

The November 2011 Revised NEEP¹ Outlook for Vermont

Executive Summary:

- In the period leading up to Hurricane/Tropical Storm Irene, the Vermont economy had been on a positive recovery trajectory, with payroll job gains on the upside of a saw-toothed pattern to recovery—including a top ten year-over-year job change performance, an upswing in the state’s manufacturing sector, and signs of a stabilization housing markets.
- Vermont’s performance during the “Great Recession” was somewhat shorter and much milder than the nation as a whole, and the Vermont labor markets have recovered at a somewhat faster pace than its U.S. economic counterpart. Through September, the Vermont economy has recovered about three-fourths of the payroll jobs lost during the 2007-09 recession (or 10,400 of 14,000 payroll jobs lost peak to bottom) during the initial 24 months of the State’s labor market recovery.
- That pace of recovery looks to be somewhat stronger than the State’s labor market recovery from the very harsh early 1990s economic downturn when it required 60 months for State labor markets to recover all the payroll jobs lost during the downturn, and it looks to be on par with the State’s labor market recovery for the 2001 recession when it took 42 months to recover the payroll jobs lost during that downturn.
- The outlook for the Vermont economy over the calendar year 2011-15 period is for slow and moderate recovery and eventually growth, with the state economy re-capturing all of the payroll jobs lost during the harsh, 2007-09 recession re-gained by the 2013:Q3. This recovery will be fueled by an expected recovery-growth in the global economy, good niche positioning by major Vermont firms to take advantage of that recovery-growth, and an expected recovery in financial markets and eventually Vermont’s residential and second home market.
- The payroll job recovery, and eventual resumption of growth, will be historically slow and uneven averaging only about 1½ percent over the forecast period. The recovery-expansion in payroll jobs will not hit a more than +2.0 percent annual average stride until calendar years 2014 and 2015.
- Improvement in unemployment will be slow and the average annual unemployment rate in Vermont will remain at 5.5 percent or higher on an annual average basis through calendar year 2013. Then the state’s unemployment rate is expected to dip below the 5.0 percent level on an annual average basis in calendar year 2014 and 2015.
- Positive job gains are expected in all NAICS² supersectors under this revised Fall 2011 NEEP outlook for Vermont—including the Government sector (at a +0.2 percent annual average over the calendar year 2011-15 period) and the Construction sector (sector (at a +0.3 percent annual average over the calendar year 2010-15 period).

¹ NEEP means New England Economic Partnership.

² NAICS means North American Industry Classification System.

- Near-term economic prospects and the pace of economic recovery in Vermont will also likely be impacted by the effects of Hurricane Irene which battered the Caribbean and east coast of the U.S. at the end of August. In Vermont, although the storm had been downgraded to tropical storm status by the time it impacted the State, heavy rains and record flooding took the lives of three state residents, closed 260 roads and 30 bridges, and closed over 350 schools.
- Disaster relief and recovery events are still unfolding as of this writing in early November of 2011, it seems apparent that there will be at least some adverse near-term impacts on State economic activity levels to the extent they are not off-set by disaster recovery activity that has included nearly 2,000 private contractors working on the restoration of the significant amount of public infrastructure damage. Long-term impacts and consequences will be determined by the speed and comprehensiveness of the federal, state and local responses—including disaster assistance and the availability of the needed labor and materials to affect repairs and restorations.
- Looking ahead, the state of Vermont faces a list of formidable challenges related to the evolving demographics. The state's population is aging, and it is aging faster than the nation as a whole. This raises significant concerns regarding work force, as the "substantial bubble" of baby boomers move into traditional retirement age categories and into age categories that typically require more health care services for the part of the elder population that cannot afford health care.
- There continues to be no easy solutions to the aging of the Vermont population. The seeds of these demographic issues have already been sown, but for initiatives that could be implemented to utilize the state's more highly educated work force as an advantage in strategic economic development. While there have recently been some state efforts to retain college graduates in Vermont from the state's growing enrollments at Vermont's higher education institutions, it is likely that even more incentives will be needed if the state is to retain enough recent college graduates to augment the state's work force needs. Further, with respect to the increasing numbers of elder residents and their potential strain on public budgets and the state's elder care services delivery network, solutions will require creative and deft policy-making at all levels of government. This need comes at a time when the public confidence gap for such policy-making, at least on the federal level, is historically wide.

The U.S. Economic Situation: Recent developments show that the U.S. economy continues to struggle with a multitude of recovery headwinds. These headwinds reflect a number of unfortunate developments so far in calendar year 2011 that have combined to constrain the labor market recovery, further undermine the still fragile psyche of consumers and businesses, and revive the collective fears about the threat to the global financial system posed by the still unfolding sovereign debt crisis within the European Union.

These developments were indeed unfortunate in that they have sapped what otherwise looked to be some promising forward momentum in calendar year 2011 which had been setting the stage for a relatively healthy year of U.S. recovery. Since that time, rising commodity prices—particularly for food and energy, the economic disruptions caused by the Japanese earthquake and tsunami, and the drama associated with the political debate surrounding the debt ceiling (and the subsequent downgrade by Standard & Poor's) have piled on each other to sap already fragile consumer, business, and investor confidence. For a time this Summer and Fall, equity prices had eroded, to bear market territory,

and the housing market prices—which had earlier shown signs of stabilizing—once again weakened as the housing market remains in deep recession.

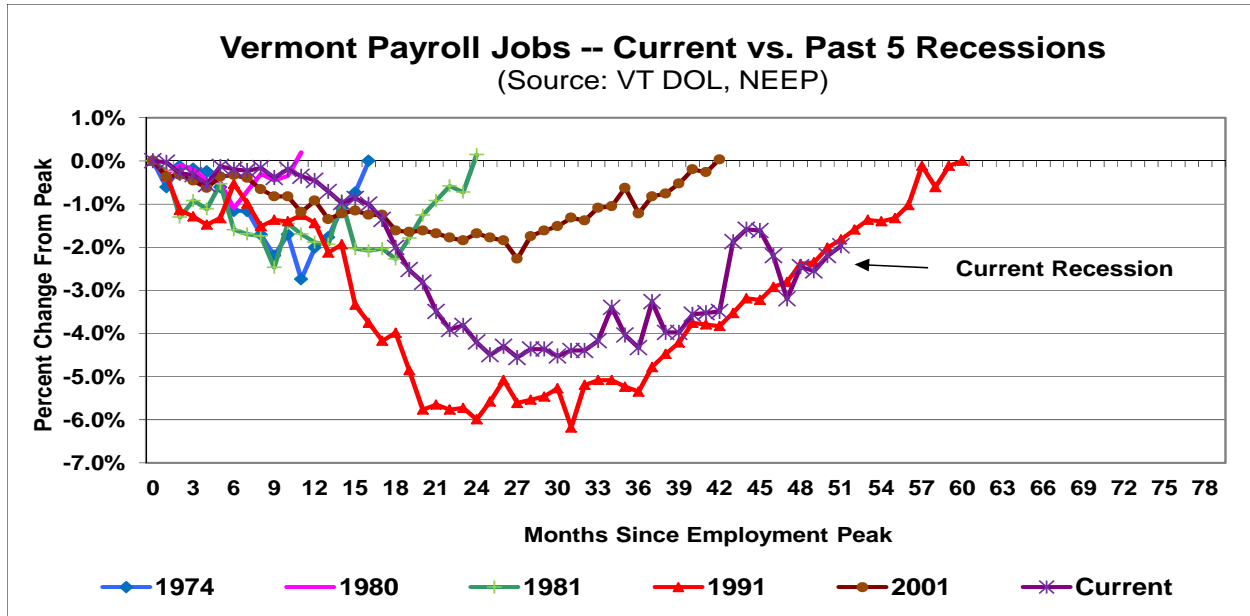
Although recent readings on output growth and the labor market recovery indicate that it remains likely that the U.S. economic recovery will continue and the economy's fundamentals have improved, it is equally clear that the near-term outlook for the economy has weakened. Prospects for output growth and further progress in the job market recovery have diminished significantly since early in calendar year 2011. It seems apparent that it will take a while longer for the U.S. economy to achieve a "more normal" pace to its current upswing.

Relative to the last NEEP forecast for Vermont completed last Spring, this updated forecast for the Vermont economy this Fall expects that U.S. GDP for calendar years 2011 and 2012 will be considerably lower than expected earlier, reduced by roughly a quarter of a percentage point since the New England Economic Partnership (NEEP) forecast completed in May, and the pace of the U.S. labor market recovery over that same period has been reduced accordingly. The May 2011 NEEP forecast for consumer inflation for calendar year 2011 and 2012 was also increased slightly for those years to reflect the upward pressure on prices from food and energy prices. As a result, the near-term consensus forecast for interest rates was reduced concurrently to reflect the first half of calendar year 2011's economic sluggishness and the initiation of yet another round of growth-supporting positioning by monetary policy known as "Operation Twist."

The fact that the near-term outlook for the economy expects that it will maintain its forward momentum at all is in and of itself a positive outlook. Daily review of the mainstream news and business pages these days contains enough disturbing news to shake the confidence of even a seasoned economy and business analyst-watcher. Even so, there is a relatively sound foundation for expecting continued forward progress for the economy over the next five years. Much of this is tied to the economy's still improving fundamentals, such as: (1) strong corporate balance sheets, (2) households that have significantly reduced their debt burdens, and (3) a banking sector is well capitalized and has returned to respectable levels of profitability. In addition, the Federal Reserve has also responded aggressively to the economy's recent slowdown, taking the unusual step of publicly announcing "Operation Twist" and their intent to leave interest rates at very low levels until mid- calendar year 2013. While the effectiveness of the Fed's most recent steps to support the economy has not yet been fully felt or integrated into the economy, it is a positive in that it is indicative of a high level of commitment by that Fed to ensure the U.S. recovery will continue.

The Vermont Situation: With that U.S. and global economic background, the most recent vitals on the health and performance of the Vermont economy show that the state—while generally following the U.S. economy's lead—has been performing surprisingly well. Since the Vermont economy bottomed in late 2007, the state's labor market has followed a "saw-toothed" pattern with exaggerated ups and downs that have centered on an overall restrained pace of recovery. So far, Vermont's labor markets have recovered about three-fourths of the payroll jobs lost during the 2007-09 recession (or 10,400 of 14,000 payroll jobs lost peak to bottom) during the initial 24 months of the State's labor market recovery (or through September 2011). That pace of recovery looks to be somewhat stronger than the State's labor market recovery from the very harsh early 1990s economic downturn when it required 60 months for State labor markets to recover all the payroll jobs lost during the downturn), and it looks to be on a somewhat slower pace in comparison to the State's labor market recovery for the 2001 recession when it took 42 months to recover the payroll jobs lost during that downturn.

The chart below shows the payroll job track compared to the previous 5 past recessions. The current recession, shows much deeper job losses than previous downturns, as well as the “see-saw” path to the job recovery.



The September 2011 over September 2010 job change performance for Vermont ranked the state 8th nationally and first in New England in terms of total payroll job change—just ahead of the 12th place performance and the second ranked New England regional performance by the state of Massachusetts.

Table 1: Comparative Payroll Job Change Statistics, September 2011 versus September 2010.

Industry Supersector	% Change in VT	VT Rank in New England	VT Rank in U.S.	Highest Ranked New England State	# of States Reporting Job Losses
Total Nonfarm	2.2%	1st	8	VT (8th)	3
Total Private	2.9%	1st	5	VT (5th)	2
Construction	0.0%	2nd	24	MA (21st)	26
Manufacturing	2.9%	1st	11	VT (9th)	11
Information	-3.8%	6th	42	CA (2nd)	25
Financial Activities	1.7%	1st	8	VT (8th)	21
Trade, Transportation, Utilities	1.4%	3rd	16	RI (4th)	11
Leisure and Hospitality	5.4%	2nd	5	NH (1st)	12
Education and Health Services	2.4%	3rd	21	ME (7th)	2
Professional and Business Services	9.3%	1st	2	VT (2nd)	7
Government	-0.9%	2nd	24	CT (21st)	38

Notes:

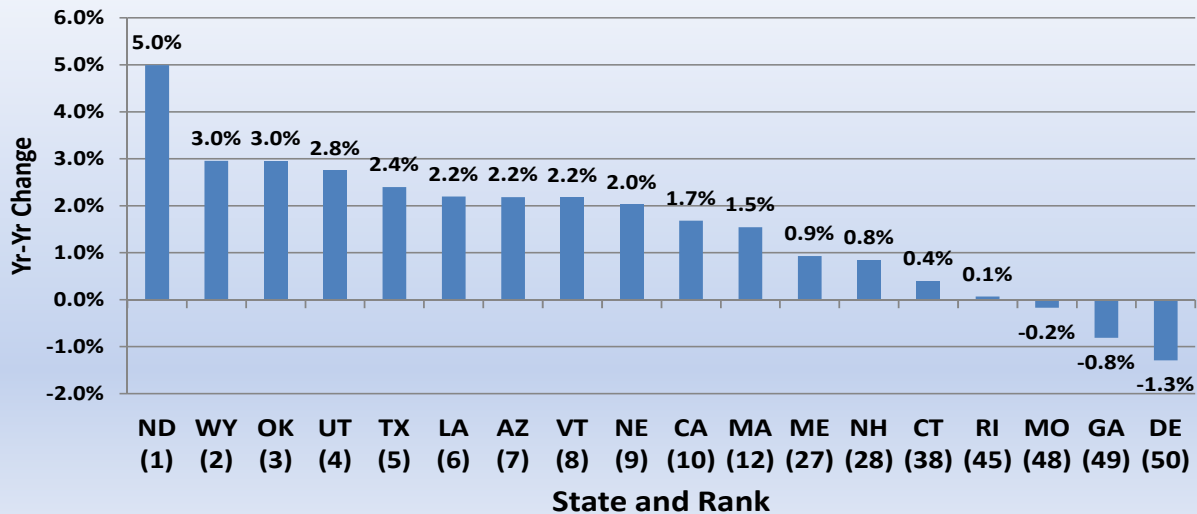
NAICS means North American Industry Classification System

Source: U.S. Bureau of Labor Statistics

Prepared by: Economic & Policy Resources, Inc.

Total Payroll Job Change September 2011 [vs. Last Year]

(Source: BLS, SA)

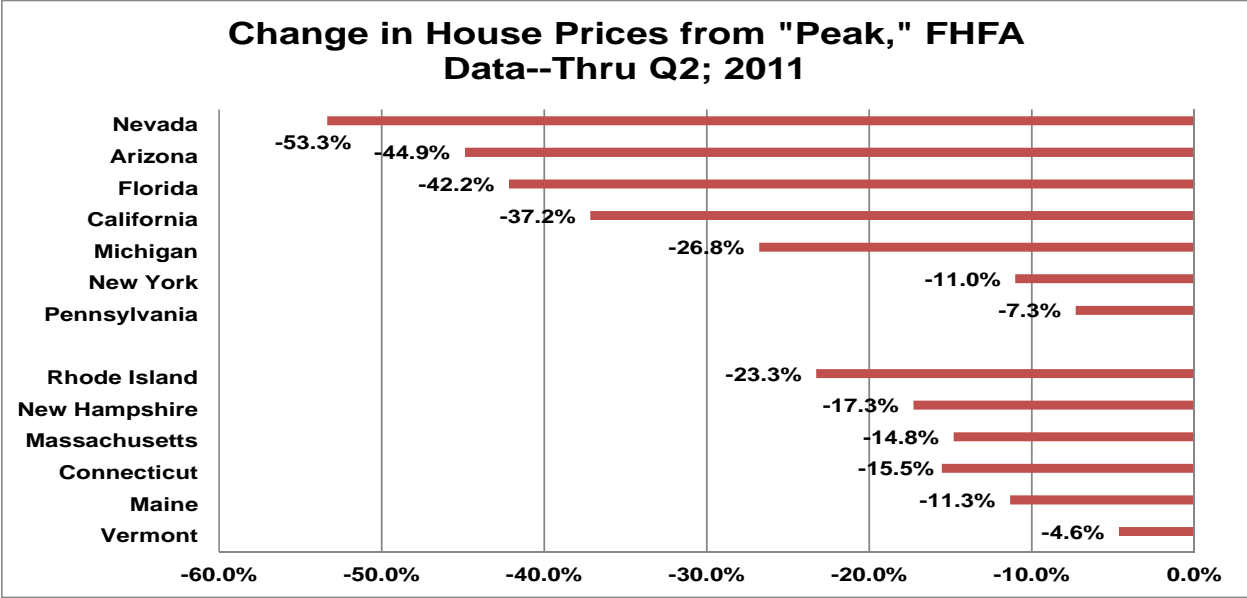


On the sector-by-sector front, Vermont's best performance over the last year as of September 2011 came in the Professional and Business Services sector, where it posted an increase of 9.3% in employment versus 2010, ranking it 2nd highest among the 50 states and 1st among the New England states. The State also had a positive performance in the Financial Activities Sector (where Vermont ranked 8th nationally and 1st in the New England region over the period) and the Leisure and Hospitality Sector³ (where the state ranked 5th nationally and 2nd in New England over the period). Another positive performance is found in the Manufacturing Sector, where the state posted an increase of 2.9% over the prior year, ranking 11th highest among the 50 states and 1st in New England. The State's poorest performance was in Information. Information payroll jobs experienced a 3.8% year-over-year decline, ranking 42nd in the nation and 6th in New England.⁴

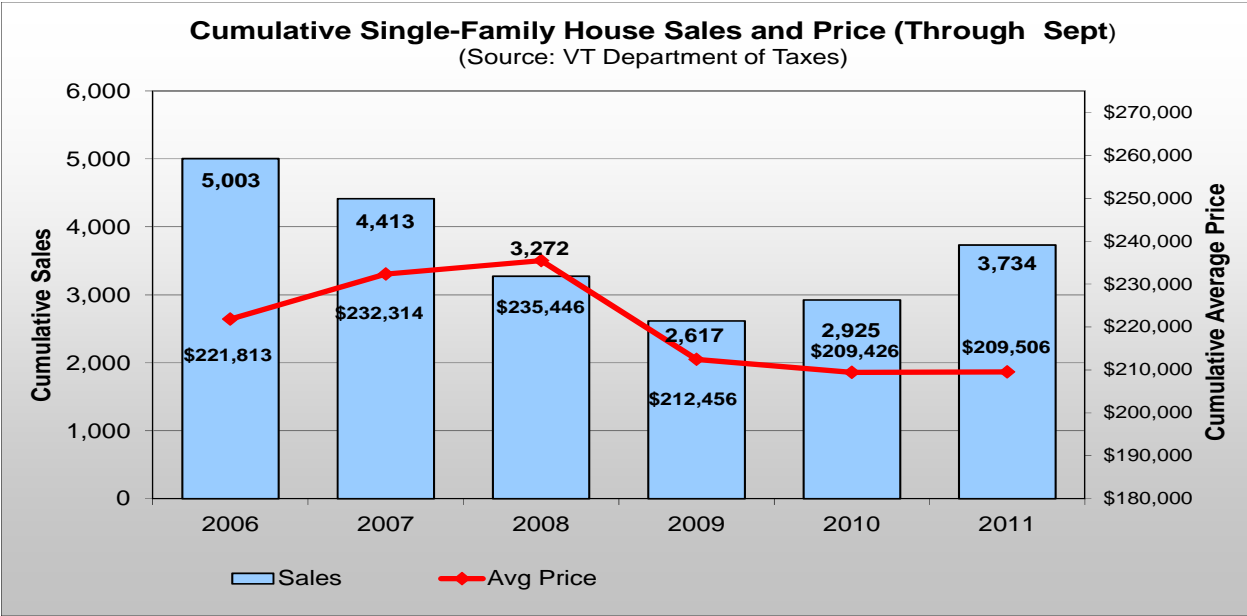
Looking at housing prices through the second quarter of calendar year 2011, housing prices overall in Vermont continue to hold up relatively well compared to many other states in the country. Using Federal Housing Finance Agency data from peak, states like Nevada (at -53.3% from peak), Arizona (at -44.9% from peak), Florida (at -42.2% from peak), California (at -37.2% from peak), and Michigan (at -26.8% from peak) have all experienced house price declines in excess of 25% since the mid-2000s. Vermont's housing prices from peak have declined more modestly at -4.6% from peak, the lowest of the six New England states—all of which have decline by more than 11% from peak.

³ It should be noted that this has been a very volatile sector in recent years with large positive and negative swings month-to-month.

⁴ Although it should be acknowledged that the Government sector in Vermont also experienced a payroll job decline on a year-over-year basis in September—one of 38 states experiencing a year-over-year decline in that month.

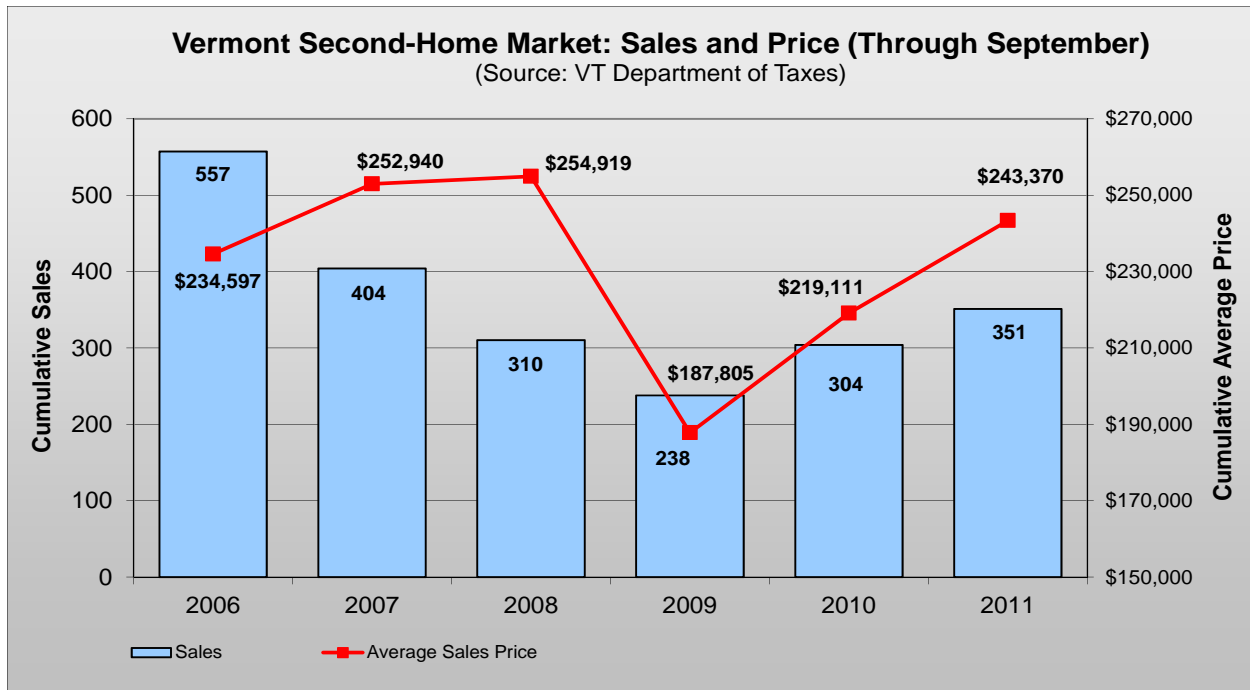


This comparatively stronger house price performance was reinforced by housing price data from the Vermont Department of Taxes' Property Transfer Tax statistics.⁵ Calendar year-to-date data through the month of September 2011 show that cumulative average house prices in Vermont have been flat versus last year but have declined by 11.0% versus the January to September average for calendar year 2008 (as the peak January to September period for this data series). Sales volume also has apparently begun to recover, and volume is currently at a level that was "in between" calendar 2007's and 2008's sales volumes (but is still well below 2006 and 2007 sales volumes). The increase in volume does represent a significant turnaround in market activity.



⁵ This data source is analogous to the National Association of Realtors house sales-price tracking concept although the timing of observations coincides to when property transfer tax information from a house sale transaction is entered into the computer system of the Vermont Department of Taxes.

Even the vacation home market component, which has seen large declines in sales and prices over the period since early in calendar year 2006, has likewise recently begun to rebound although at a very restrained pace. This is important since the second home market has been negatively impacted by the recent financial market meltdown—particularly in the Boston and New York financial sectors. However, while it is clear there has been some improvement in second home sales activity, sales volumes were still far less than what could be described as “normal.” Sales volumes also were nowhere near the sales activity volumes that were experienced in the speculative period of the early- to mid-2000s, and were roughly 40% below sales volumes as recently as for the January to September 2006 period.



Looking at developments at Vermont’s major companies, the news from key employers includes Dealer Dot Com, Inc. (“Dealer.com”) which followed through on its expansion project and added a total of 100 workers to its labor force in the greater Burlington area. In addition, a company called E-Corp—an English language training company which trains business clients—also recently announced a plan to locate its U.S. office in northwest Vermont, likewise bringing in more than 100 new positions into the area. Within the state’s manufacturing sector, Green Mountain Coffee Roasters this Fall announced plans to continue to expand its workforce in Vermont, adding 50 new employees in the Burlington area while at the same time wrapping up a 75,000 square foot expansion of its facilities in the Waterbury area. In July, the Green Mountain Coffee Roasters also announced it was recently approved by the Vermont Economic Progress Council for state employment growth incentives that would result in nearly \$250 million in new investment to expand its work force by another roughly 500 workers over the next 18 months in three communities just outside the City of Burlington (including the Towns of Essex and Williston and the City of South Burlington).⁶

⁶ It should be noted that the company continues to expand aggressively outside of Vermont as well, adding many more jobs outside of the state in states such as Virginia than inside the state based on recent company announcements.

For Green Mountain Coffee Roasters, the K-cup business continues to grow through strategic acquisitions in addition to their announcement earlier this year of an agreement to manufacture Dunkin' Donuts coffee in the increasingly well-known and accepted K-cup format.⁷ Other notable company announcements was move by Swan Valley Cheese of St Albans into the old VT Fastener building complex in Franklin County, the expansion of the specialty food manufacturer Bariatrix in the Town of Georgia, and the expansion of Vermont-based food manufacturer Vermont Smoke and Cure, which will shortly occupy part of the now closed Saputo Cheese manufacturing plant in the Town of Hinesburg.

On the IBM front, the company continues to add small numbers of workers as needed, following onto their strategy of expanding their fabrication operations through strategic business relationships and federal contracts. Earlier in calendar year 2011, IBM renamed its Essex Junction campus the Champlain Valley Technology and Innovation Park. In the Spring of 2011, the new Essex Junction campus secured the re-location of General Dynamics Technology Center from its Lake Street location in downtown Burlington. Together with ASK IntTag, a manufacturer of secure identification cards, the renamed campus near IBM is now home to 450 Vermont technology workers.

The Moody's Analytics National Economic Forecast Assumptions: The economic outlook for the calendar year 2011–15 period is based on a national outlook assembled by Moody's Analytics, a respected national economic forecasting firm. As the economy has lagged, NEEP forecast managers have opted for employing an alternative U.S. macro forecast to the current Moody's Analytics baseline U.S. forecast which forms the basis for the individual state outlooks. Again this forecast cycle, the forecast managers agreed to employ a slower recovery-growth alternative to the current Moody's baseline U.S. macro forecast. This alternative forecast corresponds to what Moody's Analytics terms its "S5 alternative"—a forecast that calls for the continuation of the U.S. up-cycle—but forward progress occurs at a rate that is slower than the long-term trend recovery-growth rate. The alternative Moody's Analytics national forecast scenario, which formed the national basis for the November NEEP forecast, includes a relatively restrained pace of recovery. The S5 alternative forecast then calls for a moderate, but still historically restrained pace of output growth for the U.S. economy during calendar years 2012–15, topping out at 3.8% rate of growth during calendar year 2014. The top-line Gross Domestic Product (GDP) growth rate numbers across the calendar year 2011–15 forecast period include: 1.6% for calendar year 2011, 2.7% for calendar year 2012, 3.5% for calendar year 2013 and 3.8% for calendar year 2014, and a 3.5% rate of GDP growth for calendar year 2015.

The Moody's Analytics national outlook for U.S. labor markets calls for an annual average increase in payroll job of 0.9% in calendar year 2011 and a continued high U.S. unemployment rate that is expected to average 9.1%. The national forecast also expects only a modest rate of payroll job additions in calendar year 2012 of 0.7%, rising to 1.8% for calendar year 2013 and to roughly 3.0% in 2014 and 2015. The national rate of unemployment is expected to remain high throughout the calendar year 2011–15 timeframe, remaining above the lofty level of 9.0% in 2011 and 2012, before declining significantly over the 2013-15 period but continuing to remain north of 6.0%.

Consumer prices, as measured by the Consumer Price Index (CPI), are expected in this forecast to increase by 3.0% in calendar year 2011 under the Moody's Analytics S5 U.S. economic scenario. For calendar year 2012 and beyond, consumer prices are expected to register restrained inflation rates of between 2.1% to 2.8% over the calendar year 2011 through calendar year 2015 period. As a result, the Moody's Analytics forecast for monetary policy is for the continuation of a generally accommodative monetary policy posture with the prospect of gradual tightening after calendar year 2012 as private

⁷ According to news reports, the company's patent on K-cups is set to expire next year as well.

sector demand is expected to strengthen. After calendar year 2012, the Federal Reserve is expected to tighten policy, with the first 3.5% Federal Funds rate by 2013, rising to 6.6% by calendar year 2015. The Moody's Analytics forecast includes an outlook for global oil prices which fluctuates around \$100s per barrel. The price of the benchmark West Texas Intermediate Crude Oil price per barrel is expected to average roughly \$96 per barrel in calendar year 2011 and then fluctuating between \$100.60 per barrel to \$103.6 dollars per barrel through calendar year 2015. The West Texas Intermediate Crude Oil price is an important benchmark price for a key commodity that is expected to have a significant cost-push effect on the general inflation rate at least early on in the forecast time horizon.

The key risks to the Moody's Analytics five-year outlook include uncertainty regarding fiscal policy (particularly in the aftermath of the federal debt ceiling debate), issues surrounding the direct and indirect impacts of the continuing housing market weakness, and the still unfolding sovereign debt crisis in Europe—with its potential effect on the still fragile global financial system. In addition, this past recession was unique in that it was a synchronized global downturn and involved an unprecedented level of financial de-leveraging, which still has not completely run its course, particularly in the public sector. Because of these exceptional risks, the likelihood of a further slowdown in the pace of the national and global recovery or even a double-dip recession remains uncomfortably high for this point in the recovery cycle. Despite this unusually high threat of recession, the Moody's Analytics forecast as adjusted expects the U.S. economy will weather its recent slowdown and will continue to recover along its historically restrained and sometimes halting recovery path over the near-term.

The Vermont Economic Outlook: The consensus forecast-adjusted Vermont near-term economic outlook similarly expects that the Vermont economy will mirror the U.S. economy throughout the calendar year 2011-15 forecast period. Looking at the major macro variables, the state can expect a similar profiled but somewhat muted recovery/expansion path for real output (as measured by Gross State Product or GSP) and for inflation-adjusted or real personal income. The somewhat muted forecast is a reflection of the fact that the Vermont economy did not decline as much as her U.S. and New England regional economic counterparts—which therefore led to more muted rates of recovery. On an annual basis, the forecast for the State expects a 2.2% increase in output in calendar 2011, followed by a 2.3% increase for 2012. For calendar year 2013 and beyond, the pace of GSP expansion bounces up to 3.3% in calendar 2014 and then slides back to 3.1% for calendar year 2015. Real or inflation-adjusted Personal Income would only have a 1.6% increase in calendar year 2011, being followed by a 3.4%, 3.0%, 2.9%, and 2.4% annual growth rate path for calendar years 2012 through 2015, respectively. For the state unemployment rate, Vermont is expected to post consistently better performances (as it has historically) over nearly all of the calendar year 2011 through 2015 forecast timeline.

The sector-by-sector breakdown shows that all major job categories will be adding jobs over the 2010-15 period. Among the sectors contributing to Vermont's economic and labor market turnaround include: the Leisure and Hospitality sector (at 3.9% per year over the 2010-15 period), the Professional and Business Services sector (at 3.0% per year over the 2010-2015 period), the Manufacturing Sector (at 2.5% per year over the 2010-2015 period), the Education and Health Services Sector (at 2.3% per year over the 2010-15 period), and the High Tech sector (at 2.4% per year over the 2010-15 period). Those four sectors are the categories that are expected to increase at a rate equal to or greater than 2.0% per annum. Other notable job increases over the calendar year 2010-15 time frame include Good Producing (at 1.9% per year over the 2010-15 period). In this forecast, none of the private sector NAICS categories lose jobs over the 2010-2015 period. Even the Governmental sector—as it struggles with its own version of the financial de-leveraging process—is forecasted to add jobs over the calendar year 2010-15 period, although it will have an uncharacteristically weak job increase performance at 0.1% per year over the calendar year 2010-15 time frame.

Although the State's relative economic performance is expected to be somewhat mixed over the calendar 2011 to 2015 period, the revised consensus forecast update includes the continuation of tight labor market conditions throughout the State and modest price increases in the Vermont housing market. The State's annual average unemployment rate is expected to average 5.5% in 2011 and 5.7% in 2012 on an annual average basis, following the average annual peak of 6.9% in 2009. For calendar year 2013, the State's unemployment rate is expected to decline by 0.2 percentage points to 5.5%, with further declines expected to under 5.0% in calendar year 2014 and calendar year 2015. That track, should this forecast be realized, would result in a Vermont unemployment rate that would be between 3.0 to 3.9 percentage points below the U.S. unemployment rate and more than 2.5 to 2.8 percentage points below the New England average unemployment rate.

Turning to the State's housing market recovery, any improvement in sales and construction activity in the Vermont housing market is forecasted to be very gradual, with a bottoming no later than the second half of calendar year 2012. At that point, the housing price decline in Vermont will likely have ended, and house prices will have reached bottom. Prices will then start to show more consistent, positive changes and activity will increase. This forecast update calls for Vermont to experience a turnaround in housing markets and experiencing a moderate housing price increase (compared to the decline of the national average housing price) over the 2010-2015 time period. This is again primarily due to more prudent lending practices overall which have led to much lower foreclosure rates. This has proven to be a key to Vermont's relatively healthier housing market environment because foreclosures typically lead to forced liquidation sales—including their significant price discounts—which can snowball and lead to and/or reinforce house price declines that make it so difficult for housing markets to build confidence among buyers and sellers needed for a genuine and lasting recovery. That negative foreclosure-force liquidation sale dynamic does not so far appear to be significantly impacting Vermont's housing markets to as large a degree as it is elsewhere.

Near-term economic prospects and the pace of economic recovery in Vermont will also likely be impacted by the effects of Hurricane Irene which battered the Caribbean and east coast of the U.S. at the end of August. In Vermont, although the storm had been downgraded to tropical storm status by the time it impacted the State, heavy rains and record flooding took the lives of three state residents, closed 260 roads and 30 bridges, and closed over 350 schools. The storm also left many communities isolated—most with their Main Streets literally flooded out—and caused roughly 50,000 state residents to be without electric power for days. The severity of the storm's damage, which received national media attention, also adversely impacted the State's late-Summer tourism activity with particularly notable impacts reported during the Labor Day weekend. The flood damage, and the attendant national reporting about it, raised additional concerns about activity levels during the short, but always important, Fall foliage season. At this point, anecdotal reports suggest the actual impact on the Fall foliage season has not been all that significant. However, the extent of the real impact will not be known until 4th quarter (covering the period of October 2011 to December of 2011) Rooms & Meals Tax receipts activity tax filings are received by the State. Monthly receipts reports for the month of October 2011 will be received in November of 2011 (for monthly filers) and quarterly filers covering the period October through December of 2011 will be filed with the state in January of 2012.

Although disaster relief and recovery events are still unfolding as of this writing in early November of 2011, it seems apparent that there will be at least some adverse near-term impacts on State economic activity levels to the extent they are not off-set by disaster recovery activity that has included nearly 2,000 private contractors working on the restoration of the significant amount of public infrastructure damage. Long-term impacts and consequences will be determined by the speed and comprehensiveness of the federal, state and local responses—including disaster assistance and the availability of the needed labor and materials to affect repairs and restorations. The near-term and long-term economic and state revenue performance implications of the disaster will be more fully and systematically assessed when more complete information becomes available and that information is analyzed as part of the next NEEP forecast scheduled for May of 2012.

The major macro variables for the revised November 2011 NEEP Outlook for Vermont are presented in the Table below. From the table, the forecast expects that Vermont's comparatively better output and job growth performance in the near-term begins to fade in comparison to the U.S. average in 2012 as the U.S. economy begins to pick up some momentum—although the state continues in most years to out-perform the New England average. In the out years of this November 2011 NEEP forecast revision, the state's comparative performance generally lags by about ½ to ¾ of a percentage point for both output and nonfarm payroll job gains. Inflation-adjusted personal income gains follow a similar pattern—although the magnitude of the differences between Vermont and U.S. percent changes (at roughly a full percentage point difference) reflect the larger percentage changes that typically accompany income changes. The state's unemployment rate, in contrast, continually stays lower than both the U.S. and New England averages, tracking down from the nearly 7.0% annual average in 2010 to an under 4.5% annual average in 2015.

Table 2: Forecast Comparison: U.S., New England and Vermont.

	Actual					Forecast				
	2006	2007	2008	2009 [2]	2010 [2]	2011	2012	2013	2014	2015
Real Output (\$2000-% Change)										
U.S. Gross Domestic Product	2.7	1.9	-0.3	-3.5	3.0	1.6	2.7	3.5	3.8	3.5
N.E. Gross Domestic Product	2.1	1.7	0.4	-2.6	3.4	2.3	1.7	2.2	2.9	3.3
Vermont Gross State Product	1.2	-0.7	0.4	-2.3	3.2	2.2	2.3	2.7	3.3	3.1
Non-Farm Payroll Jobs (% Change)										
U.S.	1.8	1.1	-0.6	-4.4	-0.7	0.9	0.7	1.8	3.1	2.8
New England	1.0	0.9	0.0	-3.6	-0.3	0.9	0.0	0.7	1.6	1.8
Vermont	0.8	0.2	-0.4	-3.2	0.1	1.8	0.6	1.3	2.5	2.4
Inflation-Adjusted Personal Income %Change (2000 Dollars)										
U.S.	4.6	2.9	1.3	-4.4	1.9	2.9	4.4	3.9	3.8	3.3
New England	5.0	3.2	-0.3	-2.2	1.0	1.8	3.3	3.0	2.7	2.4
Vermont	5.1	2.8	0.5	-0.6	1.3	1.6	3.4	3.0	2.9	2.4
Unemployment (Percent)										
U.S.	4.6	4.6	5.8	9.3	9.6	9.1	9.0	8.3	6.9	6.1
New England	4.5	4.5	5.4	8.2	8.5	8.0	8.3	8.3	7.4	6.8
Vermont	3.7	3.9	4.5	6.9	6.2	5.5	5.7	5.5	4.6	4.2
FHFA Housing Price Index [3]										
U.S.	7.4	1.4	-4.3	-4.6	-3.5	-4.8	-1.2	0.6	2.0	2.5
New England	3.3	-1.0	-3.7	-4.2	-2.3	-3.1	-0.9	2.2	3.8	4.5
Vermont	8.2	2.8	0.1	-1.5	-0.8	-0.5	0.5	1.1	1.5	2.0

Notes:

[1] U.S. data reflect the Moody's Analytics S5 Forecast Alternative for September 2011.

[2] 2010 variables are subject to further revision, and 2011 through 2015 values in this table reflect projected data as of September 2011.

[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 November 2011 Update (U.S., New England, Vermont)

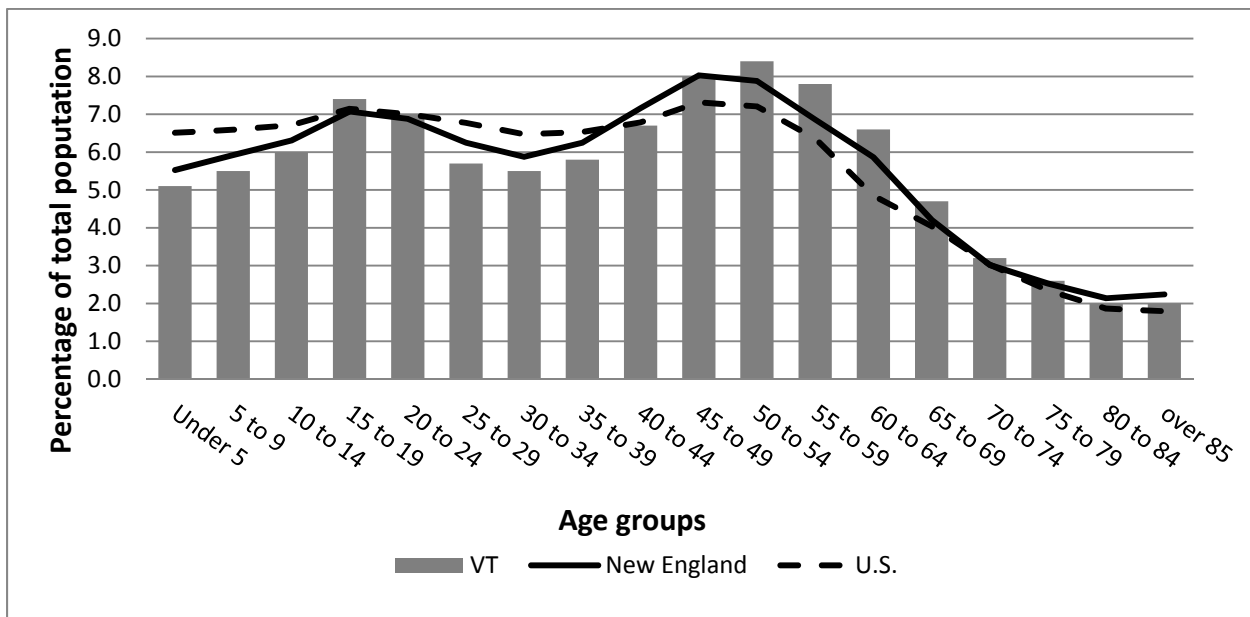
Conference Theme: Overview of Key Vermont Demographic Trends

The 2010 Census data show that since 2000, Vermont’s population grew by 16,914 persons, representing a 2.8% (annual growth rate 0.27%). This rate was slower than the population growth rate of New England of 3.75% (annual growth rate 0.37%) and the national rate of 9.7% (annual growth rate 0.93%) over the same time period.

Age data from the Census Bureau for 2010 indicate that the median age of the Vermont population was 41.5 (up from 37.7 in 2000), 4.3 years older than the national median age of 37.2 years and making Vermont the second oldest state in the country. The oldest state in the country was Maine while all states in New England ranked in top 10. The chart below shows how Vermont in 2010 had below average age concentrations in the under 20 years age category (at 24.0% of the state’s total population) relative to both the New England average (24.8%) and U.S. average (27.0%). Also, the population concentration in the 25-40 age category (at 17.0%) was lower than the state’s U.S and New England counterparts—which averaged (at 18.4% and 19.8%, respectively).

In contrast, the population concentration for Vermont in the 45-65 age category was 30.8% in 2010, significantly higher than both the national average concentration in this age category (at 25.7%) and the New England average (at 28.6%). The state also had an above average concentration in its 2010 population in the over 65 years age category (at 14.6% in Vermont), a half of a percentage point higher than the 14.1% average for New England and a full one and one half percentage points higher than the 13.0% average for the U.S. as a whole.

Vermont Age Profile Compared with U.S and New England Averages



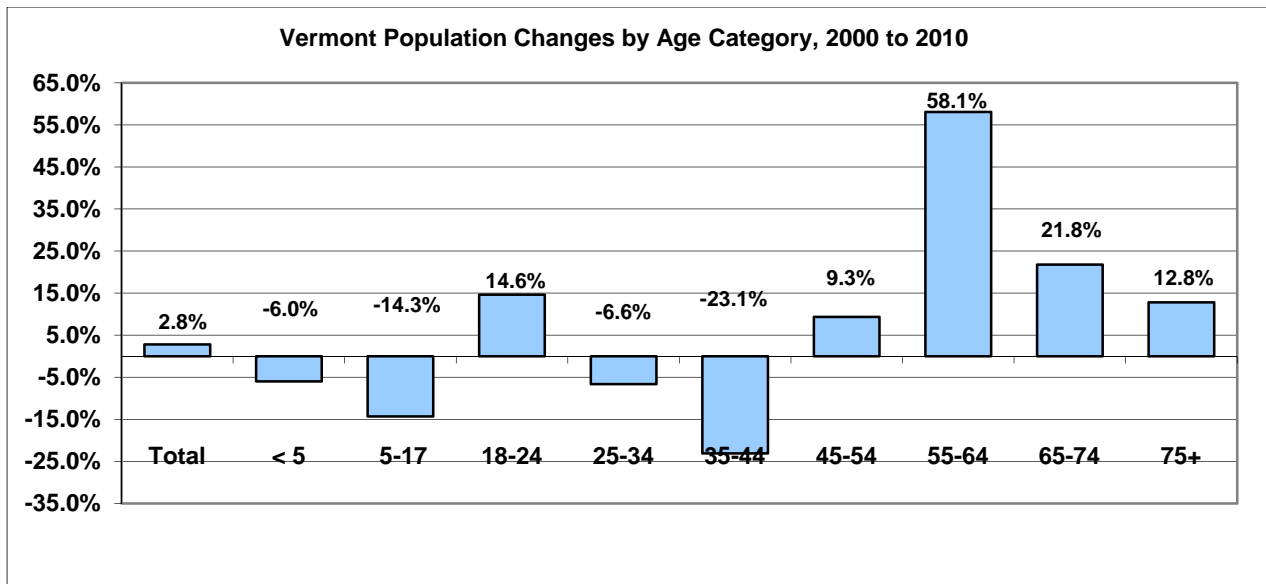
Beyond the population growth and age profile, the Vermont population had a significantly higher level of educational attainment than the U.S. population as a whole, according to the 2010 census data. A total of 33.6 percent of Vermont’s residents aged 25 years and over had bachelor’s degree or higher, a

level that ranked Vermont seventh among the 50 states, third highest among the New England states and more than five percentage points higher than the national average percentage of 28.2 percent.

The demographic dynamics of the state of Vermont is dominated by three major factors. The first major factor is the relatively rapid aging of baby boomers. Born in the post-World War era bracketed by 1946 and 1964, the majority of baby boomers had entered the 55-64 years age category by 2010. In fact since calendar year 2000, the population in this age category increased by 58.1 percent over the 2000 to 2010 period. The population in the 45-54 age category, which contains the youngest of the baby boomer generation, also increased by 9.4 percent from 2000 to 2010. Correspondingly, Vermont population in the 35-44 age category, the age category from which the baby boomers exited over the past decade, declined by a steep 23.1 percent.

The second major factor impacting the state's demographics is Vermont's consistently low birth rate over the last twenty years. According to Centers for Disease Control and Prevention, the birth rate (defined as new born babies per thousand females in the birth range years) in Vermont was 10.2 in 2008, the lowest of any state in the country and down from a rate 14.7 birth rate in 1990. Vermont has remained among the bottom three states in terms of the lowest birth rates in the country from 1992 to 2008, sharing the distinction for among the lowest birth rates in the country with two of her sister New England states—Maine and New Hampshire. Vermont's exceptionally low birth rate can be partly explained by a higher percentage of well-educated women versus the national average. In Vermont, 35.1% of women older than 25 years of age had bachelor's degrees or higher, in comparison to a national average rate of 27.9 percent. This is important because women with higher levels of education often decide to postpone, or even forgo motherhood for economic benefits of working and not leaving the workforce for periods of time for childbirth and rearing reasons. In addition, another part of the puzzle may also be explained anthropologically since it is true that Vermont's population is heavily concentrated in the Caucasian category. This category within the U.S. has had among the lowest birth rates of any nationality-race in the U.S. population. As a result of its declining and especially low birth rate over the past two decades, the population Vermont's 17 years and below age category declined by 12.4 percent from 2000 to 2010, while the same age category for the nation as a whole increased by 2.6 percent over the same period.

The third major factor influencing the state's demographics is the increased enrollment of students (many from out-of-state) in Vermont higher educational institutions. According the National Center for Education Statistics, the total Fall enrollments of out-of-state undergraduate students of all Vermont higher education institutions increased from 32,742 in 2000 to 42,416 in 2009. The 9,674 increase in enrollments roughly coincides with an 8,287 persons added to the 18-24 years age category in Vermont (corresponding to an increase of 14.6 percent over the 2000-2010 decade. In fact, outside of the 18-24 years age category, all of Vermont's population growth occurred entirely among age categories aged 45 years and higher.



Implications: Challenges and Solutions Related to the State's Demographic Future

Similar to when the demographics of the New England states were last examined by NEEP forecasters⁸ back in the Spring of 2005, the faster aging of the Vermont population like then raises several important issues of concern today—some economic, some fiscal, and others social. The first issue of significance concerns the continued availability of an appropriately skilled and available work force to staff Vermont's business base so that it can effectively compete in the global market place. With fewer children and young adults, the state may be hard-pressed to find indigenous replacement workers to meet the state's future work force needs as the 38.0 percent (or more than 4 of every 10 residents) of the population aged 45 to 64 years ages further and moves into a traditional retirement age category aged 65 years and up. Although many workers these days are choosing to stay in the work force beyond the age of 65 years,⁹ Vermont still faces a formidable challenge to either cultivate and/or attract the type of worker that has the requisite skill sets to meet the constantly evolving needs of state employers. Not enough appropriately skilled workers at critical times when job adding opportunities present themselves often means "missed opportunities" for the Vermont economy. "Missed opportunities" for still-struggling working families in Vermont can mean missed opportunity for them to improve their standard of living/quality of life—and even more missed opportunities to build on an improved job base of globally-competitive workers later on down Vermont workers' work force lives.

In addition to the implications of these demographic trends for the state's work force and economic development success, the aging population also has fiscal implications for governments. On the state level, the aging population means increasing services demand on age-sensitive and economically-

⁸ Although this analysis used Census estimates nearly half a decade past the April of 2000 census data actual.

⁹ At least some for financial reasons given the recent financial crisis that hit many families' retirement accounts very hard.

sensitive programs¹⁰ for services such as health care, temporary assistance programs (e.g. home heating assistance), and nutrition-assistance programs. These increased services demands come at a time when the lagging economy is making it very and in some cases increasingly difficult for the working population to earn the income needed to support these programs.

In addition, to those obvious fiscal strains, the aging of the population has also had the effect of reducing household size, which in turn has led to fewer people occupying each housing unit in the state. Fewer people living in each residential housing unit (e.g. relative to the 1980s and 1990s) has meant that the housing stock in the state has had to work harder to house each 1,000 persons in the Vermont population—at a time when expanding the supply of affordably-priced housing has become a significant challenge after the implosion of the last housing bubble.

Just like the situation six and one-half years ago, there are no easy answers to these complex aging of the population issues. One promising opportunity to help meet that state's work force needs to seize upon an already demonstrated competitive advantage for Vermont where, like her sister New England states, the state utilizes her more highly educated work force as an advantage in strategic economic development. While there have recently been some state efforts to retain college graduates in Vermont from the state's growing enrollments at Vermont's higher education institutions, it is likely that even more incentives will be needed if the state is to retain enough recent college graduates to augment Vermont's work force needs. With respect to the increasing numbers of elder residents and their potential strain on public budgets and the state's elder care services delivery network, solutions will require creative and deft policy-making. This comes at a time when the public confidence gap for such policy-making, at least on the federal level, is historically wide.

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¹⁰ Older workers past the age of 65 years can experience lower compensation levels as they move to different jobs than their experience set or skills capabilities have prepared them for.