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July 2012 Economic Review and Revenue Forecast Update

Prepared for the
State of Vermont
Emergency Board and
Legislative Joint Fiscal Committee

July 20, 2012

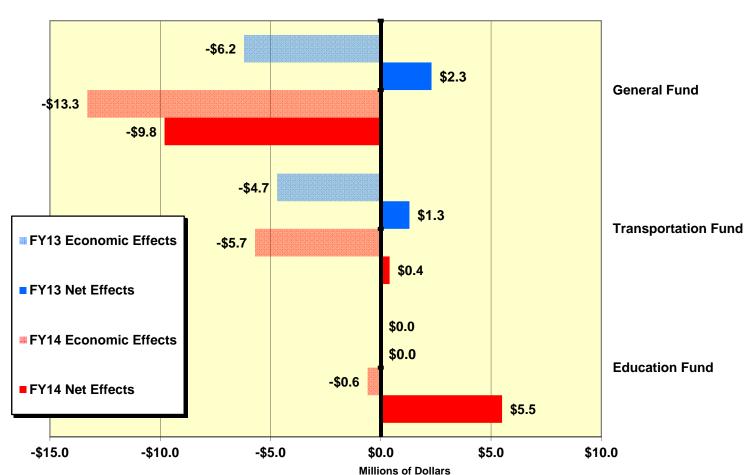
Economic Review and Revenue Forecast Update July 2012

Overview

A further lowering of expectations for economic growth over the next two fiscal years will result in a slight downgrade to projected State revenues in FY13 and FY14. Political dysfunction in both Washington and Brussels has led to policy inaction that has slowed growth prospects and kept global economic output well below potential. The result of this is a more protracted and uncertain recovery path, with attendant impacts on State tax receipts.

FY12 Vermont revenues ended the year very close to estimates, with total revenues across all three funds within 0.4% of target, among the smallest forecast variance ever. Although revenue impacts from macro-economic effects will be decidedly negative in FY13 (about -\$10M across all three funds) and FY14 (about -\$20M), tax law changes enacted during the recent legislative session will result in net revenue changes that are positive for some funds in some years, relative to January projections (see chart below).

Recommended Net Revenue Changes from January 2012 Forecast

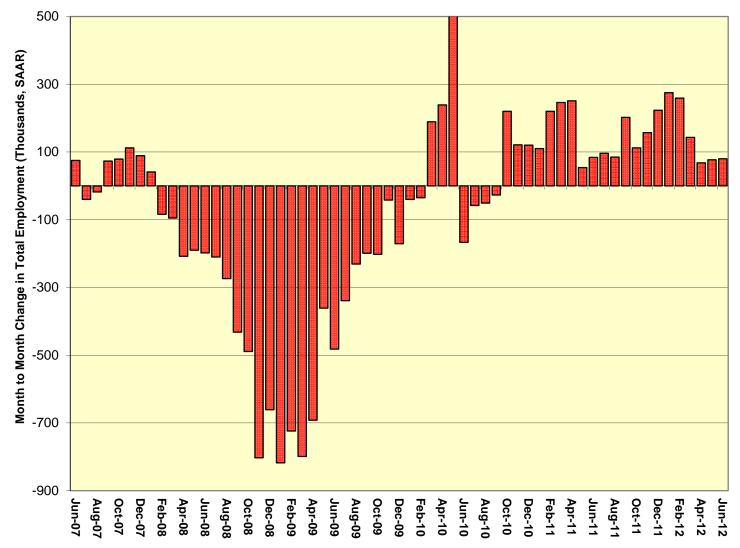


July 2012 Economic and Revenue Forecast Commentary

Just as the U.S. economy appeared to be gaining momentum, with real GDP growth in the fourth quarter of 2011 accelerating to 3% and net job creation in both January and February topping 250,000, the economy once again appears to have downshifted. Although not yet in neutral, the persistent financial crises in Europe, the slow healing of U.S. housing markets and contractionary fiscal moves at all levels of government have generated a pronounced slowing in second quarter growth, now expected to register only 1.7%. Meanwhile, job gains have also dropped below 80,000 for three consecutive months (see below chart). As a result of this, projections for annual 2012 real GDP growth have been lowered about half a percentage point to 2.2%, while 2013 growth has been reduced from 3.4% to 2.6% (see Table A on page 17). This lower growth trajectory is the primary impetus behind the negative State revenue adjustment in both FY13 and FY14.

U.S. Employment Growth Sputters Amidst Weak Global Demand and Fiscal Drag from Public Sector Retrenchment

(Monthly Change in Total Payroll Employment, Seasonally-Adjusted, Source: U.S. Bureau of Labor Statistics)



• The fallout from the European financial chaos is reaching all parts of the globe. In the U.S., it is reducing lending from large European banks to U.S. firms, slowing exports to Europe (which amount to about 3% of U.S. GDP) and depressing stock prices and bond yields. It is also affecting U.S. sales to emerging market economies, which are more heavily dependent upon European trade. China, for example, exports the equivalent of 8% of its GDP to Europe, rendering it considerably more vulnerable to a protracted slump there than the U.S. Representing nearly 25% of all world trade, the Eurozone is a critical player in an increasingly interdependent global economy.

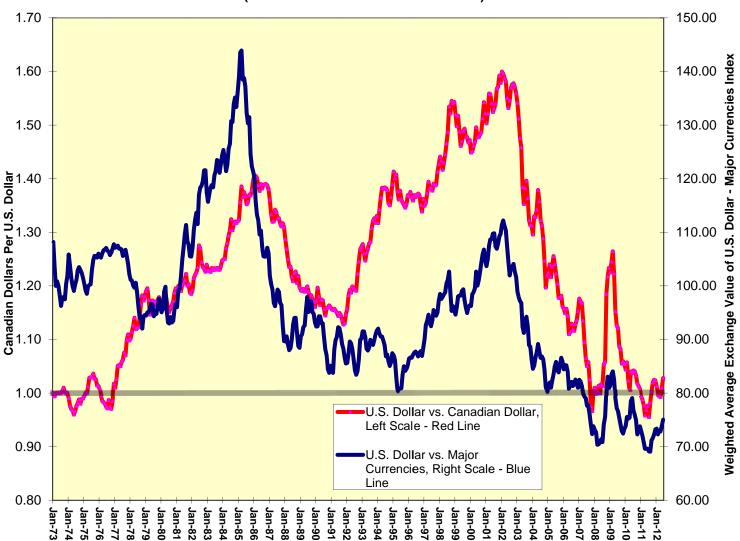


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• Uncertainty associated with resolution of the European debt morass is one of the key forecast risks in the near-term outlook. It is hindering business confidence and associated hiring and investment both in Europe and among its many trading partners. Although steps have been taken in each of the 17 summit meetings Eurozone leaders have held to stave off collapse of the Euro, comprehensive measures to end the crisis have not been forthcoming. The political limitations of the current union and the absence of bold political leadership from the dominant power, Germany, commensurate with its position of financial leadership, have left the union lurching from one sovereign debt disaster to the next.

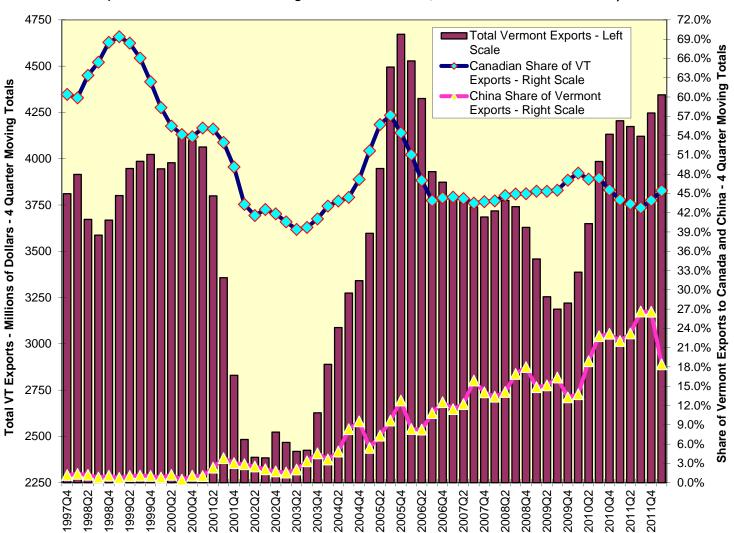
- Although the most recent summit showed progress towards development of a vital fiscal union among EU countries and expanding the European Stability Mechanism bailout fund, it stopped short of mutualizing sovereign debt through the issuance of Eurozone bonds. It also eased austerity measures somewhat, but is unlikely to ameliorate escalating political dissent in the hardest hit economies (Greece, Spain, Ireland, Portugal) until Greek voters believe that German politicians care about them and their needs and until German politicians believe they need Greek voters to retain or expand their power. This is the essential political framework that will ultimately be needed to manage and govern united Eurozone economic and monetary policies.
- With U.S. firms now among the most productive in the world and the U.S. dollar valued near historical lows against most major currencies (see below chart), U.S. exports have flourished. Annual 2011 U.S. exports topped \$2 trillion for the first time, and total exports in the 12 months ending in May of 2012 were up nearly 10% from the previous year and nearly 30% above May of 2010.

U.S. Dollar Remains Near Historic Lows, Spurring Export Growth (Source: U.S. Federal Reserve Board)



Vermont exports have also benefitted from the weak U.S. dollar and strong competitive position of many of its key companies. As depicted in the below chart, Vermont exports exceeded \$4.2 billion on an annualized basis in the first quarter of 2012 and are close to their all-time highs reached in 2005. Although quarter to quarter shares of exports by country of destination can be volatile, trade with China (including Hong Kong) has grown dramatically over the past ten years, from less than 2% to about 25% in recent quarters. Canada remains the State's largest trading partner, accounting for just under half of all Vermont exports (excluding tourism).

Vermont Exports Strengthen on Growing Chinese Demand (Source: World Institute of Strategic Economic Research, Federal Reseve Bank of Boston)



 U.S. labor markets continue to struggle in the face of the most recent economic deceleration, as the U.S. unemployment rate hovers above 8% and the average duration of unemployment at just under its record high of 40 weeks. Vermont, as usual, posted better labor market metrics, with the 4th lowest unemployment rate in the country in May at 4.6% and the best in New England for the eighth consecutive month. Much of the Vermont

Trading Places Again: Vermont vs. New Hampshire Unemployment Rates

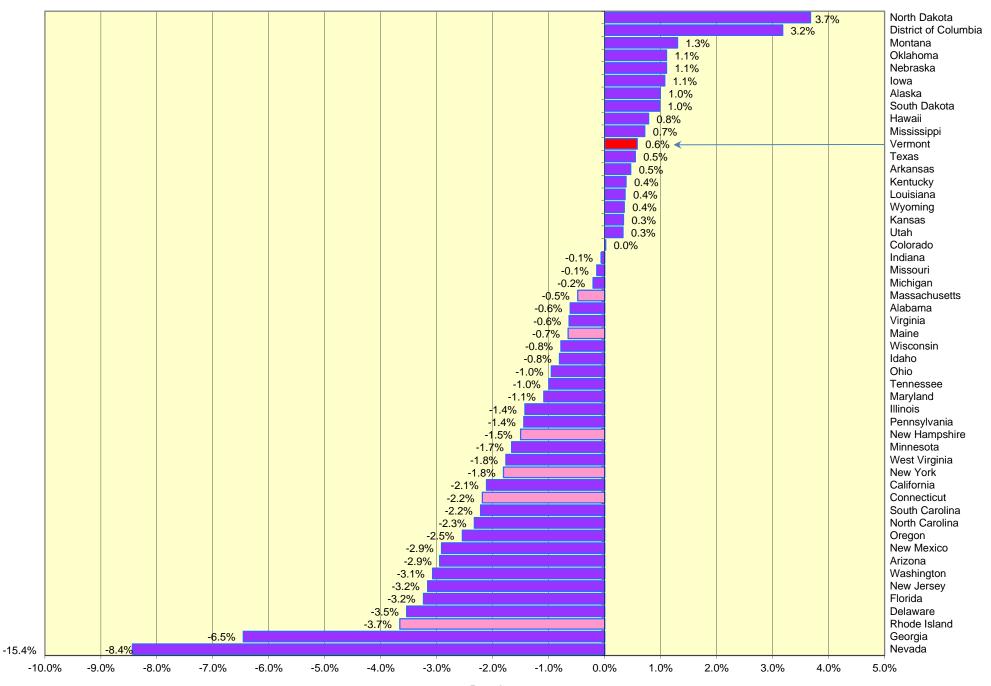


Percent Unemployed - Source: U.S. Department of Labor

- "improvement" in recent months, however, has come from people leaving the labor force rather than strong job growth.
- Housing and real estate markets in both the U.S. and Vermont, as measured by home prices, are probably close to or just past their cyclical troughs, as expected in prior forecasts. As depicted in the chart on the following page, nineteen states experienced positive year-over-year home price appreciation in the first quarter of 2102, including Vermont. In the prior quarter, only four states exhibited any price appreciation.
- This delayed bottoming out, some three years after the official end of the Great Recession (in June 2009), is not unusual for real estate markets, which typically have a much longer cycle than the general business cycle. Real estate market recovery periods are also considerably longer than those of the general business cycle and thus, it will take several years for residential home price appreciation to recover its losses and for related new construction activity to regain its footing. Still, given the depth of the downturn in this sector, impressive year-to-year percentage growth in new construction (though still at relatively low levels) could be experienced soon.
- The chart on page 9 illustrates 5-year home price changes. Though not strictly measuring peak to trough changes in each state, since each state has its own cyclical timing, it provides a general picture of the magnitude and regional variation experienced during the current cycle. Though declining home prices do not occur frequently, they are a regular part of real estate cycles and have been experienced in many geographic areas at many points in time over the past century. Most recently in New England, the bubble that developed in the late 1980's resulted in declining real prices for an extended period in the early 1990's that exceeded those in the current cycle for most states in the region. In the present cycle, the declines in Vermont have been tempered by policies and regulatory controls over both building and lending that have served to limit some of the worst speculative excesses that have affected harder-hit states. As a result, Vermont has experienced the least severe price declines in New England and as a consequence, has suffered less collateral economic damage during this downturn.
- Aside from financial collapse in the Eurozone, the biggest downside risk to the current revenue forecast stems from the political paralysis that is limiting federal fiscal policy options and has created a combination of impending current law measures slated to go into effect in 2013 that are collectively referred to as the "fiscal cliff." These measures, listed in the highlighted section on page 10, have the potential to derail the economic recovery if action is not taken to avert the most counter-productive of these. In addition to the fiscal cliff, whoever wins the November election will also need to address critical issues associated with longer-term fiscal sustainability (i.e., tax and/or spending changes that will reduce budget deficits such that the debt-to-GDP ratio is brought under control) and achieve a Treasury debt ceiling adjustment without costly brinkmanship.

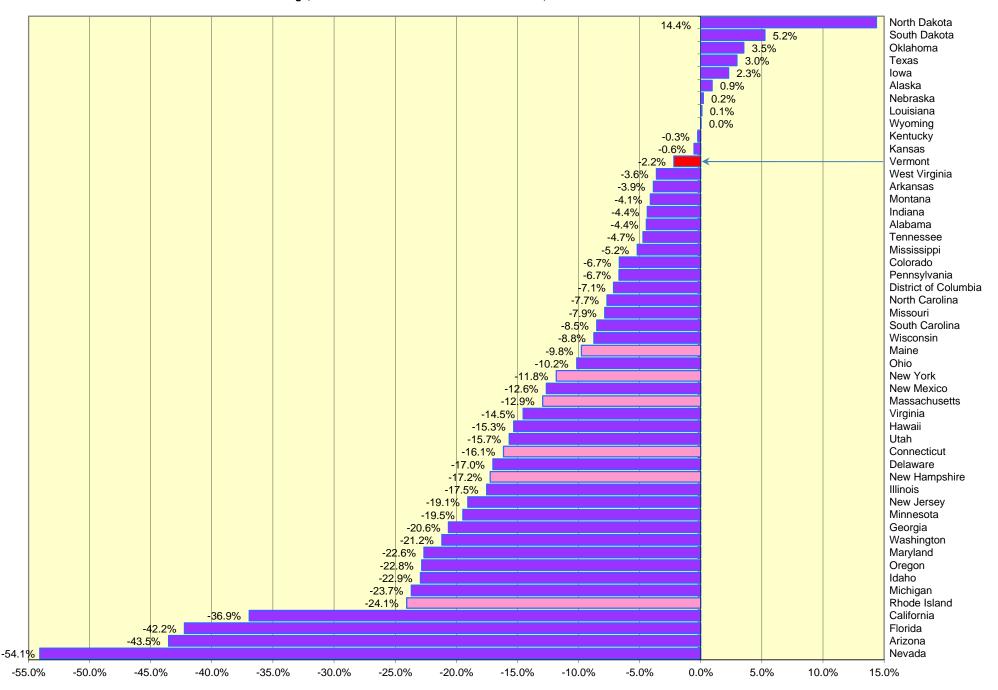
Home Prices Advance in 19 States in the First Quarter of 2012

Percent Change, First Quarter of 2012 vs. First Quarter of 2011, Source: FHFA Home Price Index



5 Year Change in Home Prices Exhibits Pronounced Regional Variation

Percent Change, First Quarter of 2012 vs. First Quarter of 2007, Source: FHFA Home Price Index



The Economic Costs of Political Gridlock: The Looming Fiscal Cliff

The economic costs of political gridlock in both Washington and Brussels have been pronounced over the past several years. The absence of civil discourse and practical compromise in the U.S. and the absence of political institutions necessary for a functioning economic union in Europe have left both economies performing well below their potentials. As Europe lurches from one crisis to the next, applying patchwork fixes that delay currency collapse but do not address the systemic problems that inevitably give rise to the next crisis, the U.S. confronts a growing backlog of policy impasses that have grown in magnitude and now represent an ominous "fiscal cliff" in 2013, if left unaddressed.

Moody's Analytics, whose macroeconomic models are used extensively in Vermont State forecasts, recently prepared the below estimates of how the major components of the fiscal cliff could affect both the federal deficit and the economy. The bottom line? Without political action to forestall some of these pending impacts, the U.S. economy could experience a \$500 billion downdraft that would almost certainly provoke a recession in 2013.

FISCAL POLICY MEASURE	Federal Deficit Reduction (\$billion)	Real GDP Reduction (\$billion)
Bush-era Tax Cut (below \$250K of income)	-198	-174
Bush-era Tax Cut (above \$250K of income)	- 83	- 40
AMT Patch	-120	<i>- 5</i> 9
Payroll Tax Holiday	-115	-100
Automatic Spending Cuts (sequestration)	-100	-105
Emergency Unemployment Insurance	- 40	<i>- 5</i> 8
Affordable Care Act (Obamacare)	- 20	- 9
Medicare Doc Fix	- 20	- 9
Tax Extenders	- 20	- 4
Bonus Depreciation	- 12	- 2
TOTAL	-728	-560
Percent of Gross Domestic Product	4.6	3.6

Notes: The difference in the budget deficit is based on a static analysis – it does not include the impact of the changing economy and the reaction of financial markets. The difference in real GDP is based on a dynamic analysis using the Moody's Analytics macroeconomic model – it does include the impact of the changing economy and the reaction of financial markets.

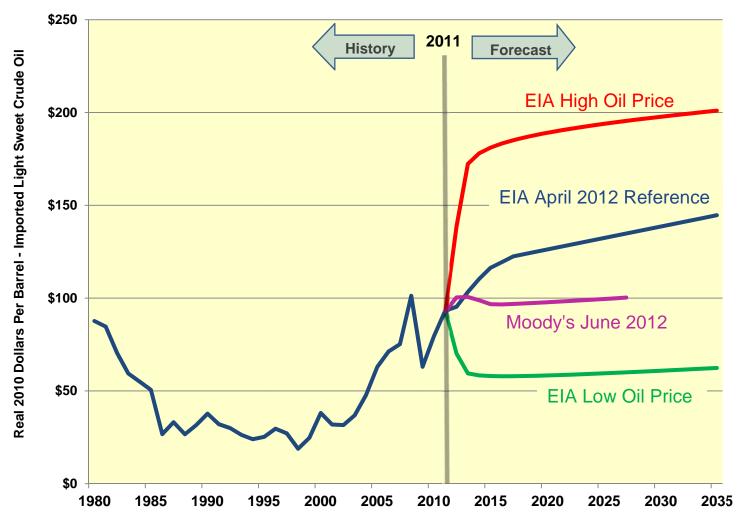
Sources: CBO, OMB, Moody's Analytics

- Aggregate Vermont revenues across all three major funds ended FY12 about \$8 million above target, 0.4% above prior January forecasts, with the General Fund 0.7% above target, the Transportation Fund 1.5% below target and the Education Fund 0.7% above target. These forecast variances are among the lowest on record (see table on page 15 and chart on page 16).
- The Transportation Fund suffered from exceptionally high gasoline prices in the second half of FY12, resulting in reduced gasoline consumption and lower

- revenues. FY12 gasoline revenues were off \$1.4 million, making the largest negative contribution to a \$3.4 million miss in the overall Transportation Fund.
- Following a recent 20% decline, gasoline prices are expected to remain relatively stable over the balance of this year and next, as weak global economic conditions minimize demand and potential price increases. Uncertainty in oil and gas price forecasts, however, is pronounced, as shown in the below graph, which depicts Moody's June oil price forecast and an equivalent April U.S. Energy Information Administration (EIA) forecast with a high and low 95% confidence interval around the EIA control projections.

Uncertainty Abounds in Oil Price Forecasts

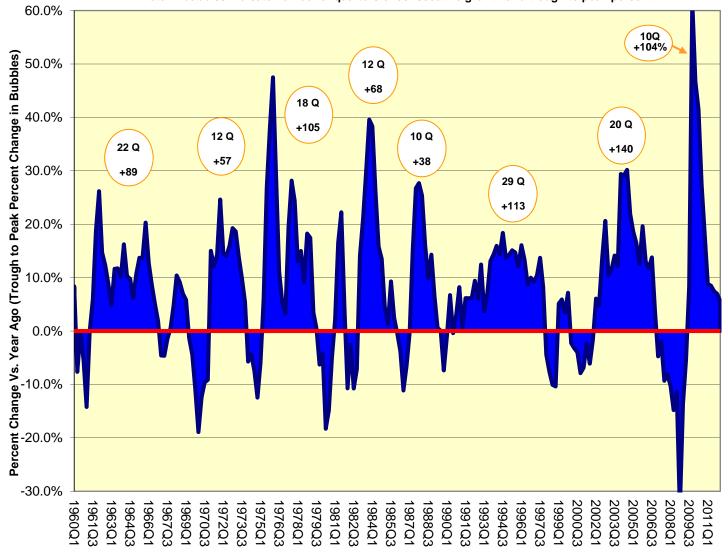
Spring 2012 Projections (Sources: Moody's Analytics - June 2102, EIA AEO Early Release Overview - April 2012)



 As shown in the above graph, oil price variability due to political, economic and climatological events could exceed \$110 per barrel (implying a price between \$60 and \$170 per barrel) within a relatively short period of time. While rising gas prices depress State gasoline revenues, they enhance revenues to the new Transportation Infrastructure Bond (TIB) Fund, which includes a gasoline tax that is based on both gallonage consumed and price. TIB revenues closed FY12 1.5% *above* prior January projections and are forecast to grow at rates significantly above Transportation Fund gas tax revenues over the next five years. While the TIB Fund is not a part of the Transportation Fund, it is used to fund both bonded projects and pay-as-you-go transportation projects in the State.

Corporate profits continue to be a bright spot in the economy, posting ten
consecutive quarters of growth through the first quarter of 2012. Since their
low point in the third quarter of 2009, U.S. corporate profits have risen more
than 100% (see below chart) to nearly \$2 trillion. With profits strong and
interest rates low, businesses are clearly in a position to hire and invest if and
when demand materializes.

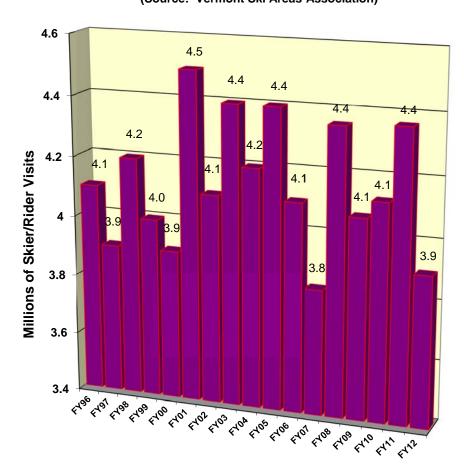
Corporate Profits Maintain Solid Growth, Boosting Tax Revenues
(U.S. corporate profits with inventory valuation and capital consumption adjustment; Source: US BEA;
Data in bubbles indicate number of quarters of consecutive growth and trough to peak percent



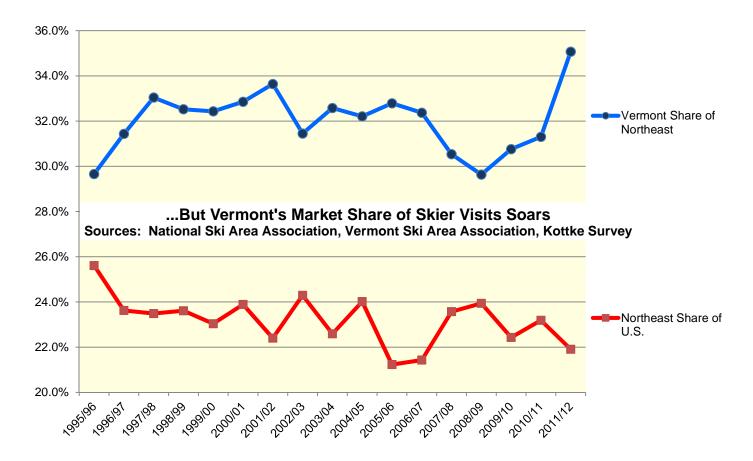
 Corporate income tax revenues in Vermont reflected this strength in FY12, closing the year \$8.6 million above targets and just 4.2% below last year's alltime record \$89.7 million. A more comprehensive corporate revenue tracking system has recently been developed with the Tax Department and should allow more precise future revenue estimation as this is implemented over the next fiscal year. Based on information currently available, FY13 is expected to decline slightly (-1.8%), as refunding increases, but will still be at near record-high levels in both FY13 and FY14.

• Meals and Rooms revenues held up remarkably well in FY12, hitting all targets, despite enduring catastrophic transportation disruptions and infrastructure losses from Tropical Storm Irene and then experiencing one of the warmest and least "skier-friendly" winters on record. Snowfall at the Burlington airport totaled only 37.7 inches this winter, the lowest amount in 99 years and the third lowest on record since 1884, causing skier visitation to drop 10.6% between FY11 and FY12.

Poor Weather Depresses FY12 Vermont Skier Visitation... (Source: Vermont Ski Areas Association)



 Poor weather, however, also enveloped the rest of New England and most of the prime western ski destinations, making it one of the worst years on record for U.S. - and especially eastern U.S. - skier visitation. Despite the FY12 decline in skier visits to Vermont, the State fared considerably better than any other New England state and outperformed many western states as well. The presence of extensive snow-making and its proximity to high-income eastern U.S. and Canadian markets made it the destination of choice for many skiers in this difficult season. As a result, Vermont's share of skier visitation in New England rose to 35.1%, its highest level since 1995-96, the earliest year comparable statistics are available, and rose from 7.3% to 7.7% of the national market.



- Personal income tax receipts in FY12 closed the year \$2.4 million above target, a variance of 0.4% above the prior forecast. The downgrade in expected economic growth in FY13 and FY14, however, will leave personal income revenues about \$9 million below prior projections in FY13 and about \$13 million lower in FY14 than previously forecast.
- Cigarette and tobacco products tax revenues in FY12 exceeded even upwardly revised January projections by more than \$1.8 million. Despite the contention by some that a tax rate increase could result in less revenue to the State, the increase to \$2.62 cents per pack generated nearly \$7 million in new receipts. The continued large price spread between Vermont and New York (more than 23% on a retail price basis) and higher gasoline prices, which reduce the cost-effective range for travel to lower cost jurisdictions (NH), helped minimize potential losses from cross-border purchases. Of more than just tangential interest, and as predicted by most serious analysis, New Hampshire lost more than \$20 million in FY12 revenue as a result of its cigarette price reduction of 10 cents per pack. Advocates of the tax rate

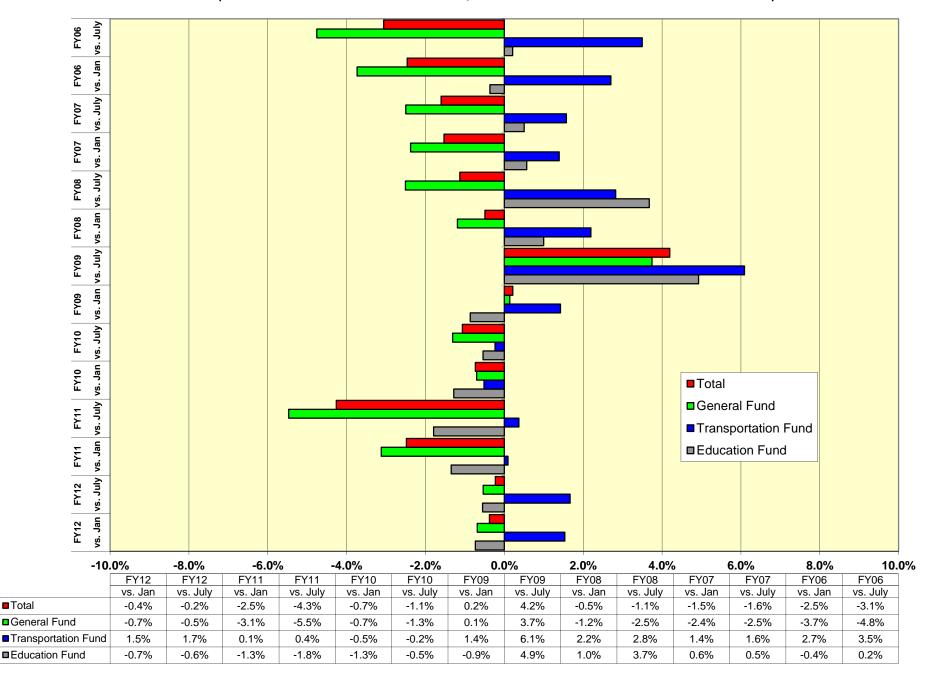
reduction argued it would bring in more revenue, not less, despite the absence of any credible empirical data to support such a position.

- Statutory changes recently enacted to the electric energy tax, which affects only Vermont Yankee, will result in higher recorded revenues in the Source and Available General Funds, but no additional budgetary benefit, since most funds in excess of the prior electric energy tax will be appropriated to the Education Fund and Clean Energy Development Fund. In the current forecast, Vermont Yankee is assumed to operate beyond FY12, pending legal and regulatory rulings now in process. The revenue impact of these changes is approximately \$9.4 million FY13 and \$11.4 million in FY14, relative to the prior January forecast.
- Other statutory directives of note include a change in the allocation of the sales and use tax from the General Fund to the Education Fund. Beginning in FY14, this allocation will increase from 33.33% to 35.00%, a shift of about \$6 million per year. In the Transportation Fund, fee increases will add approximately \$6 million per year to motor vehicle fee revenues.
- The U.S. and Vermont macro-economic forecasts upon which the revenue forecasts in this Update are based are summarized in Tables A and B on pages 17 and 18, and represent a consensus JFO and Administration macro-economic forecast developed using internal JFO and Administration State economic models with input from Moody's Analytics June 2012 projections and New England Economic Partnership (NEEP) May 2012 forecasts. These forecasts assume avoidance of the "fiscal cliff" described herein through compromise measures that retain or extend most of the current policy measures.
- Forecast versus actual revenue variance data for the most recent seven years are illustrated in the chart on the following page. The below table summarizes the same data for the past twelve years. As would be expected, January projections are generally more accurate than July (though not in FY12!). Since fiscal year 2001, there have been 24 regular forecasts (January and July for each year) for each of the three major funds (General Fund, Transportation Fund and Education Fund) for a total of 72 observations. Over this twelve year period, the average absolute value of the variance was 2.1% for total revenues across all three major funds.

AVERAGE ABSOLUTE VALUE OF FORECAST VS. ACTUAL VARIANCE													
(FY2001 to FY2012)													
Fund Forecast Period													
	January July All Periods												
Education Fund	1.1%	2.4%	1.7%										
Transportation Fund	1.4%	2.2%	1.8%										
General Fund	2.2%	3.7%	3.0%										
Total	1.5%	2.7%	2.1%										

Vermont Consensus Revenue Forecasting Record

(Forecast Percent Variance from Actual, FY2006 to FY2012 - Source: Joint Fiscal Office)



■Total

TABLE A
Comparison of Recent Consensus U.S. Macroeconomic Forecasts
December 2010 Through June 2012, Selected Variables, Calendar Year Basis

	2007	2008	2009	2010	2011	2012	2013	2014	2015
Real GDP Growth									
December-10	1.9	0.0	-2.6	2.9	3.9	4.5	4.4		
June-11	1.9	0.0	-2.6	2.9	2.7	4.2	4.1	3.4	
December-11	1.9	-0.3		3.0	1.8	2.6	3.4	4.1	3.7
June-12	1.9	-0.3	-3.5	3.0	1.7	2.2	2.6	4.0	3.7
S&P 500 Growth (Annual Avg.)		0.0	0.0	0.0					
December-10	12.7	-17.3	-22.5	20.5	12.4	6.8	5.8		
June-11		-17.3			18.4	1.2	-2.4	1.5	
December-11	12.7	-17.3	-22.5	20.3	0.0	9.2	11.5	8.7	2.9
June-12	12.7	-17.3	-22.5	20.3	11.4	4.8	0.6	2.1	2.1
Employment Growth (Non-Ag)									
December-10	1.1	-0.6	-4.3	-0.5	1.7	2.3	3.3		
June-11	1.1	-0.6	-4.4	-0.7	1.2	2.0	2.6	2.9	
December-11	1.1	-0.6	-4.4	-0.7	1.0	1.0	1.5	3.0	2.0
June-12	1.1	-0.6	-4.4	-0.7	1.2	1.4	1.5	2.3	2.6
Unemployment Rate									
December-10	4.6	5.8	9.3	9.6	9.5	8.0	6.4		
June-11	4.6	5.8	9.3	9.6	9.0	8.4	7.3	5.8	
December-11	4.6	5.8	9.3	9.6	9.0	8.8	8.4	7.0	5.9
June-12	.6	5.8	9.3	9.6	9.0	8.1	7.8	6.9	6.0
West Texas Int. Crude Oil \$/Bbl									
December-10	72.4	99.6							
June-11	72.4		_	_	-		100.5		
December-11	72.4						106.5		
June-12	72.4	99.6	61.7	79.4	95.1	98.1	100.9	110.7	108.9
Prime Rate									
December-10	8.05		3.25		3.21	4.43	6.55		
June-11	8.05		3.25		3.24		5.05	6.69	
December-11	8.05			3.25	3.21		3.32	4.69	
June-12	8.05	5.09	3.25	3.25	3.25	3.13	3.12	4.30	6.02
Consumer Price Index Growth									
December-10	2.9	3.8	-0.3	1.6	1.5	2.6	3.0		
June-11	2.9	3.8	-0.3	1.6	3.0	1.9			
December-11	2.9		-0.3			2.1			2.4
June-12	2.9	3.8	-0.3	1.6	3.1	1.9	1.9	2.7	2.7
Avg. Home Price Growth									
December-10	2.0		-4.0	-3.7		0.3	1.4	4.5	
June-11	1.4			-3.5	-4.0	0.0	1.7	4.6	. –
December-11	1.4			-3.6		-0.4	1.0	4.1	4.7
June-12	1.3	-4.5	-4.8	-3.7	-3.5	-0.9	0.0	3.1	4.7

TABLE B
Comparison of Consensus Administration and JFO Vermont State Forecasts
November 2009 Through June 2012, Selected Variables, Calendar Year Basis

	2007	2008	2009	2010	2011	2012	2013	2014	2015
Real GSP Growth									
November-09	1.7	1.7	-3.1	-0.5	4.5	5.3	4.3		
June-10	1.7	1.7	-0.3	3.5	4.0	5.1	3.2		
December-10	0.1	2.0	-0.7	3.4	4.1	5.3	3.8		
June-11	-0.7	0.4	-2.3	3.2	3.5	4.0	3.9	3.0	
December-11	-0.7	0.4	-2.3	3.2	2.3	2.8	3.5	3.6	3.3
June-12	-0.8	-0.2	-3.6	4.1	0.5	2.3	2.9	3.3	3.4
Population Growth									
November-09	0.1	0.1	0.0	0.2	0.3	0.3	0.3		
June-10	0.1	0.1	0.1	0.1	0.3	0.3	0.3		
December-10	0.1	0.1	0.1	0.1	0.3	0.4	0.5		
June-11	0.2	0.2	0.1	0.2	0.3	0.3	0.3	0.3	
December-11	0.2	0.2	0.1	0.2	0.3	0.3	0.3	0.4	0.3
June-12	0.1	0.1	0.1	0.2	0.1	0.3	0.3	0.4	0.4
Employment Growth									
November-09	0.2	-0.7	-3.8	-1.1	1.3	2.3	2.9		
June-10	0.2	-0.4	-3.3	-0.4	0.8	2.2	1.9		
December-10	0.2	-0.4	-3.3	-0.9	0.5	1.8	2.7		
June-11	0.2	-0.4	-3.2	0.1	2.6	1.0	1.9	2.4	
December-11	0.2	-0.4	-3.2	0.1	1.8	1.3	1.9	2.5	2.2
June-12	0.2	-0.3	-3.3	0.2	0.7	1.2	1.1	2.0	2.3
Unemployment Rate									
November-09	4.0	4.8	7.2	8.1	7.4	6.0	5.1		
June-10	3.9	4.5	6.9	6.7	6.6	5.4	4.5		
December-10	3.9	4.5	6.9	6.2	6.1	5.2	4.1		
June-11	3.9	4.5	6.9	6.2	5.7	5.5	4.6	3.4	
December-11	3.9	4.5	6.9	6.2	5.5	<i>5.4</i>	5.1	4.4	3.5
June-12	3.9	4.6	6.9	6.4	5.6	4.8	4.7	4.3	3.9
Personal Income Growth									
November-09	6.7	4.3	1.4	1.1	2.4	3.5	5.1		
June-10	4.8	2.7	-0.3	2.8	3.4	5.5	6.0		
December-10	4.8	2.7	0.2	2.5	2.8	5.8	6.5		
June-11	5.5	3.7	-0.3	3.4	5.5	4.8	6.8	6.1	
December-11	5.5	3.7	-1.3	3.4	4.0	5.0	5.3	5.1	4.8
June-12	5.5	4.4	-1.3	3.4	4.3	3.3	4.4	6.0	6.2
Home Price Growth									
November-09	3.2	0.8	-1.8	-1.9	0.4	1.1	2.1		
June-10	3.1	0.4	-1.5	-2.1	0.1	1.1	2.1		
December-10	3.0	0.3	-1.5	-1.3	-0.1	0.7	1.3		
June-11	2.9	0.1	-1.5	-0.9	0.0	0.7	1.3	1.5	_
December-11	2.8	0.1	-1.5	-0.8	-0.5	0.5	1.2	1.6	2.1
June-12	2.8	0.0	-1.6	-0.9	-0.4	0.6	1.1	1.6	2.0

Methodological Notes and Other Comments

- This analysis has benefited significantly from the input and support of Tax Department and Joint Fiscal Office personnel. In the Joint Fiscal Office, Sara Teachout, Stephanie Barrett, Catherine Benham, Neil Schickner and Mark Perrault have contributed to numerous policy and revenue impact analyses and coordinated JFO forecast production and related legislative committee support functions. Theresa Utton-Jerman has diligently organized and updated large tax and other databases in support of JFO revenue forecasting activities. In the Tax Department, Susan Mesner, Tax Department Economist, has made invaluable analytic contributions to many tax and revenue forecasts, including tax law change analyses, and Rachel Stanger, Tax Research and Statistics Analyst, has provided custom research and statistical and related background information from the detailed tax databases she maintains. Our thanks to all of the above for their many contributions to this analysis.
- The analysis in support of JFO economic and revenue projections are based on statistical and econometric models, and professional analytic judgment. All models are based on 35 years of data for each of the 25 General Fund categories (three aggregates), 31 years of data for each of the Transportation Fund categories (one aggregate), and 13 to 35 years for each of the Education Fund categories. The analyses employed includes seasonal adjustment using the X-11 and X-12 Census methods, various moving average techniques (such as Henderson Curves, etc.), Box-Jenkins ARIMA type models, pressure curve analysis, comparable-pattern analysis of monthly, quarterly and half year trends for current year estimation, and behavioral econometric forecasting models.
- Because the State does not currently fund an internal State or U.S. macro-economic model, this analysis relies primarily on macro-economic models from Moody's/Economy.com and the New England Economic Partnership (NEEP). The NEEP forecast for Vermont is managed by Jeff Carr, of Economic & Policy Resources, Inc., who is also the current Administration economist. Since October of 2001, input and review of initial Vermont NEEP model design and output prior to its release has been provided by KRA, as the State Economist and Principal Economic Advisor to the Vermont Legislature. Dynamic and other input/output-based models for the State of Vermont, including those from Regional Economic Models, Inc. (REMI), Regional Dynamics, Inc. (REDYN), and IMPLAN are also maintained and managed by the JFO for use in selected economic impact and simulation analyses used herein.
- The Consensus JFO and Administration forecasts are developed following discussion, analysis and synthesis of independent revenue projections, econometric models and source data produced by Administration and Joint Fiscal Office economic advisors.

TABLE 1A - STATE OF VERMONT LEGISLATIVE JOINT FISCAL OFFICE SOURCE GENERAL FUND REVENUE FORECAST UPDATE

Consensus JFO and Administration Forecast - July 2012

SOURCE G-FUND

revenues are prior to all E-Fund allocations														
and other out-transfers. Used for	FY 2008	%	FY 2009	%	FY 2010	%	FY 2011	%	FY 2012	%	FY 2013	%	FY 2014	%
analytic and comparative purposes only.	(Actual)	Change	(Actual)	Change	(Actual)	Change	(Actual)	Change	(Preliminary)	Change	(Forecast)	Change	(Forecast)	Change
REVENUE SOURCE														
Personal Income	\$622.3	7.1%	\$530.3	-14.8%	\$498.0	-6.1%	\$553.3	11.1%	\$597.0	7.9%	\$633.4	6.1%	\$686.7	8.4%
Sales & Use*	\$338.4	1.4%	\$321.2	-5.1%	\$311.1	-3.1%	\$325.6	4.7%	\$341.8	5.0%	\$352.3	3.1%	\$364.0	3.3%
Corporate	\$74.6	2.4%	\$66.2	-11.3%	\$62.8	-5.1%	\$89.7	42.7%	\$85.9	-4.2%	\$84.4	-1.8%	\$86.9	3.0%
Meals and Rooms	\$121.1	5.4%	\$117.1	-3.3%	\$118.0	0.8%	\$122.6	4.0%	\$126.9	3.5%	\$131.4	3.6%	\$136.5	3.9%
Cigarette and Tobacco**	\$59.2	-7.9%	\$64.1	8.3%	\$70.1	9.2%	\$72.9	4.0%	\$80.1	9.9%	\$77.4	-3.4%	\$75.3	-2.7%
Liquor	\$14.2	3.7%	\$15.0	6.0%	\$14.9	-1.0%	\$15.4	3.1%	\$16.4	7.0%	\$16.8	2.3%	\$17.2	2.4%
Insurance	\$54.8	3.8%	\$53.7	-2.1%	\$53.3	-0.9%	\$55.0	3.3%	\$56.3	2.5%	\$57.9	2.8%	\$59.5	2.8%
Telephone	\$9.5	-4.6%	\$9.1	-3.8%	\$7.9	-13.9%	\$11.4	44.4%	\$9.6	-15.3%	\$9.5	-1.3%	\$9.4	-1.1%
Beverage	\$5.6	1.9%	\$5.6	0.3%	\$5.7	0.4%	\$5.8	2.2%	\$6.0	3.3%	\$6.1	2.1%	\$6.2	1.6%
Electric***	\$2.7	3.3%	\$2.8	4.0%	\$2.9	2.5%	\$2.9	0.8%	\$2.9	0.3%	\$9.4	220.8%	\$11.4	21.3%
Estate	\$15.7	-11.9%	\$23.4	49.1%	\$14.2	-39.5%	\$35.9	153.3%	\$13.3	-62.8%	\$20.2	51.5%	\$21.8	7.9%
Property	\$34.0	-13.5%	\$25.9	-23.7%	\$23.8	-8.2%	\$25.6	7.7%	\$24.1	-6.0%	\$26.4	9.6%	\$28.6	8.3%
Bank	\$10.2	-3.4%	\$20.6	102.5%	\$10.4	-49.7%	\$15.4	49.0%	\$10.7	-30.9%	\$10.4	-2.4%	\$10.3	-1.0%
Other Tax	\$3.2	-51.1%	\$2.8	-12.7%	\$3.7	32.1%	\$3.7	1.7%	\$1.2	-66.7%	\$3.2	158.7%	\$3.6	12.5%
Total Tax Revenue	\$1365.5	3.0%	\$1257.9	-7.9%	\$1196.5	-4.9%	\$1335.1	11.6%	\$1372.4	2.8%	\$1438.8	4.8%	\$1517.4	5.5%
Business Licenses	\$2.7	-1.0%	\$3.0	9.4%	\$3.0	-0.2%	\$3.0	-0.6%	\$3.0	2.8%	\$3.1	1.7%	\$3.2	3.2%
Fees	\$14.7	3.6%	\$19.1	29.5%	\$19.2	0.9%	\$20.5	6.4%	\$20.9	2.1%	\$21.6	3.4%	\$22.3	3.2%
Services	\$1.7	15.9%	\$1.5	-11.0%	\$1.2	-19.9%	\$1.1	-8.7%	\$2.3	105.8%	\$1.4	-39.9%	\$1.5	7.1%
Fines	\$4.4	38.6%	\$9.8	122.0%	\$7.4	-24.8%	\$5.7	-22.2%	\$7.4	28.7%	\$6.9	-6.3%	\$7.2	4.3%
Interest	\$3.9	10.1%	\$1.4	-63.9%	\$0.6	-57.0%	\$0.3	-49.7%	\$0.5	48.4%	\$0.6	31.6%	\$1.2	100.0%
Lottery	\$22.7	-2.5%	\$20.9	-7.7%	\$21.6	3.0%	\$21.4	-0.7%	\$22.3	4.2%	\$22.4	0.3%	\$22.7	1.3%
All Other	\$0.6	-44.1%	\$0.2	-64.7%	\$0.3	57.4%	\$0.7	115.7%	\$0.9	19.7%	\$0.6	-32.9%	\$0.7	16.7%
Total Other Revenue	\$50.9	2.5%	\$56.0	10.0%	\$53.3	-4.7%	\$52.8	-1.1%	\$57.3	8.6%	\$56.6	-1.3%	\$58.8	3.9%
TOTAL GENERAL FUND	\$1416.4	3.0%	\$1313.9	-7.2%	\$1249.9	-4.9%	\$1387.9	11.0%	\$1429.7	3.0%	\$1495.4	4.6%	\$1576.2	5.4%
OTUED														
OTHER	ሮ ፖ ዓ	6.20/	ф 7 г	2.70/	ሰ ር 7	10.60/	¢7.5	11 50/	67 7	2.00/	#0 0	2 40/	የ ດ ດ	2 50/
Fuel Gross Receipts Tax	\$7.3	6.3%	\$7.5	3.7%	\$6.7	-10.6%	\$7.5	11.5%	\$7.7	2.9%	\$8.0	3.4%	\$8.2	2.5%

^{*} Includes Telecommunications Tax; includes \$3.76M transfer in FY08 to the T-Fund for prior years Jet Fuel tax processing error

^{**} Includes Cigarette, Tobacco Products and Floor Stock tax revenues

^{***} Assumes Vermont Yankee continues to operate beyond FY12, pending legal and regulatory rulings, and is taxed per Act 143 of 2012 effective in FY13; Stated Electric Energy Tax revenues exclude appropriations to the Clean Energy Development Fund and Education Fund

TABLE 1 - STATE OF VERMONT LEGISLATIVE JOINT FISCAL OFFICE AVAILABLE GENERAL FUND REVENUE FORECAST UPDATE

Consensus JFO and Administration Forecast - July 2012

CURRENT LAW BASIS

including all Education Fund	FY 2008	%	FY 2009	%	FY 2010	%	FY 2011	%	FY 2012	%	FY 2013	%	FY 2014	%
allocations and other out-transfers	(Actual)	Change	(Actual)	Change	(Actual)	Change	(Actual)	Change	(Preliminary)	Change	(Forecast)	Change	(Forecast)	Change
REVENUE SOURCE														
Personal Income	\$622.3	7.1%	\$530.3	-14.8%	\$498.0	-6.1%	\$553.3	11.1%	\$597.0	7.9%	\$633.4	6.1%	\$686.7	8.4%
Sales and Use*	\$225.6	1.4%	\$214.1	-5.1%	\$207.4	-3.1%	\$217.1	4.7%	\$227.9	5.0%	\$234.9	3.1%	\$236.6	0.7%
Corporate	\$74.6	2.4%	\$66.2	-11.3%	\$62.8	-5.1%	\$89.7	42.7%	\$85.9	-4.2%	\$84.4	-1.8%	\$86.9	3.0%
Meals and Rooms	\$121.1	5.4%	\$117.1	-3.3%	\$118.0	0.8%	\$122.6	4.0%	\$126.9	3.5%	\$131.4	3.6%	\$136.5	3.9%
Cigarette and Tobacco	\$0.0	NM	\$0.0	NM	\$0.0	NM	\$0.0	NM	\$0.0	NM	\$0.0	NM	\$0.0	NM
Liquor	\$14.2	3.7%	\$15.0	6.0%	\$14.9	-1.0%	\$15.4	3.1%	\$16.4	7.0%	\$16.8	2.3%	\$17.2	2.4%
Insurance	\$54.8	3.8%	\$53.7	-2.1%	\$53.3	-0.9%	\$55.0	3.3%	\$56.3	2.5%	\$57.9	2.8%	\$59.5	2.8%
Telephone	\$9.5	-4.6%	\$9.1	-3.8%	\$7.9	-13.9%	\$11.4	44.4%	\$9.6	-15.3%	\$9.5	-1.3%	\$9.4	-1.1%
Beverage	\$5.6	1.9%	\$5.6	0.3%	\$5.7	0.4%	\$5.8	2.2%	\$6.0	3.3%	\$6.1	2.1%	\$6.2	1.6%
Electric**	\$2.7	3.3%	\$2.8	4.0%	\$2.9	2.5%	\$2.9	0.8%	\$2.9	0.3%	\$9.4	220.8%	\$11.4	NM
Estate***	\$15.7	-11.9%	\$21.9	39.4%	\$14.2	-35.2%	\$21.0	48.3%	\$13.3	-36.5%	\$20.2	51.5%	\$21.8	7.9%
Property	\$10.7	-16.3%	\$8.5	-21.1%	\$7.8	-8.2%	\$8.4	7.7%	\$7.9	-6.2%	\$8.5	8.6%	\$9.2	8.3%
Bank	\$10.2	-3.4%	\$20.6	102.5%	\$10.4	-49.7%	\$15.4	49.0%	\$10.7	-30.9%	\$10.4	-2.4%	\$10.3	-1.0%
Other Tax	\$3.2	-51.1%	\$2.8	-12.7%	\$3.7	32.1%	\$3.7	1.7%	\$1.2	-66.7%	\$3.2	158.7%	\$3.6	12.5%
Total Tax Revenue	\$1170.3	4.1%	\$1067.7	-8.8%	\$1006.7	-5.7%	\$1121.6	11.4%	\$1162.1	3.6%	\$1226.1	5.5%	\$1295.3	5.6%
Business Licenses	\$2.7	-1.0%	\$3.0	9.4%	\$3.0	-0.2%	\$3.0	-0.6%	\$3.0	2.8%	\$3.1	1.7%	\$3.2	3.2%
Fees	\$14.7	3.6%	\$19.1	29.5%	\$19.2	0.9%	\$20.5	6.4%	\$20.9	2.1%	\$21.6	3.4%	\$22.3	3.2%
Services	\$1.7	15.9%	\$1.5	-11.0%	\$1.2	-19.9%	\$1.1	-8.7%	\$2.3	105.8%	\$1.4	-39.9%	\$1.5	7.1%
Fines	\$4.4	38.6%	\$9.8	122.0%	\$7.4	-24.8%	\$5.7	-22.2%	\$7.4	28.7%	\$6.9	-6.3%	\$7.2	4.3%
Interest	\$5.3	7.2%	\$1.2	-77.8%	\$0.5	-56.3%	\$0.3	-49.9%	\$0.4	62.3%	\$0.5	20.7%	\$1.1	120.0%
All Other	\$0.6	-44.1%	\$0.2	-64.7%	\$0.3	57.4%	\$0.7	115.7%	\$0.9	19.7%	\$0.6	-32.9%	\$0.7	16.7%
Total Other Revenue	\$29.5	6.5%	\$34.8	18.0%	\$31.7	-8.9%	\$31.3	-1.2%	\$34.9	11.7%	\$34.1	-2.4%	\$36.0	5.6%
TOTAL GENERAL FUND	\$1199.7	4.2%	\$1102.5	-8.1%	\$1038.4	-5.8%	\$1152.8	11.0%	\$1197.0	3.8%	\$1260.2	5.3%	\$1331.3	5.6%

^{*} Includes \$2.5M transfer to the T-Fund in FY08 for prior years Jet Fuel tax processing errors; Transfer to the Education Fund increases from 33.3% to 35.0% effective in FY14

^{**} Assumes Vermont Yankee continues to operate beyond FY12, pending legal and regulatory rulings, and is taxed per Act 143 of 2012 effective in FY13; Stated Electric Energy Tax revenues exclude appropriations to the Clean Energy Development Fund and Education Fund

^{***} Excludes transfer to the Higher Education Trust Fund of \$2.4M in FY05, \$5.2M in FY06 and \$11.0M in FY11

TABLE 2A - STATE OF VERMONT LEGISLATIVE JOINT FISCAL OFFICE

SOURCE TRANSPORTATION FUND REVENUE FORECAST UPDATE

Consensus JFO and Administration Forecast - July 2012

SOURCE T-FUND

revenues are prior to all E-Fund allocations and other out-transfers. Used for	FY 2008	%	FY 2009	%	FY 2010	%	FY 2011	%	FY 2012	%	FY 2013	%	FY 2014	%
analytic and comparative purposes only.	(Actual)	Change	(Actual)	Change	(Actual)	Change	(Actual)	Change	(Preliminary)	Change	(Forecast)	Change	(Forecast)	Change
REVENUE SOURCE														
Gasoline	\$62.6	-1.6%	\$60.6	-3.1%	\$61.0	0.6%	\$60.6	-0.6%	\$59.3	-2.2%	\$60.3	1.7%	\$61.4	1.8%
Diesel	\$16.6	-7.8%	\$15.5	-6.5%	\$15.1	-2.6%	\$15.4	2.0%	\$16.0	3.9%	\$16.2	1.2%	\$16.7	3.1%
Purchase and Use*	\$79.0	-2.0%	\$65.9	-16.6%	\$69.7	5.7%	\$77.1	10.5%	\$81.9	6.3%	\$86.1	5.1%	\$90.8	5.5%
Motor Vehicle Fees	\$67.5	3.2%	\$65.5	-3.0%	\$72.5	10.7%	\$72.3	-0.3%	\$73.5	1.7%	\$79.8	8.5%	\$81.6	2.3%
Other Revenue**	\$23.7	17.2%	\$18.0	-24.0%	\$18.2	1.4%	\$17.9	-1.9%	\$18.3	2.2%	\$18.7	2.3%	\$19.1	2.1%
TOTAL TRANS. FUND	\$249.4	0.6%	\$225.6	-9.6%	\$236.6	4.9%	\$243.3	2.8%	\$249.0	2.3%	\$261.1	4.9%	\$269.6	3.3%

TABLE 2 - STATE OF VERMONT LEGISLATIVE JOINT FISCAL OFFICE AVAILABLE TRANSPORTATION FUND REVENUE FORECAST UPDATE

Consensus JFO and Administration Forecast - July 2012

CURRENT LAW BASIS

including all Education Fund	FY 2008	%	FY 2009	%	FY 2010	%	FY 2011	%	FY 2012	%	FY 2013	%	FY 2014	%
allocations and other out-transfers	(Actual)	Change	(Actual)	Change	(Actual)	Change	(Actual)	Change	(Preliminary)	Change	(Forecast)	Change	(Forecast)	Change
REVENUE SOURCE														
Gasoline	\$62.6	-1.6%	\$60.6	-3.1%	\$61.0	0.6%	\$60.6	-0.6%	\$59.3	-2.2%	\$60.3	1.7%	\$61.4	1.8%
Diesel	\$16.6	-7.8%	\$15.5	-6.5%	\$15.1	-2.6%	\$15.4	2.0%	\$16.0	3.9%	\$16.2	1.2%	\$16.7	3.1%
Purchase and Use*	\$52.7	-2.0%	\$44.0	-16.6%	\$46.5	5.7%	\$51.4	10.5%	\$54.6	6.3%	\$57.4	5.1%	\$60.5	5.5%
Motor Vehicle Fees	\$67.5	3.2%	\$65.5	-3.0%	\$72.5	10.7%	\$72.3	-0.3%	\$73.5	1.7%	\$79.8	8.5%	\$81.6	2.3%
Other Revenue**	\$23.7	23.5%	\$18.0	-24.0%	\$18.2	1.4%	\$17.9	-1.9%	\$18.3	2.2%	\$18.7	2.3%	\$19.1	2.1%
TOTAL TRANS. FUND	\$223.1	1.4%	\$203.6	-8.7%	\$213.3	4.8%	\$217.6	2.0%	\$221.7	1.9%	\$232.4	4.8%	\$239.3	3.0%
OTHER														
TIB Gasoline					\$13.4	NM	\$16.5	23.6%	\$20.9	26.6%	\$21.0	0.7%	\$22.1	4.9%
TIB Diesel and Other***					\$1.5	NM	\$2.0	31.7%	\$1.9	-1.4%	\$2.1	6.4%	\$2.1	2.9%
Total TIB					\$14.9	NM	\$18.5	24.4%	\$22.8	23.6%	\$23.1	1.2%	\$24.2	4.7%

^{*} As of FY04, includes Motor Vehicle Rental tax revenue

^{**} Beginning in FY07, includes Stabilization Reserve interest; FY08 data includes \$3.76M transfer from G-Fund for prior Jet Fuel tax processing errors and inclusion of this tax in subsequent years

^{***} Includes TIB Fund interest income of less than \$15,000

TABLE 3 - STATE OF VERMONT LEGISLATIVE JOINT FISCAL OFFICE AVAILABLE EDUCATION FUND* REVENUE FORECAST UPDATE

(Partial Education Fund Total - Includes Source General and Transportation Fund Allocations Only)

Consensus JFO and Administration Forecast - July 2012

CURRENT LAW BASIS

* Source General and Transportation														
Fund taxes allocated to or associated	FY 2008	%	FY 2009	%	FY 2010	%	FY 2011	%	FY 2012	%	FY 2013	%	FY 2014	%
with the Education Fund only.	(Actual)	Change	(Actual)	Change	(Actual)	Change	(Actual)	Change	(Preliminary)	Change	(Forecast)	Change	(Forecast)	Change
GENERAL FUND														
Sales & Use**	\$112.8	1.4%	\$107.1	-5.1%	\$103.7	-3.1%	\$108.5	4.7%	\$113.9	5.0%	\$117.4	3.1%	\$127.4	8.5%
Interest	(\$1.3)	-0.8%	\$0.3	NM	\$0.1	-60.2%	\$0.1	-48.8%	\$0.0	-20.0%	\$0.1	139.6%	\$0.1	0.0%
Lottery	\$22.7	-2.5%	\$20.9	-7.7%	\$21.6	3.0%	\$21.4	-0.7%	\$22.3	4.2%	\$22.4	0.3%	\$22.7	1.3%
TRANSPORTATION FUND														
Purchase and Use***	\$26.3	-2.0%	\$22.0	-16.6%	\$23.2	5.7%	\$25.7	10.5%	\$27.3	6.3%	\$28.7	5.1%	\$30.3	5.5%
TOTAL	\$160.5	0.3%	\$150.2	-6.4%	\$148.6	-1.1%	\$155.7	4.8%	\$163.6	5.1%	\$168.6	3.1%	\$180.5	7.0%

^{**} Includes Telecommunications Tax; Includes \$1.25M transfer to T-Fund in FY08 for prior Jet Fuel Tax processing errors; Transfer percentage from the General Fund increases from 33.3% to 35.0% effective in FY14

^{***} Includes Motor Vehicle Rental revenues, restated