

2011

EAST CENTRAL VERMONT CEDS PLAN



Comprehensive Economic
Development Strategy

EAST CENTRAL VERMONT
COMPREHENSIVE ECONOMIC DEVELOPMENT
STRATEGY
(CEDS)

ADOPTED
MARCH 10, 2011

EAST CENTRAL VERMONT
CEDS

C/O TWO RIVERS-OTTAUQUECHEE REGIONAL COMMISSION
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EXECUTIVE SUMMARY

This is our second major update. The first CEDS was written in 2001, followed by a substantial update of data and action items in 2005. With EDA funding, this is a thorough rewrite of the East Central Vermont CEDS, using an analysis of economic conditions that was completed for us by an economist.

We find that the East Central Vermont region is experiencing economic distress in these ways:

1. More than half the towns in East Central Vermont lost population since 2000, including four out of the five largest towns in the region.
 - Population growth in the East Central Vermont region is anemic. This is a possible marker of the lack growth in productivity.
2. The region's real unemployment rate is 14.4%, accounting for the recent drop in the labor force participation rate and all federal measures of unemployment, including **underemployment**.
 - An average of 60% of East Central Vermont participates in the region's workforce. This is higher than the state rate, which is of concern because it is a likely signal of a low income problem.
 - East Central Vermont is dependent on other regions for jobs. One third of the working population of East Central Vermont work outside the region.
3. Real wages (per worker) are lower than real wages at the state level, and this gap is growing larger over time.
 - While during the post-Vietnam era, East Central Vermont had higher wages than the state, this trend has reversed itself since 1980.
 - Specialty manufacturing and high wage jobs formerly centered in Springfield and Windsor and that lifted the region above state wage rates, are gone.
4. The East Central Vermont region is experiencing negative net business creation and it lacks any industry clusters.
5. The per employee wage income rate is 6-7% lower than the state as a whole. Vermont in general is not a high wage state in general, as are Connecticut and Maryland.
 - The region's total wage income is lagging behind the state significantly, a trend that began in the late 1990s.
 - While the region's adjusted gross income level has been higher than that at the state level for some time, this is due to non-wage income such as dividend income from stocks and trust funds.
6. There is a substantial gap between wages and housing costs.
 - Land uses have changed, trending toward subdivision of agricultural and forest land that not only causes loss of habitat but also drives up the value of land and makes workforce housing increasingly unaffordable.
7. Though poverty data are not available for the East Central Vermont region specifically, 11.4% of all people in Vermont live below the 2009 poverty guideline of \$21,750.
8. Portions of East Central Vermont have very poor access to high-speed internet and limited, spotty cell phone service. Without universal high-speed internet access, the economy of our rural region will continue to suffer.
 - Workers will only migrate to East Central Vermont if there is sufficient access to telecommunications technology (cell phone coverage and internet access).
9. The disparity between significant higher education programs present in the region and the low-skill/low-wage jobs available is likely to be driving younger workers out of the state.
 - There is also a disconnect between the types of college degrees conferred and the fields in which jobs requiring advanced degrees are actually available.

- The number of people employed in agriculture and silviculture in East Central Vermont and other natural resources-dependant occupations has decreased. This is a hardship for a region that has always relied on these occupations.
 - There have been declines in tourism receipts in parts of East Central Vermont recently.
10. The East Central Vermont region is prone to natural disasters that can close businesses and interrupt commerce, in addition to the personal safety hazard they pose.

Following are our priorities for addressing the region's economic distress and creating a climate of growth and competitiveness that will stimulate the regional economy and allow all of its residents to share in prosperity.

- The opportunity to “live where you want to” and the exceptional quality of life here are key assets in the East Central Vermont region. Without access to high speed internet and cell phone service, entrepreneurs will not locate in East Central Vermont. The first and perhaps most urgent priority in this region is to secure expanded, comprehensive 21st Century internet and cell phone service throughout the region.
- Economic developers have an opportunity to expand on the emerging or potential clusters in East Central Vermont. Promoting one or more clusters may make a business more efficient to operate and can create some density in supporting suppliers and customers in the region. Even if sufficient density for clusters is limited by the region's rural character, this CEDS Plan supports this strategy because clusters can be beneficial to the associated businesses as well as to the health of the regional economy as a whole.
- Rail travel and transportation are prospective key components of an expanded transit and ground transportation sector. Further, if the East Central Vermont region can expand on a nucleus of manufactured products, we are in an excellent position to be able to distribute them on our existing transportation infrastructure in an energy efficient capacity without additional investment. East Central Vermont is the crossroads of the northeast and we should amplify this message in regional and national markets.
- Economic developers should assist the growth of sectors that have been both traditionally strong here – such as precision manufacturing, education, and value-added agriculture and other natural resources based industries – as well as burgeoning technology-based sectors driven by graduates of Dartmouth College, Vermont Technical College, and others. We should also cultivate recreation-based businesses, adding to the region's historically strong complex of winter skiing businesses. We can further develop the education cluster by encouraging spin-off businesses to locate in the region, near Dartmouth College and other post-secondary schools.
- East Central Vermont economic developers must formulate a skill shed analysis to align the skills of workers with the needs of employers. This should be a collaborative effort among WIBs, employers, and educational institutions, including regional technical centers, aimed at tailoring the workforce development system to our regional strengths and opportunities.

I. INTRODUCTION

CEDS PROCESS

A Comprehensive Economic Development Strategy (CEDS) is a plan required by the U.S. Department of Commerce Economic Development Administration to be eligible for its planning and construction funds. More importantly, the 2011 East Central Vermont CEDS Plan was developed through a regional planning process in order to guide the economic growth of the East Central Vermont region. This CEDS was updated with funding through grants from EDA and the Vermont Community Development Program.

The CEDS Steering Committee has been in place since 2001 and is comprised of representatives from the Southern Windsor County and Two Rivers-Ottawaquechee Regional Commissions, the Green Mountain and Springfield Regional Development Corporations, as well as communities, business leaders and other stakeholders. The Steering Committee sought grant funding for this effort, guided the CEDS planning process, and coordinated meetings of the CEDS Strategy Committee that was primarily responsible for revising and updating this CEDS. Due to the timing of this update, 2010 Census data were not available for inclusion, requiring the CEDS Steering Committee to seek other more recent data.

The CEDS Strategy Committee is comprised of the prospective Board members of the East Central Vermont Economic Development District and the current CEDS Board. CEDS Strategy Committee members represent the main economic interests of the East Central Vermont region. They include private sector representatives, such as senior executives in Vermont banks and large regional businesses. In addition, the Strategy Committee included representatives of public and community-based organizations, municipalities, workforce investment boards; and colleges.

PURPOSE OF THE CEDS

The purpose of the CEDS is to help coordinate the efforts of regional planning commissions, economic development agencies, local governments, and private industry concerning the economic health and development of the East Central Vermont region. The CEDS is intended to complement the economic conditions and capabilities of the organizations and towns within the region and to sync with economic development policies and programs in the state.

The goals, objectives and actions described in this CEDS comprise the economic development strategy for the East Central Vermont region, and each is designed to be consistent with and conform to the land use and smart growth policies embodied in Title 24 of the Vermont Statutes Annotated, as well as with the municipal plans of the 40 towns in this region and the two Regional Plans adopted by the regional planning commissions.

REGIONAL ECONOMIC DEVELOPMENT ORGANIZATIONS

Development of the CEDS was the result of a continuing planning process led by the two regional planning commissions and the two regional development corporations, organizations enabled under state statutes.

The Two Rivers-Ottawaquechee Regional Commission (TRORC) and the Southern Windsor County Regional Planning Commission (SWCRPC) were created by the acts of the constituent municipalities and with approval by the State of Vermont during the late 1960s and early 1970s. Commissioners representing the 40 towns and villages within the CEDS region are appointed by elected officials from each municipality.

Regional planning commissions are required by Vermont law to prepare, adopt and maintain regional plans for their respective regions using widespread citizen involvement, and update them every five years. The regional

plans are official statements on growth and development of a region. Their purposes are to give guidance to municipalities, the State of Vermont, private investors, and regulatory agencies on the appropriate type and location of development and conservation in each region.

Another major statutory function of regional planning commissions is to promote cooperation among its member municipalities and assist and advise them “to facilitate economic development programs for the appropriate development, improvement, protection and preservation of the region's physical and human resources.” Regional planning commission serve as liaisons between localities and the state, and have been successful in ensuring that local concerns are heard. The Upper Valley-Lake Sunapee Regional Planning Commission is our New Hampshire counterpart that was instrumental in creating the initial CEDS for this region and remains an important economic development partner today.

Green Mountain Economic Development Corporation (GMEDC) and Springfield Regional Development Corporation (SRDC) are non-profit corporations that were established in the late 1980s. Their Boards of Directors represent public and private interests and they oversee programs created by the corporations.

The regional development corporations coordinate public and private efforts designed to foster economic growth and prosperity in their respective regions. Because they are contracted by the state to provide economic development services, they are required to coordinate their activities with regional commissions, state agencies, and local governments and ensure that their activities are consistent with officially adopted local and regional plans.

Regional development corporations maintain relationships with towns and regional businesses, educational institutions, state agencies, and financiers in order to inform and support necessary workforce education and training programs, site selection and conduct direct business assistance, including lending.

A Memorandum of Understanding among the four organizations was developed at the outset of the initial CEDS process in 2001. The provisions of the MOU continue to remain the baseline or foundation for inter-regional and inter-organizational development of the East Central Vermont CEDS.

The four regional organizations interact with many state agencies, land trusts, municipal planning commissions and boards of selectmen, chambers of commerce, businesses, transportation boards, and many other organizations and civic groups.

The CEDS Steering Committee advances regional planning processes and reports its findings and recommendations to the East Central Vermont CEDS Board for action. Technical support to the CEDS Steering Committee is provided by the staff of the four lead organizations on a rotational basis.

CEDS YEARLY PROCESS AND DOCUMENTATION

The following process was designed by the CEDS Steering Committee and CEDS Board to encompass the elements of EDA's CEDS Guidelines.

August:

- Select date and location for fall workshop, and discuss possible meeting topics.
- Review roles and responsibilities of four core organizations for the coming year.

September:

- Finalize workshop topic and discuss speakers and refreshments for agenda.
- Draft workshop invitation.

October:

- Arrange final workshop logistics (speaker, refreshments)
- Finalize and mail workshop invitation.
- Place workshop advertisements.

November:

- Hold fall workshop.

January:

- Review Conceptual and Priority Project Lists.
- Evaluate goals and projects.
- Review results of the fall workshop.
- Prepare CEDS Steering Committee budget and draft work program.

February:

- Select date and location for Annual meeting, and discuss possible meeting topics.

March:

- Solicit new planning projects from communities and other stakeholders.
- Finalize Annual meeting agenda and discuss speakers and refreshments.

April:

- Finalize meeting speakers and refreshment plans.
- Finalize invitation and determine date for mailing.
- Place meeting advertisements.
- Finalize Evaluation and Project Priority and Planning Lists.

May:

- Hold Annual meeting.
- Draft Annual Report and Evaluation.
- Obtain Project Profile(s) for all new projects.

June:

- Finalize Annual Report and Evaluation and submit to EDA and other stakeholders.
- Agree on roles and responsibilities of four core organizations for the coming year.

All information regarding the CEDS process is available at the offices of Two Rivers-Ottawaquechee Regional Commission. These include the CEDS annual report, meeting minutes, conceptual and priority project lists, and other supporting materials.

II. REGIONAL CHARACTERISTICS

DESCRIPTION OF THE REGION

Vermont is one of the most rural and least populated states in the nation. There is a certain mystique about the people and land that allows us to retain and attract new people into the region. Its rugged mountainous and rich river valley landscapes, the varying seasons, superior environment, strong cultural heritage, and independent character will continue to be a haven for individuals and families seeking a rural, self-sufficient lifestyle. The excellent quality of life in East Central Vermont is a leading economic asset, of great value to our population.

The East Central Vermont region does not conform to typical national CEDS regional characteristics. In much of New England, counties simply do not exist (CT, RI, parts of MA) or have limited roles related to the courts (VT). Towns are the main governmental unit and have their own registry of deeds as well as other services such as highway and fire units that are usually present in much larger towns. Regional entities also fill the services void, most notably regional planning commissions and regional development corporations in Vermont. However these groups may span counties, Workforce Investment Boards, and other service delivery boundaries. The East Central Vermont region includes two complete Regional Planning Commissions and Regional Development Corporations, one Workforce Investment Board and portions of two others, and finally portions of four counties.

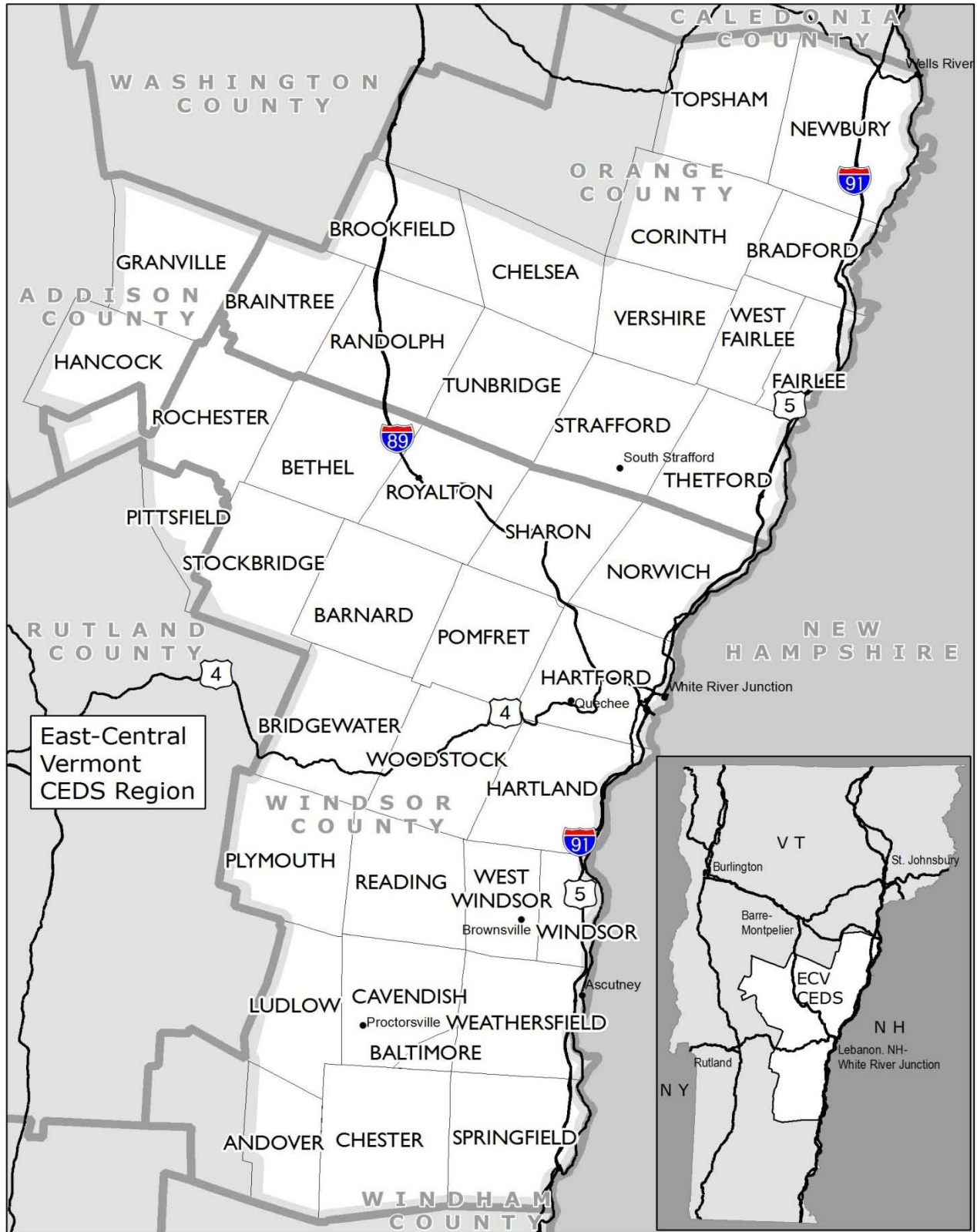
The East Central Vermont region is comprised of 40 towns covering approximately 1,627 square miles (see Figure 1). The Region rests within four counties that comprise the larger regional economy: Windsor, Orange, Rutland and Addison. The majority of the Region is in Windsor and Orange counties. The Region is home to about 13% of Vermont's total population and is primarily rural. The East Central Vermont region is part of the larger Lebanon-Claremont (NH) Micropolitan Statistical Area, and our economy reflects a healthy interdependency with New Hampshire's Sullivan and Grafton counties. There is no Metropolitan Statistical Area in this region, attesting to its truly rural nature.

Major transportation routes within the region include Interstates 89 and 91, and US Routes 4 and 5, as well as major passenger and freight rail lines. The region is a short drive to important urban markets areas such as Concord, Manchester, Portsmouth, and Nashua NH, and Portland, ME, and is central to a 250 mile radius of major metropolitan areas Boston, MA, New York, NY, and Montreal, Quebec, the second largest city in Canada. Our location at the crossroads of New England is a second major economic asset, one which this CEDS will expand upon.

The Region's economy is a reflection of historical land uses, more recent patterns of development, and modern day economic trends occurring locally, regionally and statewide.

The land itself reflects many changes. Although the amount of land in farms has increased marginally, the number of people employed in agriculture has decreased, possibly due to the shrinking size of farms themselves. The trend of decreasing jobs is also true of silviculture in East Central Vermont and other natural resources-dependant occupations. Instead, today's land uses show more of a trend toward subdivision of agricultural and forest land, resulting in single or multiple home development geared toward middle and upper income buyers.

During the 1980s, there were great losses in manufacturing jobs in East Central Vermont and growth in the construction, finance, real estate, service, and retail trade sectors. Springfield and Windsor are part of the area known as the "Precision Valley" due to its predominance of machine tool and precision metal working manufacturing sector. While this region was a major economic force in Vermont in the early 1900's and during WWII, rapid changes in this sector lead to the demise of the part of the region, causing higher property taxes, aging infrastructure and population loss.



Two Rivers-Ottawaquechee Regional Commission, 2011

FIGURE 1 - EAST CENTRAL VERMONT CEDS REGION MAP

The towns of the region have developed in different ways economically. Some towns serve as economic hubs. Others celebrate their remoteness but are still concerned about the lack of local employment. Many town plans state that they would like increased commercial activity so long as it did not adversely affect their rural character, natural resources, or local services. For the most part however, they do not propose specific policies that would help guide growth or protect special attributes. And because they are designed to be carried out by volunteer boards, Town Plans are often poorly implemented. This is where the CEDS Plan fits in.

Most towns have remained rural because they are remote. They are “bedroom communities” for the Hartford, Vermont/Lebanon-Hanover, New Hampshire area, they are least accessible by road from existing economic centers, and many have very poor high speed internet access. While it's possible that outward growth pressures from these centers could reach the farthest corners of the region, it is unlikely to be substantial in any way without increased access to technology. In the meantime, home based and small scale businesses that process local products in towns that have access to transportation and/or high-speed internet will be most likely to succeed. Clearly the economic future of these towns depends largely on forces outside of their direct control.

On the “developed” end of the spectrum, several towns define themselves as economic hubs and are seeking suitable locations for growth by encouraging diversification (Woodstock and Bradford). Others such as Randolph, Springfield, Windsor, and Hartford want to accommodate growth and increase their roles as regional employment, shopping and service centers through improving infrastructure and services. The Precision Valley continues to have a machine tool presence and continues to support that sector while adding more diversity to its economic base, such as in the renewable energy industry. Larger communities like these are balancing their importance as sub-regional centers for growth and commerce with the resulting development, traffic, and the preservation of their historic downtowns.

Occupations common to the region now include office administration and support, management, sales and related activities, education/training/library, and production. A single business cluster does not dominate the Region's economy. And jobs in the agricultural sector are no longer widespread, as they have traditionally been in a region that strongly favors working landscape occupations.

The work force is changing, as shown by the region's high labor force participation rates. While there are more people in the region that have more jobs to go to, demonstrating some job growth in the region, it also points to an income problem in East Central Vermont and a continued problem with unemployment. Wages are low in this region, and Vermont is a low wage state as compared with other parts of the northeast. Families in East Central Vermont have been forced by necessity to send wage-earners into the workforce to bring home additional paychecks or to supplement their primary jobs with part time work on the side. The data in this CEDS show that there are more and more households with two or more wage earners. This trend of underemployment is likely to continue.

The region's diverse business mix currently affords a reasonably good match between jobs and our population. While this provides residents with a healthy economy, the East Central Vermont region's economic health depends upon diligently maintaining and enhancing existing economic resources, such as housing, labor, child care, infrastructure and income, and continuing to develop new economic resources that increase the potential for greater wages and job diversity.

It holds then that one of the main economic challenges for the Region is to increase wages and quality of jobs through various means, rather than to increase the number of jobs. It is in the Region's long-term economic interest to foster a business climate that will encourage the growth of businesses appropriately scaled to their communities and that provide higher-paying, high satisfaction jobs. Further, the East Central Vermont CEDS

region should continue to provide and expand training for the workforce that's already here. To complement these efforts, additional workforce housing and expanded technology infrastructure must be added.

ECONOMIC DISTRESS

The balance of this CEDS Plan will illustrate how East Central Vermont is a region in economic distress. These conditions will be described in detail:

1. More than half the towns in East Central Vermont lost population since 2000, including four out of the five largest towns in the region.
 - Population growth in the East Central Vermont region is anemic. This is a possible marker of the lack growth in productivity.
2. The region's real unemployment rate is 14.4%, accounting for the recent drop in the labor force participation rate and all federal measures of unemployment, including **underemployment**.
 - An average of 60% of East Central Vermont participates in the region's workforce. This is higher than the state rate, which is of concern because it is a likely signal of a low income problem.
 - East Central Vermont is dependent on other regions for jobs. One third of the working population of East Central Vermont work outside the region.
3. Real wages (per worker) are lower than real wages at the state level, and this gap is growing larger over time.
 - While during the post-Vietnam era, East Central Vermont had higher wages than the state, this trend has reversed itself since 1980.
 - Specialty manufacturing and high wage jobs formerly centered in Springfield and Windsor and that lifted the region above state wage rates, are gone.
4. The East Central Vermont region is experiencing negative net business creation and it lacks any industry clusters.
5. The per employee wage income rate is 6-7% lower than the state as a whole. Vermont in general is not a high wage state in general, as are Connecticut and Maryland.
 - The region's total wage income is lagging behind the state significantly, a trend that began in the late 1990s.
 - While the region's adjusted gross income level has been higher than that at the state level for some time, this is due to non-wage income such as dividend income from stocks and trust funds.
6. There is a substantial gap between wages and housing costs.
 - Land uses have changed, trending toward subdivision of agricultural and forest land that not only causes loss of habitat but also drives up the value of land and makes workforce housing increasingly unaffordable.
7. Though poverty data are not available for the East Central Vermont region specifically, 11.4% of all people in Vermont live below the 2009 poverty guideline of \$21,750.
8. Portions of East Central Vermont have very poor access to high-speed internet and limited, spotty cell phone service. Without universal high-speed internet access, the economy of our rural region will continue to suffer.
 - Workers will only migrate to East Central Vermont if there is sufficient access to telecommunications technology (cell phone coverage and internet access).
9. The disparity between significant higher education programs present in the region and the low-skill/low-wage jobs available is likely to be driving younger workers out of the state.
 - There is also a disconnect between the types of college degrees conferred and the fields in which jobs requiring advanced degrees are actually available.

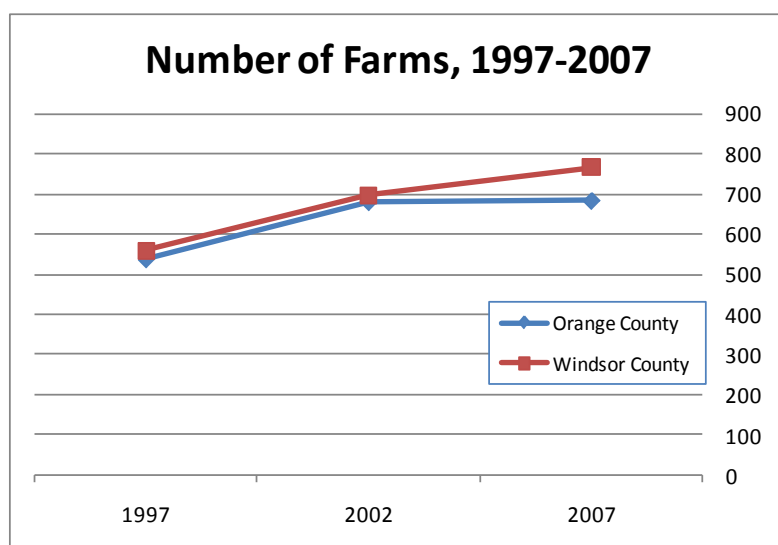
- The number of people employed in agriculture and silviculture in East Central Vermont and other natural resources-dependant occupations has decreased. This is a hardship for a region that has always relied on these occupations.
 - There have been declines in tourism receipts in parts of East Central Vermont recently.
10. The East Central Vermont region is prone to natural disasters that can close businesses and interrupt commerce, in addition to the personal safety hazard they pose.

RESOURCES

NATURAL & CULTURAL RESOURCES

AGRICULTURE

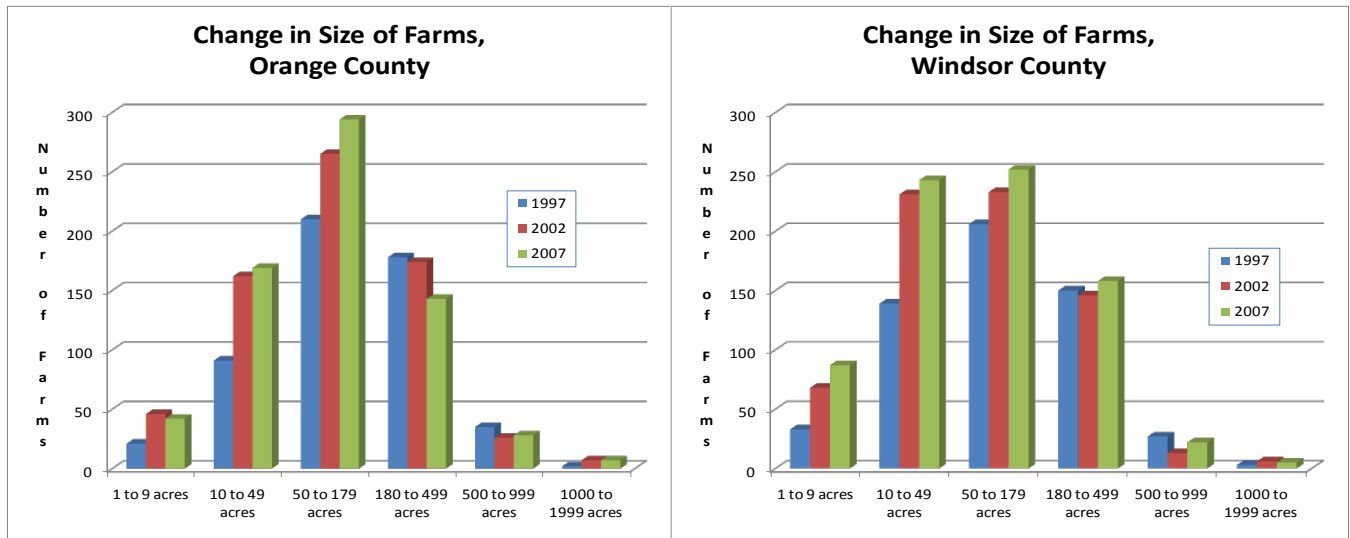
The US Department of Agriculture conducts a census of farms every five years. The most recent Census, conducted in 2007, showed that while the number of farms in Vermont remained about the same from 1997 to 2007, the number of farms in Orange and Windsor Counties has increased by 27% and 37% respectively, as shown in the figure below.



The increase in the number of farms was not accompanied by a similar increase in the amount of land farmed in East Central Vermont, however. Total acreage farmed in Orange County increased only 3.3% during this time, and Windsor County land in farms increased by 6.5%. The average acreage per farm in both counties decreased, however, by about 20% during this period. This is explained by the fact that the number of small farms grew substantially, while larger farms disappeared. Smaller farms employ fewer people, thus there has been a decrease in the number of agricultural jobs resulting from this change in land use.

Two Rivers-Ottawaquechee Regional Commission, 2011

FIGURE 2 - CHANGE IN NUMBER OF FARMS

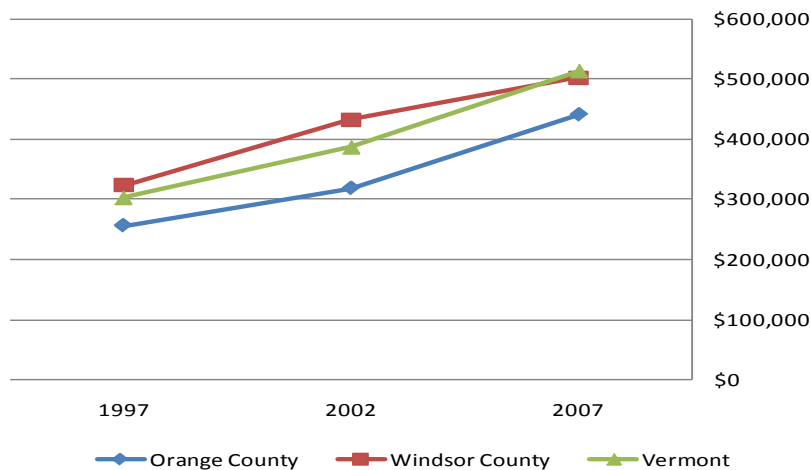


Two Rivers-Ottawaquechee Regional Commission, 2011

FIGURE 3 - CHANGE IN SIZE OF FARMS

More compelling is the fact that the average market value of farm land and buildings has increased substantially in both East Central Vermont counties as well as statewide (see below).

Average Market Value, Farm land & buildings



Two Rivers-Ottawaquechee Regional Commission, 2011

FIGURE 4 - CHANGE IN VALUE OF FARMS

The result of these changes is the amount of land that remains in farming is valued at a much higher level than ever before. This puts pressure on farmers to produce more crops or livestock that are more highly valued in order to help them meet their land ownership costs. Farmers that are no longer able to meet these demands are selling farms for higher sums, eroding traditional land uses and jacking up development costs for the housing that is built in pastures and fields.

Vermont's food system is critical to our state's economy, identity, quality of life, and sustainability. When measured by employment and gross state product, food manufacturing is the second-largest manufacturing industry in Vermont. Despite Vermont's long history of agricultural production, a number of recurring weaknesses, gaps, and barriers have negatively affected the state's food system. As a result, there is an acute need for highly networked communication and coordination among food system enterprises, markets, technical assistance providers, and advocacy organizations regarding products, activities, and services.

In 2009, Vermont's Farm to Plate Investment Program was created through legislation, with the goals of:

1. Increasing economic development in Vermont's food and farm sector;
2. Creating jobs in the food and farm economy; and
3. Improving access to healthy local foods.

The ultimate purpose of the Farm to Plate Strategic Plan is to encourage policies and strategic investments that accelerate the movement toward strong local and regional food systems. Farm to Plate Strategic Plan goals related to economic development include those that focus on:

- increasing food production for local and regional markets;
- strengthening Vermont's food processing and manufacturing sector;
- strengthening Vermont's retail distribution system and providing food enterprises with more market outlets in Vermont and beyond;
- improving food system education;
- increasing the number of new farmers and food system entrepreneurs and responding to the needs of today's food system workforce;
- increasing coordination between technical assistance and business planning providers;
- increasing awareness of and access to funding and financing opportunities for food system entrepreneurs and farmers;
- reducing non-renewable energy use while increasing efficiency and renewable energy production; and
- firmly linking food system development with economic development.

FORESTRY

No county or regional data are available regarding forestry activities in East Central Vermont. According to the 1997 Forest Inventory conducted by the U.S. Forest Service (USFS) however, the state of Vermont was 78% forested at the time of the survey. The amount of forested land in the state (4,629 thousand acres) had increased at that time by five percent since 1948. The USFS estimated in 2005 that this figure had decreased to 75% forest cover (4,463 thousand acres), and that 97% of Vermont's forest land, or 4,353 thousand acres, was classified as timberland or commercial forest land. The majority of timberland in Vermont was privately-owned (4.0 million acres or 81%) by family forest owners or businesses at this time.

At an average of 5,155 board feet per acre, there was a volume of 23.1 billion board feet of saw timber in Vermont in 1997. By 2006, this volume decreased by nearly 400 million feet.

The annual contribution of forest-based manufacturing and forest-related recreation and tourism to the Vermont economy is quite significant. According to a 2007 report by the Northeast State Forester's Association, Vermont's forests contribute over \$1.5 billion to our state economy, providing jobs and payroll for 13,000 people. Forest-based manufacturing contributes \$1.0 billion to the economy, or 9.3% of Vermont's total manufacturing sales. This industry provides employment for 6,379 people and generates a payroll of over \$207.4 million. Additionally, our forests attract millions of visitors to the state for recreation and tourism, contributing nearly \$500 million to the state economy.

An important part of this discussion is the Vermont Use Value Appraisal Program, commonly known as “current use.” The program enables landowners who practice long-term forest management to have their enrolled acreage appraised for property taxes based on its value for forestry, rather than its fair market or development value. The intended goal of the program is to conserve Vermont’s working landscape by keeping agricultural and forest land in their current uses, slowing development of these lands, and achieving greater equity in property taxation on undeveloped land. Forest land must be managed to a state-defined standard.

In the 40 East Central Vermont towns during the 2009 tax year, a total of 423,817 acres of land were enrolled in Current Use, representing 41% of the total acreage of the region. The number of acres enrolled increased by 12% overall from 2005 totals. The change in acreage enrolled varied from town to town, increasing 16% on average over this time. Statewide, there was a 10% increase in acreage enrolled in Current Use between 2005 and 2009.

TOURISM, RECREATION AND CULTURAL RESOURCES

The Vermont brand is well known across the northeast and the nation. More importantly, Vermont is within a day’s drive for approximately 70 million people as well as a half days drive for the residents of the New York, Massachusetts and Montreal metro areas. The East Central Vermont CEDS region includes most of the northern half of the Green Mountain National Forest which hosts up to 3.4 million visitors each year.

CY 2009 Total Taxable Receipts						
	Rooms 9%	Meals 9%	Alcohol 10%	Change	Change	Change
Vermont	784,554,621	332,383,729	136,443,939	-1.40%	-10.60%	-0.60%
Chittenden	234,102,198	79,953,398	43,018,483	0.10%	-4.60%	-0.10%
Rutland	73,861,129	37,526,990	16,117,948	-4.80%	-12.80%	-0.80%
Washington	71,436,972	20,595,574	12,333,780	-0.70%	-8.70%	0.30%
Windham	65,815,649	32,809,292	13,103,164	-2.10%	-7.80%	-3.60%
Windsor	63,788,746	44,573,683	14,088,955	-2.70%	-16.60%	-0.80%
Orange	12,673,577	4,422,057	1,709,887	-2.20%	-8.30%	-6.40%
Local Communities (Windsor County)						
Hartford	16,588,462	10,136,789	2,853,559	(Quechee Lakes, White River Jct.)		
Ludlow	11,575,775	12,002,409	3,148,765	(Okemo Mtn. Resort)		
Woodstock	8,987,004	8,945,697	2,501,366	(Woodstock Area, Inn, MABI)		

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FIGURE 5 - 2009 TOURISM TAX INCOME, WINDSOR AND ORANGE COUNTIES

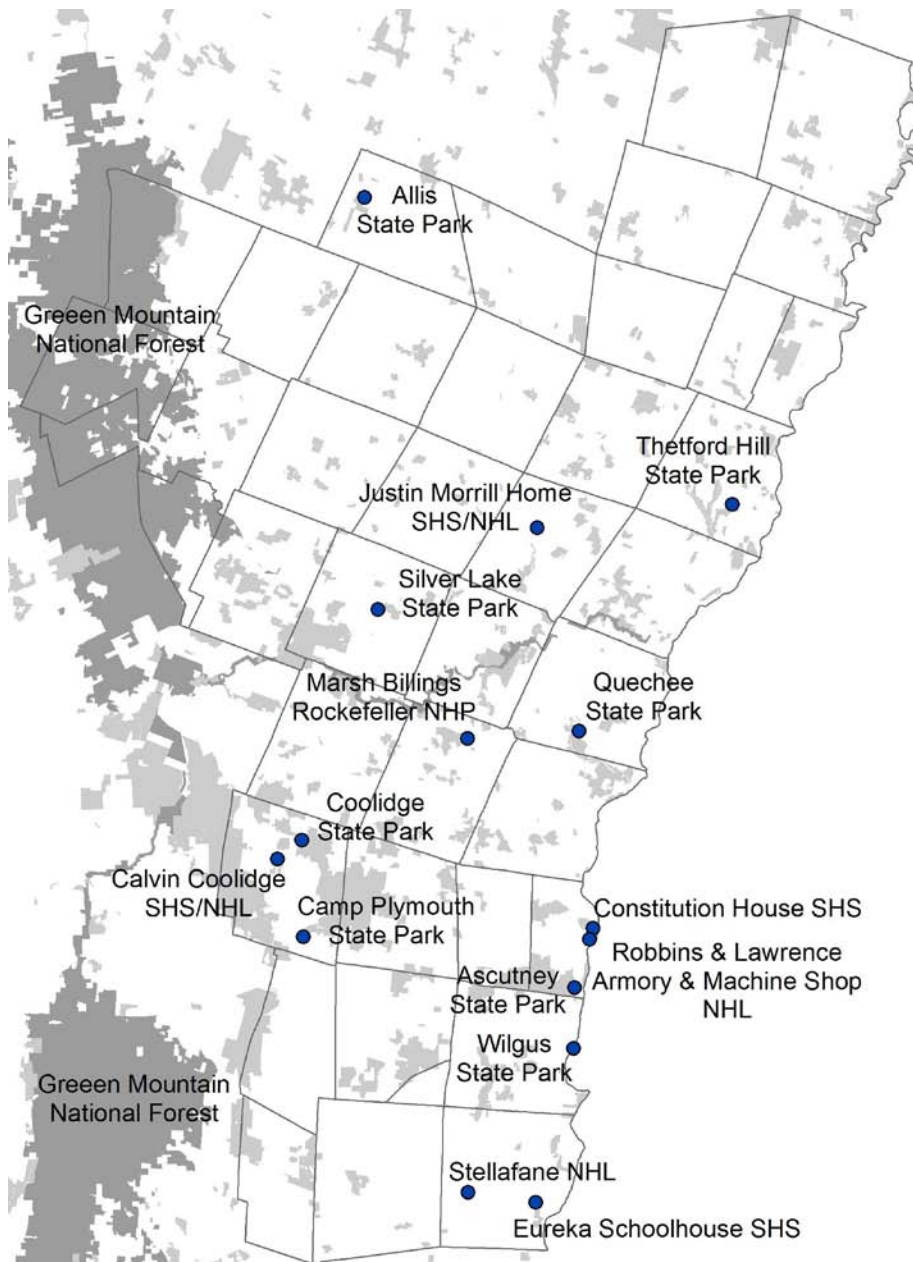
The table above shows the 2009 tourism tax receipts for Windsor and Orange counties. Windsor County’s economy is clearly more tourist-oriented than Orange County’s. Windsor ranks 5th statewide in room receipts, 2nd in meals, and 3rd in alcohol sales, while Orange is last in all categories. The year over year trend is clearly down due to the recession, however, which is worrisome. Controlling for population, Windsor County’s numbers are still more than double Orange County with \$1,127 room receipts per person to \$438 receipts per person.

Marsh-Billings NHP	
Woodstock	
Year	Visitors
2005	28,660
2006	22,484
2007	32,179
2008	37,121
2009	31,129

The Windsor County towns of Hartford, Ludlow and Woodstock lead in gross receipts with their planned resort communities (Quechee Lakes), ski resorts (Okemo), and area attractions and restaurants (Marsh-Billings-Rockefeller National Historic Park and the Woodstock Inn). Data (see chart) on visits to the Marsh-Billings-Rockefeller National

Historic Park in Woodstock show the draw that this and other heritage tourism sites in the region represent.

The East Central Vermont CEDS region has eight state parks as well as four state historic sites. Two of these state historic sites, the Justin Morrill Home and the Calvin Coolidge Home are National Historic Landmarks. The region has two more national historic landmarks: the Robbins and Lawrence Armory and Machine Shop in Windsor and the Stellafane Observatory in Springfield. Both of these two national landmarks are examples of the region's precision manufacturing history. The Black River Valley stretching from the Connecticut River to Windsor, Springfield and Ludlow was one of the manufacturing centers in the United States for precision machine tools and became known as the Precision Valley. The East Central Vermont region has one National Historic Park, the Marsh-Billings-Rockefeller site and surrounding lands. This Park is a testament to Vermont's place in the conservation movement as George Perkins Marsh, considered by some to be one of America's first environmentalists, made his home here.



East Central Vermont is also home to a thriving creative community, with events happening year round at Northern Stage/Briggs Opera House, Chandler and Tupelo Music Halls, and the Woodstock Town Hall Theater. The Montshire Museum of Science and Vermont Institute of Natural Science are also renowned science museums catering to children and adults alike.

Last, but not least, East Central Vermont is home to exceptional alpine, cross country and telemark skiing and riding, numerous golf courses, warm and cold water fishing, and other water sports. Mountain biking, hiking and snowmobile trails permeate the region, as do the businesses that support all of these recreational activities.

LAND USE PLANNING

As stated previously, the majority of the towns in the region view themselves not only as small rural communities without much economic activity. This philosophy is carried over to their Town Plans, some of which have few policies to guide growth or protect local natural resources or services.

The two Regional Planning Commissions, by contrast, have discreet portions of their Regional Plans that directly address economic development and planning. The Regional Plans describe economic conditions in their respective regions, identifying issues and opportunities, citing goals, policies and recommendations for economic growth and development.

Both planning processes have in common the statutory directive to engage in a continuing planning process that will further several goals, including considering the use of resources and the consequences of growth and development for the state, region and community in which growth takes place. In addition, Town and Regional Plans must plan development “so as to maintain the historic settlement pattern of compact village and urban centers separated by rural countryside.” The intent of this legislation is to avoid sprawl, which is a land use pattern characterized by dispersed, automobile-dependent development outside of compact urban and village centers, along highways, and in the rural countryside. The goal then is to develop and implement smart growth policies and practices relating to land use, conserving land value and quality of life. This is essential in maintaining our tourism and agricultural sectors.

Key to smart growth is Vermont’s landmark Act 250, a permitting program designed to regulate land use and ensure that proposed commercial developments and subdivisions are not unduly detrimental to the environment. This legislation came from concern that small towns did not have the resources to manage rapid second-home growth occurring in the state, particularly near ski resorts. The legislation sought to balance the need for economic growth with smart growth, prior to that coin of phrase.

EDUCATIONAL RESOURCES AND ATTAINMENT

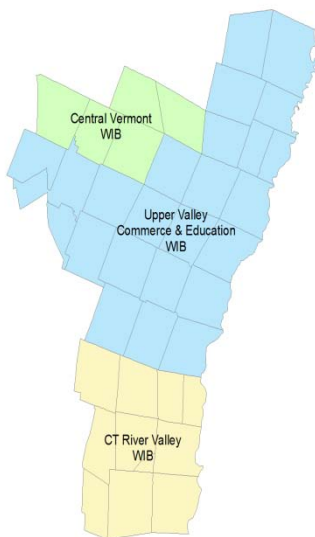
East Central Vermont and the surrounding areas are home to several community colleges and high school career training centers, which are excellent technical training resources for high-skill jobs. Community College of Vermont, Vermont Technical College, and Vermont Law school are all located within this region. Dartmouth College is across the river in Hanover, NH as well as two technical colleges: the private Lebanon College and the public River Valley Community College. Norwich University is just outside the region in Northfield, VT and offers several innovative graduate programs such as Business Continuity Planning.

High School Career Centers	Towns	Degrees
River Bend Technical and Career Center	Bradford	HS technical ed.
Randolph Technical Career Center	Randolph	HS technical ed.
Hartford Area Career and Technology Center	Hartford	HS technical ed.
River Valley Technical Center @ Dean Center	Springfield	HS technical ed.
Colleges		
Community College of Vermont	Hartford	18 2yr & 12 career cert.
Vermont Technical College	Randolph	22 2yr & 11 4yr degrees
Nearby Facilities		
Lebanon College	Lebanon, NH	2 yr degrees
River Valley Community College	Claremont, NH	2 yr degrees
Dartmouth College & Medical School	Hanover, NH	4 yr and grad degrees
Norwich University	Northfield	4 yr and grad degrees
Castleton State College	Castleton	4 yr and grad degrees

Vermont Technical College (VTC) offers academic and practical programs for students in more than 30 bachelor's and associate degree programs. The college boasts a 98% placement or continuing education rate for its graduates, spanning two decades. Since 2007, the number of degrees and certifications conferred by VTC has grown by nearly 12% overall, with an 86% increase in the number of baccalaureate degrees earned. Vermont Tech also offers a program for motivated high school seniors, the Vermont Academy of Science and Technology (VAST). This is a chance to complete the senior year of high school and the freshman year of college simultaneously; plus, two semesters of free college tuition for Vermonters and a stimulating environment in which to grow and mature. The high school center also offer adult technical and continuing education programs in the evening and on weekends.

The Howard Dean Education Center offers a wide range of learning opportunities presented educational partners such as Community College of Vermont, Johnson State College, River Valley Technical Center, and the University of Vermont. Programs offered at The Dean Center are the direct result of area business leaders and education providers working together to assess needs and provide services.

The Community College of Vermont offers enrollment to more than 9,000 students every year and has campuses in 13 locations across the state including the Upper Valley and Springfield at the Howard Dean Education Center, and nearby Montpelier, Rutland, and St. Johnsbury, and offers two year degrees and certificates.



The region is also served by three Workforce Investment Boards or WIBs, though only one (Upper Valley Commerce & Education WIB) is completely within the East Central Vermont region, covering 24 towns. The other two Boards do not align with the areas served by the East Central Vermont CEDS, as shown on the map to the left.

Each of the region's WIBs have work plans designed to foster market-driven workforce education and training, connecting workers, employers, educators and service providers so that they can collaborate for mutual benefit. The Springfield Regional Development Corporation has always worked very closely with the Connecticut River Valley WIB, making that partnership very active and the resulting effective programs.

The Upper Valley WIB is actively engaged in regular meetings to implement the goals of its work plan, which include:

- Continuing to strengthen career and technical education for the region's youth and for adults needing retraining for new careers.
- Building a workforce development system composed of the education and training programs found in the Upper Valley.
- Developing a better understanding of shifts in the Upper Valley economy and be prepared to meet the accompanying workforce development needs.
- Developing incentives and nurture entrepreneurs who will, in turn hire a skilled well paid workforce for the new economy.

Degree	Associates	Bachelors	Masters	PhD	Total
Business Management Marketing and Related Support Services	179	689	222	0	1,090
Social Sciences	0	719	345	0	1,064
Education	40	269	496	24	829
Health Professions and Related Clinical Sciences	242	274	60	91	667
Liberal Arts and Sciences General Studies and Humanities	360	177	13	0	550
English Language and Literature/Letters	0	319	214	0	533
Visual and Performing Arts	18	458	37	0	513
Psychology	0	382	58	8	448
History	0	199	146	0	345
Computer and Information Sciences and Support Services	25	105	168	1	299
Foreign Languages Literatures and Linguistics	0	93	178	5	276
Legal Professions and Studies	17	16	66	173	272
Biological and Biomedical Sciences	0	216	19	19	254
Natural Resources and Conservation	3	189	30	5	227
Engineering	0	156	48	9	213
Security and Protective Services	23	120	64	0	207
Public Administration and Social Service Professions	33	95	60	0	188
Personal and Culinary Services	169	15	0	0	184
Communication Journalism and Related Programs	11	159	0	0	170
Multi/Interdisciplinary Studies	0	96	34	0	130
Engineering Technologies/Technicians	81	30	0	0	111
Area Ethnic Cultural and Gender Studies	0	109	0	0	109
Agriculture Agriculture Operations and Related Sciences	29	71	2	3	105
Parks Recreation Leisure and Fitness Studies	0	103	0	0	103

Source: Vermont Higher Education Council

FIGURE 6 - VERMONT DEGREES CONFERRED, 2007-2008

The data in Figure 5 above and Figure 6 below show a large percentage of Vermont's graduates have Bachelor's degrees or better. Occupational data in the following chapter will show that most occupations that are projected to grow in the near future require post-secondary degrees.

However, among the occupations that currently employ more people in East Central Vermont, only Health Care and Social Assistance, Educational Services, and Professional, Scientific, Technical Services, Administrative, and Waste Management services jobs require an Associate's Degree or higher. Yet more people are getting degrees in business and social sciences than in the fields in which jobs are available in Vermont. The mismatch between college degrees conferred and jobs available is believed by economic development practitioners to be driving younger workers out of the state. This issue must be addressed by economic, community and workforce developers in cooperation with post-secondary schools and employers.

Vermont Educational Attainment					
	2003-04	2004-05	2005-06	2006-07	2007-08
<u>Associate's Degrees</u>					
number	1,390	1,271	1,380	1,275	1,264
percent change		-8.60%	8.60%	-7.60%	-0.90%
<u>Bachelor's Degrees</u>					
number	4,648	4,892	4,981	5,101	5,315
percent change		5.20%	1.80%	2.40%	4.20%
<u>Master's Degrees</u>					
number	1,474	1,684	1,782	1,951	2,302
percent change		14.20%	5.80%	9.50%	18.00%

Source: Vermont Higher Education Council
















FIGURE 7 - VERMONT EDUCATIONAL ATTAINMENT CHANGE

INFRASTRUCTURE

TELEPHONE AND TELECOMMUNICATIONS

The telecommunications providers in Northern New England that serve the East Central Vermont region include Fairpoint, Comcast and Charter (cable), VTel, and other local telephone companies. Fairpoint is the ILEC (incumbent local exchange carrier) and there are CLEC (competitive local exchange carriers) including SoverNet and SegTel who lease lines from Fairpoint and then resell these to ISPs or service customers directly.

The region's high speed internet service varies widely with several rural areas such as Plymouth and Topsham having standard DSL service available to all telephone customers. These two examples both have small telephone companies acting as the ILEC with 100% DSL penetration. Several towns closer to upper valley population centers such as Barnard, Strafford, and Pomfret have significantly less than 100% DSL penetration because they are served by the historic (Bell System) ILEC carrier, currently Fairpoint. Fairpoint is working to increase penetration but this has been a slow process for several towns listed above as well as portions of Randolph, Thetford, Tunbridge, and Chelsea.

Provider	Type	Location	Comments
ECFiber	 Fiber	Barnard, Royalton	900k to do FTTH pilot
VTel	 small ILEC: Fiber/DSL	southern ECV	FTTH & wireless pilot
Level 3 Communications	 Fiber	various ECV nodes	VT State College & fiber provider
Comcast	 Cable	ECV - non Charter Comm. served areas w/cable	
Charter Communications	 Cable	Bradford, Chelsea, Newbury, Royalton, Tunbridge	
Topsham Telephone	 small ILEC: DSL	Bradford, Corinth, Topsham, Newbury	small telephone co.
TDS Telecom	 small ILEC: DSL	Cavendish, Ludlow, Perkinsville, Weathersfield	small telephone co.
Fairpoint	 ILEC: DSL	ECV	uses Fairpoint lines
SegTel	 CLEC: DSL	Hartford	uses Fairpoint lines
SoverNet	 CLEC: DSL	ECV	uses Fairpoint lines
GAW (formerly Finowen)	 Fixed Wireless	Fairlee, Hartford, Norwich, Plymouth, Strafford, Thetford	
WaveComm	 Fixed Wireless	Brownsville, Hartford, Norwich, Quechee, Reading, Strafford, Thetford, Tunbridge, Weathersfield, Windsor	
Wireless VT Solutions	 Fixed Wireless	Brookfield	
HughesNet	 Satellite	ECV	
WildBlue	 Satellite	ECV	

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Local projects to address these service gaps have begun including fixed wireless providers along the Connecticut River (WaveComm and GAW) and a 23 town fiber-to-the-home (FTTH) initiative called ECFiber (East Central Vermont Community Fiber Network). The ECFiber project has just raised over \$900,000 in local private placements to build a hub and an initial proof of concept loop from Royalton to Barnard. The project is now in the midst of securing private, large-scale funding for the rest of the towns. The largest Vermont-based ILEC in the region, VTel, has received a large USDA-RUS broadband grant to roll out FTTH to its wireline customers across southern Windsor County as well as 4G/LTE wireless service across the underserved portions of the rest of Vermont. Areas immediately around Springfield in southern Windsor County have FTTH service as VTel begins this project.

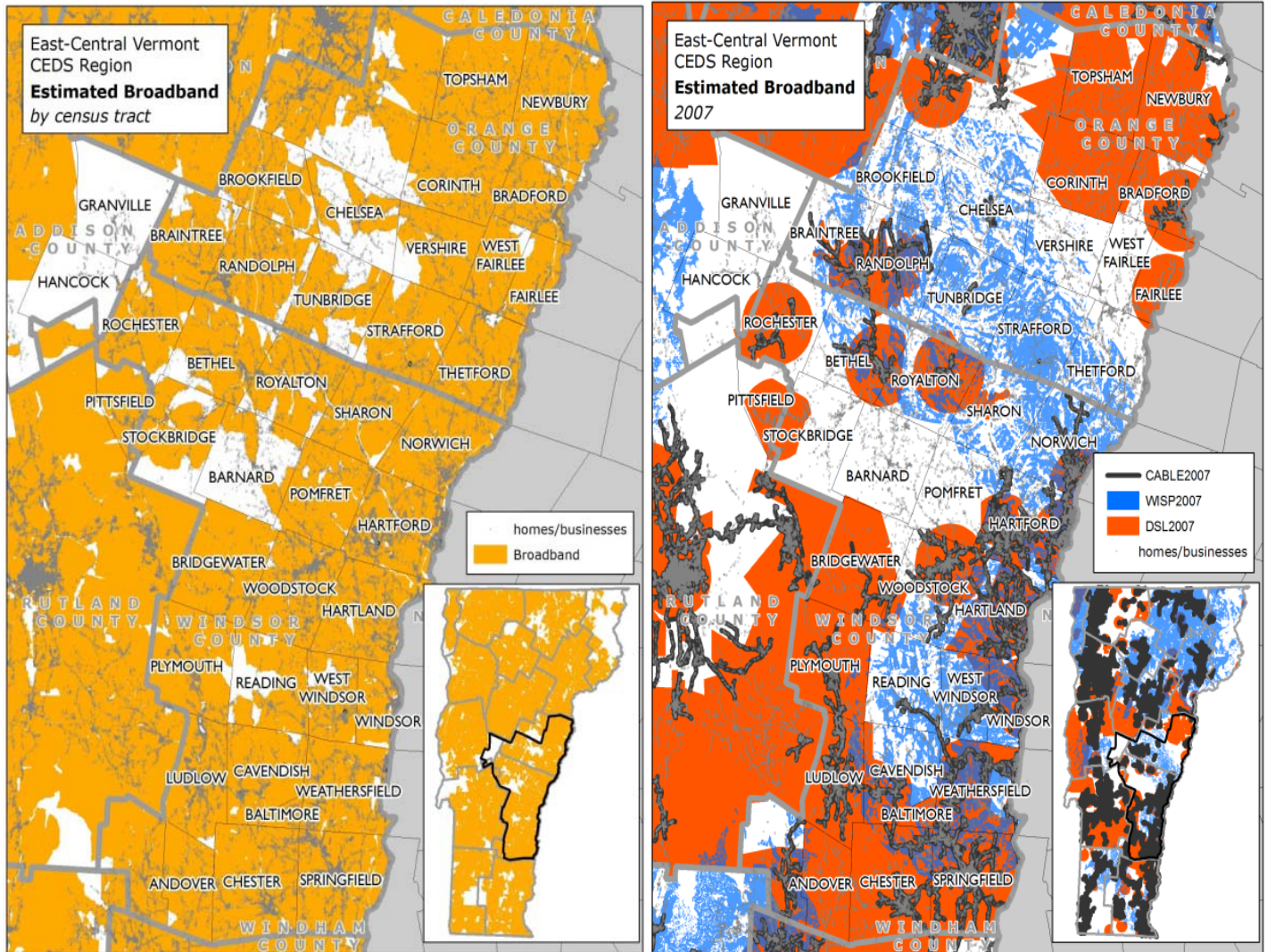


FIGURE 8 - REGIONAL TELECOMMUNICATIONS INFRASTRUCTURE

The figures above depict an approximate area of broadband coverage in East Central Vermont. In the figure on the left, the data were created under a currently active broadband mapping stimulus grant. However since these data were developed via telephone survey, this map overestimates the coverage and areas actually served. The figure on the right shows 2007 broadband coverage across the region in the form of DSL, cable and fixed wireless coverages and this map shows more pronounced gaps. The current broadband coverage is somewhere in between these two figures.

Several “gaps” in coverage are obvious. Entire towns in the western portion of the region do not receive any broadband service, and other towns throughout the region are only partly covered. New service is promised by the major providers, but is several years away at best. For the homes located in these white areas on the map, dial-up or satellite service are the only options, “technologies” that are renowned for their lack of speed and reliability. In 21st Century America, which is ranked third in the developed world for internet speeds, in a state that is ranked 46th for internet speeds, in a region that is a short drive from several major metropolitan markets, East Central Vermont’s lack of complete broadband coverage is exasperating to residents and a serious impediment to economic growth for regional businesses.

INDUSTRIAL & BUSINESS PARKS

Windsor County has three Industrial Parks: Ludlow Industrial Park, North Springfield Industrial Park, and See It Made Industrial Park in Windsor. There are also many other small commercial and business parks throughout the region, including those in Bradford, Hartford, Randolph, and Sharon as well as a business incubator in Randolph that is being rebuilt since it was destroyed by a fire.

TRANSPORTATION

As shown in Figure 1 (see page 5), the East Central Vermont region is well served by the Interstate highway system. Hartness State Airport is located in North Springfield and is the second largest airport in Vermont. It is served by two paved and lighted runways, but has no regular commercial passenger service. What is unique to this region, however, is the active rail freight lines operated by New England Central Railroad. Service is provided daily between the Vermont and Quebec borders, south to the Port of New London, CT. The railroad interfaces with transatlantic steamship access in New London, CT, and offers railcar storage and on-line public warehouse and transfer yard facilities for rail/truck, truck/rail and rail/ocean service. New England Central moves many commodities, including lumber, panels & plywood, newsprint and paper, compressed gas, chemicals, fuel oils, road salt, metals, finished vehicles, machinery & equipment, recyclables, construction debris, and food.

HOUSING

The region's primary housing issues are its affordability and its availability. Unfortunately, 2000 Census data that is used to calculate demand vs. availability are 10 years old and are no longer reliable. We do know, however, from 2010 Census data, that there was a net gain of 3,602 housing units across the CEDS region from the previous Census. In 2010, the Census shows a total of 44,854 housing units. The 2010 occupancy rate dropped accordingly from 76% to 73%. Only two towns lost housing units: Baltimore and Hancock.

Affordability data are updated by the state yearly and are presented below.

Income needed to afford a 3 bedroom apartment at HUD's Fair Market Rate, 2010		Median household income for a family of four, 2010	
Orange	\$44,560	Orange	\$60,800
Windsor	\$45,880	Windsor	\$63,800

The data above show that it *can* be easier for families, because of their dual incomes, to afford to rent an apartment. That is, assuming they are earning at or above the median *and* that there is housing available in the area that can accommodate the number of people in the family *and* at a price that does not exceed an affordable rate. Housing is considered affordable if it does not cost more than 30% of their income. With so many conditions, however, it is easy to see how finding affordable rental housing for families is not simply a matter of income.

The situation is far different for single people. The 2010 wage rates necessary to make a 1 bedroom apartment affordable are shown here:

Orange County	\$13.21
Windsor County	\$13.79

State employment projections for 2008 to 2018, using U.S. Bureau of Labor Statistics data, tell us that 21 of the top 50 occupations that are expected to grow in the coming years pay less than these affordable housing wage rates. Of the top 10 growing occupations, only four pay an affordable housing wage.

A modest 2-bedroom apartment in Vermont now costs \$920 a month on average, which requires an hourly wage of \$17.70 or an annual income of \$36,800. While this represents only a slight increase over the year before, it represents a 54 percent increase since 2000. At least 46% of Vermont's occupations have median wages below this threshold. When the high costs of commuting between the remote locations that affordable homes are located, towns like Corinth and Reading, and job centers like Hartford, are added in, not to mention heating any residence in this unforgiving climate, a complete picture is evident.

Purchasing an affordable home in Vermont is even more difficult. The median home price in Vermont was \$190,000 in 2009, requiring an annual income of \$57,000 and at least an additional \$15,000 in down payment and closing costs. More than 80% of Vermont's occupations had median wages below that amount. The median price of a newly constructed home was \$305,000 in 2009, up 13% from the year before. A home buyer would need an income of \$92,000 and down payment and closing costs of \$23,000 to afford this home.

With the increased population of older and aging residents in the region, there is an increased need for more elderly housing today that will only grow over time. We do know that state and federal low-income housing assistance programs are being stretched by tight budgets in a down economy.

NATURAL HAZARDS

Using hazard histories from the region, state, and nation and given our region's natural and manmade environment, hazards that could potentially affect the region and its towns are:

- Flood
- Structural Fire
- Winter Storms (Snow blizzards and ice storms)
- Technological Hazards (hazardous materials spills, plane crashes, train derailments, motor vehicle pileups, dam failures, power outages)
- Severe Weather (Thunderstorm/Lightning/Hail/Tornado)
- Hurricane and Tropical Storm
- Epidemic and other Health Threats
- Terrorism and Civil Hazards
- Drought/Wildfire
- Climate Change
- Landslide
- Displaced Persons
- Earthquake
- Extreme Temperature
- Infestation/Invasive Species
- Food Shortage

Flooding and severe weather in the form of blizzards, ice storms, and rain storms causing widespread tree damage are the main natural hazards that cause the most property and infrastructure damage in our region, as shown in the following figure.

<i>Declared Disasters in East Central Vermont since 1996</i>		
<u>Declaration date</u>	<u>Counties affected</u>	<u>Type</u>
2/13/1996	Addison, Orange, Rutland, Windsor	Storms and flooding
1/15/1998	Addison, Orange, Windsor	Ice storms
6/30/1998	Addison, Orange, Rutland, Windsor	Severe storms and flooding
11/12/1999	Orange, Rutland, Windsor	Tropical Storm Floyd
7/27/2000	Addison, Orange, Rutland, Windsor	Severe storms and flooding
9/12/2003	Orange, Windsor	Severe Storms and Flooding
9/23/2004	Addison	Severe storms and flooding
5/4/2007	Orange, Rutland, Windsor	Severe storms and flooding
8/3/2007	Orange, Windsor	Severe storms and flooding
7/15/2008	Addison, Orange, Rutland, Windsor	Severe storms and flooding
9/12/2008	Addison, Orange, Windsor	Severe storms and flooding

Two Rivers-Ottawquechee Regional Commission, 2011

FIGURE 9 - DISASTER DECLARATIONS IN EAST CENTRAL VERMONT

Since most small municipalities and many businesses are unprepared for these events, the Regional Planning Commissions have set up technical assistance programs to help with emergency planning and hazard mitigation. Road Foreman Roundtables and public works mutual aid programs are ongoing to assist municipalities.

An important and complementary aspect to this CEDS update is the Business Continuity of Operations technical assistance program. There is a dire need for businesses to develop emergency plans to prevent closures resulting from natural disasters, to mitigate the effects and costs of these disasters, and to prepare employees how to respond to workplace emergencies. Small businesses are especially at risk of closure from natural disasters because few of them have the resources or experience to accurately assess disaster risks and develop comprehensive mitigation and recovery plans. Vermont's climate is extreme, with intense rainstorms, deep snows, and destructive ice jams. In the event of a major rain or snow event or other natural disaster, the impacts to businesses and families are just as extreme as the weather. Flash flooding represents the most frequent disaster type and has resulted in the greatest magnitude of damage suffered by private property and public infrastructure.

Business continuity planning prepares an organization to respond to an interruption of essential business functions and provides the guidelines to fully recover operations, services and programs. A Business Continuity Plan (BCP) is the least expensive insurance any company can have. This is especially true for small companies.

In the Two Rivers-Ottawquechee region alone, there are 117 commercial properties, three commercial farms, and 30 other commercial properties located in federally-defined flood hazard areas. In addition, there are five industrial properties and six lodging properties in this flood hazard area.

Business Continuity Plans will be developed, using EDA funding, for 40 small and medium-sized businesses in inundation and flash flooding areas in this CEDS region, helping them become more disaster-resistant and recover more rapidly from the effects of disaster events. Throughout the CEDS Region, we expect to reach construction and building trade contractors, professional, administrative and technical service businesses, retail trade businesses, educational and health services, and leisure and hospitality businesses.

III. ANALYSIS OF THE REGIONAL ECONOMY

The CEDS Steering Committee hired economists Kavet, Rockler & Associates (KRA) of Williamstown, VT to gather and analyze various economic data in support of this CEDS update. KRA used social and economic data from the U.S. Census 2000 and brought it forward using estimates and other available data. The following information is taken from their report, "Analysis of the Economic and Demographic Characteristics of the East Central Vermont Region," dated December 31, 2010. Their report is appended to the CEDS.

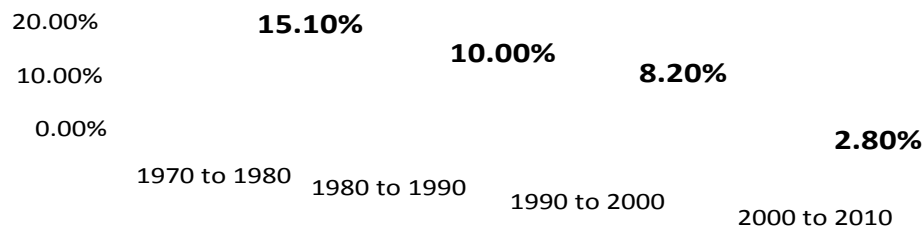
DEMOGRAPHICS

POPULATION

Vermont's current population is 625,741, according to the first set of data released from the 2010 Census. This represents an increase of 2.8% from the count in 2000, and more importantly, a dramatic slowing of the population growth rate compared to previous Census counts. Only six states grew more slowly than Vermont between 2000 and 2010. Vermont continues to be the second smallest state in the country, behind Wyoming.

□

Vermont Population Growth 1970 to 2010



Two Rivers-Ottawaquechee Regional Commission, 2011

FIGURE 10 - CHANGES IN VERMONT POPULATION GROWTH

The 2010 population of the East Central Vermont region was 80,707 persons, according to the latest US Census figures. We have lost 900 residents since 2003 estimates. The region's population represents about 13% of the Vermont state population.

The largest towns in the region are:	The smallest towns in the region are:
<ul style="list-style-type: none">• Hartford, population 9,952• Springfield, population 9,373• Randolph, population 4,778• Windsor, population 3,553• Norwich, population 3,414	<ul style="list-style-type: none">• Baltimore, population 244• Granville, population 298• Hancock, population 323• Andover, population 467• Pittsfield, population 546

The following chart shows changes in population by town over the last three Census cycles. Overall, East Central Vermont has more towns that have lost population between the last two Census counts (21), than towns that have gained population (19).

Town	County	1990 Total	2000 Total	2010 Total	90-00 % Change	00-10 % Change	Town	County	1990 Total	2000 Total	2010 Total	90-00 % Change	00-10 % Change
LUDLOW	Windsor	2,302	2,449	1,963	6.4	-19.8	PITTSFIELD	Rutland	389	427	546	9.8	27.9
HANCOCK	Addison	340	382	323	12.4	-15.4	VERSHIRE	Orange	560	629	730	12.3	16.1
WEST FAIRLEE	Orange	633	726	652	14.7	-10.2	NEWBURY	Orange	1,985	1,965	2,216	-1.0	12.8
POMFRET	Windsor	874	979	904	12.0	-7.7	PLYMOUTH	Windsor	440	555	619	26.1	11.5
CAVENDISH	Windsor	1,323	1,470	1,367	11.1	-7.0	STOCKBRIDGE	Windsor	618	674	736	9.1	9.2
CORINTH	Orange	1,244	1,461	1,367	17.4	-6.4	BRADFORD	Orange	2,522	2,619	2,797	3.8	6.8
ANDOVER	Windsor	373	496	467	33.0	-5.8	ROYALTON	Windsor	2,389	2,603	2,773	9.0	6.5
READING	Windsor	614	707	666	15.1	-5.8	SHARON	Windsor	1,211	1,411	1,502	16.5	6.4
WOODSTOCK	Windsor	3,212	3,232	3,048	0.6	-5.7	BROOKFIELD	Orange	1,089	1,222	1,292	12.2	5.7
WINDSOR	Windsor	3,714	3,756	3,553	1.1	-5.4	HARTLAND	Windsor	2,988	3,223	3,393	7.9	5.3
BRIDGEWATER	Windsor	895	980	936	9.5	-4.5	STRAFFORD	Orange	902	1,045	1,098	15.9	5.1
HARTFORD	Windsor	9,404	10,385	9,952	10.4	-4.2	BRAINTREE	Orange	1,174	1,194	1,246	1.7	4.4
NORWICH	Windsor	3,093	3,544	3,414	14.6	-3.7	CHESTER	Windsor	2,832	3,044	3,154	7.5	3.6
ROCHESTER	Windsor	1,181	1,171	1,139	-0.8	-2.7	SPRINGFIELD	Windsor	9,579	9,078	9,373	-5.2	3.2
BALTIMORE	Windsor	190	250	244	31.6	-2.4	BETHEL	Windsor	1,866	1,968	2,030	5.5	3.2
TUNBRIDGE	Orange	1,154	1,309	1,284	13.4	-1.9	WEST WINDSOR	Windsor	923	1,067	1,099	15.6	3.0
GRANVILLE	Addison	309	303	298	-1.9	-1.7	TOPSHAM	Orange	944	1,142	1,173	21.0	2.7
RANDOLPH	Orange	4,764	4,853	4,778	1.9	-1.5	WEATHERSFIELD	Windsor	2,674	2,788	2,825	4.3	1.3
BARNARD	Windsor	872	958	947	9.9	-1.1	FAIRLEE	Orange	883	967	977	9.5	1.0
THETFORD	Orange	2,438	2,617	2,588	7.3	-1.1							
CHELSEA	Orange	1,166	1,240	1,238	6.3	-0.2							

Two Rivers-Ottawaquechee Regional Commission, 2011

FIGURE 11 - CHANGES IN EAST CENTRAL VERMONT TOWN POPULATIONS

What is most compelling about these data is the fact that in 2000, East Central Vermont had only two towns that had lost population (Rochester and Granville). Now more than half of the towns in this region are losing residents. Another concern is that four of the five largest towns in the region have lost residents. Springfield gained 3.2% in population since 2000, nearly bringing it even with the town's population in 1990.

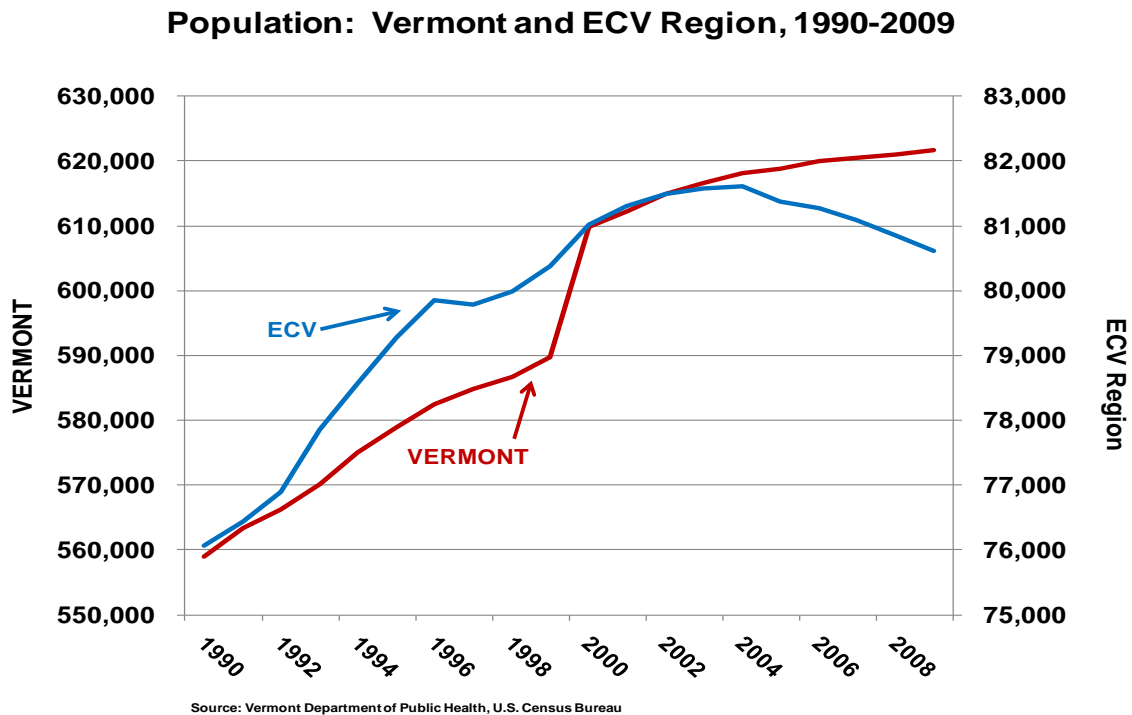
The region's population growth has been slower than the state growth rate over the last 20 years. At 0.3% per year, the regional growth rate is half the state's 0.6% per year, and about one quarter the US rate of 1.1%. KRA economists think that the current recession will limit further out-migration from the region, as the housing market will not allow home sales in anticipation of a move to other markets.

On a town level, growth rates have been generally declining since 1990. The towns of Andover, Baltimore and Plymouth are the exceptions to this trend, all showing growth at more than one percent per year. Numerous other towns had positive but declining growth rates. Several towns have seen extended negative growth rates. Springfield was the most pronounced, losing 1,000 people between 1990 and 2009, and Granville, Rochester, Windsor and Woodstock also had negative growth during this time.

The state is growing very slowly, at half the national rate, because of declining birth rates and our increasing older population. It is important to understand this because population and economic growth rate (GDP) are correlated. Vermont has almost no population growth and some GDP growth. Other states like Florida, Arizona and Nevada were building new infrastructure and houses, and they were showing high growth rates of both population and GDP until the recession started. If there is a silver lining in this for Vermont, it is that these states are suffering now while Vermont is holding slow but steady, and is ready for growth in housing, education, and infrastructure.

While population density state-wide has remained mostly the same, economic and community development officials are concerned that our slow population growth may signal the lack growth in productivity in the region and beyond.

The number of deaths in the region has been increasing slowly, while the birth rate has been falling rapidly. When apparent migration is taken into account, net population growth has become negative since 2005 (see figure below). That is, there has been net out-migration from the region since this time, versus a prolonged period of net in-migration from 1990-2005. The region's aging population and declining birth rates are issues that this CEDS will address.



Kavet, Rockler & Associates, 2010

FIGURE 12 - COMPARATIVE POPULATION GROWTH

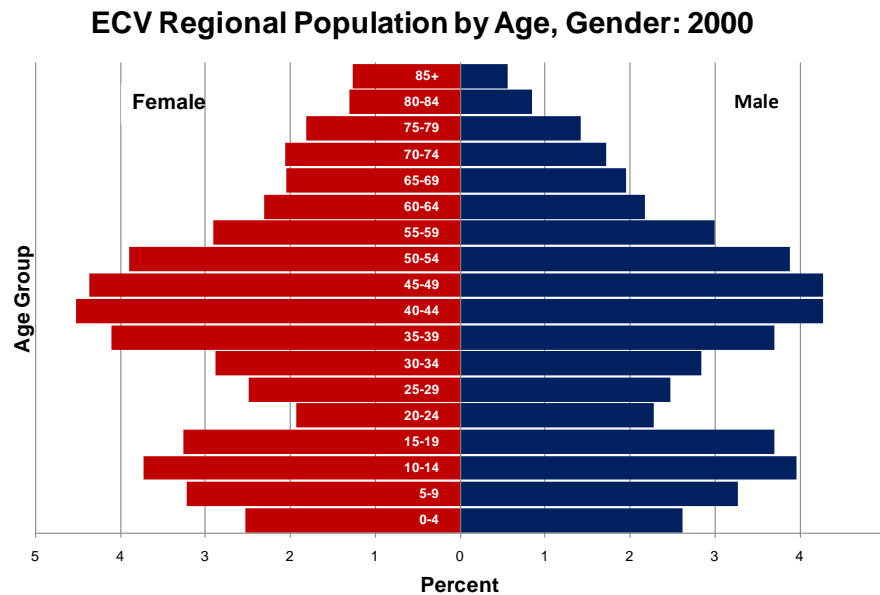
The population of the region is expected to increase slowly until 2020, according to one projection. The region should gain about 4,200 persons by 2020, a five percent growth rate. Only three towns can expect to see growth at more than one percent per year (Sharon, Topsham, and West Fairlee), and five towns in Windsor county can expect to see population declines (Rochester, Springfield, Weathersfield, Windsor, and Woodstock).

AGE AND GENDER COMPOSITION

The East Central Vermont region's population looks a lot like the population at the state level when it comes to gender. There are a similar number of men and women regionally and state-wide. Similarly, the percentage of residents between infancy and age 14 are similar to that at the state level. This is where the similarities end, and the differences described below have importance in the creation of economic development policies and programs for the region.

In general, East Central Vermont has an older population and has a lower percentage of teenagers and young adults than the rest of the state. A total of 26.9% of the region's residents are between the ages 45 and 64, versus 24.8% in Vermont. If not for the 45-64 year old group, population in Vermont would be declining. In the 65 to 85

year old range, East Central Vermont has 13.2%, while the state overall has 11.1%. On the other end of the scale, only 22% of East Central Vermont residents are between 15 and 34 years of age, while in the rest of the state this number is 25.9%. Every one percentage point difference translates to about 800 people.



Source : VT Department of Public Health

Kavet, Rockler & Associates, 2010

FIGURE 13 - REGIONAL AGE COHORTS

When the US population is broken down by gender and age as it is above, the number of people is evenly distributed among the clusters of people over the age of 40. The contrast with Vermont and especially the East Central Vermont region is significant. There is a hole in the population of people aged 15-34, more so in the age 20-24 group. Younger people are leaving the region and are not being replaced through domestic in-migration.

These facts are significant for several reasons.

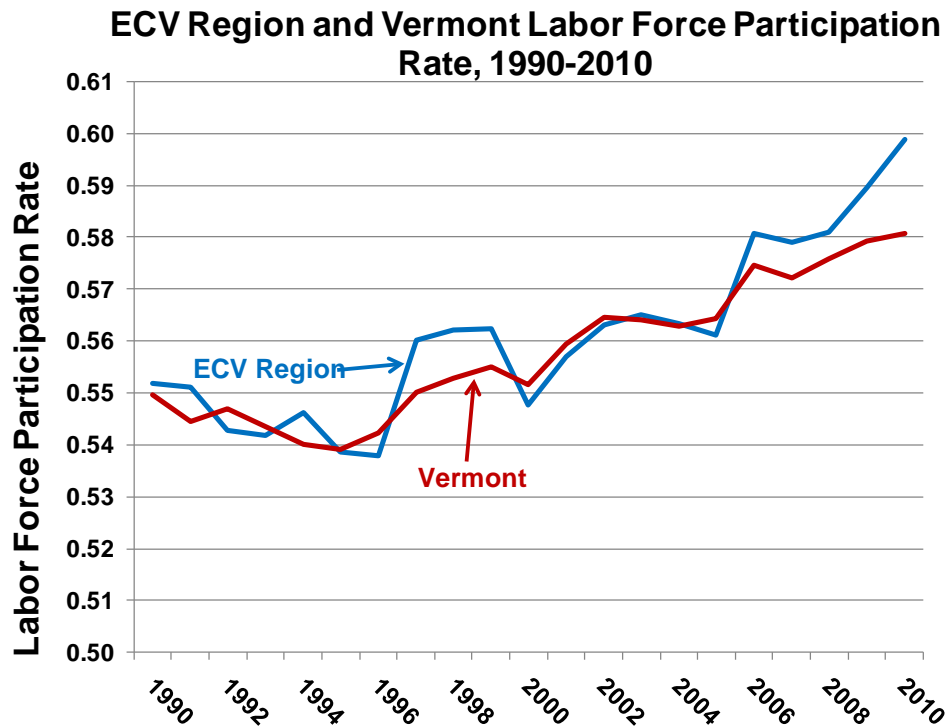
- Fewer young people means fewer young, skilled or trainable workers.
- A shortage of experienced workers could hurt the region's competitiveness, particularly in technology and other industries that rely on workers with college degrees.
- A smaller number of young individuals and more middle-aged residents means there are fewer families raising future workers here. This also signals a need for more senior support programs and services in the future for this large group of middle-aged residents.
- A larger number of retirement-aged residents means that the region must provide more health and social services without the income generating worker base to support these services. If this group of people does not retire in their 60s due to economic conditions, there will be fewer available jobs.

This CEDS will consider the impacts of these demographics in development of goals, objectives and actions related to training and education, infrastructure, finance, housing, natural resources, and land use for economic, community and workforce development.

LABOR FORCE TRENDS

WORKFORCE

The East Central Vermont region's labor force is currently 48,280, meaning that 60% of the region's population is eligible to participate in the workforce. This rate is higher than the state rate, which is of concern because in a down economy, the workforce participation rate would normally fall. Higher numbers like this likely signal a low income problem. The East Central Vermont workforce participation rate has been increasing steadily in the region since 1990, which is both typical of a rural area and a distress signal.



Kavet, Rockler & Associates, 2010

FIGURE 14 - COMPARATIVE WORKFORCE PARTICIPATION RATES

Several towns have very high participation rates, compared to others within the region. These towns are:

- Pittsfield: 75%
- Fairlee: 74%
- Hancock: 73%
- Granville: 70%
- Sharon, Baltimore, Thetford: 69%
- Hartland: 68%

At 70% participation, there is a low income problem. It's not the good news that a high number can sometimes mean. The highest rates world-wide are found in some of the poorest countries such as Mozambique, Zambia, and Angola (>75%). In advanced countries, 63% is the highest rate typically seen (Sweden). This region is like Switzerland and the UK, with participation rates at 60%, but higher than most other EU countries (<55%).

Since the Second World War, the number of people participating in the workforce has been on the rise. More women have begun working outside the home and off the farm, and with declining birth rates, there are more women available to enter the workforce. There are more two-income households, both regionally and nationally. In the 1960s and 1970s, this was viewed as a positive sign of more choices for women and improved economic conditions. Today, however, experts believe this is evidence of reduced earnings, limited job opportunities and poor wage growth, which has forced women (and others) to enter the work force so that households can meet their obligations. While it may be good news that there are employment opportunities in the region that are open to our residents, it also portends the lack of jobs providing a living wage so that more people are forced by necessity to participate.

This situation is most apparent in towns with very high unemployment. Pittsfield, Hancock, Granville, Bethel, and Stockbridge, all saw major employers close their doors in the second half of the last decade, leaving behind unemployment levels that are 50% higher than the state average (6%), coincident with high labor force participation rates.

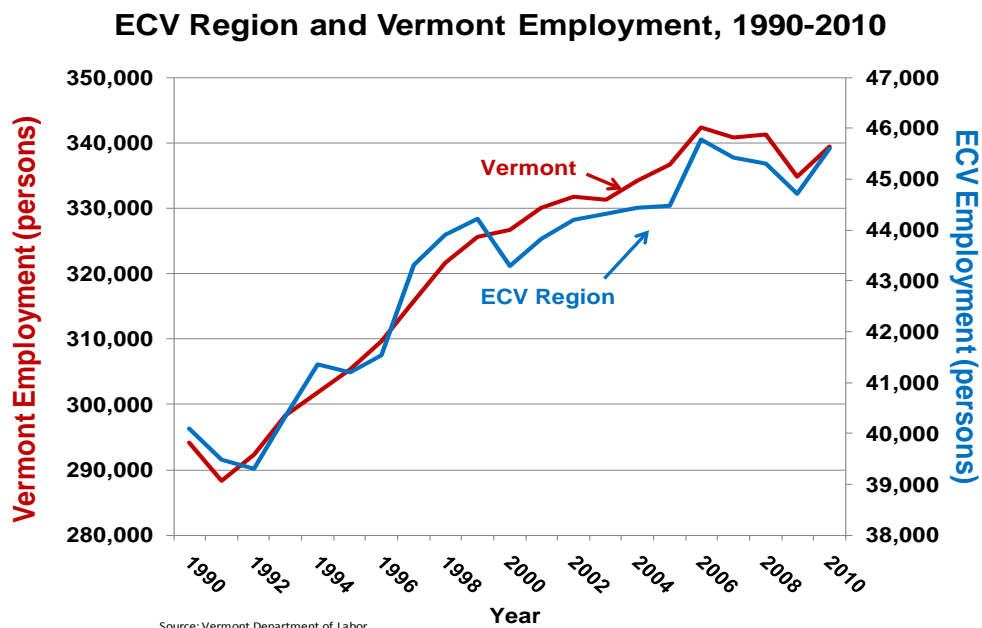
Most towns in the region saw positive labor force growth between 1990 and 2010, with the exception of Rochester and Springfield where the labor force declined slightly during this period. Both of these towns also saw population declines during these years as well as significant employment losses. With Springfield being the second largest town in the region, this is of grave importance.

EMPLOYMENT TRENDS

EMPLOYMENT

Employment has grown modestly since 1990 in East Central Vermont. Currently, 45,600 people are employed here, up from 43,300 in 2000. Of the 40 towns in this region, only Springfield experienced net job losses. Four other towns had zero percent growth, and the remainder had positive employment growth rates during the 20 year period. Overall, employment in the region follows the state-wide trend closely for 1990 to 2010.

By definition, a person is unemployed if they are more than 16 years age, available to work (that is, not institutionalized), eligible to take a job, and have been looking for work during the four weeks prior to the time at which they were surveyed by the labor department. State labor department data show that employment in the East Central Vermont region has grown at 0.7% per year over the nearly 30 year period from 1980 to 2009. This is only half of the state's employment growth rate, however. And while all towns showed a decline in employment at some point during this interval, two towns – Springfield and Windsor – showed larger losses than other towns. On the other hand, Hartford, Ludlow, Royalton and Bradford all gained employment.



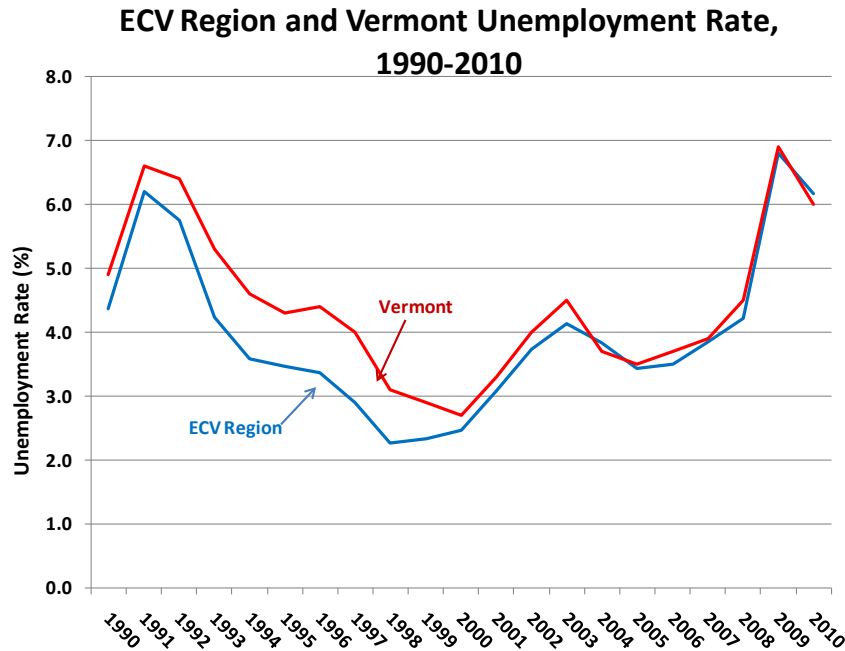
Kavet, Rockler & Associates, 2010

FIGURE 15 - REGIONAL AND STATE EMPLOYMENT

Rising employment can reflect greater numbers of job opportunities in the region, a shift toward later household formation and child bearing by women, a healthy economy that offers rewarding work, or weakened earning and lower incomes in the labor market, as demonstrated by a higher proportion of the population participating in the workforce to compensate for lower wages received. Even if the latter is true, work opportunities need to be there at all, and this does not happen during periods of economic distress. It is likely that in East Central Vermont, some portions of the regional economy are experiencing favorable work conditions and have appealing work opportunities, while others are experiencing low wage rates and weak income growth which has pushed them into work they otherwise might not do.

UNEMPLOYMENT

Unemployment in the region has been relatively low since 1990, averaging 4.0%. That said, the unemployment rate in the region has been swinging upward steadily since 1998, virtually tripling in the interim. The 2010 rate for the region (as of late in the year) stood at 6.2%, falling from the 2009 rate of 6.8%. The state's 2010 unemployment rate was 6.0%, through October. The figure below illustrates the last 20 years of unemployment history in the region and the state.



Kavet, Rockler & Associates, 2010

FIGURE 16 - UNEMPLOYMENT IN REGION AND STATE

Numerous towns have low unemployment numbers, including Baltimore, Barnard, Granville, Pomfret, Reading, Vershire, and West Fairlee. Many of these towns have high labor force participation rates. The exception to this is the Town of Plymouth which has a low unemployment rate and a very low labor force participation rate, owing to the high number of retirees there.

The US Bureau of Labor Statistics uses six measures to indicate underemployment. Taken together they are measures of the degree to which available labor resources – or human capital – are under-used. At the bottom of this underemployment scale, the number of Vermont workers who have been unemployed for 15 weeks or more tripled during the recession, from 0.9% in 2005 to 2.9% in 2009. When we add all unemployed people in Vermont to the number of discouraged workers, those who are marginally attached, and those who are employed part-time for economic reasons, the full extent of the underemployment problem can be seen. This summary measure of underemployment (U-6) is about 13%, nearly double the state unemployment rate.

U1: Unemployed (15 weeks or more):	3.0%
U2: U1 + temporary job loss:	3.9%
U3: Standard rate:	6.4%
U4: U3 + discouraged workers:	6.8%
U5: U4 + marginally attached (still in labor force):	7.6%
U6: U5 + willing to work part-time:	12.9%

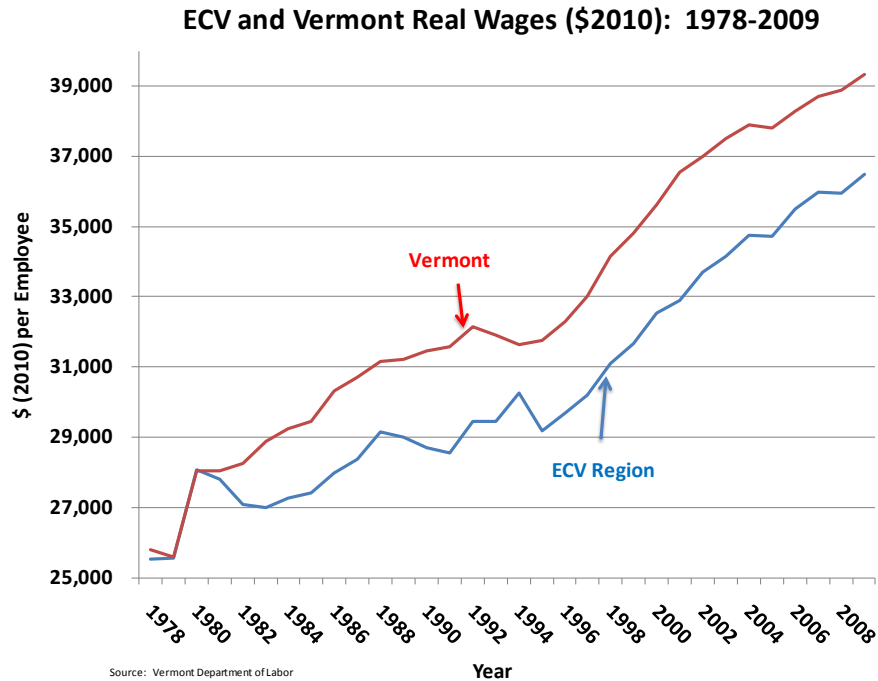
Add to this 12.9% total unemployment rate the 1.5% loss in workforce participation that has occurred in the last few years, we find that the region's real unemployment rate is 14.4%.

This is evidence that lower wages and income are putting many Vermonters in severe economic distress. While the state is 6th in the nation for unemployment, Vermont ranks 10th in underemployment, proving that the high number of discouraged job seekers and those who are not looking for jobs at all are having an impact on the state economy, and thus that of the East Central Vermont region.

WAGES

In 2009, the regional average of wage receipts was \$36,475 per employee. More than \$1.1 billion in wages were generated by businesses in the East Central Vermont region in 2009.

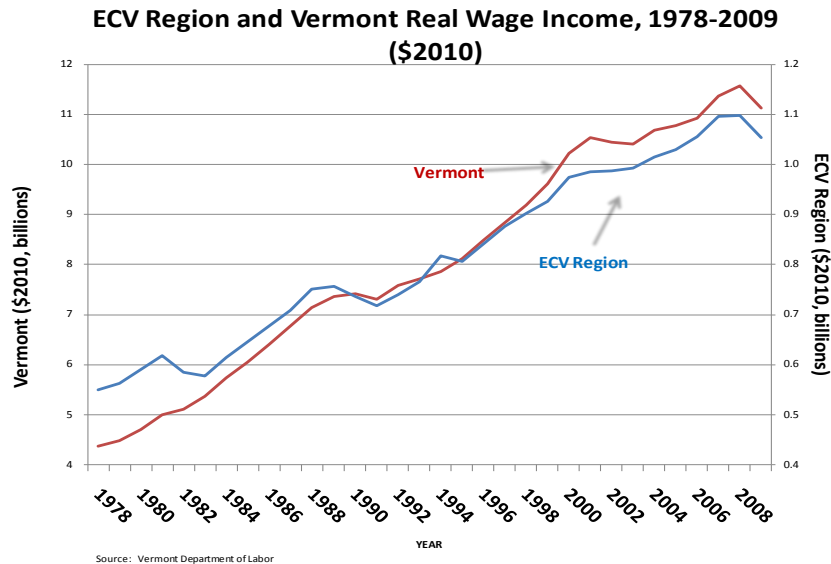
Looking at the trend in wages in the region, real wages (per worker) are an average of 10% lower than real wages at the state level. This trend began in 1980 – nearly 30 years ago – and has grown steadily since. This is significant since Vermont in general is not a high wage state, as are states like Connecticut and Maryland.



Kavet, Rockler & Associates, 2010

FIGURE 17 - COMPARISON OF REAL WAGES

The following figure shows that during the 1980-2009 period, real wages grew in this region by an average 2.0% per year, while wages in Vermont as a whole grew by an average 3%. During the initial years in this period, the East Central Vermont region had a higher wage income growth rate than the state's, but the situation reversed itself in the late 1990s. The state has maintained a higher wage income growth rate since then and it is growing larger over time.



Kavet, Rockler & Associates, 2010

FIGURE 18 - REAL WAGES, REGION AND STATE

The towns that are leading in wage income growth are the smaller towns in the region such as Corinth, Bridgewater and Brookfield. While this may be good news locally, it is another indicator of distress regionally because relatively few people benefit from it.

Springfield and two smaller towns (Hancock and West Fairlee) were the only towns that saw declines in real wage income during the 1980 to 2009 period. Up until the late 1970s, the post-Vietnam era, East Central Vermont had specialty manufacturing in Springfield and Windsor that brought with it higher wages than the state. Those jobs and wages are gone, and today the region manufactures food products that do not bring the wages and benefits that the machine tool industry did.

The anemic growth in wage rates in this region and low wages themselves are serious signs of economic distress that must be addressed in order to improve the East Central Vermont regional economy.

INCOME

Personal income is the combined measure of all sources of income, including wage and salaries, rents, transfer payments, business profits, dividends and interest. State and federal data show that total personal income in Vermont is about double adjusted gross income (AGI), and the region's AGI moves in sync with state AGI.

AGI is determined primarily by wage and salary payments. Through reviewing AGI data for the last decade, we can see that AGI grew steadily in the state and region, rising in East Central Vermont at 1.5% until 2008. At that time, AGI turned downward sharply, falling back to 2004 levels as the recession took hold, the construction and real estate industry collapsed, and the stock market sustained heavy losses.

The drop in personal income was more pronounced in the East Central Vermont region than in the state, however. It is probable that a higher proportion of AGI in the region is from non-wage income sources such as capital gains on stock and real estate, dividends, and interest, which would have been more sensitive to stock market fluctuations. This speaks to the uneven distribution of income in the East Central Vermont region, and shows that the regional economy is dependent to a degree on earnings by only a portion of the population.

For the 2000-2008 interval, per capita incomes in East Central Vermont were nearly identical to those at the state level. The median of the region's town-level AGI per capita values is in Weathersfield at \$17,000, while the lowest is in Newbury at \$12,147. Twenty nine East Central Vermont towns have per capita income values in the tens of thousands, eight are in the \$20,000 to \$30,000 range, and three towns total have higher per capita income values, which tend to distort the overall median per capita income. These data are a fitting summary of income values in East Central Vermont, where aggregate personal incomes in the vast majority of our communities are modest, in stark contrast with incomes in just a couple of towns that are quite affluent. This clash of cultures is more pronounced today than ever before, making economic progress just that much harder to achieve equitably.

POVERTY

Poverty data offer a clearer picture of income inequities. Local data are not available, but state data show a significant problem that affects the East Central Vermont region.

More than 11% of all people in Vermont live below the 2009 poverty guideline of \$21,750. While the state's total population growth rate is nearly level at 0.3% per year, the poverty rate is growing at nearly 1% per year.

The state's younger population is more impoverished than its elderly and middle aged residents. More than one quarter of all 18-24 year olds in Vermont are living below the poverty guideline, as well as 19% of the children under 6 years of age. In the 6-11 year old group, 13% are in poverty, as are 15% of 25-34 year olds.

According to American Community Survey data, among working age Vermonters (18-64), the poverty rate increased significantly in 2009, a three-year trend. The poverty rate among married couples also increased.

Vermont ranks high nationally (17th) for the portion of income paid toward housing. An estimated 38% of Vermont's mortgaged homeowners and 47% of the state's renters paid more than 30% of their incomes for housing in 2009.

School district data tell us that in 2000, 8.3% of the school aged child population in East Central Vermont was impoverished. This number rose to 10.6% by 2008. These figures are significant because these children live in families that are in poverty as well. In the school districts that include the towns of Newbury, Tunbridge, Corinth, and Topsham, poverty rates average above 15% over the 2000 to 2008 period. Other districts have seen spikes in their poverty rates during these nine years, including Braintree (up 19% since 2000), Stockbridge and Windsor (both up 10% since 2000).

While the East Central Vermont region has a lower proportion of its residents living in poverty than in Vermont as a whole, this region's numbers have been steadily rising over the last decade whereas the state numbers are level with that of 2000.

Dartmouth College has reported that:

1. Vermonters in poverty are more likely to be white and from rural areas, obviously, but are also more likely to have parents with a high school diploma or some college.
2. Since people in deep poverty often lack connection to government benefits or support systems, it is difficult to collect data on them.
3. The most effective measures to reduce deep poverty might involve programs designed to alleviate transportation costs associated with living in rural areas. These programs will likely increase productivity and lead to less poverty and increased self-sufficiency.

OCCUPATIONS

According to occupation-specific employment growth projections developed by the state, based on 2000-2006 data by place of residence, following are the leading occupations in East Central Vermont:

- Office administration and support
- Management
- Sales and related activities
- Education/training/library
- Production

Employment in these five occupational groups amounts to nearly half of the East Central Vermont region's total employment.

State employment projections for 2008 to 2018, using U.S. Bureau of Labor Statistics data, show the growth of 469 occupations that currently employ more than 50 people in the state. The total number of projected annual job openings due to growth in all occupations is 6,821. Of these annual job openings, 1,351 (20%) require post-secondary education, an associates' degree or better. The others can all be done with some amount of on-the-job training.

The 10 occupations that are projected to have the highest growth rates over the 2008 to 2018 period, according to the U.S. Bureau of Labor Statistics, are:

GROWTH OCCUPATIONS, 2008-2018, SORTED BY ANNUAL GROWTH RATE					
	Job Title	Annual Growth Rate	Annual Job Openings due to growth	Average Hourly Wage	Educational / Training Category
1	Network Systems and Data Communications Analysts	4.9%	31	\$32.11	Bachelor's degree
2	Personal and Home Care Aides	3.9%	336	\$10.32	Short-term on-the-job training
3	Home Health Aides	3.8%	60	\$12.25	Short-term on-the-job training
4	Computer Software Engineers, Applications	3.5%	36	\$35.85	Bachelor's degree
5	Computer Software Engineers, Systems Software	3.3%	27	\$40.36	Bachelor's degree
6	Geoscientists, Except Hydrologists and Geographers	3.3%	4	\$31.28	Master's degree
7	Environmental Engineers	3.3%	8	n/a	Bachelor's degree
8	Pharmacy Technicians	3.3%	22	\$13.69	Moderate-term on-the-job training
9	Medical Scientists, Except Epidemiologists	3.3%	8	\$58.10	Doctoral degree
10	Environmental Science and Protection Technicians, Including Health	3.3%	4	\$18.97	Associate degree

Two Rivers-Ottawaquechee Regional Commission, 2011. Source: Vermont Department of Labor and U.S. Bureau of Labor Statistics

Seven of these top 10 occupations require an associate's degree or better, and the jobs pay very good wages, well in excess of the minimum housing wage. The data in Figure 6 attest to the fact that Vermont colleges and universities are graduating students that have the degrees needed for these jobs. The other three occupations on this top-ten list require only on-the-job training, and the pay is not at livable-wage levels.

This diversity of growth occupations speaks to the need for a diverse range of education and training to support employment growth in some of these higher wage occupations.

In terms of jobs for some of the region's key occupations, the following data show averages of projected growth rates in these key occupational fields for the entire state from 2008 to 2018.

OCCUPATIONS BASED ON SECTOR	Projected average growth rate, 2008-2018
BUSINESS AND FINANCIAL OPERATIONS	1.2%
ARCHITECTURE AND ENGINEERING	1.1%
COMMUNITY AND SOCIAL SERVICES	1.0%
LEGAL	1.6%
EDUCATION, TRAINING, AND LIBRARY	1.1%
ARTS, DESIGN, ENTERTAINMENT, SPORTS, MEDIA	0.8%
HEALTHCARE PRACTITIONERS, TECHNICAL	1.4%
HEALTHCARE SUPPORT	1.6%
FARMING, FISHING, FORESTRY	0.9%
CONSTRUCTION AND EXTRACTION	0.9%
INSTALLATION, MAINTENANCE, REPAIR	0.7%
PRODUCTION	-0.1%
TRANSPORTATION, MATERIAL MOVING	0.4%

Two Rivers-Ottawaquechee Regional Commission, 2011. Source: Vermont Department of Labor and U.S. Bureau of Labor Statistics

FIGURE 19 - PROJECTED CHANGES, KEY OCCUPATIONS BY SECTOR

REGIONAL EMPLOYMENT STRUCTURE

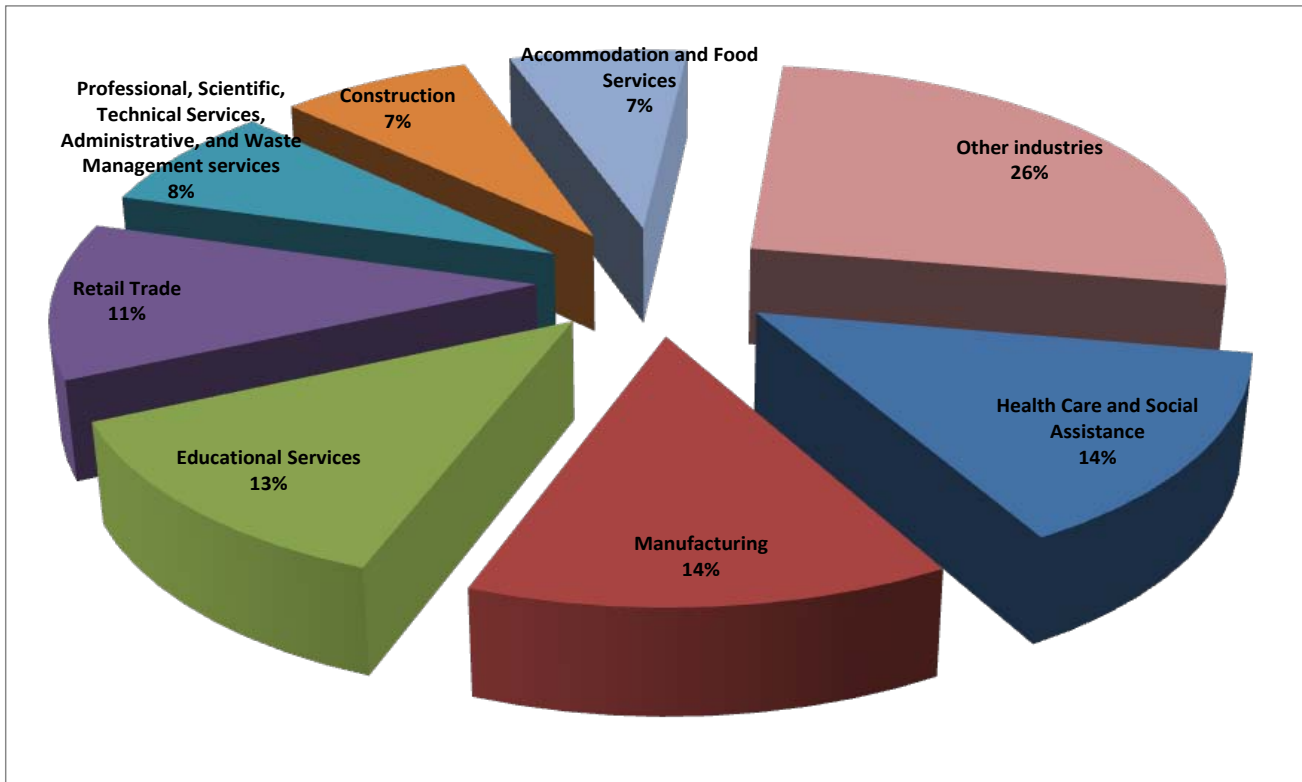
The concentration of economic activity in East Central Vermont, sorted by industry, is an indicator of the region's natural resource assets, access to markets, participation in the larger economy (state, regional, national), and investments in infrastructure and human capital.

KRA data show that there are about 34,000 people employed in the East Central Vermont region as of 2010. According to 2000 Census data, which is the most current data available at this time (and is pre-recession data), the region showed concentrated economic activity in:

- health care and social services (5,900 persons employed)
- manufacturing (5,700 persons employed)
- educational services (5,200 persons employed)
- retail trade (4,700 persons employed)
- construction (3,100 persons employed)

These industrial concentrations were similar to those at the state level at the time of the last Census.

Even though 7,100 people are employed by a large New Hampshire hospital, the East Central Vermont region has a higher proportion of people working in health care. About 28% of all private jobs in East Central Vermont are in health care, while in Grafton and Sullivan Counties, the share is 20%.



Two Rivers-Ottawaquechee Regional Commission, 2011

FIGURE 20 - CEDS REGION EMPLOYMENT

Since 2000, both the state and the region have seen dramatic changes in employment for certain industries, according to US Bureau of Labor Statistics figures. Reductions in housing construction and consumer and business spending have caused employment in manufacturing and construction to fall off sharply in the East Central Vermont region.

During the recent recession, manufacturing, information services, and construction all saw annual rates of employment decline by 6% per year and more. Furthermore, the East Central Vermont region's declines in these industries were worse than the declines in the same industries at the state level. The only industries that did not see declines in employment were agriculture (which employs only 1,500 people total in the region), professional and business services, education and health (possibly due to public funding accorded them), and public administration.

The location of major employers across the Connecticut River in New Hampshire has a profound effect on employment in East Central Vermont. These dynamics are explained by the presence of large employers in the education (Dartmouth College, employing 4,400) and health care fields (Dartmouth-Hitchcock Medical Center) in nearby Hanover and Lebanon, NH. The balance of New Hampshire jobs afforded East Central Vermont residents are primarily in retail.

According to the 2000 Census, of the approximately 41,000 employed East Central Vermont residents, 27,018 or about 65% live *and* work in the region. The remaining one third, about 14,000 people, work outside the region – 9,400 in New Hampshire (primarily in Grafton and Sullivan counties), 3,500 elsewhere in Vermont, and 900 in other areas.

There is some reciprocity between the twin states, as about 3,400 New Hampshire residents work in East Central Vermont. Another 3,200 Vermonters come to East Central Vermont to work. The net result of this exchange is that approximately 7,000 East Central Vermont residents commute to work outside the East Central Vermont region. On balance, East Central Vermont is dependent on other regions for jobs.

There are four times the number of towns in East Central Vermont with workers commuting out to work than towns with workers commuting in to work, as the following table shows.

TABLE 1 - WORKER INFLOWS AND OUTFLOWS BY TOWN

Town	worker inflow	Town	worker inflow
Woodstock	681	Hartford	256
Ludlow	582	Bradford	186
Springfield	574	Hancock	23
Randolph	263	Total	2,565

Town	worker outflow	% of population *	Town	worker outflow	% of population *
Hartland	-1,173	-38.7%	Barnard	-245	-25.6%
Weathersfield	-900	-31.5%	Reading	-220	-31.0%
Thetford	-686	-24.6%	Chelsea	-149	-12.2%
Norwich	-540	-15.4%	Royalton	-138	-5.6%
Brookfield	-481	-39.4%	Rochester	-129	-11.5%
Sharon	-453	-34.1%	Fairlee	-118	-11.8%
Tunbridge	-418	-32.2%	Plymouth	-114	-20.2%
Topsham	-389	-34.2%	Andover	-100	-18.1%
Corinth	-370	-25.5%	Granville	-96	-33.8%
Braintree	-342	-27.9%	Bethel	-92	-4.7%
Strafford	-324	-30.1%	Windsor	-76	-2.1%
Chester	-317	-10.6%	West Windsor	-59	-5.4%
Pomfret	-288	-30.1%	Pittsfield	-46	-11.1%
West Fairlee	-274	-38.0%	Cavendish	-18	-1.3%
Newbury	-268	-12.3%	Total	-9,532	

* 2009 population estimate

Two Rivers-Ottawaquechee Regional Commission, 2011

The data above show how dependant the East Central Vermont region is on other outside regions for a large share of employment. While many work at larger specialized employers in New Hampshire, others have found jobs in the adjacent towns across the river due to the strong retail and commercial presence there. A recent twin state tax study cites evidence that this is so because of the absence of sales tax in New Hampshire. Other experts suggest instead that this is due to the larger population base in New Hampshire, more than twice that of Vermont, a base that can support a more diverse retail environment and land topography that is suitable for this type of development.

Windsor and Orange Counties in Vermont, and Grafton and Sullivan Counties in New Hampshire make up the Claremont-Lebanon Combined Statistical Area.

A December, 2010 Federal Reserve Bank report described employment across New England as stable and increasing, though it remains well below 2008 levels at most firms. This translates into higher demand for workers, particularly in the information technology, medical, manufacturing, and legal fields. Labor supply is starting to tighten, according to the report, and employers are reporting increasing difficulty in finding qualified candidates, especially for high-skilled jobs. These jobs are remaining open for longer periods of time.

FIGURE 21 - LARGEST EMPLOYERS WITH NAICS

Employer	Location	# employed	NAICS	NAICS Category
Okemo Mountain Area Shop	Ludlow	750	487990	Transportation & Warehousing
VA Hospital	WRJ	700	622110	Health Care & Social Assistance
G W Plastics Inc	Bethel	410	326199	Manufacturing
Hartford School District	White River Junction	407	611110	Educational Services
Mt Ascutney Hospital	Windsor	400	622110	Health Care & Social Assistance
Springfield Hospital	Springfield	400	622110	Health Care & Social Assistance
US Post Office	White River Junction	375	491110	Transportation & Warehousing
Springfield School District	Springfield	300	611110	Educational Services
Green Mountain Container Corp	Sharon	290	322211	Manufacturing
Gifford Family Health Center	Randolph	240	622110	Health Care & Social Assistance
Jeld Wen Windows & Door	Ludlow, N. Springfield	210	321911	Manufacturing
Vermont Technical College	Randolph Center	200	611210	Educational Services
Staffing Solutions Vermont LLC	Woodstock	200	561312	Administrative, Support & Waste Management Services
Newsbank	Chester	200	511199	Information
Ethan Allen Retail Inc	Randolph	200	337122	Manufacturing
Woodstock Inn & Resort	Woodstock	190	721110	Accommodation & Food Services
Randolph School District	Randolph	180	611110	Educational Services
Windsor Central Supervisor Union	Woodstock	174	611110	Educational Services
Royalton School District	South Royalton	169	611110	Educational Services
Southern State Correctional Facility	Springfield	160	922140	Public Administration
Bloods Seafood & Catering Inc	White River Junction	150	722320	Accommodation & Food Services
Windsor School District	Windsor	147	611110	Educational Services
King Arthur Bakers Catalog Inc	Wilder	141	454113	Retail Trade
Health Care & Rehab	North Springfield	140	621420	Health Care & Social Assistance
Black River Produce	North Springfield	140	424480	Wholesale Trade
Quechee Lakes LA	Quechee	125	531210	Real Estate, Rental & Leasing
Precision Valley Communications	Springfield	125	332813	Manufacturing
Lake Morey Country Club	Fairlee	120	812990	Other Services
Mascoma Bank	WRJ	113	522110	Finance & Insurance
Town of Hartford	Hartford	100	921110	Public Administration
Simon Pearce Restaurant	Quechee	100	722110	Accommodation & Food Services
Sterling Area Services Inc	White River Junction	100	624190	Health Care & Social Assistance
Valley Vista	Bradford	100	622210	Health Care & Social Assistance

Employer	Location	# employed	NAICS	NAICS Category
A D A Traffic Control Ltd	Bridgewater	100	561611	Administrative, Support & Waste Management Services
Pompanoosuc Mills Corp	East Thetford	100	442110	Retail Trade
Anichini	Tunbridge	100	423220	Wholesale Trade

Two Rivers-Ottawaquechee Regional Commission, 2011

ECONOMIC CLUSTER ANALYSIS

Linkages between local, national, and international markets, local resources (natural and human), capital investment, entrepreneurs, and other factors and conditions allow regions to encourage the growth of particular sectors of an economy.

For many reasons, our rural location being the biggest, this is not so in East Central Vermont. This region is not urbanized, and it does not produce specialty goods or services that could be aided through co-location of competitors, information technology, and suppliers, nor that could be made more efficiently or in greater volume.

A location quotient analysis was conducted for the region by KRA, as part of their final report to the CEDS Steering Committee. The only industry cluster with any serious potential was transit and ground transportation. Other industries with moderate potential were:

- motor vehicle and parts dealers,
- gasoline stations,
- truck transportation,
- transportation support activities,
- postal service,
- educational services,
- social assistance, and
- accommodation.

Many of these clusters with moderate growth potential could complement and enhance the transit and ground transportation sector. Key supplier and customer industries have no co-located in East Central Vermont, however, with any kind of density or particular strength. Thus, there are no clusters in East Central Vermont at this time. This should be of great concern to economic, workforce and community development professionals.

Net business creation, or new business formation minus business closures, is another measure of economic performance of any region. County-level data from the Labor Department show that while both East Central Vermont and the state have been experiencing growth in the number of business establishments since the late 1970s, the region started losing more businesses than were being formed in 2005, *years before the recession began*. The state shows a downturn only after the recession kicked in hard in 2009. KRA's economists believe this reflects the effect of weakening manufacturing, construction, and real estate markets.

IV. REGIONAL ECONOMIC DEVELOPMENT POTENTIALS AND CONSTRAINTS

In order to develop an economic growth and development vision for East Central Vermont, the CEDS Strategy Committee identified relevant strengths, weaknesses, opportunities and threats unique to the region. We supplemented this list through a review of the KRA report. Goals, objectives, and priorities were developed as a result of this analysis and follow in the Strategic Plan section.

STRENGTHS

1. Infrastructure

- A. Designated Hartford Growth Center.
- B. Recent water/wastewater system upgrades in Springfield.
- C. VTel ARRA Grant/Loan will lead to expanded broadband region-wide as well as state of the art fiber in the southern part of the region.
- D. Phase 1 of ECFiber's 23 town high speed fiber-to-the-home project will be completed in 2011, demonstrating the viability of its business plan.
- E. Second largest airport in Vermont is located in region.
- F. Proximity to two interstate highways and the major cities to the region's south.
- G. Junction of two rail lines.
- H. Stimulus funding provided to upgrade rail line in East Central Vermont region, primarily benefitting freight lines.

2. Labor Force

- A. Proximity to Dartmouth provides access to highly skilled human capital in the northern portion of region.
- B. Howard Dean Education Center is a workforce training facility in the southern part of the region.
- C. Community College of Vermont and Vermont Technical College serve the entire region, offering access to training programs for high skill positions.
- D. Southern Windsor County Incubator is an existing entity to stimulate entrepreneurship, and Randolph incubator is being rebuilt.
- E. Region has three existing Workforce Investment Boards that interface with region non-profits.
- F. Bi-state regional workforce.
- G. Large population of mature, experienced workers.
- H. Currently there is a good match between jobs and population in the region.
- I. Strong network of small hospitals, especially in northern portion of region.

3. Land and Natural Resources

- A. Several existing designated downtowns and many village centers in region.
- B. Hartford has been designated as a growth center.
- C. The state's only Opportunity Zone (to date) is in the southern half of the region.
- D. Strong partnerships between Regional Planning Commissions and Regional Development Corporations.
- E. Natural beauty of region and assets such as the Connecticut and White Rivers brings success of tourism sector and makes the region a desirable place to live.
- F. Rural character of region and state support enables agriculture to succeed.

4. Support for Economic Development and Investment

- A. Existing regional economic development support system that interfaces well with businesses.
- B. Several existing state incentive programs.
- C. Vermont's scale allows for good collaboration between development and training resources.
- D. Vermont's scale allows for involvement of high level elected officials.

5. Workforce Housing

- A. Strong existing relationships between housing trusts, communities and Regional Planning Commissions allows development of partnerships.
- B. Hartford's Growth Center designation will enable development of more housing.
- C. Lower cost of middle income/workforce housing in southern half of region.

WEAKNESSES

1. Infrastructure

- A. Aging infrastructure in many communities and lack of financial capacity to maintain what currently exists.
- B. Limited bicycle/pedestrian paths in much of region.
- C. Truck access to industrial regions (in and out of region) leads through downtowns.
- D. Lack of widespread commercial aviation service in the region.
- E. Lack of broadband in significant portions of the CEDS region.

2. Labor Force

- A. Lack of human capital in southern half of region, particularly for middle/upper level positions, which could hurt the region's competitiveness.
- B. Lack of higher education resources in southern half of region for bachelors, masters degrees.
- C. Largest sector of employment is in health care and social services.
- D. Lack of private sector employment.
- E. Lack of Class A space for development.
- F. Limited incentives to compete with NH, which has no income, capital gains or sales/use tax.
- G. Lack of population growth in region, continuing trend of declining population growth.
- H. Higher than average labor force participation rate indicates lack of available jobs.
- I. Large number of highly-qualified, experienced workers competing for jobs that are not available to match their skills.
- J. Real wages per worker are lower than real wages at the state level, and this gap is growing larger over time.
- K. Specialty manufacturing and high wage jobs in Springfield and Windsor are gone.
- L. Outmigration of 19-34 year old population means few trainable young employees are available to businesses that can offer internships and starting positions.
- M. Older workers are not retiring, due to recent recession and loss of retirement savings, taking jobs that would otherwise be available.
- N. Dependency on New Hampshire side of Upper Valley for jobs, in contrast to lower wages jobs available in Vermont.
- O. Lack of statewide workforce development strategy.
- P. Poor selection of entry level professional/career jobs that pay sustainable wages, and over-abundance of low wage, dead end jobs.

Q. Poor match of degreed Vermont college graduates to jobs available.

3. Land and Natural Resources

- A. Lack of available resources in state's downtown program.
- B. Existing agriculture businesses are struggling to survive, particularly in dairy.
- C. Difficulty in growing a retail base due to sales tax being a border region.

4. Support for Economic Development and Investment

- A. No existing economic development plan for the State of Vermont.
- B. Lack of consensus, reflected in public policy, about what economic development is and the types of industries that should receive support.
- C. Lack of strong legislative support for Vermont Employment Growth Incentive program.
- D. Difficulty of existing companies in their ability to replace key employees as well as attracting new employees, especially for high skill positions.
- E. Lack of locally owned banks, more so in southern half of region.
- F. Lack of venture capital.
- G. Growing businesses and industries often hit a growth "ceiling" and require investment capital that is not available from banks or elsewhere, causing them to move out of state.

5. Workforce Housing

- A. Permitting process may make new housing construction difficult.
- B. Disproportionate share of subsidized housing in some communities in region and lack of affordable housing in others.

OPPORTUNITIES

1. Infrastructure

- A. Potential of 25 mW Biomass Facility in North Springfield.
- B. Policy support for development of renewable energy resources.
- C. Increased use/development potential of Hartness State Airport.
- D. Hartford Growth Center will lead to improved infrastructure and denser development.
- E. Use nucleus of transit and ground/passenger transportation cluster to expand complementary businesses.
- F. Possible district heating plant in Randolph.

2. Labor Force

- A. With access to Dartmouth College and Dartmouth Regional Technical Center, spin off businesses could locate in this region.
- B. Potential to expand Howard Dean Education Center.
- C. New public/private partnerships.
- D. Expansion of existing healthcare sector, including services for veterans now available in the region.
- E. Development of incubators and internships, especially in hospitals and high tech businesses.
- G. Potential to expand nucleus of transit and ground/passenger transportation industry cluster.
- H. Strong presence of artisans, due to the quality of life in this region, speaks to potential for a thriving creative economy.

3. Land and Natural Resources

- A. Strong heritage tourism potential.
- B. Potential to expand complex of skiing industry and link to recreation and amusement businesses.
- C. Farm to Plate investments can increase economic development in the region's food and farm sector and create jobs in the region's agricultural and food economy.

4. Support for Economic Development and Investment

- A. VTel's ability to run high capacity fiber (with direct connections to major northeastern markets) in southern half of region.
- B. ECFiber will issue a second public offering, creating potential to finance and deliver high speed internet to the balance of its 23 town service area.
- C. Available commercial space in southern half of region.
- D. Strengthen relationships between economic development practitioners and state government.

5. Workforce Housing

- A. Available financial resources and partners for workforce housing projects.
- B. Housing is being built by private companies for transient workers.
- C. Concern about lower school populations is creating demand for workforce housing, to counter NIMBY syndrome.

THREATS

1. Infrastructure

- A. High cost of future upgrades to infrastructure and aging systems.
- B. Potential uncertainty about future cost of energy.

2. Labor Force

- A. Aging population and workforce.
- B. Declining birth rates.

3. Land and Natural Resources

- A. Reconciling land use regulations with business development (e.g. wind towers, cell towers).
- B. NIMBY syndrome (Not-In-My-Backyard) threatens energy resource and business development.

4. Support for Economic Development and Investment

- A. Lack of consensus/support on State level for economic development
- B. Continued growth of Upper Valley on New Hampshire side of the river.

5. Workforce Housing

- A. Need for strong social infrastructure (e.g. education) to attract and sustain growth in middle and upper class housing.

- B. NIMBY syndrome threatens housing projects.
- C. Risk averse investment policies.

V. STRATEGIC PLAN

The CEDS Strategy Committee used the preceding analysis of potentials and constraints to economic development within the Region and developed the following vision, mission, and competitive advantage statements. These three key findings were instrumental in our development of the set of goals and objectives that follow. Taken together, these comprise the region's Strategic Plan, the intent of which is to provide a framework for public and private decision making. It also serves as the basis for the CEDS Action Plan that follows.

COMMUNITY AND PRIVATE SECTOR PARTICIPATION

An essential aspect of creation of this Strategic Plan was participation by community members and the private sector businesses. In Vermont, the second least populous state in the country, community matters greatly. Vermont is all about the people who live and work our land. Given this mind-set, a bottom up approach is the most effective method for achieving meaningful results, and we not only used this approach in developing this plan but aim to continue it in its implementation.

OUR VISION

It is our vision that the East Central Vermont CEDS region will have a balanced, diversified and healthy economy and environment that continues to support a high quality of life for its residents.

OUR MISSION

The mission of the East Central Vermont CEDS region is to promote a strong, diverse and competitive regional economy through public-private partnerships, with investment in public infrastructure, workforce training, and housing, while protecting the region's natural resources.

OUR COMPETITIVE ADVANTAGE

The competitive advantage of the East Central Vermont Region is that it can supply those businesses wishing to take advantage of the region's accessibility to markets in Boston, New York, Montreal and beyond, Vermont's marketing brand, superior natural environment, and high quality of life, with sufficient land, labor, transportation and housing infrastructure, and investment capital.

GOALS AND OBJECTIVES

- 1. Improve the region's public infrastructure to support and sustain a viable economy and environment.**
 - A. Support public investments and public/private partnerships to facilitate expansion of telecommunications infrastructure throughout the region.
 - B. Support water and wastewater facilities upgrades and expansions in appropriate locations.
 - C. Support public investments in roadways, transit, air, rail and bicycle and pedestrian facilities.
 - D. Encourage energy conservation and diversity, cost and supply management, and generation.

- 2. Create and retain a workforce that aligns with the strategic needs of our region's current and future employers and meets the region's economic demands.**
 - A. Work with employers, schools and other partners to identify and create workforce development, health and educational programs.
 - B. Nurture the culture of entrepreneurship, providing technical and financial support to entrepreneurs as well as new, existing and expanding businesses.
 - C. Improve the skill level of employed workers through workplace training and dialog with primary schools, post secondary schools, technical centers and colleges.
 - D. Work with region nonprofit agencies to improve access to training and employment opportunities.
 - E. Improve policies to attract and retain highly skilled human capital for housing-sustaining wage jobs.
- 3. Land use that enhances the value of our region's unique natural resources, integrating economic growth with our working landscape.**
 - A. Ensure consistency between the CEDS and adopted regional and local plans.
 - B. Encourage development in growth centers, downtowns, village centers, and commercial and industrial park for efficient public investments and for the protection of natural resources.
 - C. Support opportunities that highlight the natural, historic, cultural and recreational resources in the region.
 - D. Encourage green business development.
 - E. Promote open space protection activities that sustain the tourism-land use connection.
 - F. Preserve the nexus between land use and full-cycle agriculture, from farm to plate, linking food system development with economic, community and workforce development.
- 4. Improve the region's capacity to stimulate and sustain economic development and investment.**
 - A. Identify potential public and private funding sources that will facilitate various types of business development and enhance economic development opportunities.
 - B. Encourage opportunities to attract promising industry sectors, grow the region's emerging creative economy, and increase awareness of and access to funding and financing opportunities for food system entrepreneurs and farmers.
 - C. Improve the communication between economic development assistance providers, both in Vermont and New Hampshire, and regional businesses regarding new and existing programs.
 - D. Provide technical assistance to improve the region's economic competitiveness and promote buy local programs for the region's goods and services.
 - E. Support business clusters and industry that increases regional income, enhances regional income multiplication and improve the comparative advantage of the region's products.

- F. Support and encourage the retention and expansion of existing business in the region, emerging businesses and entrepreneurs.

5. Promote sufficient availability of adequate safe and workforce primary housing for residents of the Region, including those with special needs.

- A. Create diverse housing opportunities through public-private partnerships as well as tax and land use incentives.
- B. Encourage new initiatives to keep housing affordable and allow the development of new housing.
- C. Encourage public-private partnerships to create new housing.
- D. Provide the infrastructure necessary to support new housing within growth centers and logical extensions thereof.
- E. Balance the proximity of housing, jobs and services.

VI. ACTION PLAN

ECONOMIC DISTRESS

The following is a summary of the economic distress conditions present in East Central Vermont.

1. More than half the towns in East Central Vermont lost population since 2000, including four out of the five largest towns in the region.
 - Population growth in the East Central Vermont region is anemic. This is a possible marker of the lack growth in productivity.
2. The region's real unemployment rate is 14.4%, accounting for the recent drop in the labor force participation rate and all federal measures of unemployment, including **underemployment**.
 - An average of 60% of East Central Vermont participates in the region's workforce. This is higher than the state rate, which is of concern because it is a likely signal of a low income problem.
 - East Central Vermont is dependent on other regions for jobs. One third of the working population of East Central Vermont work outside the region.
3. Real wages (per worker) are lower than real wages at the state level, and this gap is growing larger over time.
 - While during the post-Vietnam era, East Central Vermont had higher wages than the state, this trend has reversed itself since 1980.
 - Specialty manufacturing and high wage jobs, formerly centered in Springfield and Windsor and that lifted the region above state wage rates, are gone.
4. The East Central Vermont region is experiencing negative net business creation and it lacks any industry clusters.
5. The per employee wage income rate is 6-7% lower than the state as a whole. Vermont in general is not a high wage state in general, as are Connecticut and Maryland.
 - The region's total wage income is lagging behind the state significantly, a trend that began in the late 1990s.
 - While the region's adjusted gross income level has been higher than that at the state level for some time, this is due to non-wage income such as dividend income from stocks and trust funds.
6. There is a substantial gap between wages and housing costs.
 - Land uses have changed, trending toward subdivision of agricultural and forest land that not only causes loss of habitat but also drives up the value of land and makes workforce housing increasingly unaffordable.
7. Though poverty data are not available for the East Central Vermont region specifically, 11.4% of all people in Vermont live below the 2009 poverty guideline of \$21,750.
8. Portions of East Central Vermont have very poor access to high-speed internet and limited, spotty cell phone service. Without universal high-speed internet access, the economy of our rural region will continue to suffer.
 - Workers will only migrate to East Central Vermont if there is sufficient access to telecommunications technology (cell phone coverage and internet access).
9. The disparity between significant higher education programs present in the region and the low-skill/low-wage jobs available is likely to be driving younger workers out of the state.
 - There is also a disconnect between the types of college degrees conferred and the fields in which jobs requiring advanced degrees are actually available.
 - The number of people employed in agriculture and silviculture in East Central Vermont and other natural resources-dependant occupations has decreased. This is a hardship for a region that has always relied on these occupations.

- There have been declines in tourism receipts in parts of East Central Vermont recently.
10. The East Central Vermont region is prone to natural disasters that can close businesses and interrupt commerce, in addition to the personal safety hazard they pose.

ECONOMIC DEVELOPMENT PRIORITIES

“Living where you want to” and the exceptional quality of life here are key assets in the East Central Vermont region. Many, perhaps even most Americans live where they *have* to. The East Central Vermont region, as we have demonstrated, has a high in-migration rate of highly-trained and experienced middle-aged adults. Yet without access to high speed internet and cell phone service, entrepreneurs will be hard-pressed to locate in any great numbers in East Central Vermont. Thus the first and perhaps most urgent priority in this region is to secure expanded, comprehensive 21st Century or so-called 4th Generation internet and cell phone service throughout the region.

Economic developers have an opportunity to expand on the emerging or potential clusters in East Central Vermont. Promoting one or more clusters may make a business more efficient to operate and can create some density in supporting suppliers and customers in the region. Even if sufficient density for clusters is limited by the region's rural character, this CEDS Plan supports this strategy because clusters can be beneficial to the associated businesses as well as to the health of the regional economy as a whole.

Given the history of this region, always strong in railroads, it is possible that rail travel and transportation are prospective key components of an expanded transit and ground transportation sector. Further, federal stimulus funding was recently awarded here to modernize miles of track feeding into the region. To the extent that the East Central Vermont region can expand on a nucleus of manufactured products, we are in an excellent position to be able to distribute them on our existing transportation infrastructure in an energy efficient capacity without additional investment. East Central Vermont is the crossroads of the northeast and we should amplify this message in regional and national markets.

Economic developers should assist the growth of sectors that have been both traditionally strong here – such as precision manufacturing, education, and value-added agriculture and other natural resources based industries – as well as burgeoning technology-based sectors driven by graduates of Dartmouth College, Vermont Technical College, and others. We should also cultivate recreation-based businesses, adding to the region's historically strong complex of winter skiing businesses. We can further develop the education cluster by encouraging spin-off businesses to locate in the region, near Dartmouth College and other post-secondary schools.

Last but certainly not least, East Central Vermont economic developers must formulate a skill shed analysis to align the skills of workers with the needs of employers. This should be a collaborative effort among WIBs, employers, and educational institutions, including regional technical centers, aimed at tailoring the workforce development system to our regional strengths and opportunities.

REGIONAL PROJECTS, PROGRAMS AND ACTIVITIES

The nuts and bolts of the East Central Vermont Economic Development Action Plan are two project lists: Conceptual Projects and Priority Projects. These lists were created in order to reduce economic distress specific to this region, respond to documented regional needs, benefit one or more communities in the region, and to embrace opportunities before us and others that may emerge. Projects on the Conceptual Projects List are consistent with the East Central Vermont region's goals and objectives and are suggested to help address economic development weaknesses and threats while leveraging opportunities and strengths. Projects on the Priority Projects Lists that follows have met a higher threshold for inclusion in the CEDS and are viewed as keys to success. Criteria for each list are discussed below.

CONCEPTUAL PROJECTS

The conceptual projects, programs and activities listed in Table 2 below were identified due to their potential:

- Financial feasibility;
- Relation to economic development and opportunity;
- Relation to CEDS Plan Goals; and
- Potential eligibility for economic and community development funding.

TABLE 2 - CONCEPTUAL PROJECTS LIST

Infrastructure
1. Improve the condition of railroad track and bridge deficiencies between Bellows Falls and Rutland.
2. Redevelop the South Main Street rail yard site in White River Junction.
3. Expand and redevelop the rail spur in Chester Depot.
4. Construct Park & Ride Facilities at Exits 1 and 3 of I-89.
5. Expand the Exit 7, 9, and 16 Park & Ride facilities on I-91.
6. Construct a Park & Ride facility in White River Junction near the I-89/I-91 interchange.
7. Develop new Park & Ride facilities in Fairlee and Norwich (Exits 13 and 15) on I-91.
8. Build Mount Ascutney water and sewer infrastructure to allow community development.
9. Extend the sewer line along Route 66 in Randolph.
10. Expand infrastructure per "Beanville Study" in Randolph (add sewer, water & storm water service).
11. Build community water and sewer systems to allow economic growth in Hartland Three and Four Corners, Sharon, East Thetford.
12. Upgrade water and wastewater lines in Hartford to allow business expansion.
13. Develop a downtown White River Junction parking lot.
14. Implement White River Junction Revitalization Capital Improvement Projects.
15. Develop biomass energy facility in southern Windsor County and in Orange County.
16. Develop a biodiesel production facility in the Region.
17. Construct downtown wood chip power/heat generating stations in Randolph.
18. Build a meat processing facility in East Central Vermont region.
19. Install high speed, last mile communications infrastructure throughout the Region.

20. Improve sidewalks to promote economic activity in East Randolph, Norwich, Fairlee, Ascutney Village

Labor Force

1. Create a Southern Windsor County Business Incubator.
2. Promote opportunities for educational advancement of professionals in high-wage occupations.

Land and Natural Resources

1. Improve bicycle accessibility along Route 4 and Route 5 in the Town of Hartford.
2. Redevelop the Goodyear property and the riverfront in Windsor.
3. Clean up and redevelop former Brownfield sites in White River Junction, Windsor, and Bradford.

Support for Economic Development and Investment

1. Develop state property near former prison in Windsor.
2. Redevelop the East End area of Woodstock.
3. Develop a region-wide revolving loan fund.
4. Support the four-season expansion at Okemo and Ascutney Mountain resorts.
5. Develop Branchwood site in Randolph to include light commercial, industrial & retail.
6. Conduct an economic redevelopment study for Fairlee's downtown.
7. Support the redevelopment of the North Springfield Industrial Park.
8. Redevelop the Granville Bowl Mill and the Pittsfield Stanley Tools buildings.

Workforce Housing

1. Redevelop the Post Mills mill property for housing and commercial.
2. Redevelop Prospect Street in White River Junction for commercial and residential use; clean-up Brownfield property.
3. Support the development of an assisted living center in Bradford.
4. Develop scattered-site senior housing and small scale sewer systems in Strafford and Thetford.
5. Develop elderly housing in Fairlee, Thetford, Strafford, and/or West Fairlee.

PRIORITY PROJECTS

The following is a list of priority projects, programs, and activities that can be implemented over the next five years (to 2016) to address the region's greatest needs or that will best enhance the East Central Vermont region's competitiveness. This list, as well as the Conceptual Projects List above, is current as of the writing of this CEDS and will be updated annually. Priority projects offer the opportunity to help the region foster effective transportation access, protect the environment, support workforce development, expand access to technology, or implement smart growth. Included is the source of funding for each project and the organization(s) with responsibility for each project.

A project is included as a priority if:

1. It is on the Conceptual Project List or is clearly supported by the CEDS Plan goals.
2. It has strong local support and momentum.
3. It is supported by the policies in adopted local and regional plans adopted pursuant to 24 V.S.A.
4. It is conceptually designed.
5. It has a funding strategy in place or another identified funding stream.
6. Individual RDC and/or RPC Boards have discussed the project.
7. It meets EDA investment criteria:
 - a. The project is market-based and results-driven
 - b. The project has strong organizational leadership
 - c. The project advances productivity, innovation and entrepreneurship
 - d. The project looks beyond the immediate economic horizon, anticipates economic changes, and diversifies the local and regional economy
 - e. The project demonstrates a high degree of commitment by exhibiting:
 - High levels of local-government or nonprofit matching funds and private-sector leverage
 - Clear and unified leadership and support by local elected officials
 - Strong cooperation between the business sector, relevant regional partners, and local, state, and federal governments

TABLE 3 - PRIORITY PROJECTS

<i>Project (location)</i>	<i>Description</i>	<i>Promoter Organization(s)</i>	<i>Cost</i>	<i>Source of Funding</i>
Bradford Sewer Line Extension (Bradford)	Extend sewer infrastructure from downtown Bradford to the Pierson Industrial Park (2.2 miles) to provide for existing and future development.	Town of Bradford, TRORC, GMEDC	\$2.9 million	Town, USDA Rural Development
Cedar Hill Expansion (Windsor)	Phased expansion of senior care facility to include memory care, assisted and independent living facilities.	Windsor Improvement Corporation	\$20 million	Private, Federal
Hancock Plywood Mill Redevelopment (Hancock)	Carry out engineering, marketing and business development plans necessary to redevelop the former Hancock Plywood Mill.	TRORC, Town of Hancock, GMEDC	\$1 million	USDA Rural Development, EDA,

Project (location)	Description	Promoter Organization(s)	Cost	Source of Funding
				private
High Speed, Last Mile Communications Infrastructure (region-wide)	Extending broadband communications services throughout the region, allowing development of rural small businesses and facilitating telecommuting in rural communities.	Vermont Telecommunications Authority, VTel, EC Fiber, SoverNet	\$40 million	Private, State
Jones and Lamson Plant Redevelopment (Springfield)	Redevelop 12.6 acres for industrial use at the former Jones and Lamson site in Springfield. Partially demolish the existing 270,000 sq ft building and conduct environmental site clean-up.	SRDC	\$7.3 million	State, Fed, local
North Springfield Sustainable Energy Project (North Springfield)	Construct 25 mW wood-to-energy facility that will produce electricity and steam for potential heating and cooling use by tenants of existing Industrial Park.	SRDC	\$150 Million	Private, State, Federal
Railroad Row Improvements (White River Junction)	Continuation of phased improvements along Railroad Row - street, streetscape, riverwalk, parking, railroad crossing and train depot gateway improvements.	Town, State, Railroad, Hartford Development Corporation	\$4.5 million	FHWA, State, Town, Railroad, Private
Salisbury Square Affordable Housing Project (Randolph)	Reclaim the former Ethan Allen site to construct 37 units of affordable housing.	Randolph Area Community Development Corporation, TRORC	\$5 million	State, Fed
Windsor Depot Park - Rails to the Riverfront project (Windsor)	Incubator and small business support center to be located within the revitalization site in downtown Windsor. Revitalize former railroad property and improve this key underutilized gateway of the community. Traffic generated by the project will be able to access the site from Route 5, limiting impact on small, downtown streets.	Windsor Improvement Corporation	\$4 million	VCDP, VEDA, EPA, FHWA, Private

COORDINATION WITH OTHER ECONOMIC DEVELOPMENT ORGANIZATIONS

Inherent in the day-to-day activities of the four regional organizations forming the core of the East Central Vermont CEDS Committee, is interaction with many state agencies, land trusts, planning boards, selectboards, chambers of commerce, businesses, transportation boards and many other organizations and civic groups. This ongoing interaction happens in several ways.

First, regional planning commissions have ongoing contracts with many state agencies including the Agency of Commerce & Community Development (ACCD), Agency of Transportation (VTrans), and the Agency of Natural Resources (ANR). Work programs with these agencies are developed cooperatively, considering the needs of the region as well as statewide interests. Through project work, meetings and progress reports there is extensive interaction and teamwork towards addressing state and local interests. The Regional Planning Commissions' role as a liaison between localities and the state has been successful in ensuring that local concerns are heard.

Regional Development Corporations have similar relationships with businesses, towns, educational institutions, state agencies and financiers. They are contracted by the State Department of Economic, Housing and Community Development to deliver business retention and expansion programs and other services to the region. Furthermore, while seeking to attract and retain suitable industries, businesses and labor force, RDCs interact with groups of different interests and needs. These relationships provide a detailed knowledge of the opportunities, threats, priorities, and needs of the region.

Since the core of the CEDS Steering Committee is comprised of these two groups, their interactions will provide the foundation of the Committee's relationship with major economic development players. As the Committee diversifies and identifies additional resources and issues, they will develop new associations to deal with the needs of their constituents.

RELATION TO STATEWIDE ECONOMIC DEVELOPMENT PRIORITIES

Economic development planning was transferred in 2006 from the Vermont Economic Progress Council to the Commission on the Future of Economic Development. In 2008, the state legislature directed the Commission to develop specific economic development goals and the result was the 2009 Report Economic vitality, security and opportunity for all Vermonters. This report urges that Vermont develop a "unified economic development plan" (page 3) and that these goals become the basis for economic development planning in the future. The goals are:

- Vermont's businesses, educators, non-governmental organizations and government form a collaborative partnership that results in a highly skilled multi-generational workforce to support and enhance business vitality and individual prosperity.
- Vermont invests in its digital, physical, and human infrastructure as the foundation for all economic development.
- Vermont state government takes advantage of its small scale to create nimble, efficient and effective policies and regulations that support business growth and the economic prosperity of all Vermonters.
- Vermont leverages its brand and scale to encourage a diverse economy that reflects and capitalizes on our rural character, entrepreneurial people and reputation for environmental quality.

These goals are entirely consistent with the goals and objectives of the East Central Vermont CEDS Plan.

VII. EVALUATION

The East Central Vermont CEDS Plan will be evaluated annually to assist the CEDS Board and EDA in understanding the effectiveness of the CEDS Plan itself and our efforts to implement it, toward our ultimate goal of achieving our economic development priorities. The Steering Committee's staff will use the performance measures listed below to complete an annual evaluation of this CEDS Plan and an analysis of the region in attaining our economic development priorities and goals: infrastructure, labor force, land and natural resources, support for economic development and investment, and housing. We will measure success in implementing each of the regional goals in both qualitative and quantitative terms where possible. Various state, federal, and regional data sources will be used, together with input from each of the CEDS partners.

MEASURES OF SUCCESS

The CEDS Strategy Committee will use the performance measures listed below to evaluate development *and* implementation of this CEDS Plan, adjusting the CEDS Plan annually as needed:

1. Priority projects started, permitted, or successfully completed.
2. Increases in areas served by broadband internet and expanded information technology infrastructure.
3. Growth in sectors that have been traditionally strong as well as those in emerging sectors in East Central Vermont, such as manufacturing, technology, education, value-added agriculture, forestry, and other natural resources based industries.
4. Number of Business Continuity plans developed for businesses at risk of interruption due to natural disasters.
5. Improvements to physical infrastructure such as water, sewer, and roads.
6. Changes in the economic environment of the region (such as lending practices).
7. Increased and diversified participation in the CEDS.
8. Workforce Investment Board (WIB) activities and programs tailored to our regional strengths and opportunities.
9. Evidence of heightened awareness of the need for affordable and workforce housing, i.e. discussions of issue by regional organizations, presence on planning commission agendas.
10. Zoning changes to provide for more opportunity for housing.
11. Planning activity aimed at fostering economic development in built up or developed areas, growth centers, and/or business and industrial parks.
12. Changes in other quantitative measures traditionally used to measure success of a CEDS Plan, such as:
 - Number of jobs created and retained in the region since implementation of the CEDS.
 - Number, types and amount of private sector investment in the region after implementation of the CEDS.
 - Dollars invested in infrastructure in downtown areas and growth centers.
 - Dollars invested in infrastructure in industrial parks.
 - Number of daycare centers.

- Average annual wages.
- Employment growth.
- Unemployment or underemployment rates.
- Number of employees trained in the Industrial Job Training Program.
- Changes in educational attainment.
- Distribution of covered employment across major NAICS industry groups.
- Number of Vermont businesses assisted.
- Number of Vermont businesses assisted with financing.
- Public transit services, park-and-ride lots, and ridesharing programs designed to improve linkage between available housing/land and jobs.
- Number of Vermont-based sponsors of Upper Valley Housing Coalition.
- Improvements in the financial ability of housing trusts.
- Number of housing units added that are affordable to low/moderate income families.

VIII. APPENDIX A

ANALYSIS OF THE ECONOMIC AND DEMOGRAPHIC CHARACTERISTICS OF THE EAST CENTRAL VERMONT REGION

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December 31, 2010