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 evaughn@ccrpcvt.org, no later than 3 business days prior to the meeting for which services are requested.

CCRPC Long Range Planning Committee

AGENDA

DATE: Thursday, February 9, 2017
TIME: 8:30am to 10:00am
PLACE: CCRPC Office, 110 West Canal Street, Suite 202, Winooski, VT.

1. Welcome – 5 minutes

2. Approval of January 12, 2017 Minutes* (Action) - 5 minutes

3. Transportation Schedule (Discussion) – 5 minutes

4. Forecasts (Discussion)* – 15 minutes

5. New Comprehensive Economic Development Strategy Outline (Discussion)* – 40 minutes

6. Indicators – Primary Research (Discussion) – 10 minutes
   How would these inform our planning? Would we change anything because of it?

7. Potential Planning Area Updates (Discussion) – 10 minutes

8. Next Meeting – 5 minutes
   Thursday, March 9, 2017 from 8:30am to 10:00am

9. Adjourn

*=attached to agenda in the meeting packet
DATE: Wednesday, January 12, 2017
TIME: 8:30 a.m. to 10:00 a.m.
PLACE: CCRPC Offices, 110 West Canal Street, Suite 202, Winooski, VT

Members Present
Ken Belliveau, Williston – PAC Rep
Alex Weinhan, Hinesburg – PAC Rep
Justin Rabidoux, So. Burlington – TAC REP
Lisa Falcone - Socio/Econ/Housing Board Rep
Heather Danis – ECOS Steering Committee Rep
Edmund Booth – ECOS Steering Committee Rep
Chris Shaw, South Burlington – Board Rep

Staff
Regina Mahony, Planning Program Manager
Melanie Needle, Senior Planner
Charlie Baker, Executive Director
Eleni Churchill, Transportation Program Manager

1. Welcome and Introductions
Chris Shaw called the meeting to order at 8:40 a.m.

2. Approve Minutes
Justin Rabidoux made a motion, seconded by Alex Weinhan, to approve the minutes of November 10, 2016. No further discussion. MOTION PASSED. Edmund Booth abstain.

3. Plan Update Schedule
Regina Mahony provided the Committee with two updated schedules – the big overall project schedule, and a month by month schedule for the LRPC specifically with information about what Staff and other Committees are working on. We remain focused on keeping the update and public outreach specifically focused on the topics of transportation, energy and economic development. Regina reported that we do think we can set up the ECOS website with a left-hand Table of Contents of sorts on the ECOS Plan page. We will need to use our internet consultant to help us build this, but it shouldn’t be too difficult. Then we’ll see how much time we have to transition Chapter 2 of the current plan into an online only format. At the very least we will host the indicators online as they are now, and ideally, we’d incorporate the key issues into that format as well.

Chris Shaw asked about public engagement and emphasized that it would be helpful to give the public a heads up that we are working on this and that public input and feedback will be requested in the future; and we should set the public input comment period for a reasonable length of time for real input (certainly not two weeks). Staff explained the outreach and engagement timeline for each of the big pieces, but will certainly set the schedule for easily accessible, good length, public engagement efforts, likely in the Fall. Staff will also look into interactive, map based online engagement tools.

4. Updates in the Works
Potential re-organization options:
1. Population Forecasts – Regina Mahony provided an update on the forecast schedule. The county wide population forecast that was presented to this Committee in November has been revised based on comments from this Committee, the PAC and Staff. The forecast is now closer to the mid-range of the forecasts we reviewed in the graphs at the last meeting. This acknowledges that Chittenden County may grow at a faster rate than the rest of the County. The consultant has also responded to a few questions that we had about the age cohorts. At the end of January, we are expecting the municipal level population forecasts, and the households and employment forecasts. This information will be presented to the Board in February, and we will also bring it to this Committee if we have it before your meeting. At the very least we will send it to you via email with a link to the Board presentation, and we will discuss it at your March meeting. This will then be on the March Board agenda for
Planning Advisory Committee

January 12, 2017

2

2. Transportation Plan – Eleni Churchill described the work that we’ve been doing on the transportation plan, and our strategy for moving forward. We need the forecast first. This will be used to establish the baseline network for each of the 5 years – including committed TIP projects and all committed projects. Once we have the model in May we can run scenarios, but we will start thinking about them sooner. We haven’t figured out the scenarios yet and will be looking to the TAC and LRPC to help with that. As an example, we may want to look at scenarios for connected vehicles and energy goals. Then we will run the scenarios once we have the model in May. Lots of analysis in summer, and public outreach in September. Justin Rabidoux asked how the population growth forecast will translate to VMT? RSG will be looking at current mode share splits and they will establish appropriate future mode share splits at the TAZ level (i.e. Burlington will look very different than Huntington). Justin Rabidoux explained that in So. Burlington they’ve had more success with ranges for project outcomes, rather than exact outcomes of one particular scenario. Charlie Baker indicated that we will likely end up with a hybrid scenario after weighing three scenarios and getting feedback on where we may want to land. The meat of the MTP is in the project list, and the scenario will help inform that but it will also be constrained by the fiscal reality of how much money we’ll have to construct these projects. Currently the MTP project list is three to four times what we can fund, and it isn’t fair to set those unrealistic expectations. Ken Belliveau indicated that we may see a more robust federal transportation funding. Charlie Baker concurred that we don’t want to restrict ourselves unnecessarily, but maybe it isn’t 3 to 4 times the number of projects. Alex Weinhagen asked about the staging process of the transportation model and whether we run the scenarios first and then introduce the projects or vice versa. There was quite a bit of discussion about this; we are still working this out and there will be further discussions. We will be figuring this out as we develop the scenarios and run them in the summer. Heather Danis asked whether we will incorporate or look at health costs and implications. Charlie Baker indicated that it isn’t likely that the transportation model tool won’t likely be able to answer all the questions that we’d like it to. Regina Mahony suggested that this exists a bit more in the project prioritization methodology through surrogates such as downtowns, walkable/bikable locations, etc. Charlie Baker indicated that we will bring the scenario building and project prioritization work to this table between June and August for feedback and input. We will also share the TIP prioritization methodology so you can see what that looks like. Heather asked if we include the equity criteria from the ECOS implementation grants into the transportation project prioritization.

3. Energy Planning – Melanie Needle provided an overview of the Energy Planning work. To date 14 out of the 19 municipalities have received a presentation. We held the first Act 174 training on Dec. 8th. This was largely the same presentation that was given to the PCs with a bit more info about the data analysis component. The training was well attended. We have received comments from municipalities on local constraints except Williston, Winooski, Charlotte & Huntington. We’ll be adding those to the State resource and constraint area maps. The State level data was updated to be in line with the new criteria for energy certification. We just received the new energy map data at the end of December and may push the Energy sub-committee meeting back to Jan. 31st to give us a bit more time to set up the maps. The Energy sub-committee has also begun looking at the existing ECOS and Climate Action strategies and actions compared to the required pathways. The sub-committee is interested in developing actionable strategies that CCRPC and the municipalities can do. Melanie explained the three contracts we have for this work – two Dept. of Public Service grants (the first is for the regional energy plan, and the second is for outreach, municipal level data, and technical assistance for three municipalities); and our contract with VEIC that will help us develop an energy scenario for the transportation sector (likely lower VMT b/c the LEAP model assumes that this remains steady per capita). We’ve also had a discussion with VT Gas regarding the LEAP model assumptions that use of natural gas nearly zeros out to get to 90 by 2050. Ken Belliveau asked if we should we be working with VEIC instead. Staff stated that we are working with VEIC as well, but we have spoken with all the major utilities and the natural gas issue seems to be one that we may not reach a solution on, but need to at least acknowledge the challenges associated with moving away
from this fuel source. While most of the energy goals are in legislation, the 90 by 2050 goal is not. We will look at a second LEAP analysis with some alternative VT Gas scenarios, and the population forecast from our consultants. Alex Weinhagen asked when we’ll see the energy maps. Likely at your February meeting.

4. Education Strategy – Amy Fowler, Deputy Secretary of Education, went through ECOS Education strategy, and the associated sections in Chapter 2 to give us her opinion of whether the issues are still accurate and the whether the actions are still on track. This was a very helpful review, and most the content is still good as is.

5. Health Strategy – United Way, UVM-MC and the Dept. of Health in Burlington will be meeting in early February to review the Health content. The UVM-MC has a community meeting in June that has been well attended and will be a great avenue for getting feedback on that content. Heather Danis added that it will provide an opportunity for those folks to engage more with ECOS.


5. **Next Meetings**

   February 9, 2017 from 8:30am to 10:00am

6. **Adjourn**

   The meeting adjourned at 9:50 a.m.

Respectfully submitted, Regina Mahony
**Draft Future Population Forecasts**

**Issue**
At the February TAC Meeting, Staff will present the latest county and municipal population forecasts and request TAC member’s feedback. See the attached table for the Chittenden County Municipal Population Forecast (dated January 25, 2017).

**Background**
As you may recall, at the November TAC meeting staff introduced the topic of future population forecasts that were necessary for the Regional Plan, Metropolitan Transportation Plan (MTP)/Transportation Model Update, and Regional Energy Plan. Since November, staff has been working with the consultants, RSG and Economic & Policy Resources (EPR), to refine the initial county-wide population forecast per comments heard from the TAC, LRPC, PAC and the Board. As a result, the consultants worked to bring the forecast into alignment with the ACCD/VEIC Population Projection and to account for the County’s historically increasing share of the State’s total population. Additionally, the consultants developed a municipal-level forecast for each town. The municipal population forecasts were developed based on each municipality’s share of the 2015 county population and a population growth rate derived from a combination of the county forecasted average annual growth rates, the 2010-2015 average annual municipal population growth, and the 2010-2015 average annual municipal growth in total housing. The consultant is also developing employment forecasts for the County and municipalities. The employment forecast will be distributed at the TAC meeting.

During February and March, Staff will review the forecasts with the TAC, LRPC, PAC, and the Board and share any feedback with the consultant. It is anticipated that the Board will consider approval of the county and municipal forecasts at their March meeting.

Vermont Statute requires that all plans shall be based upon surveys of existing conditions and probable future trends, and shall be made in light of present and future growth and requirements (24 VSA §4302(d)). Therefore, the CCRPC has historically prepared future demographic forecasts for the Regional Plan and MTP. As we prepare for the 2018 update of the ECOS Plan, we need to yet again set the County’s population, housing, and employment forecasts. More specifically, forecasts are needed as inputs to the Energy Plan and Travel Demand Model which will inform the MTP.

In previous iterations of approving forecasts, the CCMPO/CCRPC have agreed that forecasts should **describe the future as we expect it to be, not as we want it to be**. Essentially, forecasts are a necessary planning tool which help us to understand the impacts of increased population and enable us to make informed decisions based on a potential growth scenario. Also, it is important to keep in mind that future growth predictions are continually updated and revised along with the Regional Plan. Figures 1-3 provide an overview of the various sets of predictions made for Chittenden County since 1996.

**Staff Recommendation:**
There is no recommendation at this time. Board approval is anticipated for consideration in March, and we will ask for a LRPC recommendation in March.

**For more information, contact:**
Melanie Needle
mneedle@ccrpcvt.org or 846-4490 ext.*27
Figure 1: Chittenden County Historic Population (1970-2015) & Population Forecasts

- Historic Population
- ACCD Population Projection
- VEIC draft Regional Energy Plan
- 2017 draft County Forecast
- 2013 ECOS Regional Plan
- 2006 Regional Plan
- 2001 Regional Plan/2001 EPR Report
- 1996 Regional Plan Low Range
- 1996 Regional Plan High Range
Figure 2: Chittenden County Historic Population (2000-2015) & Population Forecasts

- Historic Population
- ACCD Population Projection
- VEIC draft Regional Energy Plan
- 2017 draft County Forecast
- 2013 ECOS Regional Plan
- 2006 Regional Plan
- 2001 Regional Plan/2001 EPR Report
- 1996 Regional Plan Low Range
- 1996 Regional Plan High Range
Figure 3: Chittenden County Population 1990-2015, Chittenden County Population Forecasts

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a-Year ACS Estimate, 2010 needs to be adjusted to 156,705

b-U.S. Decennial Census

c-Historic Population - U.S. Dept. of Commerce
4.2 Comprehensive Economic Development Strategy (CEDS)

4.2.1 SUMMARY BACKGROUND

Over the past several decades, it is apparent that Chittenden County enjoys a competitive advantage relative to the balance of the state, based on the findings presented in the Economic Base and Competitive Assessment reports: the County’s share of population, Gross Domestic Product, jobs and income, among other economic indicators, has increased.

Despite the advantages the region has enjoyed in many areas, however, there are some disquieting trends that need to be acknowledged. If recent trends continue, there will be additional loss of jobs in high-wage industries and slow growth in lower-wage industries. Job growth has been slow over the past decade and this is likely to continue into the future. However, the Chittenden County region has a highly desirable quality of life by many measures and there will continue to be growth pressures. Our challenge is how to manage and shape these larger external growth pressures to improve our job opportunities and incomes while also improving our quality of life.

Understanding Economic Development

- Economic development is about building a community’s capacity for shared and sustainable improvements in the economic well-being of residents.
- Economic development is about access to good jobs that can support an adequate standard of living for all residents of a region or community. Economic development is also about continuous and sustainable improvements in the internal functioning of the economy, where its structural underpinnings are made stronger without sacrificing long-term quality of life.
- Economic development provides the means and the continuous process to strengthen the foundation of our communities.

Why we need economic development:

- ‘To constantly renew and strengthen the “living economy”.


• To address on-going infrastructure needs of key dollar-importing regional businesses.
• To supply the financial resources in order to create and sustain healthy communities.

**The Circle of Prosperity**
When a state has and maintains a talented workforce it attracts a diverse industrial base of dollar importing businesses that create high wage jobs. From the economic drivers dollars flow into the private sector to provide taxes, public revenues, capital, resources, and employment opportunities. These private sector actions fund the public sector’s operations through taxes and governmental fees of which both the public and private sectors invest in creating and maintaining a clean environment, good schools, access to higher education and housing, and enhances the state’s quality of life, thereby creating healthy communities. The “Circle of Prosperity” illustrates this interrelationship. First articulated in Vermont back in 1997 by the Vermont Business Roundtable, the “Circle of Prosperity” emphasizes the fact that economic development and healthy communities are a system, involving the collective and sometimes coordinated actions of many individuals, businesses, and institutions.¹

**Key Issues/Trends/Insights**

**Economy** [Data in this section drawn from Economic Base Analysis, and the Economic Competitive Assessment Analysis Reports]

- Chittenden County’s employment base is largely within five private industry sectors: Healthcare and social assistance; retail trade; manufacturing; accommodation and food service; and professional, scientific and technical services.
- Chittenden County is a mix of urban, suburban and rural areas, with a rural character that is important to many residents. Similarly, the economy includes the largest for-profit employer in the state (the major IBM complex); the largest retail area in Vermont with four communities ranking in the top five in the state based on preliminary 2011 retail sales tax reports (Williston – #1; South Burlington – #2; Burlington– #4; and Colchester - #5 (source: Vermont Department of Taxes); and significant agricultural, recreational and open space areas. This mix of uses results in a character cherished by its residents and appealing to prospective residents. The challenge is to plan and manage future growth, including economic development, so that it sustains and enhances this community character.
- Employment in the private sector declined between 2000 and 2010. Total non-farm employment in Chittenden County decreased from 95,354 to 93,231 between 2000 and 2010 – a loss of 2,123 jobs, or

-2.2 percent. This was offset in part by an increase in public sector employment, but it was not sufficient to offset private sector losses (private sector: -4,386 + public sector: 2,263 = net -2,123).

- Chittenden County is currently modestly-supplied with buildings and land for business expansion. In the future, additional “shovel-ready” sites with good access, full utilities and proper zoning will be necessary if the County is to be competitive in attracting larger projects or retaining local businesses seeking to expand.

- Educational levels among residents 25 years old and older exceed state and national norms. (See Section 2.5 Education for more detail.) However, due to our aging demographics and available workforce, we need more individuals with postsecondary training and experiences.

- The County is blessed with a highly desirable quality of life. The notable exception is the affordability of housing, which was both rated the lowest quality of life factor in the Employers Survey (can be found in the Analysis Reports referenced above) as well as being the most commonly observed weakness of the area in interviews of employers.

- Based upon the results of the Employers Survey, recreational opportunities, safety from crime, and cultural opportunities all scored Very Good or higher, while the quality of the K – 12 educational system scored just below Very Good.

- The County’s labor force has a relatively low unemployment rate and high labor participation rate, with many skills categories, particularly technical skills, reported as difficult to find or unavailable by area employers. While some of these needs are for skills that are unique to specific companies, several employers surveyed reported similar training needs for skilled manufacturing occupations particularly in the machine trades. Interviewed manufacturers emphasized the strong need for local training programs in machining and other skilled occupations to support their growth and sustainability. They also expressed concern and frustration over a lack of proficiency in math and writing skills.

**Household Financial Security** [Data in this section drawn from Housing Analysis Report]

- In 2008, 21% of Chittenden County residents were living at less than 200% of the federal poverty level and many receive state and federal assistance to meet basic needs.

- Lower income Vermonters report higher rates of depression and chronic conditions, such as obesity, asthma, heart disease, stroke and diabetes.

- The County’s ability to grow its economy in the future will be closely tied to its ability to provide available labor, particularly once the currently unemployed are absorbed back into the ranks of the employed as much as their skills will allow. A broad-based strategy of skills upgrading, new methods of recruiting and alternative working arrangements will be necessary.

- More focus is needed on education and workforce development to train employees for the opportunities in the technologies needed for manufacturing, professional services and health care. See more under the “Education” topic.

- Household financial security influences a family’s ability to access enough food to fully meet basic needs at all times. Lack of financial resources can cause food insecurity.
  - 15,401 Chittenden County residents participate in 3SquaresVT (formerly known as Food Stamps).
  - 6.6% increase in 3SquaresVT participation since 2010.
  - 1 in 7 children in Chittenden County are food insecure.
  - 26% of grade school and high school students are eligible for free or reduced-price meals (Hunger Free VT – www.hungerfreevt.org).

**Working Lands & Land Based Industries** [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 Parcrlization 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. 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 buildings. 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).
Economic Base Analysis

This sub-section provides an analysis of the current economic base of Chittenden County and the trends that have been shaping the County’s economy up to this point in time. It considers those aspects of a regional economy most typically included in the preparation of a Comprehensive Economic Development Strategy (CEDS) or similar economic development strategic plans.

In reviewing the findings presented in the Economic Base Analysis report (http://ecosproject.com/analysis), it is apparent that Chittenden County enjoys a competitive advantage relative to the balance of the state. Further, the County is an essential part of the Vermont economy as evidenced by:

- Chittenden County contains 25 percent of the State’s population
- Median household income is $60,182 versus $51,219 for the State
- The County poverty rate is 10.6 percent compared to 11.5 percent statewide
- Accounted for about 60 percent of State population growth between 2000 and 2010
- Home to 25 percent of the State’s private businesses
- Accounted for 45 percent of total manufacturers’ shipments in 2007
- Twenty nine percent of the State’s retail sales occurred in the County (2007)
- GDP per capita is $50,000 vs. $40,000 for the State
- Provides 32 percent of sales tax revenue in Vermont
- Provides 35 percent of state income tax revenues

Over the past several decades the County’s share of population, GDP, jobs and income, among other factors, has increased. While this is certainly good news for the economic development community in the Burlington region, the analysis also points out some areas of concern, described below:

- Employment in the private sector declined between 2000 and 2010. This was offset in part by an increase in public sector employment, but it was not sufficient to offset private sector losses (private sector: -4,386 + public sector 2,263 = net -2,123).
- The annual rate of population growth in both Chittenden County as well as the State has slowed over the past several years. This may suggest that the advantage the region has enjoyed from its population gains is shrinking. Slow population growth is endemic in the region sometimes described as the “frost belt” or “snow belt.”
- The growth in the MSA’s gross domestic product over the past decade has come entirely from the services sectors. Output from the goods-producing industries, primarily manufacturing, has remained flat in nominal terms and, as a result, goods-producing industries represent a declining share of economic activity. Services include high wage professional services as well as lower wage personal services.
- The number of Chittenden County jobs in high-wage industries has declined by more than 5,000 since the year 2000; much of this has been from cutbacks at IBM. Employment in mid-wage and low-wage industries has increased slightly. The loss of jobs in high wage industries is not unique to this region—it is part of a larger trend that has been seen nationwide.
- The number of unemployed individuals remains at historically high levels. If the region is not growing jobs it seems unlikely that this unemployment problem, particularly for those with lower skills, will improve anytime soon. What becomes of these workers?
- The construction industry is still being constrained by the collapse of the housing market and greatly reduced new residential construction activity. Residential permits issued remain at an all-time low.
- The volume of home sales has declined over the past few years and there is little evidence of any improvement on this front.
- Although growth in total nominal wages has risen off its sharp decline in 2009, they remain below the County’s long-term growth rates.
• Growth in traded-sector industries (those industries that sell their products and services outside the region and bring new money back in, thus supporting the local, or non-traded, industries) has been limited primarily to the retail sector. The computer and electronic industry (NAICS 334) remains the most important element of traded sector employment but, following the loss of more than 4,000 jobs over the past decade, the long-term security of these jobs may be in question.

• There has been a decrease in the number of businesses over the past few years. Between 2008 and 2010 more than 100 businesses, on net, closed their doors.

Despite the advantages the region has enjoyed in many areas, there are some disquieting trends that need to be acknowledged. If recent trends continue (for instance, additional cutbacks at IBM), there will be additional loss of jobs in high-wage industries and slow growth in lower-wage industries. Job growth has been elusive over the past decade and this too is likely to continue into the future. The rate of population growth has declined and that is likely to continue into the future. These and other problems are exceedingly difficult to address on a local level, but this does not mean that one should throw up one’s arms in despair. Local efforts, coupled with strong pressure on state and federal elected officials, could work to mitigate some of these disadvantages.

While reversing these trends is unlikely, awareness of them can facilitate local planning. It is unlikely that these issues can be successfully addressed locally since many of the policies affecting these changes emanate at the federal level. The larger issue here is the long-term structural change impacting most snow-belt states. Slow growth is a regional problem and will most likely require a regional solution. Local planning is necessary, but not nearly sufficient, given the magnitude of ongoing changes.

Competitive Assessment

This sub-section provides an assessment of the competitiveness of Chittenden County, Vermont as an economic development product. In the economic development marketplace, the product being sold is usually a place, and the characteristics of that place determine its competitiveness. In this instance, the place being assessed is Chittenden County, Vermont and its constituent communities, in particular, the central City of Burlington. Chittenden County is comprised of many communities that have varying degrees of interest in differing forms of economic development. Taken as a whole, this provides the basis for a diverse and sustainable economy and quality of place in the future.

In reviewing the findings presented in the Competitive Assessment report (http://ecosproject.com/analysis), the following highlights were noted:

- Chittenden County is a mix of urban, suburban and rural areas, with an essential rural character that polling has consistently shown is important to many residents. Protection of this character must be reflected in economic development efforts if public sector economic development efforts are to be broadly supported.
- The County represents a quarter of the state’s population, and is relatively young, with household incomes and educational attainment exceeding state and national norms.
- Chittenden County’s employment base is largely (83%) within five private industry sectors: healthcare and social assistance; retail trade; manufacturing; accommodation and food service; and professional, scientific and technical services.
- The number of subsectors with high location quotients shows a diversified employment base that offers opportunities for continued economic diversification and a broad base on which the County’s economy can flourish.
- The County’s ability to grow its economy in the future will be closely tied to its ability to provide available skilled labor, particularly once the currently unemployed are absorbed back into the ranks of the employed as much as their skills will allow. A broad-based strategy of skills upgrading, training, new methods of
recruiting and alternative working arrangements will be necessary. An integrated workforce delivery system plan will need to be considered and implemented.

- The County’s labor force has a relatively low unemployment rate and high labor participation rate, with many skills categories, particularly technical skills, reported as difficult to find or unavailable by area employers. To remedy this situation, recruitment of needed skills from other locations, and development of those skills within the area’s workforce, retaining graduating students from area educational institutions, limiting the out-migration of skilled residents, and maximizing the return of local students graduating from colleges in other locations are needed.

- The best recruiting experiences reported by county employers are typically from workers in the Northeast, the upper Midwest and areas with similar climate and outdoor recreational opportunities, such as the Northwest and Colorado. Recruiting people from large technology centers such as Boston, Austin and California is difficult.

- Employers report very good to excellent workforce quality, with good work ethic and productivity, and low turnover and absenteeism.

- The County’s higher education infrastructure is excellent, although almost 30% of employers participating in the Employer Survey indicated that they have training needs that are not being met by local resources. While some of these needs are for skills that are unique to specific companies, several employers surveyed for this assessment reported similar training needs for skilled manufacturing occupations particularly in the machine trades. Interviewed manufacturers emphasized the strong need for local training programs in machining and other skilled occupations to support their growth and sustainability.

- With the notable exception of affordability of housing, most every kind of quality of life factor sought by most people is readily available in the County.

- The County’s perceived regulatory environment rates as less than Good (where Good = 3 on the five point scale used in the Employer Survey conducted as part of this assessment), with local property taxes and the local construction permitting process (regulations and procedures) both topics of complaint.

- Chittenden County has a good inventory of available buildings or partial space in buildings, with 388 buildings totaling nearly 2.9 million square feet.

- Chittenden County is currently modestly-supplied with land for business construction. In the future, additional “shovel-ready” sites with good access, full utilities and proper zoning will be necessary if the County is to be competitive in attracting larger projects or retaining local businesses seeking to expand.

- Chittenden County is well-served with a highway network that facilitates multi-directional travel and is well-planned for roadway and related improvements. Those plans must be implemented, often at substantial cost and sometimes (particularly for larger projects) with delays from state-mandated permitting. A potential impending decline in the adequacy of the County’s roadway system caused by increasing traffic congestion, necessary roadway maintenance, and need for new road construction, coupled with the opportunity and need for future economic development, has resulted in the identification of a number of issues and situations that require immediate and careful consideration.

- The County is generally well-served with utilities and telecommunications services necessary to support economic development. The weakest part of the County’s utilities and telecommunications system is the quality and costs of telecommunications, in particular cell phone service. A major state-wide initiative to improve telecommunications services is underway.

- Interviews and surveys show there are lingering misconceptions about the mission of GBIC.

- Continued and increased attention must be paid to providing services to existing businesses and entrepreneurs in Chittenden County.

**Strategic Industry Sector Analysis**

This sub-section provides a summary of the identification of target clusters and industry sectors that will likely be significant economic drivers for Chittenden County. The full Strategic Industry Sector Analysis report
can be found at [http://ecosproject.com/analysis](http://ecosproject.com/analysis). Based on the Economic Base Analysis and Competitive Assessment, the following 12 initial target clusters and industries for attraction and development efforts were identified and submitted to GBIC for consideration:

- Information Technology
- Value Added/Sustainable Agriculture
- Digital Media
- E-Commerce
- Clean Tech/Green Technology
- Tourism
- Retail
- Non-profit Organizations
- Health Care
- Business and Administrative Services
- Value-Added Manufacturing
- Higher Education

From this initial selection, five primary targets, one of which is a combination of three of the initial recommendations, were selected as value-adding industries with high location quotients and are profiled in the Strategic Industry Sector Analysis report referenced above:

1. Information Technology, Communications, and Media
   - Information Technology
   - E-Commerce
   - Digital Media
2. High Value-Added Manufacturing
3. Higher Education
4. Clean Tech/Green Tech
5. Health Care and Wellness

### 4.2.2 SWOT ANALYSIS

Assess a wide variety of regional attributes (but focus on the sections that make the most sense for your region, based on what comes out of the SWOT) for example: state of the regional economy, clusters, partners and resources for economic development; global competitiveness/FDI/exports; workforce/job-driven training; spatial efficiency/sustainability; broadband; energy; natural hazards; equitable development; housing; public safety, etc.

The following is from the 2012 Competitive Assessment:

**Population and Demographics Overview**

**Major Issues, Opportunities and Potential Responses Identified by the Consultant Team**

The table below summarizes the County’s major population and demographic issues and opportunities indentified by the consultant team, and suggested responses by GBIC or its allies.

<table>
<thead>
<tr>
<th>Issue</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintaining attractiveness for a young and educated population</td>
<td>Maintain and Accentuate the assets that attract this demographic, such as social venues and</td>
</tr>
<tr>
<td>Issue</td>
<td>Response</td>
</tr>
<tr>
<td>------------------------------------------------</td>
<td>--------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Diversified employment base</td>
<td>Maintain economic diversity, and deepen existing sectors, seek even greater diversity. Become familiar with the County’s economic sectors with high location quotients and provide stronger assistance to companies in these sectors, where needed, to enhance development and expansion.</td>
</tr>
<tr>
<td>Skewed data</td>
<td>Manufacturing and overall employment and wage numbers are skewed by IBM, so separate data should be maintained by GBIC and other County economic development agencies that exclude this company to give a truer picture of the County’s manufacturing sector without the impact of this single large employer.</td>
</tr>
<tr>
<td>Large impact of IBM</td>
<td>IBM has a major impact on the local economy, so all possible efforts are needed to help the local facility prosper. One specific response by GBIC and its partners is to assist the company in its recruitment and retention of technicians, including reviewing its workplace culture to make it as attractive a work environment for recruiting technical personnel as exists at many of the County’s other high tech entrepreneurial operations. Another is to have a special response team at GBIC to work with the facility’s needs, including lobbying the state for favorable regulatory and workforce training assistance where needed, to sustain or expand current operations (some communities do this for large government facilities, such as R&amp;D centers and military bases that are major employers).</td>
</tr>
<tr>
<td>Entrepreneurial development</td>
<td>Entrepreneurial development is a core characteristic of the area, and needs to be nurtured. Champlain College’s entrepreneurial</td>
</tr>
</tbody>
</table>
programs, local entrepreneurs, the Technology Council and other resources can be used to generate a community entrepreneurial ethos. Opportunities for startups such as incubators and for established but developing firms need to be explored. Create venues where entrepreneurs and creative individuals can personally interface to exchange ideas.

University of Vermont

The university could be more involved in working with area companies, entrepreneurial development and the area’s economic development. GBIC and other economic development agencies across the state are encouraged to work with the new president to guide the University in a stronger outreach. The University of Delaware’s approach to incubating technology development from the University should be investigated, including increased efforts to open up university resources to area companies.

Vermont Technical Council

Sustain the Council’s high energy and focus.

### Occupational Base

**Major Issues, Opportunities and Potential Responses Identified by the Consultant Team**

The table below summarizes the County’s major occupational base related issues and opportunities indentified by the consultant team, and suggested responses by GBIC and its partners.

<table>
<thead>
<tr>
<th>Issue</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>High distribution of occupations in high tech fields</td>
<td>This condition can be leveraged for more high tech development.</td>
</tr>
<tr>
<td>High occupational distribution in office/administrative fields</td>
<td>Leverage to expand the area’s administrative private sector office base.</td>
</tr>
</tbody>
</table>

### Labor Availability

**Major Issues, Opportunities and Potential Responses Identified by the Consultant Team**

The table below summarizes the County’s major labor availability related issues and opportunities indentified by the consultant team, and suggested responses by GBIC and its partners.

<table>
<thead>
<tr>
<th>Issue</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>In-commuting labor</td>
<td>The County is dependent upon in-commuting labor to sustain its economy; therefore, improved awareness in surrounding counties and localities of employment opportunities, employers and their products/services, prevailing wages and benefits, and other advantages offered in the County is recommended through job fairs, various media</td>
</tr>
<tr>
<td>Issue</td>
<td>Response</td>
</tr>
<tr>
<td>-------</td>
<td>----------</td>
</tr>
</tbody>
</table>
| Relatively low unemployment, high labor participation, labor shortages in some skilled professions and occupations gives a minimal base for economic expansion | - Efforts are needed to retain more college students in the area after graduation. One way is through stronger employer-student job recruiting efforts.  
- Improved manufacturing training is needed for the area’s manufacturers. The Vermont HiTech Inc. training approach is novel and deserves consideration for expansion.  
- Greater outreach to the immigrant communities for inclusion in the area’s workforce is suggested.  
- The area needs to address labor recruitment and development to offer the attractions needed for such recruitment, including more affordable quality housing and school systems that are at least on par (in key quality measurements, such as test scores, percent of graduates going on to post secondary education, extracurricular activities, advanced placement courses, available technical courses and programs such as those in Science, Technology, Engineering and Mathematics-STEM, etc) with those communities in which technical, professional and managerial personnel live in leading technology centers across the country.  
- Identify leading edge human resource policies and work environments from local experiences to publicize for expanded use.  
- Develop networks with other small to moderate-sized university towns with high entrepreneurial activity to exchange ideas and experiences (e.g. Medford OR, Eugene OR, Ft. Collins CO).  
- Investigate what can be done to enhance the ability of area companies to recruit summer or other interns, such as low cost housing (e.g. at any available dorms at UVM, St. Michaels College, and Burlington College or boarding opportunities within the community), and transportation.  
- Develop a social networking effort with area residents who are self employed and/or are long-distance tele-commuters (e.g. to New York, Boston) for engagement in the area’s economic and intellectual life and for possible talent recruitment by area companies. |
<table>
<thead>
<tr>
<th>Issue</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employer – employee – training linkages</td>
<td>▪ Create an online system linking job postings, business and worker training requests, and training providers.</td>
</tr>
<tr>
<td></td>
<td>▪ Identify ways to better align the business, education and government sectors so that the courses and skills needed by local businesses are being taught at area schools, and students are being encouraged to take these courses.</td>
</tr>
<tr>
<td></td>
<td>▪ The local secondary and post secondary educational institutions need to graduate more students with the skills needed by area manufacturers, particularly in the advanced machine trades, such as CNC.</td>
</tr>
<tr>
<td></td>
<td>▪ Area public schools need to increase the academic abilities of their students, particularly in science, technology, engineering and mathematics (STEM), to meet the expectations of area employers, including those in the manufacturing sector.</td>
</tr>
</tbody>
</table>

**Labor Quality**

**Major Issues, Opportunities and Potential Responses Identified by the Consultant Team**

The table below summarizes the County’s major labor quality related issues and opportunities indentified by the consultant team, and suggested responses by GBIC and its partners.

<table>
<thead>
<tr>
<th>Issue</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>High labor quality</td>
<td>This asset should be used as part of any business attraction or expansion effort.</td>
</tr>
</tbody>
</table>

**Labor Cost**

**Major Issues, Opportunities and Potential Responses Identified by the Consultant Team**

The table below summarizes the County’s major labor cost related issues and opportunities indentified by the consultant team, and suggested responses by GBIC and its partners.

<table>
<thead>
<tr>
<th>Issue</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Skewed earnings data</td>
<td>The impact of IBM on the County’s average reported wages is high, especially for the manufacturing sector. This high average will eliminate the County from many location screenings by companies looking for a new facility location. GBIC should have information gleaned from local company data on average wages, by manufacturing sector, on its website that do not reflect the impact of IBM, and note them as such.</td>
</tr>
<tr>
<td>Healthcare insurance</td>
<td>The State is urged to consider the impact any new health care plan will have on employers in Vermont. Interviews completed as part of the</td>
</tr>
<tr>
<td>Issue</td>
<td>Response</td>
</tr>
<tr>
<td>-------</td>
<td>----------</td>
</tr>
<tr>
<td>Skilled trade education</td>
<td>Surveyed and interviewed employers reported a need for more skilled trades training, such as CNC machine programmers and operators and punch press operators. Area post secondary institutions are urged to do a coordinated, cooperative feasibility analysis that identifies the need and the ability to provide such programs in the County, and identify the appropriate institution(s) to provide these programs. Possible alternative instruction programs could be considered for development on employer sites or as part of an apprenticeship program.</td>
</tr>
<tr>
<td>Public schools</td>
<td>Three of the County’s public high schools have low performance indicators, which are supported by employer interviews. The performance of these schools must be improved to match the other school test scores and graduation rates. Such improvement will take longer than at the other five schools due to a student population that has a higher percentage of financially disadvantaged students for which English is not their primary language. Meanwhile, the math and science test scores, such as those given to 11th graders in 2010, are low even though they are generally above the state averages. In most cases, less than 50% of students in the schools with the best scores are proficient in math and science. If Chittenden County is to be a high tech community, it must enhance its public school performance in these fields to attract top technology and medical talent from across the country and to generate a local labor supply that meets employer needs.</td>
</tr>
<tr>
<td>Career fairs, career planning</td>
<td>Planning for and execution of improved ways of exposing early high school students to the types and wages of jobs available in the County and the educational requirements for those jobs should be developed. Greater involvement of employers in</td>
</tr>
</tbody>
</table>

**Education and Training**

**Major Issues, Opportunities and Potential Responses Identified by the Consultant Team**

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<table>
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</tr>
</thead>
<tbody>
<tr>
<td>Affordable housing</td>
<td>Continued efforts are necessary to make Chittenden County a more affordable place to live for more people. This can be a limiting factor on the County’s ability to grow its labor force. Particular attention should be paid to work on this topic being undertaken as part of this ECOS project.</td>
</tr>
<tr>
<td>Child care</td>
<td>Efforts are necessary to improve the availability of child care services. This would support expansion of the labor force and if economically priced, could improve the standard of living of area residents.</td>
</tr>
</tbody>
</table>

### Quality of Life

**Major Issues, Opportunities and Potential Responses Identified by the Consultant Team**

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<tbody>
<tr>
<td>Local and state construction permitting</td>
<td>Create a Public/Private Sector Development Process Review Task Force for the County and similar initiatives at the municipal level to identify ways to streamline the development permit and approval process and related regulations, and incorporate this initiative in the County’s sustainability planning.</td>
</tr>
<tr>
<td>Development – environmental protection interface</td>
<td>Establish a business-oriented environmental initiative similar to the Indiana Environmental Institute, Inc. to study and mediate disagreements between the County’s development and environmental protection sectors. This initiative could be within CCRPC or a separate entity.</td>
</tr>
</tbody>
</table>

### Regulatory Environment

**Major Issues, Opportunities and Potential Responses Identified by the Consultant Team**

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</tr>
</tbody>
</table>

### Real Estate

**Major Issues, Opportunities and Potential Responses Identified by the Consultant Team**

The table below summarizes the County’s major real estate related issues and opportunities identified by the consultant team, and suggested responses by GBIC and its allies.
Developable site inventory

Given the relatively limited supply of “shovel-ready” sites, GBIC should prepare a “longevity analysis” to project when additional fully-serviced land should be added to the regional inventory.

New developable sites

Based on the results of the “site inventory longevity analysis”, GBIC should begin the process of identifying new sites suitable for development and take action to make them “shovel ready” and where possible, pre-permitted.

Available commercial real estate information

The GBIC website should include more information on available commercial real estate to meet the research needs of companies and site location consultants.

## Transportation and Accessibility

### Major Issues, Opportunities and Potential Responses Identified by the Consultant Team

The table below summarizes the County’s major road transportation related issues and opportunities indentified by the consultant team, and suggested responses by GBIC and its allies.

<table>
<thead>
<tr>
<th>Issue</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roadway and parking improvements</td>
<td>An impending decline in the adequacy of the County’s roadway system, coupled with the opportunity and need for future economic development, has resulted in the identification of a number of issues and situations that require immediate and careful consideration. A continued aggressive and coordinated approach is essential to assure timely planning, permitting and funding of necessary improvements to existing roads and construction of new ones, as well as the provision of adequate parking in downtown Burlington.</td>
</tr>
</tbody>
</table>

## Utilities and Telecommunications

### Major Issues, Opportunities and Potential Responses Identified by the Consultant Team

The table below summarizes the County’s major utility and telecommunications related issues and opportunities indentified by the consultant team, and suggested responses by GBIC and its allies.

<table>
<thead>
<tr>
<th>Issue</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wastewater treatment service areas and capacities</td>
<td>GBIC or CCRPC should prepare and maintain a master list of wastewater treatment plants with current design and excess capacity information.</td>
</tr>
<tr>
<td>Telecommunications services</td>
<td>Continue to support upgrades to the telecommunications services in the County, particularly those needed by current and future businesses.</td>
</tr>
</tbody>
</table>
#### Economic Development Programs and Services

**Major Issues, Opportunities and Potential Responses Identified by the Consultant Team**

The table below summarizes the County’s major economic development programs and services related issues and opportunities indentified by the consultant team, and suggested responses by GBIC and its allies.

<table>
<thead>
<tr>
<th>Issue</th>
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</tr>
</thead>
</table>
| Inadequate website information       | The GBIC website must be upgraded to conveniently provide information companies and site location consultants typically look for from such websites. This would include information on:  
  - Available commercial real estate  
  - Air freight services  
  - Utility and telecommunication providers, services and relevant specifications  
  - Statistical information formatted to meet the Site Selection Standards of the International Economic Development Council (IEDC)  
  - Available incentive programs  
  A first step would be an independent review by a qualified economic development website consultant. GBIC should also review the websites of the most recent award winners recognized by IEDC for superiority in this category. |
| Economic development services        | Continued and increased attention, including new or improved economic development programs and services, must be paid to existing businesses and entrepreneurs in Chittenden County. Examples of possible initiatives include:  
  - Establish or expand the Young Professionals/Young Entrepreneurs Association.  
  - Create a public/private Financing Network linking conventional lenders, venture capitalists and angels, philanthropic sources and others.  
  - Establish a fully equipped prototyping center to assist entrepreneurs in developing product prototypes at low cost.  
  - Establish a Center for Business and Economic Development at the University of Vermont.  
  - Establish an Incubator Without Walls program to stimulate and support business start-ups.  
  - Create an Entrepreneurs Boot Camp and Business Plan Competition.  
  - Continue to expand and improve the County’s “one-stop” organizational network and information resources about County-wide and local economic development assistance and |
Issue | Response
--- | ---
incentive programs. There is an opportunity to create a one-stop Regional Resource Center that co-locates more agencies than currently occupy the same building.
Regional economic development team-building | GBIC should consider establishing an economic development team-building process to involve all communities and their staff, boards and commissions that impact the development process.
- Future economic development plans must include a “feedback loop and procedures” to keep constituent communities and residents informed about and engaged in the County’s economic development efforts.
GBIC image | GBIC must continue efforts to reposition itself and its image in the minds of all Chittenden County residents.

4.2.3 STRATEGIC DIRECTION/ACTION PLAN - emphasize goals & measurable objectives & strategies rather than a stand alone list of projects. A project list is no longer required – wanted to stress vision and measurable goals. But still want to have prioritized activity areas; and should not exclusively reflect those activities that EDA alone could potentially support. The strategic direction & action plan are the heart and soul of the document. The strategic direction should evolve from a clearly defined vision with prioritized goals and measurable objectives. A successful action plan should then focus on those regionally-driven strategic priorities that will result in a prioritized, measurable collection of capacity building areas.

Goals

Broad Goal: Build the region’s capacity for shared and sustainable improvements in the economic well-being of the community through support of both local and globally competitive initiatives.

Economy Goal: Retain and support existing employers and job growth, grow target sector employers and entrepreneurs, and work to attract a greater diversity of employers and employees.

Household Financial Security Goal: Improve the financial security of households.

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

Strategies

3.2.1 IMPROVE AND STRENGTHEN THE ECONOMIC SYSTEMS OF OUR REGION TO INCREASE OPPORTUNITIES FOR VERMONT EMPLOYERS AND EMPLOYEES.

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

1. **High wage employers** – The primary goal of any economic development strategy is retaining and growing the already existing high wage jobs within the economy. Providing support and connecting available resources is critical to ensuring that this economic base remains vital and is able to grow. The high wage sectors in which Chittenden County expects to drive our economy are: Information Technology, Communications, and Media (including Information Technology, E-Commerce, and Digital Media); High Value-Added Manufacturing; Higher Education; Clean Tech/Green Tech; and, Health Care and Wellness (see the Target Sector Analysis – will be located here www.ecosproject.com/analysis shortly).
   a. Build relationships with these employers. For example, the recent Tech Jam highlighted some of the region’s many successful tech companies. Success here connects to the action on innovation and entrepreneurial development and includes: developing and attracting a tech workforce, access to financing, marketing VT and the region as a home for tech jobs and tech companies, supportive infrastructure such as broadband access, incubator space, and networking.
   b. Facilitate access to employment and infrastructure development resources made available by the State. Currently these include programs such as the Vermont Employment Growth Incentive, Vermont Training Program, etc.
   c. Market the quality of life – Chamber action

2. **Industrial Site Locations** – With only a few years supply of existing buildings or permitted sites left for high wage industrial or manufacturing businesses in the region, additional sites need to be identified and carefully planned to ensure a smooth permitting process to be ready for employers’ needs for expansion or relocation in Chittenden County. The most likely employment sectors with this need are high wage, technology-based and other types of manufacturing. The best opportunities for these sites are on vacant portions of land owned by current major employers, within close proximity to - or already connected to - existing infrastructure services for long term efficiency.
   a. **FUNDED VITAL PROJECT - GBIC with IBM** will examine these undeveloped properties owned by IBM for environmentally responsible infill development opportunities considering water, wastewater and transportation infrastructure, and take sites through permitting. (Phase 1 of this work is funded by HUD, IBM, and GBIC. Additional federal and/or state funding to help with site development infrastructure may be sought as appropriate. Future funding sources may include EDA or CDBG funds. Total future estimated job growth at this site could be 1,000 or more.)
   b. CCRPC and GBIC will work with ACCD to have business/industrial parks recognized as benefit locations in state designation programs. (Funded by GBIC and CCRPC. No direct additional employment is expected, but this would help to create future opportunities.)
   c. Efforts should be made by CCRPC to educate businesses and developers on development practices that achieve a higher level of density, greater compatibility within traditional development patterns, use less land, and provide for all modes of transportation.

3. **Workforce Education and Skills Development** – Promote public/private partnerships for education that connect the skills development infrastructure of our institutions of higher education, vocational programs, and technical schools with the direct needs of the Vermont workforce. If education takes place with connections to our economic needs, students and retrained workers will have their skill sets match with the employment market.
   a. **FUNDED PROJECT - Chittenden County After School Aspirations Program (ASAP)**. Lake Champlain Regional Chamber of Commerce and 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. (Funded by HUD, LCRCC. No direct additional employment is expected, but this would help to create future opportunities.)

b. See Strategy 3.2.6 for more actions

4. Innovation and Entrepreneurial Development – Coordinate and promote the providers, programs, and services already available in the State to create an economic system of resources that is easily navigable at all stages of the innovation and entrepreneurial continuum. This must aggregate and address services such as finding capital, mentorship, prototyping, commercialization, etc.

a. FUNDED VITAL PROJECT - 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 "Innovate Vermont." 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. Funded by GBIC, State of Vermont, UVM and other partners. No direct additional employment is expected, but this would help to create future opportunities.

b. Encourage home-based small businesses in villages as allowed by municipal zoning.

c. Research Dayton, OH’s work which capitalizes on the entrepreneurial spirit of recent immigrants as a cornerstone of their economic development policy and actions.

5. Creative Economy and the Arts – Arts and the creative economy are what drives a large and diverse amount of economic activity in our region (e.g. local foods, design, technology, media, craftsmanship/fabrication, arts, emergent media, music, dance, festivals, education, and recreation). This portion of the economy is fundamentally unique in that it is a significant contributor to the culture in our region. Support creative economy and arts programs and efforts.

a. Create collaborations between arts, culture and recreation groups and the Chamber of Commerce and local businesses to promote the use of local artists in regular business needs (i.e. advertising, branding, communications, etc.) and to share vacant or underutilized commercial spaces with artists for gallery and/or studio space.

6. Working Lands - Support value-added foods, farms and forest products through the work of Farm to Plate by Vermont Sustainable Jobs Fund and Working Lands Enterprise Board. See Strategy 4 for more details.

7. Tourism – Continue good efforts in tourism including VT Convention Bureau, Lake Champlain Regional Chamber of Commerce, and Lake Champlain Byway.

8. Economic Development Coordination – Both the State of Vermont and Northwest Regional Planning Commission have begun economic development planning efforts to develop CEDS for the State and Northwest region. There has not previously been a Statewide CEDS. A Statewide CEDS process is beginning in 2013 and this Plan will help inform that effort. Any recommendations that come out of that process will be considered in future ECOS Plan amendments or revisions as appropriate. CCRPC staff is actively participating on behalf of CCRPC and GBIC in both efforts as part of their advisory committees. GBIC and CCRPC will coordinate and assist those efforts to improve the effectiveness of efforts in Chittenden County and for the State.

4.2.4 EVALUATION FRAMEWORK – SMART (Strategic, measurable, achievable, ??) Goals. See NADO’s Performance Metrics Matter (www.nado.org/performance-metrics-matter/)
Key Indicators

Economy

- **Recent Chittenden County job growth** has been stronger than the U.S., New England and Vermont.

![Recent Chittenden County Job Growth Since 1990](image1)


**FIGURE 1 - RECENT CHITTENDEN COUNTY JOB GROWTH, SINCE 1990**

- **Total number of businesses in Chittenden County**: Since peaking in 2008 the County’s business count has dropped by 101.

![Total Number of Businesses in Chittenden County](image2)

Source: Vermont Department of Labor

**FIGURE 2 - TOTAL NUMBER OF BUSINESSES IN CHITTENDEN COUNTY**

- **The unemployment rate in the greater Burlington area** (Burlington New England City and Town Area (NECTA)) has declined faster than the New England and US rates over the past two years.
Professional and technical services and Manufacturing jobs pay significantly higher salaries than our other major employment sectors.

Economic Diversity – need to add this for the new Economic Resiliency requirement.

Household Financial Income
- Chittenden County household income is higher than both VT and the US. However, median household income in the County has declined for two consecutive years, approximately back to 2006 levels.

![Figure 5 - Median Household Income](source)

- Household income varies significantly by race

<table>
<thead>
<tr>
<th>Race of Head of Household</th>
<th>Median Income</th>
<th>Margin of Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>$60,297</td>
<td>+/- $1,376</td>
</tr>
<tr>
<td>African-American</td>
<td>$40,865</td>
<td>+/- $5,687</td>
</tr>
<tr>
<td>Asian</td>
<td>$54,417</td>
<td>+/- $10,580</td>
</tr>
<tr>
<td>Two or more races</td>
<td>$52,358</td>
<td>+/- $12,820</td>
</tr>
</tbody>
</table>

**Figure 6 - Median Household Income by Race**

Source: U.S. Census Bureau, American Community Survey 2005-9

- Percentage of Families whose Income in the Last 12 Months is Below Poverty Level

<table>
<thead>
<tr>
<th></th>
<th>ACS 2007 3-year Estimates</th>
<th>ACS 2010 3-year Estimates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chittenden County</td>
<td>6.10%</td>
<td>6.70%</td>
</tr>
<tr>
<td>Vermont</td>
<td>6.90%</td>
<td>7.60%</td>
</tr>
<tr>
<td>US (2010)</td>
<td>15.10%</td>
<td></td>
</tr>
</tbody>
</table>

**Figure 7 - Percent of Families Below Poverty Line**

Source: U.S. Census Bureau, American Community Survey 2005-9

- Average Combined Housing + Transportation Costs in 2010 is 53% of County median income (derived from the H+T Affordability Index, Center for Neighborhood Technology). 45% is considered the threshold of affordability.
Working Lands & Land Based Industries

- **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.**

<table>
<thead>
<tr>
<th>Farm Size</th>
<th>1987</th>
<th>1997</th>
<th>2007</th>
<th>1987 to 2007 Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Acres)</td>
<td></td>
<td></td>
<td></td>
<td>Number</td>
</tr>
<tr>
<td>1,000 or More</td>
<td>7</td>
<td>10</td>
<td>11</td>
<td>4</td>
</tr>
<tr>
<td>500 to 999</td>
<td>44</td>
<td>23</td>
<td>25</td>
<td>-19</td>
</tr>
<tr>
<td>180 to 499</td>
<td>140</td>
<td>123</td>
<td>203</td>
<td>63</td>
</tr>
<tr>
<td>50 to 179</td>
<td>134</td>
<td>123</td>
<td>178</td>
<td>44</td>
</tr>
<tr>
<td>10 to 49</td>
<td>99</td>
<td>123</td>
<td>143</td>
<td>44</td>
</tr>
<tr>
<td>Under 10</td>
<td>28</td>
<td>40</td>
<td>81</td>
<td>53</td>
</tr>
<tr>
<td>Total</td>
<td>452</td>
<td>456</td>
<td>641</td>
<td>189</td>
</tr>
</tbody>
</table>

**FIGURE 8 - NUMBER OF FARMS OF DIFFERENT SIZES IN CHITTENDEN COUNTY, 1987 - 2007**


<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Acres</td>
</tr>
<tr>
<td>Cropland</td>
<td>53,177</td>
<td>42,188</td>
<td>31,161</td>
<td>-22,016</td>
</tr>
<tr>
<td>Woodland</td>
<td>31,925</td>
<td>28,853</td>
<td>34,744</td>
<td>2,819</td>
</tr>
<tr>
<td>Other (including pasture)</td>
<td>12,967</td>
<td>12,314</td>
<td>17,477</td>
<td>4,510</td>
</tr>
<tr>
<td>Total</td>
<td>98,069</td>
<td>83,355</td>
<td>83,382</td>
<td>-14,687</td>
</tr>
</tbody>
</table>

**FIGURE 9 – ACRES DEVOTED TO DIFFERENT USES ON CHITTENDEN COUNTY FARMS 1987-2007**


* Cropland includes land planted for Christmas tree production and short rotation woody crops. Woodland includes natural or planted woodlots or timber tracts and cutover and deforested land with young growth that has or will have value for wood products and land in tapped maple trees.

- 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)


### 4.2.5 ECONOMIC RESILIENCE

An area’s ability to withstand, prevent, or quickly recover from major disruptions (i.e., ‘shocks’) to its underlying economic base. Identify vulnerabilities and withstand or recover from disruptions. Could be done in a variety of ways (separate section, distinct goal or priority action, and/or as an area of investigation in the SWOT analysis).

EDA suggests a two-pronged approach:

1. **Implement specific goals or actions to bolster the long-term economic durability of the region (steady-state).** Steady-state initiatives – longer-term efforts that seek to bolster a community’s ability to withstand or prevent a shock

2. **Establish information networks (this is the role that many of you play) among the various stakeholders in the region to facilitate active and regular communications between the public, private, education and non-profit sectors to collaborate on existing and potential future challenges (responsive).** Responsive initiatives – establishing capabilities that allow an organization/region to be responsive to region’s recovery needs following an incident. Essentially, we reach out to the municipalities and assist the State.