood Development Area). The specific boundaries of the Designated Village Center and Vermont Neighborhood are depicted in Map 6 below. As noted above, the DVC supports community goals by giving the community priority consideration for state grants and other resources. VN designation supports community goals by providing special permit and tax incentives for communities and developers that commit to building mixed-income housing within and adjacent to designated village centers.

Altogether, these land use goals, objectives, and recommended actions will achieve the land use vision set forth in the Vision Section of this Plan.

Policy on Noise

In the Town’s rural, residential and conservation zoning districts, in particular, but also in other districts, the Town has a substantial interest in preserving the public health, safety, and welfare of its residents and visitors by prohibiting unreasonable and disturbing noise and preventing noise that is prolonged, unsuitable for the time and place and/or detrimental to the peace, health and good order of the community. Thus, in such districts, no person shall make or cause to be made any loud or unreasonable noise, and the Town should, through available legal, regulatory and law enforcement mechanisms, take steps to prevent such noise. Noise shall be deemed “unreasonable” when it exceeds what is usual and customary in the rural, residential and conservation districts and disturbs, injures or endangers the peace and health of another or the health, safety and welfare of the community, and may include, without limitation, unreasonable noise from fixed outdoor audio devices, wind mills, wind turbines, or similar devices. It should be noted that the foregoing text in this paragraph is intended to meet the so-called “Mirkwood” standard (see below), as developed by the former Environmental Board and applied by the PSB to municipal plan provisions. Under Mirkwood, a provision of a town plan evinces a specific policy if the provision: (a) pertains to the area or district in which the project is located; (b) is intended to guide or proscribe conduct or land use within the area or district in which the project is located; and (c) is sufficiently clear to guide the conduct of an average person, using common sense and understanding.

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Map 6. Boundaries of Designated Village Center and Vermont Neighborhood in Relationship to Planning Areas

Legend
- Designated Village Center (DVC)
- Vermont Neighborhood
- Village Center Area
- Village Residential Area
- Institutional/Museum Area
- Shelburne Falls Area
- Mixed Use Area
- Commercial/Industrial Area
- Growth Area 2 Residential
- Rural Area
- Conservation Area
- Water/Shelburne Pond
- Highways and Streets
- Railroad
- Lakes and Ponds

Source: DLUPE, Gisland, USA. Data provided by VT Planning Division. Date: 10/23/2014
Shelburne Bicycle & Pedestrian Infrastructure Development Plan

Future Improvements
- Proposed Signalized Crosswalk
- Planned Signalized Crosswalk
- Proposed Crosswalk
- Planned Pedestrian Bridge

Existing Infrastructure
- Town Center - Fire, Police, Library & Town Offices
- Shelburne Rescue School
- Community Recreation Sites
- Existing Crosswalk
- Existing Signalized Crosswalk
- Bike Route; Not Designated On-Road Bike Lane
- Shared Use
- Primitive Path
- Designated On-Road Bike Lane
- Common On-Road Bike Route: Not Designated

Sources:
- Open to Public
- Town Owned Land
- Flood Hazard Area
- FEMA Special Flood Hazard Area (SFHA)
- Vermont Significant Wetland
- Stream Centerline
- Wetland Inventory
- Contour Line, Minor
- Contour Line, Major
- US or State Route
- Class 1-3
- Private or Unknown
- Railroad
- 20 Foot Contour Interval
- 1 inch = 1,200 feet

Planned Projects
1. LaPlatte River Bridge Crossing
2. Longmeadow Dr. to Boulder Hill Path
3. Falls Road Sidewalk
4. Sidewalk & bridge over LaPlatte at Irish Hill
5. Sidewalk & curbs on Falls Road in Village
6. Faved path along Athletic Drive
7. Gravel Path at Shelburne Bay Access
8. Widen Falls Rd. shoulder from Church St. to Marsett Rd.
9. Sidewalk North and South of Shelburne Museum
10. Longmeadow/Webster Rd to Hullcrest Park Shared-Use Path
11. Shared-Use Path - from Harbor Rd to Hullcrest Park
12. Path to Beach
13. Bike Lanes on Irish Hill, Falls, Marsett and Bostwick Roads
14. Bike Lanes on Dorset St.
15. Bike Lanes on Barstow/Creamery Rds.
16. Bike Lane on Harbor Rd
17. Shelburne Heights Connector
18. Northern Connector to Spear St.
19. (inter-community connector, (along rail line)
20. Shared-Use Path, hard surface from Marsett to Ridgefield. Pedestrian controlled crosswalks at north & east side of Marsett/Route 7 intersection, Vineyard/Fiddlehead crossing and Ridgefield Rd
21. Pedestrian Suspension Bridge over LaPlatte River

This plan developed by the Shelburne Bicycle and Pedestrian Path Committee for its long term planning. Supports the Shelburne Alternative Transportation Market Plan, the Transportation Section of the 2014 Town Plan, and the CCRPC/CCRPC Regional Bicycle/Pedestrian Plan.

Credits:
- All Sources: Interactive, online map - http://map.ccrpcvt.org/ShelburneBikePed
- Existing & Future bike/ped data: CCRPC w/guidance
- Existing infrastructure: Chittenden County Regional Planning Commission, USGS & Vermont Natural Heritage Program
- Base map: CCRPC, 2014; Surface Water - VHD, 2010
- Roads - e911, 7/2010; railroad - VTrans; Conserved Lands - CCRPC w/guidance from Shelburne NR Committee, 2010; Flood Hazard Area levees - Fema, 2010
- 1 inch = 1,200 feet
- 2015-2016 Vermont Natural Heritage Program data not yet available.
CCRPC staff are seeking feedback on future PAC training topics to ensure that future meetings are useful for you. We’ve heard back from several PAC members already, who have voted on topics and offered their own suggestions. So far, the topics below have been the most popular.

Four Votes:
- Housing crunch – scope of issue in Chittenden County; types of housing needed most; types of housing the market is currently creating
- Aging demographic – planning housing and municipal services for an aging population/aging in place
- Creative community engagement – sharing ideas on how to engage an increasingly distracted citizenry

Three Votes:
- Maps as a planning tool, not just as an inventory
- Housing affordability and the effect of transportation costs – VNRC, VEIC, CVOEO, AARP & NWRPC joint project
- Renewable Energy Siting including presentations from the other RPCs
- A presentation on State funding sources for Water, Wastewater and Stormwater planning, design and construction.
- Future of public transportation – service areas now and 10 years from now; funding options
- Form Based Code, including examples from member municipalities and a discussion about how towns can gain better outcomes with it

Two Votes:
- State Planning Manual
- A presentation on the ECOS Annual Report

One Vote/Member Suggestions:
- Shelburne Envision Tomorrow Fiscal Analysis Tool
- Any water quality topics?
- A discussion on TDM tools and the potential of inclusion of these tools earlier in the development review process.
- An overview on the State Designation Programs – benefits, application requirements, etc.
- A presentation on the updated Sustaining Agriculture guide (Peg Elmer and VNRC are developing this update).
- Changes we’d like to Chapter 117,
- A discussion on ZAs: holding a ZA boot camp, conducting annual trainings for ZAs and discussing how to coordinate and share part time ZA positions between towns