

VERMONT ECONOMIC OUTLOOK

Executive Summary

- This NEEP¹ forecast for the Vermont economy calls for a continuation of the current economic upturn through calendar year 2018. While geopolitical instability in the Middle East and Eastern Europe remains a concern, at this point it does not reach the level of threatening the current economic expansion-recovery.
 - Seasonally adjusted payroll job data from the Vermont Department of Labor through July 2014 indicate that the State has added a total of 1,300 payroll jobs since last December—a 0.4% rate of increase. Throughout calendar year 2014, month-to-month data show the uneven character of month-to-month job changes. Through July, there have been no two consecutive months of seasonally adjusted job increases or declines across the entire calendar year.
- The data also show that Vermont’s labor market recovery from the “Great Recession” is nearly complete. Through July, the State has re-captured 12,700 jobs (or 86.4%) of the 14,700 jobs the State lost during the downturn—despite the well-publicized job reductions at the State’s largest private employer IBM.
 - As this forecast update is completed, Vermont is competing with the other states in the New England region to be the second fastest state in the region to complete its labor market recovery (following the lead of the state of Massachusetts).
 - There is no doubt that, but for the 410 layoffs at IBM over the mid-2012 to mid-2013 period, the State by now would have easily completed its labor market recovery and numerically re-captured all of the employment ground lost during the last recession.
- State economic activity going forward will be underpinned by the general rising tide of the U.S. economy, and the ability of the State’s businesses to fill their niches in the local, regional, national and global market places.
 - The Moody’s Analytics national forecast calls from a strengthening in U.S. economic activity across calendar year 2014 and into calendar years 2015 and 2016. Economic activity in calendar year 2017 and 2018 is expected to continue to increase, but fall back somewhat as the current business cycle ages further. Even though U.S. output and job growth are expected to slow significantly in calendar year 2018, the forward momentum gained through the current economic upturn is expected to continue to overcome these restraining factors.
 - For Vermont, forward progress will be found across all but two of the State’s broad employment categories—the exceptions being the Information Sector and the Government Sector.
 - Job gains in the goods-producing sector will be paced by the construction sector and food manufacturing sector. The forecast also expects that job growth in the trade, transportation, and utilities sector will be slowed by the closure of the Vermont Yankee nuclear power plant located in Vernon.

¹ NEEP refers to the New England Economic Partnership.

- Repairs and restoration activity related to the aftermath of Tropical Storm Irene continue to assist in providing some forward momentum continue through calendar year 2015—as storm recovery activity continues, but tails off through the initial stages of the current forecast update period.
- Compared to last fall’s NEEP forecast, the revised NEEP outlook is again mixed—with slightly lower near-term activity forecasted for calendar years 2014 and 2015 and somewhat higher activity levels forecasted for calendar years 2016 and 2017 versus the NEEP forecast last fall.
 - The forecast once again expects that the pace of economic activity will pick up to more typical rates of increase after dealing with the near-term effects of the transitory factors that underpinned the economic “speed bump” that occurred during the first half of calendar year 2014.
- Improvement in the state’s unemployment rate will continue in the near term but flatten over the forecast period, but will occur at a slower pace than either the U.S. or New England regional economies. As mentioned in previous NEEP outlooks, this reflects Vermont’s significantly lower rate of unemployment to begin with, and the state’s aging demographic profile.
 - The average annual unemployment rate in Vermont is expected to drop by 1.2 percentage points over the calendar year 2013-2018 forecast period, declining to an average annual rate of 3.2% for calendar year 2018.
- The conference theme of this NEEP outlook update concerns the economic development challenges and opportunities for the New England states as we look to the future.
 - Vermont, like her New England sister states, has many of the same economic development advantages and challenges. Chief among the state’s challenges is Vermont’s remote and northern location, its aging population, its higher than average energy costs, its relative lack of available investment capital, and its reputation (whether deserved or undeserved) as a higher than average taxed state in what is viewed as a relatively higher taxed New England region. It is also evident that Vermont is a state with geographic disparities, and this offers a particular challenge to state economic development policy makers.
 - In terms of economic development advantages, the state enjoys the advantage of a well-educated work force, strong commitment to K-12 education, a well-developed telecommunications system covering nearly all of the state, small-accessible size that makes business entry, networking, and government officials “accessible,” low crime rates, a reputation for high quality natural and recreation amenities, and a strong brand identity for certain types of products and services.
- Vermont’s collective economic development effort is executed by the State Agency of Commerce and Community Development in cooperation with roughly a dozen regional economic development corporations (of varying sophistication in terms of their services), other partners such as VEDA and the Vermont Technology Council, a system of regional marketing organizations and chambers of commerce, and municipal development departments throughout the state.

- The state recently completed a U.S. Economic Development Administration-funded Comprehensive Economic Development Strategy (CEDS) effort designed to better coordinate the efforts of the Agency of Commerce and Community Development and its partners under one umbrella strategy and to allow the state to more effectively compete for federal infrastructure and other economic development dollars.
 - Although it is Vermont’s first statewide CEDS effort, it is the fourth statewide economic development strategy since 1997.
 - The CEDS is part of an effort to become more strategic and to unify current, sometimes widely divergent efforts under the same strategy umbrella.
 - The CEDS process had broad support from a number of stakeholders involved in economic development. The broad input process hopefully has resulted in the type of Buy-in needed for full and complete efforts implementation. Only time will tell if this latest effort to leverage federal infrastructure and other dollars in the aftermath of Tropical Storm Irene will ultimately be successful.

Review of Recent U.S. Economic Developments: Although U.S. output growth hit a speed bump during the first half of calendar year 2014, national economic fundamentals continue to look relatively strong. Following a surprising 2.1% decline in U.S. GDP² during the first quarter of calendar year 2014—output growth rebounded to increase at a 4.2% annualized rate during the second quarter, reinforcing the view that the first quarter decline was more an aberration than the start of a trend.³ In the labor market, total nonfarm payroll jobs averaged just north of 225,000 new jobs per month over the first half of calendar 2014, a noticeably stronger pace of month-to-month job increases versus the same time period in 2013. In fact, payroll job additions through August in the U.S. economy have been enough to push the total job increase so far during the recovery from the “Great Recession” to more than 9 million jobs.⁴ The unemployment rate also has fallen significantly over the recovery to 6.1% in August, representing an improvement of just over 1.0 percentage points during the past year. Moreover, despite the sharp decline in GDP during the first quarter of calendar 2014, recent indicators on spending and production suggest that growth has rebounded.

Activity in the housing sector, however, bears close watching. Since the end of the “Great Recession,” housing has made little forward progress after the initial flush of activity tied to investor activity. Most of the slowdown in housing activity over the past year appears tied to last year’s increase in mortgage interest rates and a lack of new household formation in the age categories that typically correspond to first time home-buyers.⁵ Housing market activity so far in calendar year 2014 has continued to be disappointing overall, and it is difficult to imagine the U.S. economy shifting into a higher gear without the full participation of the housing sector.

² GDP refers to Gross Domestic Product.

³ Many of the factors that led to the first quarter decline in GDP looked either temporary (e.g. due to the weather) or due to faulty preliminary assumptions (e.g. in health care services).

⁴ Where the labor market recovery from the “Great Recession” was recently completed. However, it should be noted that the full labor market recovery is only true in terms of the number of jobs only. Early on in the labor market recovery, there was a widely reported difference in the quality of jobs recovered versus those lost during the downturn. While reports indicate the quality of the jobs added recently have improved, the overall track record of the labor market recovery from the “Great Recession” is one of lower quality new jobs replacing the higher quality jobs lost during the downturn.

⁵ Which, in some respects, may be tied to the recent increases in student loan debt.

While there has in fact been good—albeit it slow—forward progress in the national economy since the end of the “Great Recession,” the U.S. economy continues to operate below potential. The unemployment rate still remains above the level associated with long run full employment. Labor force participation is still below normal—and has shown a disquieting declining trend in recent times that exceeds what would be expected by an aging population. Those indicators are among those that point to the still significant amount of slack that remains in labor markets today. This slack is underpinning the on-going slow pace of increase in key measures of hourly compensation that have characterized the current recovery to-date.

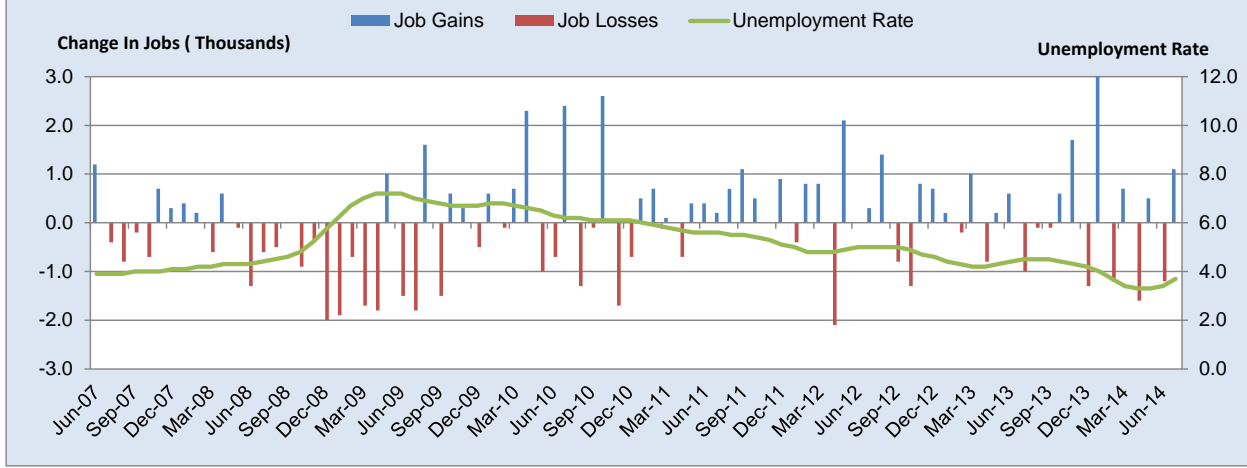
The other side of the double-edged sword associated with the slower than expected forward recovery progress is that the inflation rate remains low—and is apparently a “non-factor” in the economic and monetary policy formulation process. Although the inflation rate has pinged up somewhat higher in recent months, it still remains below the 2.0% level—which is the reported long term inflation target of Federal Reserve policy makers. Pressures in food and energy prices have pushed the Personal Consumption Expenditures (PCE) price index up to around 2.0% over the first half of calendar year 2014. The total core inflation rate, a price increase measure that excludes food and energy prices, is expected to increase by less than 2.0% for all of calendar year 2014. Those types of price increases are indicative of an economy that still has a way to go before reaching a level of activity that could be considered healthy and “normal,” at least in terms of price changes

Review of Recent Vermont Economic Developments: In Vermont, the state’s continued low unemployment rate (which has ticked up slightly in recent months to 3.7% in July—but is down from 4.5% a year ago on a seasonally adjusted basis)—continues to track as the lowest in the New England region and among the lowest states (e.g. tied for second lowest in July among the 50 states) in the U.S. as a whole. The Vermont Department of Labor (VDOL) in mid-August also reported a seasonally adjusted job increase of 1,100 jobs in July from the revised June labor market data—continuing a one month up-one month down, or “see-saw” pattern to seasonally adjusted month-to-month job changes in the state.

Overall since the end of last calendar year (2013), month-to-month seasonally adjusted nonfarm payroll job changes in Vermont have essentially moved sideways. The data show that Vermont has added 1,300 payroll jobs since last December—corresponding to a 0.4% rate of seasonally-adjusted job additions. The data through the month of July also continued the trend of alternating months of seasonally adjusted employment increases or declines—with no two consecutive months of seasonally adjusted job gains or losses across the entire 2014 calendar year to-date (see below).

Vermont Jobs-Unemployment (S.A.), June 2007 - July 2014

Source: U.S. Bureau of Labor Statistics; Boston Federal Reserve Bank



Looking at the labor market recovery to-date from the “Great Recession” in Vermont, the data show that the State has re-captured 12,700 jobs, or 86.4% of the 14,700 jobs the State lost during the downturn. Vermont is competing in this area with the other states in the New England region to be the second state to make a full labor market recovery (following the lead of the state of Massachusetts). No doubt, but for the 410 layoffs at IBM over the mid-calendar year 2012 to mid-calendar year 2013 period, the State by now would have very likely re-captured all of the employment ground lost during the last recession.

The year-over-year job change numbers for July 2014 show a similar up and down character reflecting the saw-toothed pattern described above. Vermont’s best year-over-year performance is found in the construction sector with job additions on a year-over-year basis of +5.8%. That performance corresponded to Vermont’s ranking in the highest U.S. (at 12th—along with the government sector at +1.1% year-over-year and 12th nationally) and its highest England ranking (1st—again along with the government sector), and reflected the significant volume of construction projects in the Northeast Kingdom region and in Northwest Vermont. Financial activities at +2.4% year-over-year through July 2014 (ranking Vermont 13th in the U.S. and 2nd in New England) and professional and business services at +2.2% (ranking Vermont 31st in the U.S. and 4th in New England) round out the employment categories making significant gains in July 2014. Among the other categories, the leisure and hospitality sector (at +0.9% year-over-year change—ranking the sector at 44th nationally and 6th in New England) and the education and health services sector (at +0.5% year-over-year—ranking the sector 46th nationally and 5th in the New England region) round out the larger employment sectors.

The weakest year-over-year job changes have come in the information sector (at -10.6% in July of 2014 versus July of 2013) and the manufacturing sector (at -0.3% in July of 2014 versus July of 2013). This is not surprising given the state’s factory sector has had to deal with two significant layoffs at IBM over the last 18 months in this category.

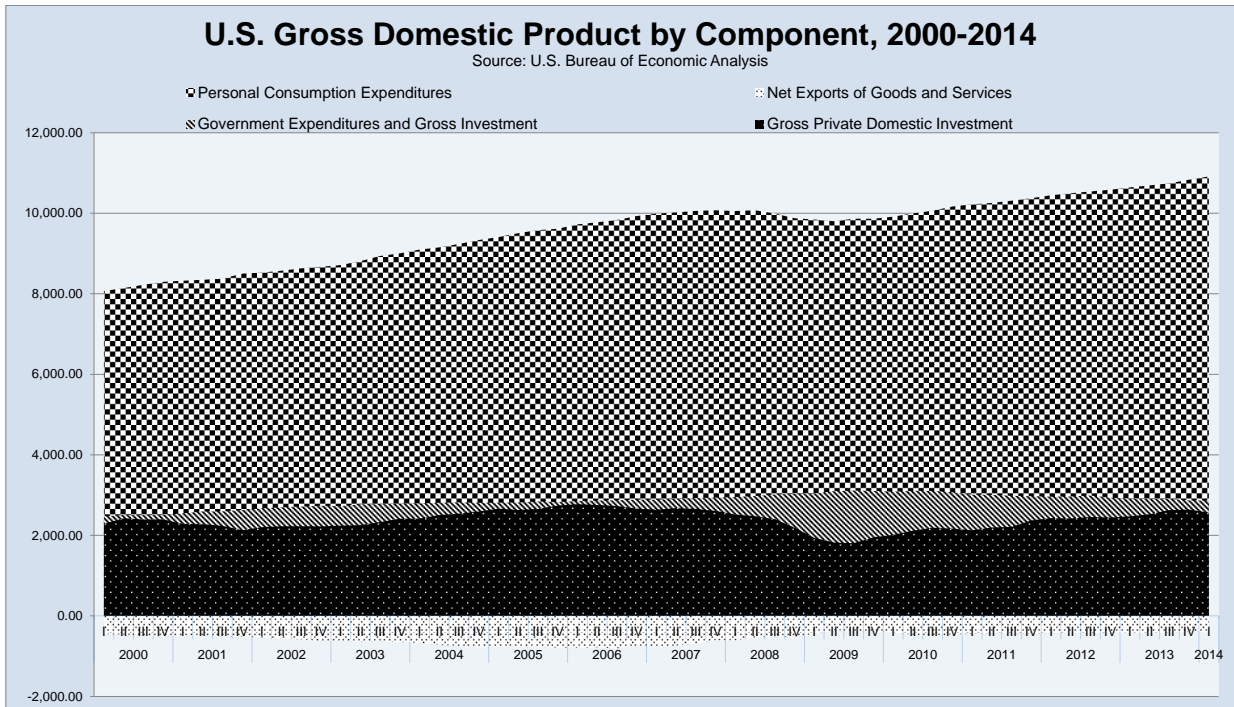
However, looking only at year-over-year job changes can sometimes be misleading since they emphasize only recent job labor market developments. Looking back at the job change numbers of the last three years indicate that progress toward a labor market recovery is still being made in the Vermont economy, with many of the same sectors that have been flat or down over the last year

actually experiencing modest job gains over the longer three-year time horizon. Since July of 2011, the Vermont economy has added 7,600 nonfarm payroll jobs overall—including 6,800 private sector nonfarm payroll jobs—corresponding to growth rates of 2.5% and 2.8%, respectively. This is consistent with a Vermont labor market that: (1) did not lose as many jobs as its national or New England regional counterparts did during the “Great Recession,” and (2) made more significant recovery earlier in the labor market recovery process than was the case nationally and in many other states.

Overview of Key Factors Impacting the Short-Term Economic Outlook: Even though the economy appears to possess the underlying fundamentals to move forward on a somewhat higher performance plane, there remain a number of factors that will shape the pace and profile of the economy’s continued forward progress—at least over the short-term. Some of these factors have been generally supportive of the economic recovery-upturn, while others have exerted a drag. Some are short-term factors, while some others appear to be more secular, or long-term, in nature. These factors include the following:

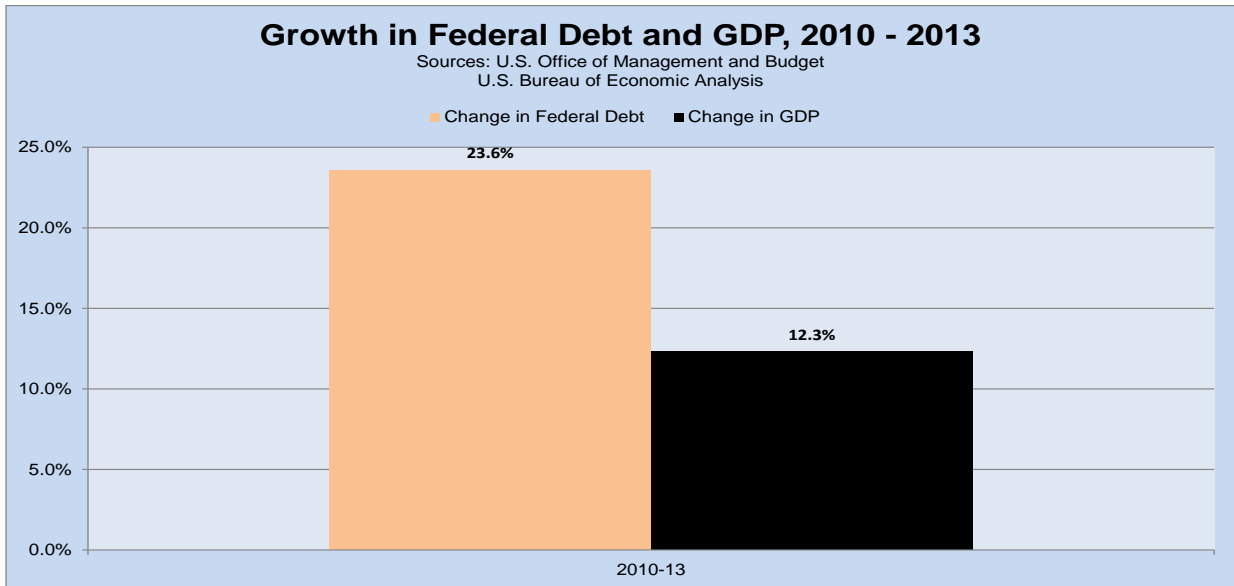
- (1) Whether or not the Fed will be successful in unwinding its Quantitative Easing (or “QE”) policy in an orderly way (at least as it impacts the changing sources of demand and future inflation-interest rate levels),
- (2) Whether or not the current pause in the fiscal policy acrimony and uncertainty in Washington will continue after the November elections, and how any on-going uncertainty will impact the federal budget deficit, the upcoming debt ceiling debate, and the still rising federal debt,
- (3) Whether or not the on-going plight of the long-term unemployed and the underemployed will impact economic performance through restraining household income growth and consumption behavior,
- (4) Whether or not the still fledgling housing market recovery will find its stride after the pull-back in investor activity and the absence of first-time homebuyers as mortgage interest rates have risen, and
- (5) The improving, but still fragile level of household and business confidence, which so far during this upturn has acted to restrain a more typical business and household response to the improving—but still historically restrained—recovery/expansion.

Regarding the first, there is some disagreement among analysts regarding the effectiveness of the federal stimulus program and what the Federal Reserve has done on the monetary policy front to help keep interest rates low to encourage a turnaround in housing markets and the overall economy. Labeled as “quantitative easing” or “QE,” these policies along with the federal fiscal stimulus policies from have underpinned the evolving factors-forces supporting economic activity. Regardless of where any analyst stands on the above fiscal and monetary policy matters, the sources of final demand underpinning GDP growth have changed and continue to evolve since 2000—with the support provided by fiscal and monetary policy ebbing in recent years. For the near-term economic outlook, it appears it will be up to the business sector and individuals to carry the “economic ball” farther down the field as the public sector’s support provided through deficit spending further wanes and monetary policy begins to eventually “tighten” as the Federal Reserve’s QE program ends.

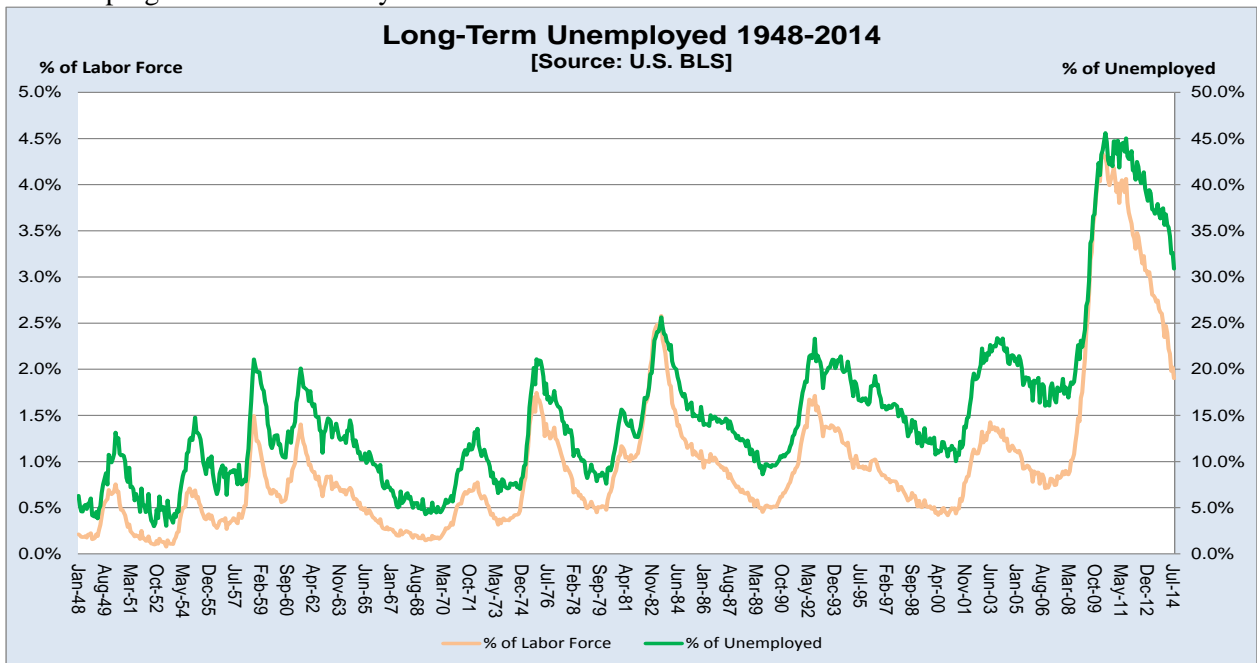


Regarding the second, the current lull in what could be termed “manufactured fiscal crises in Washington” has come as a welcome development. However, the data show the federal debt is still increasing even as the deficit has begun to narrow. This increase in the national debt comes on top of the already significant growth in the federal debt that has occurred just over the 2010 to 2013 period. Over the calendar year 2010 to 2013 period, the federal debt increased at a rate roughly two times as fast as the increase in output over the same period.

This dynamic is likely to continue to produce tension in the execution of national fiscal policy. The tension will rise around budget and appropriations discussions and it will almost certainly affect future debates around the U.S. debt ceiling. While this tension is not expected to be expansion-threatening, it could act to keep a somewhat dark cloud of concern about the negative consequences of past fiscal stalemates hanging over the near term economic outlook.

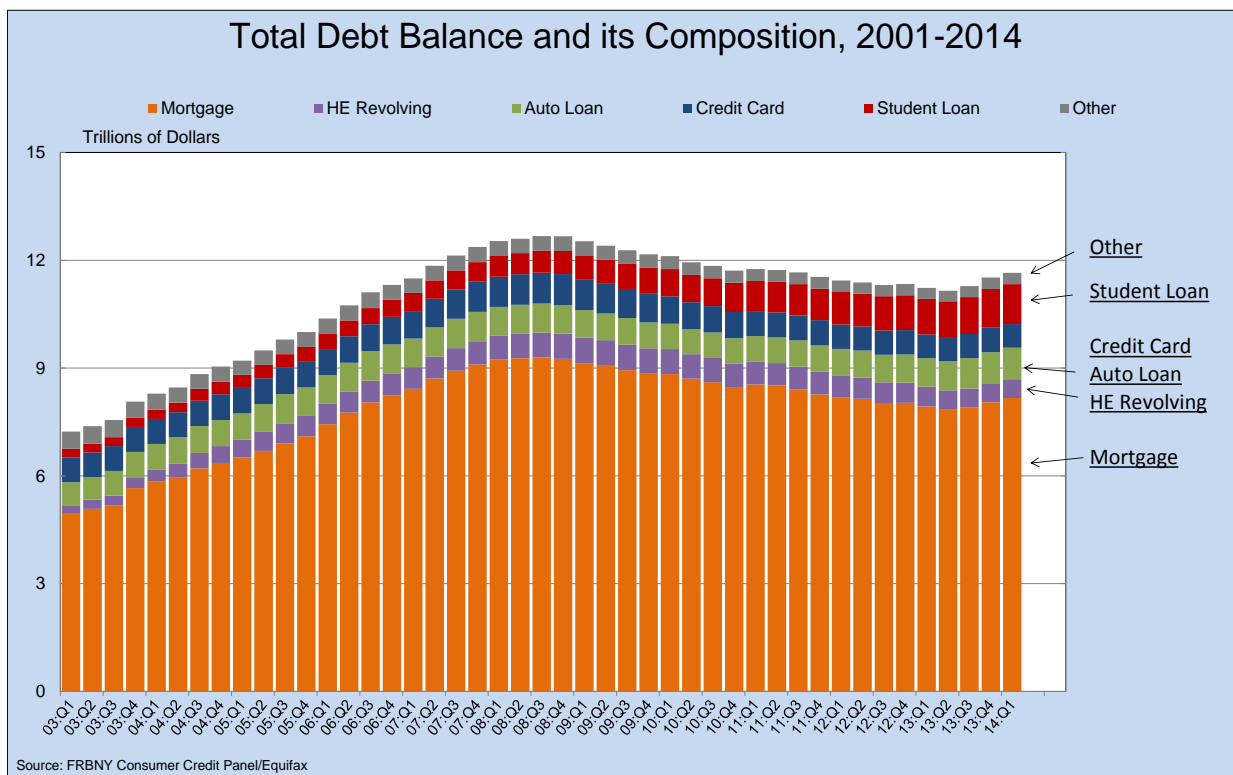


Regarding the third, the number of long-term unemployed has been and continues to be a drag on the pace of the labor market recovery—even though it has recently been improving. The percentage of long-term unemployed remains very high by historical standards (at roughly third of the total number of unemployed or nearly 3.1 million) relative to this point in the any past U.S. economic recovery-expansion dating all of the way back to World War II.⁶ Since consumption drives the U.S. economy, the large number of long-term unemployed and the chronic nature of their unemployment tenure threatened to slow consumption activity to the detriment of continued forward progress in the economy.



⁶ The closest prior recovery-expansion experience was the roughly 25% figure associated with the early 1980s recession-recovery. That recession-recovery-expansion was similar in that the 1981-82 recession had financial sector underpinnings as the Fed tried to wring inflation out of the U.S. economy and financial system by increasing short-term and long-term interest rates.

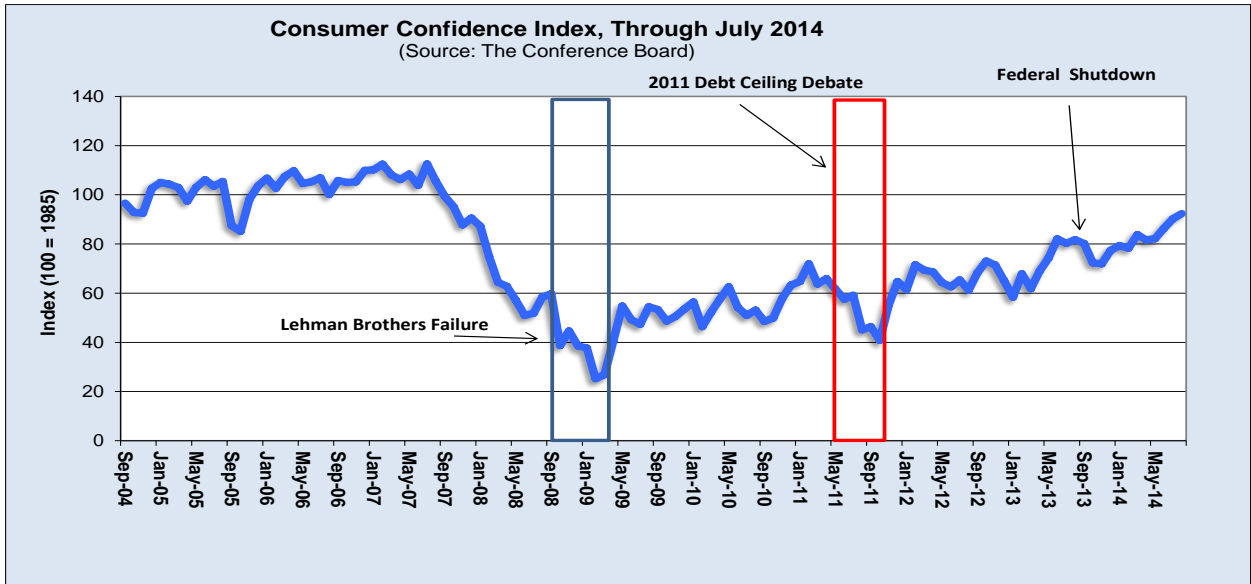
Regarding the fourth, it is difficult to envision a “typical pace and character” to the U.S. upturn without a normalizing in U.S. housing market activity. At this point, the first time buyer component appears to be lagging in the aftermath of last year’s increase in mortgage interest rates and the slowdown in investor-induced housing activity. At least part of the reason underpinning the sluggish first time homebuyer component of the housing market is the unprecedented level of student debt outstanding which has grown to roughly \$1.1 trillion—or to account for about 1/8 of the level of total mortgage debt outstanding. Student debt outstanding in 2014 exceeds the total amount of credit card debt or auto revolving credit, and is now impacting even the upper age categories. This situation has become a significant negative both for the health and performance of the housing sector and for future consumption activity that is important to future GDP and job



growth.

Regarding the fifth and last key factor that is impacting the economy, even as the negative psychological effects of the “Great Recession” are now fading, there are still lingering fears that maybe the current upturn is not really sustainable even though we are more than four years “beyond the bottom.” That still fragile level of confidence in the current upturn—in combination with the other factors listed above—appear significant enough to negatively affect current and future consumption (from households), current and future business investment and hiring (by businesses), and current and future investment (by investors) going forward. This negative psychology manifests itself by periodic retreats in the various equity market indices at the first sight of something negative in either the current economic environment and/or in the current unsettled geopolitical situation (e.g. in places like the Middle East and the Ukraine). In some respects, it seems as though analysts, regarding anything positive that is reported about the U.S. economy, are intentionally looking for why it could not possibly be so. It seems as though this anxiety will not dissipate unless or until there is a plethora of unequivocal positive evidence to

once and for all rebut all the “analytic negativism” that currently seems common in analytical publications.



Given the above, there is a considerable amount of uncertainty surrounding any forecast of economic recovery-growth for any time horizon. While the forecast risks appear to generally be evenly balanced at this point in the current economic cycle, it is unusual for forecast risks to not have significant upside—for this point in the economic cycle. This is at least in part attributable to the factors mentioned above which in many ways appear to be establishing a “new normal” for the economy. At the minimum, these factors and the ever present forecast risks warrant close monitoring over the upcoming months.

The Moody's Analytics National Economic Forecast Assumptions

The economic outlook for Vermont for the calendar years 2013–2018 period is based on a comprehensive national economic outlook assembled by Moody's Analytics, a respected national economic forecasting firm. The statistics in the Moody's Analytics economic forecast in Table 1 (below) reflect this underlying national economic forecast as completed in August 2014. This forecast includes the expectation that "firmer" consumer spending, job creation, and business investment will boost the underlying pace of U.S. GDP growth over the forecast period, aided by an expected revival in U.S. housing markets (driven by favorable demographics). In addition, the Moody's Analytics' national forecast expects national economic growth will also be aided by a subsiding fiscal drag—with the federal government's deficit stabilizing and the fiscal condition of state and local governments gradually improving. Moody's identifies political and military conflicts overseas as the largest threats to the economic outlook. However, Moody's notes that the U.S.' position as a safe haven for assets will help cushion the effects of any overseas disruptions. Overall, the forecast calls for the continuation of the rebound in economic activity from the first quarter of calendar year 2014 "hiccup." Calendar year 2014 in total is expected to post a moderate 2.1% rate of increase, followed by a more robust but still historically restrained pace of output growth for the U.S. economy of 3.5% in calendar year 2015 and 3.3% in calendar year 2016. For the 2013-18 time frame as a whole, U.S. GDP growth is expected to average 2.7% per year.

The Moody's Analytics national outlook for U.S. labor markets predicts an annual average increase in payroll jobs of 1.8% in calendar year 2014, averaging a total of 1.7% per year over the 2013 through 2018 forecast period. The U.S. unemployment rate, which is expected to average 6.3% in calendar year 2014, is expected to improve significantly over the forecast update period. By calendar year 2018, the U.S. unemployment rate is expected to average 5.1% for all of calendar year 2018. That would represent a 2.2 percentage point decline in the U.S. unemployment rate over the forecast period to a level last experienced prior to the "Great Recession."

Consumer prices, as measured by the Consumer Price Index (CPI), are expected in the Moody's Analytics forecast to increase by 1.9% in calendar year 2014, rising modestly to increase at a rate of 2.2% in calendar year 2015. Consumer prices are then expected to continue to inflate at a rate above 2.0% for the remainder of the forecast horizon. The Moody's Analytics forecast for monetary policy expects a "graceful exit" from QE by the Federal Reserve, with a tightening of monetary policy and therefore an increase in interest rates expected to commence in calendar year 2015 as the U.S. unemployment rate slips below 6.0% in the fourth quarter of calendar year 2014.

The Vermont Economic Outlook

The Vermont near-term economic outlook, which is based on the Moody's Analytics' national forecast as described above (and reflected in Table 1 below), assumes a Vermont economy that will follow a path similar to that of the U.S. economy's through the calendar year 2014-2018 period. A review of the State's major macro variables under the revised NEEP forecast includes the expectation that current economic upturn will continue through 2018 in: (1) real output (as measured by Gross State Product or GSP), (2) inflation-adjusted or real personal income, and (3) in the labor market. It is also expected that the pace of recovery-expansion will continue to be moderate. As mentioned in previous NEEP outlook revisions, the more moderate rate of recovery-expansion in Vermont is the result of the less than average declines in output, income, and jobs that the State experienced during the "Great Recession"—that is, in comparison to its U.S. and New England counterparts.

For Vermont's key macro variables, the calendar year 2014-2018 forecast update for Vermont

expects an annualized 2.4% increase in output for all of calendar year 2014. Calendar year 2015's output is then expected to follow a more typical 3.9% annual rate of increase. For calendar year 2016, GSP growth is expected to pull back, increasing at a 3.0% annual rate, followed by a 2.3% GSP growth rate in calendar year 2017 and a 1.8% in calendar year 2018. The forecast reflects an anticipated slowing in GSP growth over the back end of the forecast period as the U.S. economy slows due to the maturing economic cycle. The rate of payroll job growth is expected to be 1.2% in calendar year 2014, followed by increases of 2.0% in calendar year 2015 and 1.9% in calendar year 2016. The rate of payroll job additions is expected to fall back to 1.5% in calendar year 2017 and 0.9% in calendar year 2018—again as the U.S. economic growth/recovery slows. Even so, payroll job growth is expected to average 1.5% per year over the calendar year 2013-18 period—a healthy uptick versus the -0.1% average for the calendar year 2008-13 period covering the timeline of the last recession, and the 0.5% annual rate of change over the calendar year 2003 to 2008 time period.

Nominal dollar personal income is expected to have a performance similar to GSP and employment growth, posting the strongest rates of growth during the initial years of the forecast horizon then tapering off during the out-years of the forecast as the other macro variables are expected to do. For calendar years 2014 through 2016, nominal dollar personal income growth is expected to increase by more than 4.0% per year. After calendar year 2016, nominal dollar personal income is expected to increase by more restrained rates of 3.1% in calendar year 2017 and 2.3% in calendar year 2018. The final two years of the forecast horizon show this metric perform consistently with the other macro variables discussed above. The state's unemployment rate is expected to continue in its current position as lowest in New England (as it has for the last 3 years) and to perform consistently superior to U.S. unemployment rate (the State's unemployment rate has ranked it second lowest in the U.S. in recent times) throughout the calendar year 2014–2018 forecast timeline. The Federal Housing Finance Agency (FHFA) Housing Price Index for Vermont is also expected to post a more modest and restrained rate of increase over the forecast update period than in previous analyses, reflecting the mid-2013 slowdown and the outright decline in housing prices during the first quarter of calendar year 2014, where the index declined by 1.8% in Vermont versus the first quarter of calendar year 2013. During 2014:Q1, only five states in the country experienced a housing price decline (three other states in New England also experienced a FHFA housing price decline (including Connecticut, Maine and Rhode Island). Although these data are often revised (and since sales volume is typically very low during the Winter, revisions can, at times, be substantial), this was not a price change reading that would ordinarily be thought of as supportive of typical levels of residential construction activity.⁷

While the Vermont economy is not expected to establish any new records for output, job, and income growth robustness over the 2014-2018 forecast period, the revised forecast calls for the continuation of very “tight” labor market conditions and for a modest recovery in housing prices in the Vermont housing market. The state's annual average unemployment rate is expected to fall through the entire calendar year 2014-2018 forecast update period. For calendar year 2014, the State unemployment rate is expected to average 3.5%—down roughly 0.8 percentage points versus the annual average for calendar year 2013. Over the calendar year 2015 through 2018 time line, the unemployment rate is expected to decline to an annual average rate of 3.2% by calendar year

⁷ This has in fact been the case. Residential construction activity which was started during the 12 month period ending in June 2014 totaled approximately \$290 million. That total was up by 25% from the 12 months ending in June of 2013, but stood more than 60% below the prior peak level in March 2006 of \$697 million in spending. Nonresidential construction, which has benefitted from both strong commercial and public building starts in the past 12 months, in June of 2014 exceeded residential construction by \$100 million. That represented the largest differential in these two building types ever recorded in the F.W. Dodge construction expenditures statistics for such a period.

2018—corresponding to a forecasted 1.2 percentage point decline in the unemployment rate over the period. If the updated forecast as presented is in fact met, the forecast would result in an average annual Vermont unemployment rate during calendar year 2018 that will be 1.9 percentage points below the U.S. annual average unemployment rate and 1.7 points below the New England annual average unemployment rate in that year.

For the revised forecast, positive job gains are expected in seven of the state's eight private-sector NAICS supersectors.⁸ Outside the private sector, the government NAICS supersector is not expected to add jobs overall during the forecast period. The forecasted job gains in the manufacturing NAICS supersector is due to the food sector (including Keurig Green Mountain, Ben & Jerry's, Vermont Hard Cider, King Arthur Flour, and plethora of craft brewers⁹ and specialty food manufacturers that characterize that part of the state's factory sector), and is predicated on no significantly adverse developments at the state's largest private sector manufacturing employer IBM.¹⁰ The rumored sale of IBM's Microelectronics Division has been discussed on and off since last spring, with rumor after rumor discussed in the financial press and by key players in the union that represents a significant share of the IBM workers. Most recently, discussions have again re-surfaced as this write-up "goes to press" regarding the "on again-off again" discussions with Global Foundries being back on again. The last time negotiations broke down this past summer, the reported transfer of roughly \$1.0 billion in cash in terms of a payment that would be made by IBM to Global Foundries to take over IBM's fabrication facilities was not enough to reach agreement. Should the long-rumored sale actually go through (which certainly is possible at press time), it is likely that the forecast for the state's manufacturing supersector will very likely need to be re-evaluated.

Among the notable gaining sectors are the construction sector (at a +4.5% per year over the calendar year 2013-2018 period) and the leisure and hospitality sector (at +2.7% per year over the calendar year 2013-2018 period). Activity in the construction sector continues to be bolstered by repairs and restoration activity related to the aftermath of Tropical Storm Irene. Expenditures on Irene-related repairs are expected to contribute some forward momentum through calendar year 2015 but will tail off after the initial stages of the forecast update period. The impacts of the Tropical Storm Irene recovery efforts in this sector are clearly illustrated by the small year-over-year decline in Construction jobs in calendar year 2013. Following the peak of this recovery-related construction activity in 2011 and 2012 was a retrenchment during 2013.

Other positive performances over the forecast period are also expected in the professional and business services sector (at a +2.5% annual average over the calendar year 2013-2018 period) and the education and health sector (at a +1.8% annual average over the calendar year 2013-2018 period). One NAICS supersector that remains slightly positive (at +1.1% per year over the calendar year 2013-2018 time period), but lower than it would otherwise be, is the trade, transportation, and Utilities super sector. This supersector's job performance would have been somewhat higher but for the expected loss of high paying jobs associated with the closure of the Vermont Yankee electric generating facility. While it is expected that a number of jobs would be needed post-closure, those jobs' pay levels will be lower than the plant workers that they will partially replace.

⁸ NAICS means North American Industry Classification System. Labor data reported by the Bureau of Labor Statistics is classified by NAICS sector. Public and private reporting agencies follow this paradigm.

⁹ Including Magic Hat Brewery, well-known brands such as Long Trail and Switchback, and some of the world's best microbreweries such as Trapp Lager, Hill Farmstead, Lawson's, and The Alchemist.

¹⁰ During the late summer, IBM has had "Help Wanted" signs posted on its corporate signposts at each of its street entrances).

With respect to the State’s housing market recovery, the revised NEEP forecast expects the gradual recovery in activity, and prices will continue over the forecast period. Improvement in sales and construction activity in the Vermont housing market will be made at a historically restrained pace—at least early on in the forecast period. Housing prices, as measured by the FHFA Price Index, are expected to build some momentum beginning in calendar year 2015 (after an “up and down” calendar year 2014 which is expected to see an increase of only 0.4 percent versus calendar year 2013). Beyond calendar year 2014, the forecast calls for prices to realize the following schedule of annual increases: a 1.7% increase in calendar year 2015, 2.9% increase in calendar year 2016, a 3.6% increase in calendar year 2017, culminating in a 5.1% increase in calendar year 2018. While the Vermont housing price performance has generally been superior to the U.S. and New England averages over the calendar year 2008 to calendar year 2012 time frame, the more restrained housing price growth in Vermont over the calendar year 2014 through 2018 time frame (including the first quarter decline in calendar year 2014) is expected given the fact that Vermont housing prices as measured by the FHFA index did not experience nearly the rate of housing price decline as what was experienced by many other states, as well as relative to the New England and U.S. averages during the depth of the housing market recession.

Table 1: Forecast Comparison: U.S., New England, and Vermont
Forecast Comparison: United States, New England, and Vermont (November 2014 NEEP Forecast) [1]

	Actual					Forecast				
	2009	2010	2011 [2]	2012 [2]	2013 [2]	2014	2015	2016	2017	2018
Real Output (\$2000-% Change)										
U.S. Gross Domestic Product	-2.8	2.5	1.6	2.3	2.2	2.1	3.5	3.3	2.7	2.1
N.E. Gross Domestic Product	-2.9	2.4	0.9	1.6	1.3	1.7	2.9	2.7	2.5	2.2
Vermont Gross State Product	-2.5	4.4	2.2	1.0	1.9	2.4	3.9	3.0	2.3	1.8
Non-Farm Payroll Jobs (% Change)										
U.S.	-4.3	-0.7	1.2	1.7	1.7	1.8	2.4	2.4	1.3	0.5
New England	-3.6	-0.2	1.0	1.3	1.1	1.3	1.5	1.7	1.1	0.4
Vermont	-3.3	0.3	0.8	1.3	0.5	1.2	2.0	1.9	1.5	0.9
Inflation-Adjusted Personal Income %Change (2000 Dollars)										
U.S.	-2.7	1.1	3.7	3.3	0.8	3.0	3.7	3.9	3.0	2.5
New England	-2.0	1.3	3.0	1.7	1.2	2.4	3.3	3.7	2.7	1.7
Vermont	-1.4	0.0	4.6	1.8	1.8	2.6	1.4	1.3	0.4	0.0
Unemployment (Percent)										
U.S.	9.3	9.6	8.9	8.1	7.3	6.3	5.7	5.6	5.3	5.1
New England	8.1	8.5	7.8	7.2	7.1	6.0	5.7	5.5	5.1	4.9
Vermont	6.9	6.4	5.6	4.9	4.4	3.5	3.5	3.5	3.3	3.2
FHFA Housing Price Index [3]										
U.S.	-5.5	-4.0	-3.7	-0.1	4.1	4.8	3.3	2.1	3.1	3.4
New England	-4.9	-2.8	-2.3	-0.9	1.2	3.0	4.0	2.8	2.1	3.3
Vermont	-2.1	-1.2	-0.6	0.5	0.2	0.4	1.7	2.9	3.6	5.1

Notes:

[1] U.S. data reflect the Moody’s Analytics Baseline Forecast for August 2014.

[2] 2012 and 2013 variables are subject to further revision, and 2014 through 2018 values in this table reflect projected data as of October 2014.

[3] FHFA refers to the Federal Housing Finance Agency (formerly the Office of Federal Housing and Enterprise Oversight).

Sources: Moody’s Analytics (U.S.), New England Economic Partnership Forecast October 2014 Update (U.S., New England, Vermont)

NEEP Fall 2014 Conference Theme: Challenges and Opportunities in Economic Development

The conference theme of this NEEP outlook update concerns the economic development challenges and opportunities for the New England states as we look into the future. Vermont has many of the same economic development advantages and challenges as her New England sister states. Chief among the state’s challenges is Vermont’s remote and northern location, its aging population, its higher than average energy costs (even though they are low in comparison to the New England region), its relative lack of available “early stage” investment capital and other forms of financing, and its reputation (whether deserved or undeserved) as a higher than average taxed state in what is viewed as a relatively higher taxed New England region. In terms of economic development advantages, the state enjoys the advantages of a well-educated work force, strong

commitment to K-12 education, a well-developed telecommunications system covering nearly all of the state,¹¹ small-accessible size or scale that facilitates business entry, business networking, and access to government officials, low crime rates, a reputation for high quality natural and recreation amenities, and a strong brand identity for certain types of products and services.

Vermont's collective economic development effort is executed by the State Agency of Commerce and Community Development¹² (ACCD) in cooperation with 12 regional economic development corporations (or RDCs) of varying sophistication in terms of their services¹³, a system of Chambers of Commerce and regional marketing programs, and development staff at some municipalities (such as the City of Burlington) that are found throughout the state. In addition, the State coordinates job training and work force development efforts through a myriad of organizations (including the Vermont Department of Labor and the ACCD's own training program) and works cooperatively through the regional development corporations and state educational institutions—including Vermont's system of State Colleges. Also affiliated with the state as partners are entities such as the Center for Emerging Technologies, a cooperative public-private partnership located at the University of Vermont, the Vermont Economic Development Authority (VEDA) which is a key economic development finance lender in Vermont, and the Vermont Technology Council, a cooperative effort that focuses on preparing Vermonters to work productively in the technology sector through apprenticeships and STEM¹⁴ education programs to boost the State's competitiveness.

Over the years there have been a number of statewide efforts to develop and implement a statewide economic development strategy. Since 1997, there have been a total of four efforts that have met with varying degrees of implementation success. The latest effort was undertaken by the ACCD over a period of roughly a year, from mid-2013 through mid- 2014. It was funded by the U.S. Economic Development Administration (or the U.S. EDA), where Vermont was invited to undertake a statewide Comprehensive Economic Development Strategy effort—a Vermont CEDS¹⁵—in part as a response to the need for building economic resiliency in the wake of Tropical Storm Irene. Following that August 2011 storm, roughly 500 miles of state roads were destroyed, 200 bridges were damaged, and 1,000 homes were lost, a level of infrastructure damage that significantly disrupted the state's economy. In total, of the state's 251 towns, 225 municipalities had significant damage to their infrastructure.

During the CEDS process, a Steering Committee was formed of more than 30 representatives of business, education, non-profits, government, labor groups, and other stakeholders to coordinate the effort. The CEDS process systematically assessed the Vermont economy and identified 4 key components of the State economy to be approached with an array of strategies in a systematic way. The strategies would be organized and, ideally, funded to achieve the following goals:¹⁶

- 1. Accessible Financing and Capital:** Create financial structures and programs that give Vermont enterprises access to capital and the means to grow.

¹¹ As of December 31, 2013, the State of Vermont reports that over 99% of Vermonters have access to high speed internet service. The remaining roughly 1% had an identified solution for service. See State of Vermont Comprehensive Economic Development Strategy 2014-2020; Page 52.

¹² Which is home to the Vermont Employment Growth Incentive (VEGI) Program.

¹³ Most Regional Development Corporations (RDCs) in Vermont have a wide variety of services in-house resulting from their partnerships with Small Business Development Centers and other programs associated with the U.S. Small Business Administration and USDA's Rural Development initiatives.

¹⁴ STEM refers to Science, Technology, Engineering, and Math programs.

¹⁵ The acronym CEDS refers to Comprehensive Economic Development Strategy.

¹⁶ See State of Vermont Comprehensive Economic Development Strategy 2014-2020; Page 5.

2. **A Skilled Workforce:** Ensure that all Vermont citizens have the skills they need to produce a robust livelihood and that Vermont businesses have the skilled talent they need to succeed.
3. **Sound Infrastructure:** Provide or improve infrastructure that is critical to economic and community development in Vermont.
4. **A Competitive Business Environment:** Create a hospitable environment for the establishment, cultivation and growth of businesses at all stages and for entrepreneurial innovation.

The CEDS also sought to put the above goals into the uniquely Vermont context of fostering a working landscape, enhancing Vermont’s brand, encouraging the state’s efforts to enhance its entrepreneurial culture, and broadly improving Vermonters’ “quality of life” by spreading the net of prosperity more widely than it currently is spread.

What also is interesting about the state’s CEDS effort, which is characteristic of all CEDS efforts, is the identification of key industry sectors (or “clusters” ala Michael Porter) for the state as a whole. This is somewhat unusual in that states typically have to label nearly all its industries “strategic” for political reasons—lest some key constituency may feel left out of the state’s economic nurturing process. However, the state CEDS went forward and targeted these industry sectors for strategic “focus.” The CEDS document indicated that these key sectors would be where “the deployment of the state’s limited capital and human resources on certain economic sectors that can provide the greatest return on those investments in terms of benefits to businesses, workers, and the Vermont economy.”¹⁷ The key sectors were selected from the broader economic landscape through a series of filtering criteria which included:

1. Potential for growth
2. Existing concentration in Vermont
3. Strong leadership
4. Higher than average wages
5. Meeting other policy goals
6. Building on Vermont strengths such as the Vermont brand and quality of life

Although the selection process for identifying key industry sectors included quantitative measures, the CEDS process was careful to include consideration of the 5th and 6th evaluative criteria listed above that were not quantitative. The end result of the CEDS selection process was the following 12 key sectors:

1. Advanced Manufacturing
2. Arts and Culture*
3. Biotechnology
4. Education*
5. Financial Services and Insurance (including Captive Insurance)
6. Food Systems*
7. Forest Products
8. Green Businesses
9. Health Care*
10. Renewable Energy and Efficiency*

¹⁷ Ibid; Page 74.

11. Software Development and IT
12. Tourism

Note: The target sectors that meet one of the last two criteria are marked with an asterisk ().*

Given the recent EDA approval of the Vermont CEDS, the CEDS document is now in a position to become a strategic strategy umbrella for the ACCD and its partners—both its equity partners (e.g. those who are recipients of the State ACCD funds) and its broader list of economic development collaborators and stakeholders. Ideally, this strategy umbrella would help guide strategic economic development efforts and, potentially, funding support decisions going forward for the many groups involved with economic development in Vermont which currently may not be going in the same direction as the state and its partners.

CEDS efforts are relatively rare for an entire state. The Vermont effort included participation of more than 300 citizens and more than 12 state departments. Because of this broad participation, it is hoped that the final CEDS document will carry with it the credibility needed for full, long-term implementation. With full and long-term implementation, it is possible that this laudable effort to re-organize what is currently a fractionalized statewide economic development effort will in the end become a more structured and strategic mosaic of high value services. If this latest statewide effort to be strategic about economic development is successful, it will avoid the all-too-common fate of past efforts, where the final strategy was not accepted broadly enough to allow for full, long-term implementation. Only time will tell in this regard with respect to the State's latest effort to bring a higher level of strategic organization to the economic development effort in Vermont.

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