Kavet, Rockler & Associates, LLC
Economic and Public Policy Consulting

985 Grandview Road
Williamstown, Vermont 05679-9003 U.S.A.
Telephone: 802-433-1360
Facsimile: 866-433-1360
Cellular: 802-433-1111
E-Mail: tek@kavet.net
Website: www.kavetrockler.com

January 2018 Economic Review and Revenue Forecast Update

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

January 18, 2017

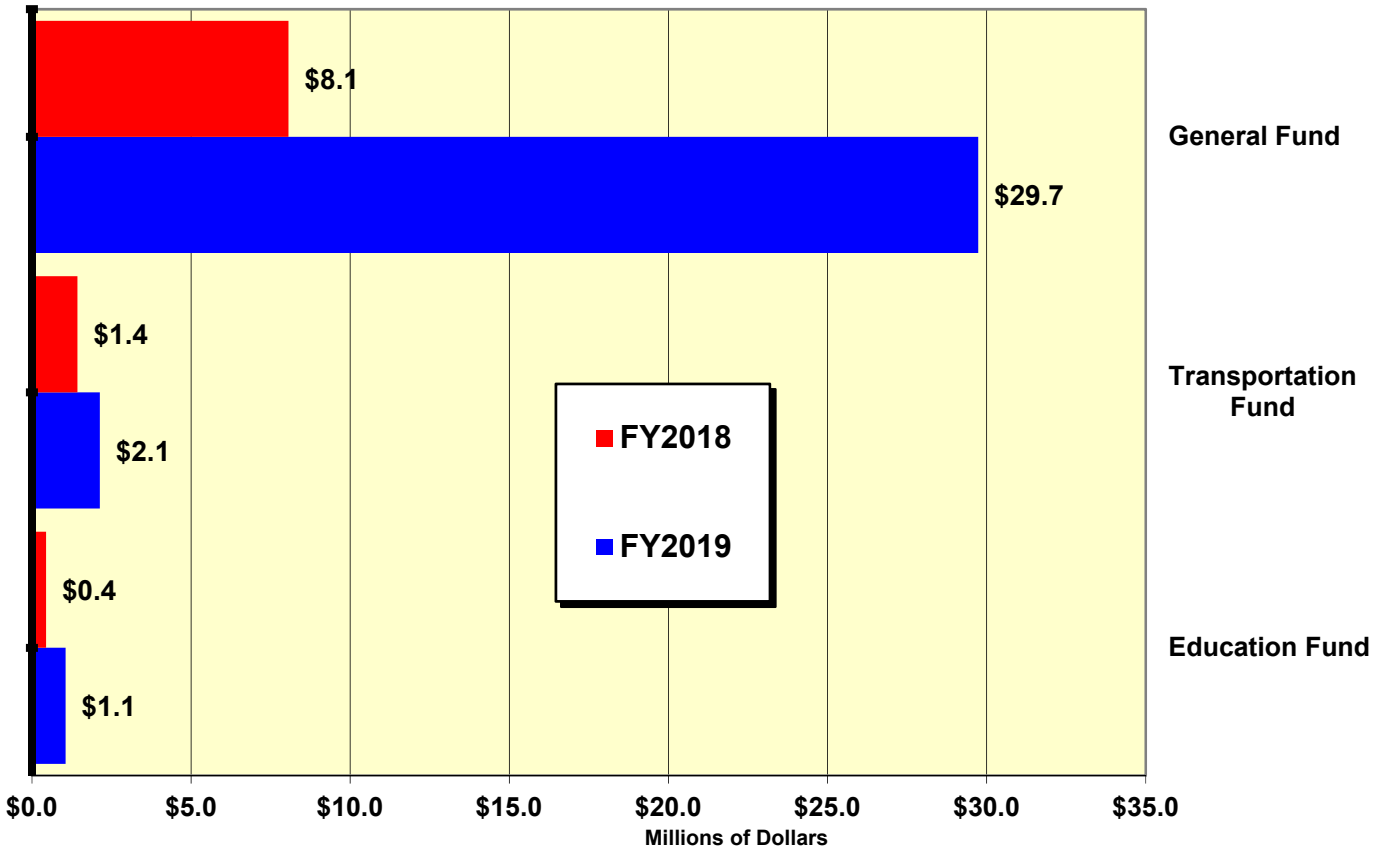
Economic Review and Revenue Forecast Update
January 2018

Overview

In recognition of the uncertainty surrounding potential State revenue impacts associated with the recently enacted Federal Tax Cut and Jobs Act (see page 3 and Appendix B for details), this Revenue Forecast has a "provisional" aspect. Although some of the Tax Act impacts are included herein, many remain ambiguous, are complex and are potentially material, requiring more detailed analyses to ascertain and quantify. Accordingly, we will continue to review these provisions with the possibility of revised revenue forecasts at a later date in the current legislative session, and/or consensus staff recommendations for formal adjustments in the interim.

Although most of the positive General Fund changes from the prior July forecast depicted in the below chart are related to preliminary Tax Act impacts included to date, the slow, steady improvement in the Vermont economy has also generated slight upward revenue revisions in all three broad funds included in this review.

Recommended Net Revenue Changes from July 2017 Forecast

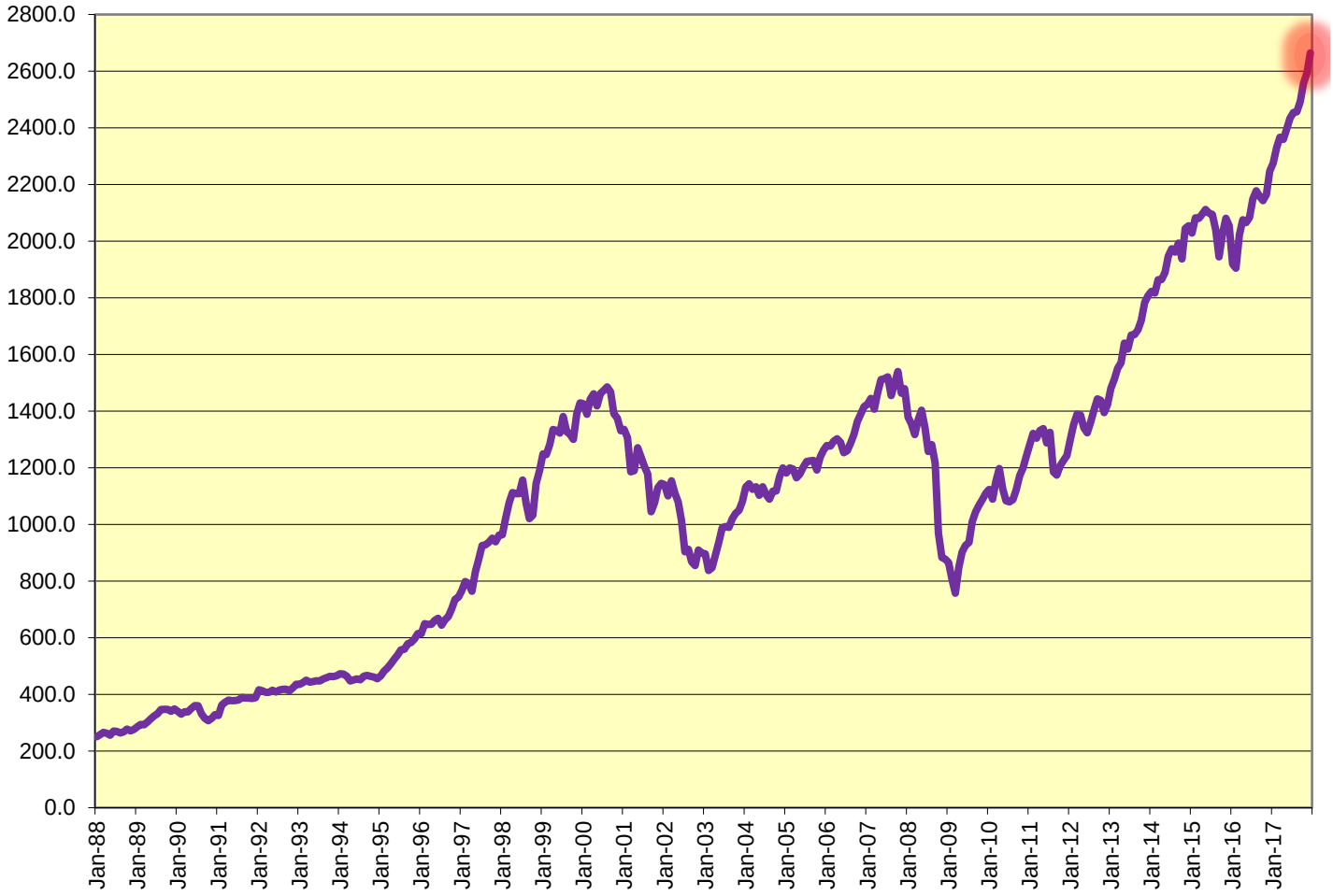


- The far-reaching tax changes associated with the Tax Act will significantly impact the near-term economic outlook and State tax revenues. While corporations and their owners are the biggest beneficiaries of these tax cuts, the complex provisions in the Act will affect taxpayers in diverse ways – both positive and negative (see page 3). Because these cuts are financed via more than a trillion dollars in projected additional federal debt, they will have a stimulative near-term effect on the economy, temporarily boosting growth. As the costs of added debt and many of the individual tax cuts expire over time, the effects will become broadly negative. Although the macroeconomic models used in this analysis do not yet fully capture all of these effects, most had been anticipated in the mid-December control forecasts used. We expect to update this analysis with more current models to be issued in February or March of this year.

- One of the first of the Tax Plan impacts has been a run-up in equity market valuations, as anticipated corporate benefits are capitalized in stock prices. These gains create large potential tax liabilities that could represent an upside to State personal income tax receipts in FY18 and beyond.

U.S. Stocks Soar, But is the Exuberance Irrational Yet?

(S&P 500 Monthly Average, Source: Standard & Poor's, The McGraw-Hill Companies, Inc.)



The Tax Cut and Jobs Act of 2017: A Full Employment Act for Tax Advisors…

The Tax Cut and Jobs Act of 2017, one of the most extensive tax reform initiatives in U.S. history, was passed with extraordinary rapidity and virtually no expert testimony or in-depth economic or fiscal impact analysis performed prior to its passage. As a result, many of the provisions in the Act are only now being fully analyzed at the state and federal levels. The vote to approve this legislation was strictly partisan, drawing into question its permanence in the event there is a shift in future party control of the federal government. Although touted as "simplifying" the tax code, for many filers, the 1,097 page bill introduces numbing complexity. Pass-through businesses and corporations now have favored provisions that could drive behavioral changes that could take years for IRS rule-making to legally clarify. In the meantime, the Act will support robust employment for professional tax planners – especially for wealthy individuals, owners of pass-through entities and corporations.

Although Tax Plan revenue impact analysis is ongoing, the Vermont Joint Fiscal Office and Tax Department have generated preliminary impact estimates for many of the personal income tax provisions using a detailed microsimulation model consisting of 293,900 representative returns. While this analysis is not final, it has informed some of the revenue estimates herein and will be refined in the coming months, along with further analyses affecting corporate, estate and other revenue categories.

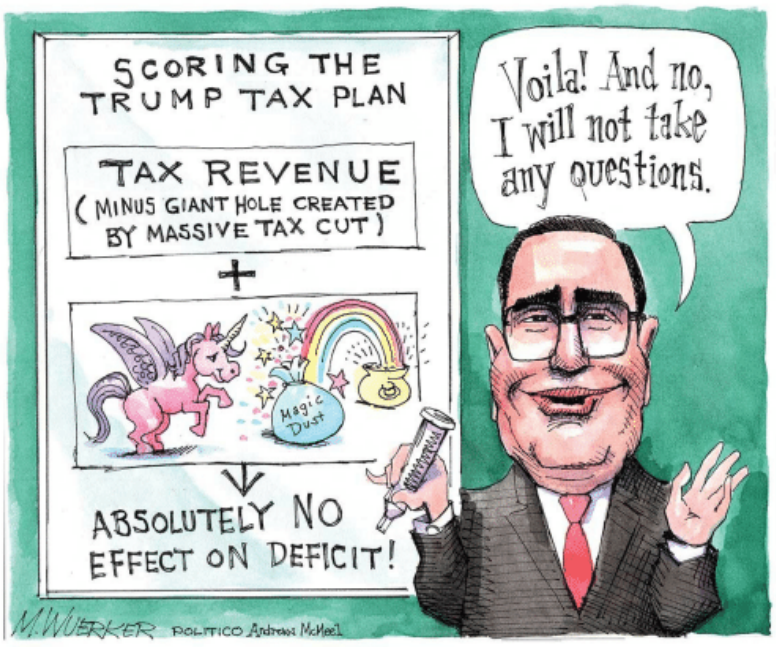
This initial analysis shows that aggregate Vermont personal income tax liabilities could increase by about $30 million per year as a result of the Tax Act. These effects are primarily due to the treatment of exemptions and their effect on Vermont's current definition of taxable income. As shown in the charts on the following two pages, about half (52.7%) of all Vermont taxpayers would pay less in State income taxes and about half (47.3%) would pay more – with net revenue positive due to amounts paid by those owing more exceeding savings from those paying less.

As shown in the charts, those likely to pay less tend to be concentrated in the lowest (below $50K) and highest (above $500K) income groups, with those earning between about $50K and $500K having a better than 50% chance of paying more. However, in every income group, there are some who would pay more and some who would pay less. Filing status also affects the likelihood of paying more or less, with those filing as "Single" having a 74% chance of paying less, while those filing as "Married Joint" having only a 29% chance of paying less. Married Joint filers represent about 42% of all filers, but would end up paying more than 87% of all net new State revenue. By AGI income class, 95% of the net new tax liability would be paid by those earning $50K to $300K, despite representing fewer than 50% of all filers.

Note that these effects do not include federal income tax reductions or increases – which are likely to greatly exceed state level changes.

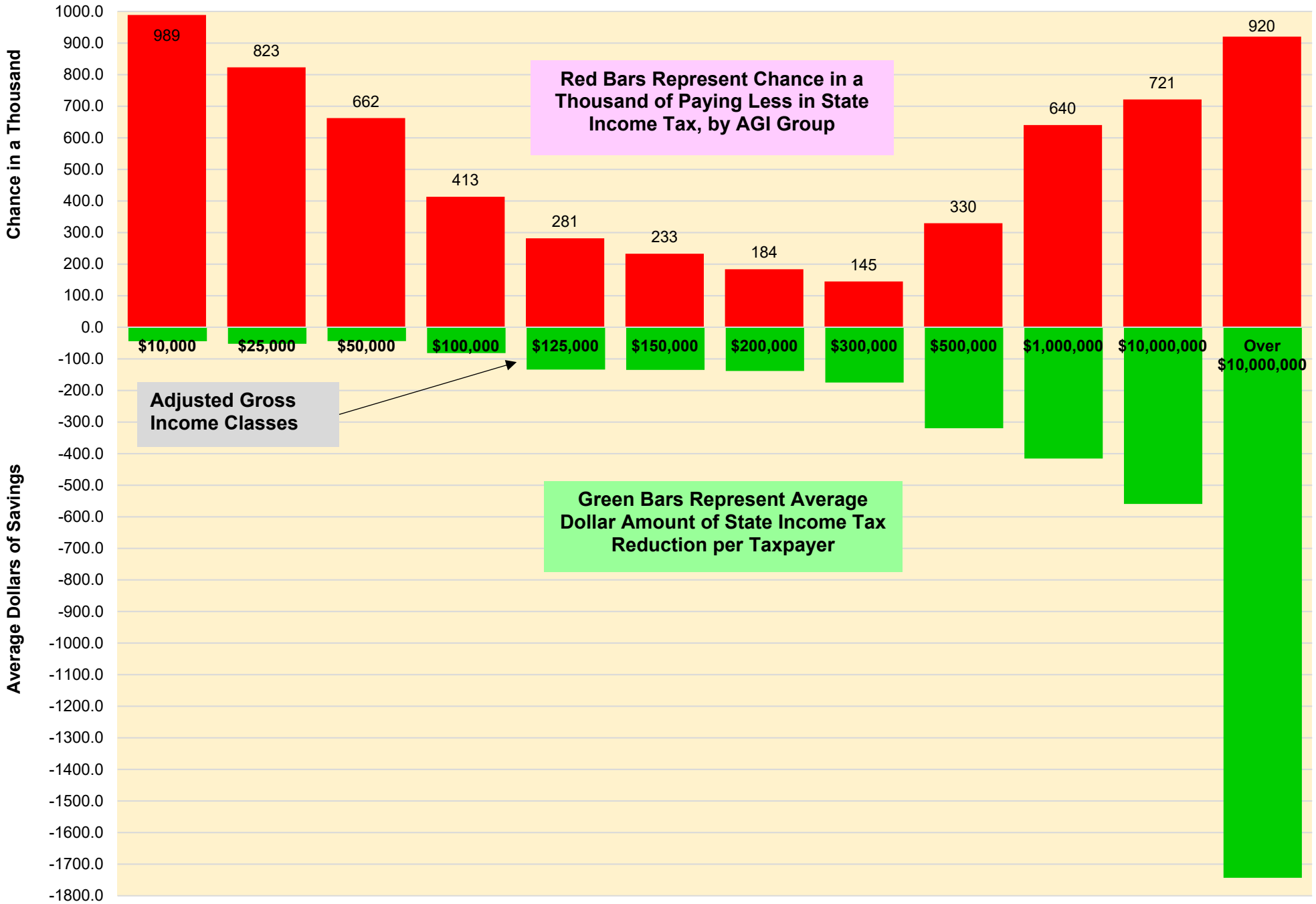
It should also be noted that the revenue estimates generated by this model and other related analyses have fluctuated widely over the past several weeks as refinements and new information became available. Despite being included in the revenue estimates herein at about $30M per year on a tax year basis, these estimates may continue to change in the coming months.

See Appendix B for Tax Plan impact details, and stay tuned…



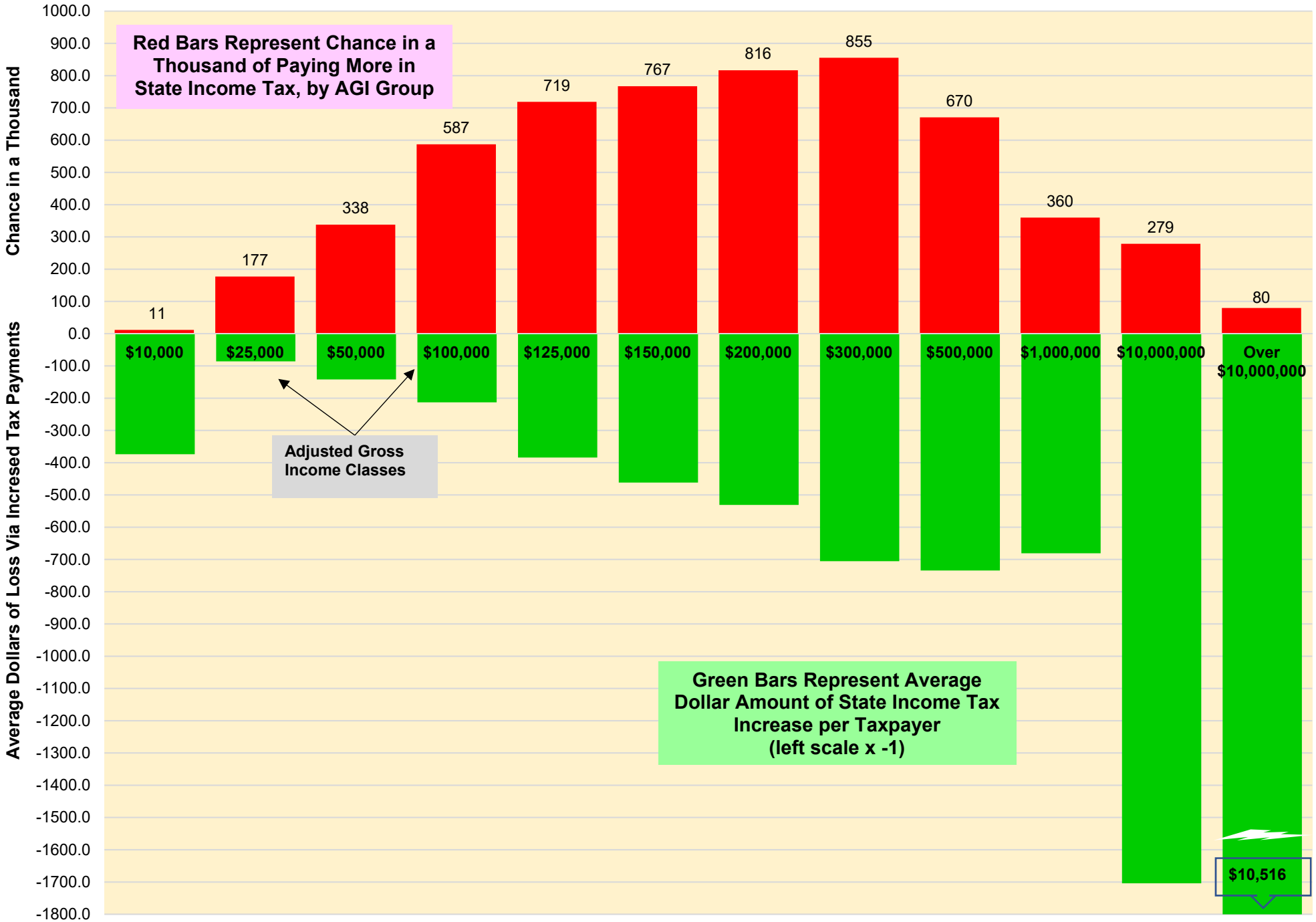
Who Might Pay Less?

53% of Vermont taxpayers could pay less State income tax as a result of the Federal Tax Act
Impacts are shown by AGI class, based on preliminary Tax Department and JFO estimates



Who Might Pay More?

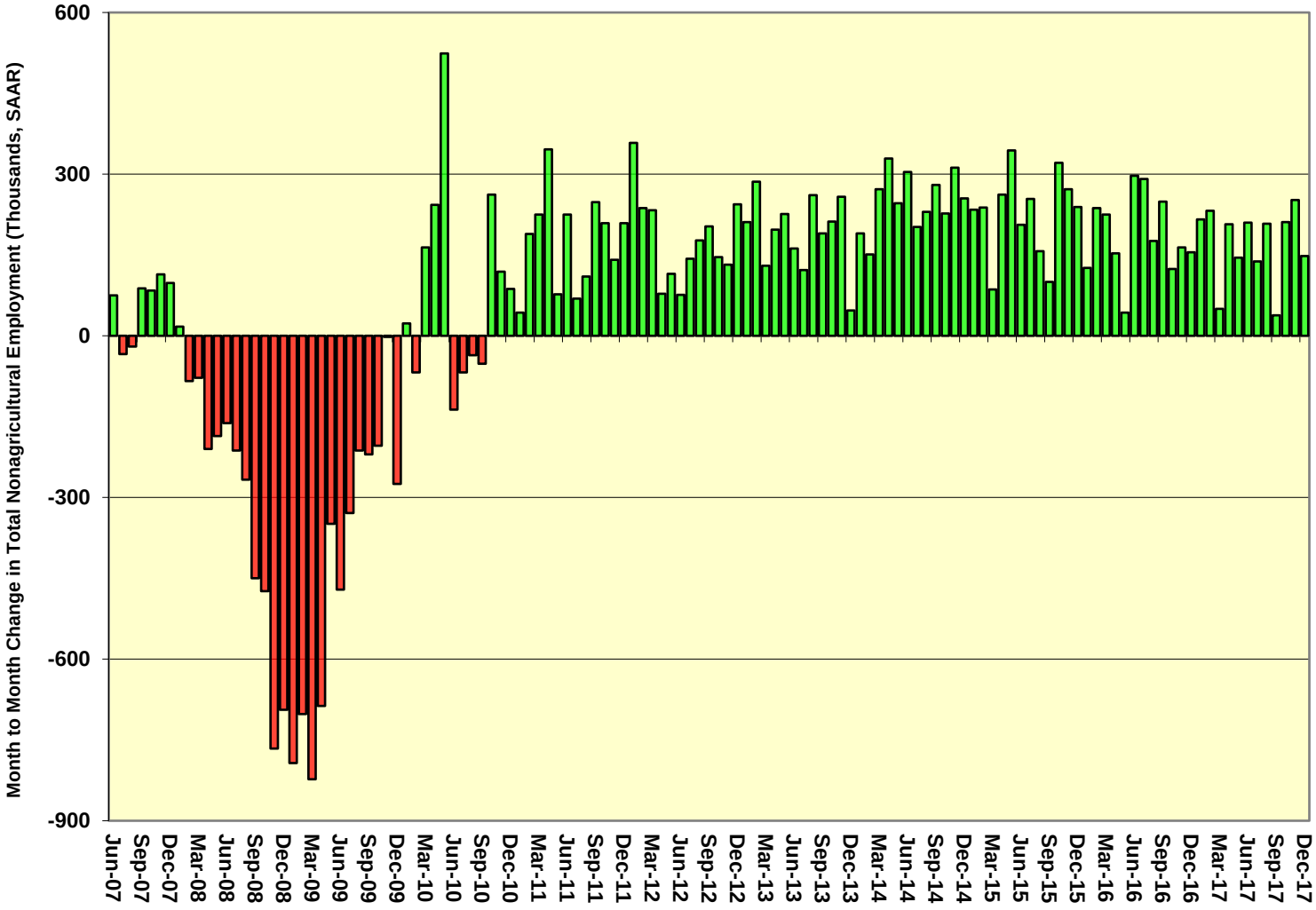
47% of Vermont taxpayers could pay more State income tax as a result of the Federal Tax Act
Impacts are shown by AGI class, based on preliminary Tax Department and JFO estimates



- The continuing recovery in home prices and recent strong equity market performance will bolster household wealth and along with continued low energy prices in 2018, should support robust consumer spending – which represents about 70% of the economy. These factors, bolstered by sustained consumer sentiment optimism, produced real retail sales growth in the 3%-4% range during the last two months of 2017 (see chart on following page), nearly double the growth rate of much of the last year.

- More than 17 million jobs have been added since February of 2010, pushing the U.S. unemployment rate to 4.1% in November, its lowest level since December of 2000. If U.S. unemployment reaches 3.7% in 2019, as currently forecast, it would be the lowest level in 48 years. Some economists now believe that stimulus from the Tax Act could drive the rate into the low 3% range – a level not experienced since the Korean War in the 1950s.

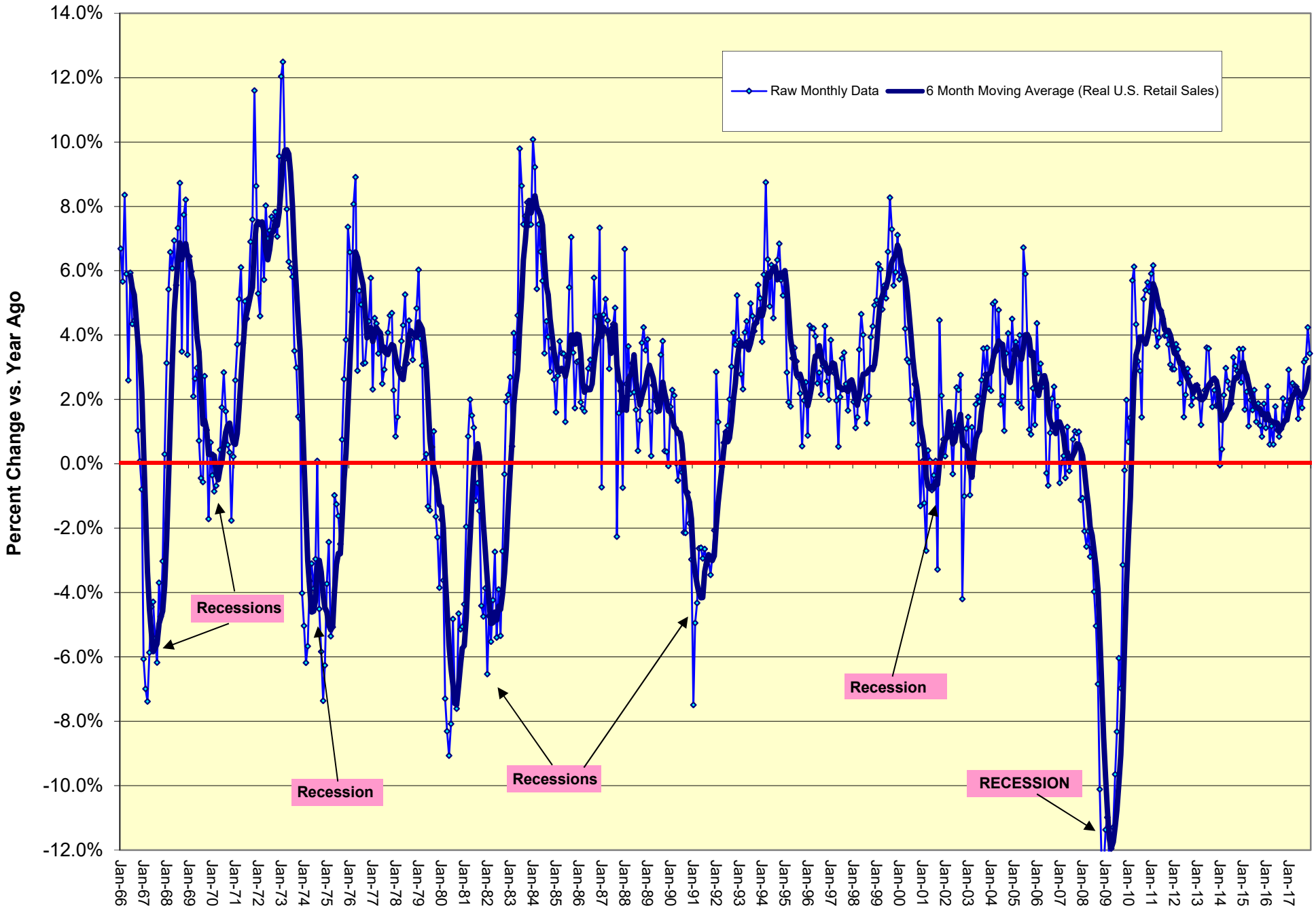
After 87 Consecutive Months, 17.6M New Jobs Underpin a Strengthening Economy
(Monthly Change in Total Payroll Employment, Seasonally-Adjusted, Source: U.S. Bureau of Labor Statistics)



- Vermont is currently tied with Colorado, Idaho and Iowa for the 5th lowest unemployment rate in the nation, at a seasonally adjusted monthly rate of 2.9% in November, the latest period for which data are available. In New

Real Retail Sales Post Strong Holiday Growth

Total Constant Dollar U.S. Retail Sales - Percent Change from Year Ago, Source: U.S. Census Bureau



England, Vermont has the second lowest rate, after New Hampshire, which has posted a rate between 2.7% and 2.9% in each of the last 24 months. Hawaii now boasts the lowest state unemployment rate at 2.0%, replacing North Dakota, Colorado and South Dakota in recent periods. The highest unemployment rate continues to be in Alaska, at 7.2%, followed by the District of Columbia at 6.4% and New Mexico at 6.1%.

- Initial claims for unemployment insurance in Vermont, a leading indicator of labor markets, dropped to near record lows in recent quarters.

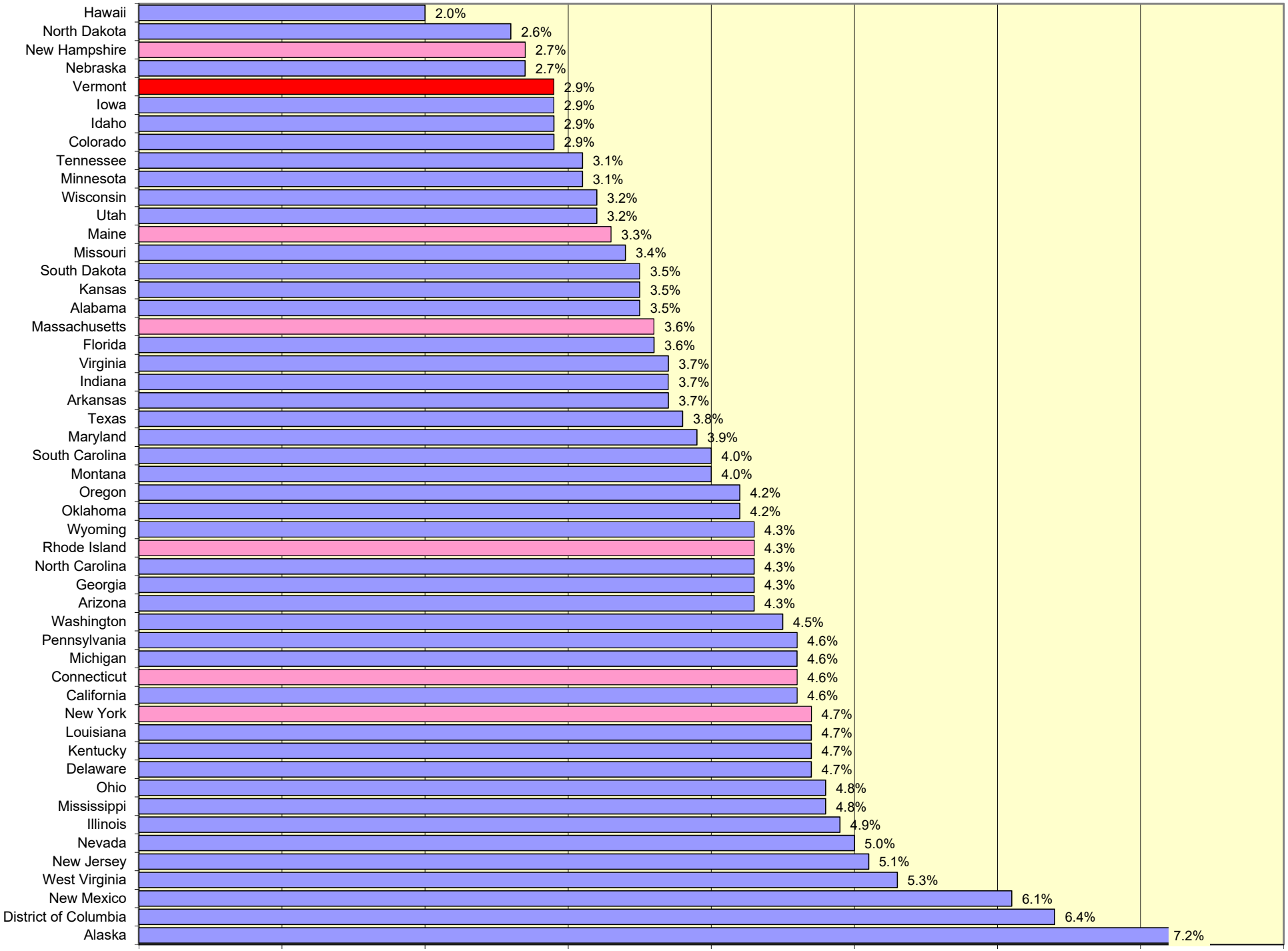
No Recession in Sight, As Vermont Initial Unemployment Insurance Claims Drop to Near Record Lows

(3 Month Centered Moving Average - Seasonally Adjusted Average Weekly Initial Unemployment Claims)

- Tightening labor markets have finally begun to exert some upward pressure on wages and incomes, resulting in some of the first real household income gains across all income strata in 2016 (the latest available data), however, this remains among the most pressing economic issues, as income gains continue to be increasingly concentrated among the highest income groups. The Tax Act will only serve to exacerbate U.S. income inequality, with the

Unemployment Rate by State - November 2017

Seasonally Adjusted Data, Source: U.S. Bureau of Labor Statistics

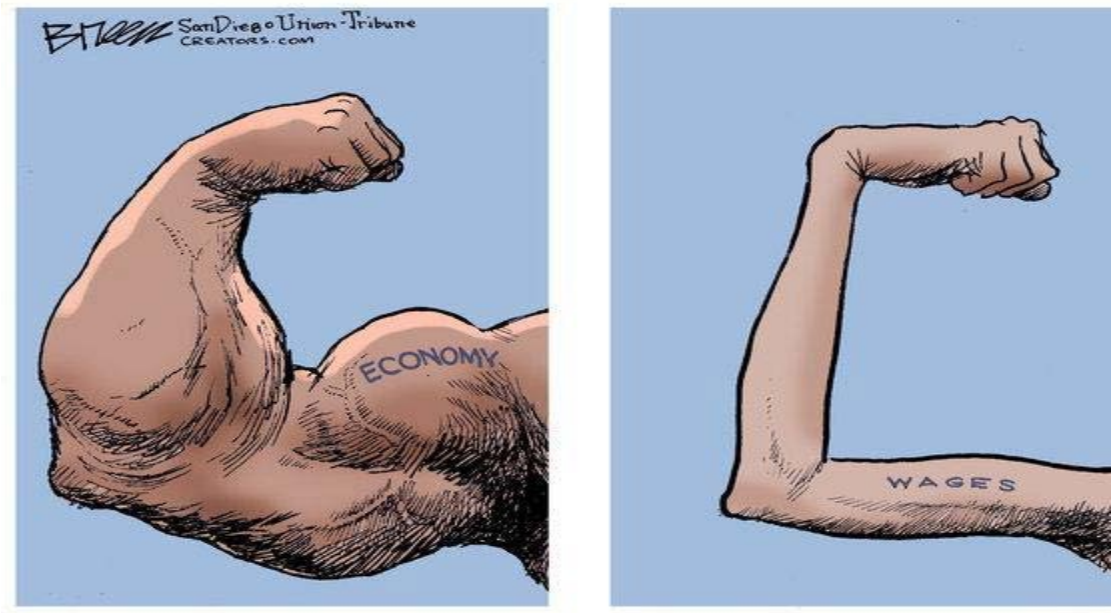


greatest absolute and relative benefits accruing to the highest income and wealth classes.

- Regional unemployment continues to reflect disparities between the Burlington metropolitan area and the remainder of the state, with pockets of consistently higher long-term unemployment in the NEK. Job growth in the Burlington metro area has exceeded its prior June 2007 cyclical peak since 2011, whereas the remainder of the State has still not reached its prior peak level as of the end of 2017 (though it is close - and should occur in 2018).

- Job "quality" and related income and wage growth continue to be a concern, although improvement has occurred in the last year.

- For example, real household income for the bottom 60% of the population grew more than 3% in 2016 (the latest data available), but was still below real earnings in 1999. For the lowest 20%, earnings were below 1989 levels. Meanwhile, real income among the top 40% of the population hit record highs in 2016, with the top 5% now earning more than $375,000 per year – about 29 times that of the lowest 20%.

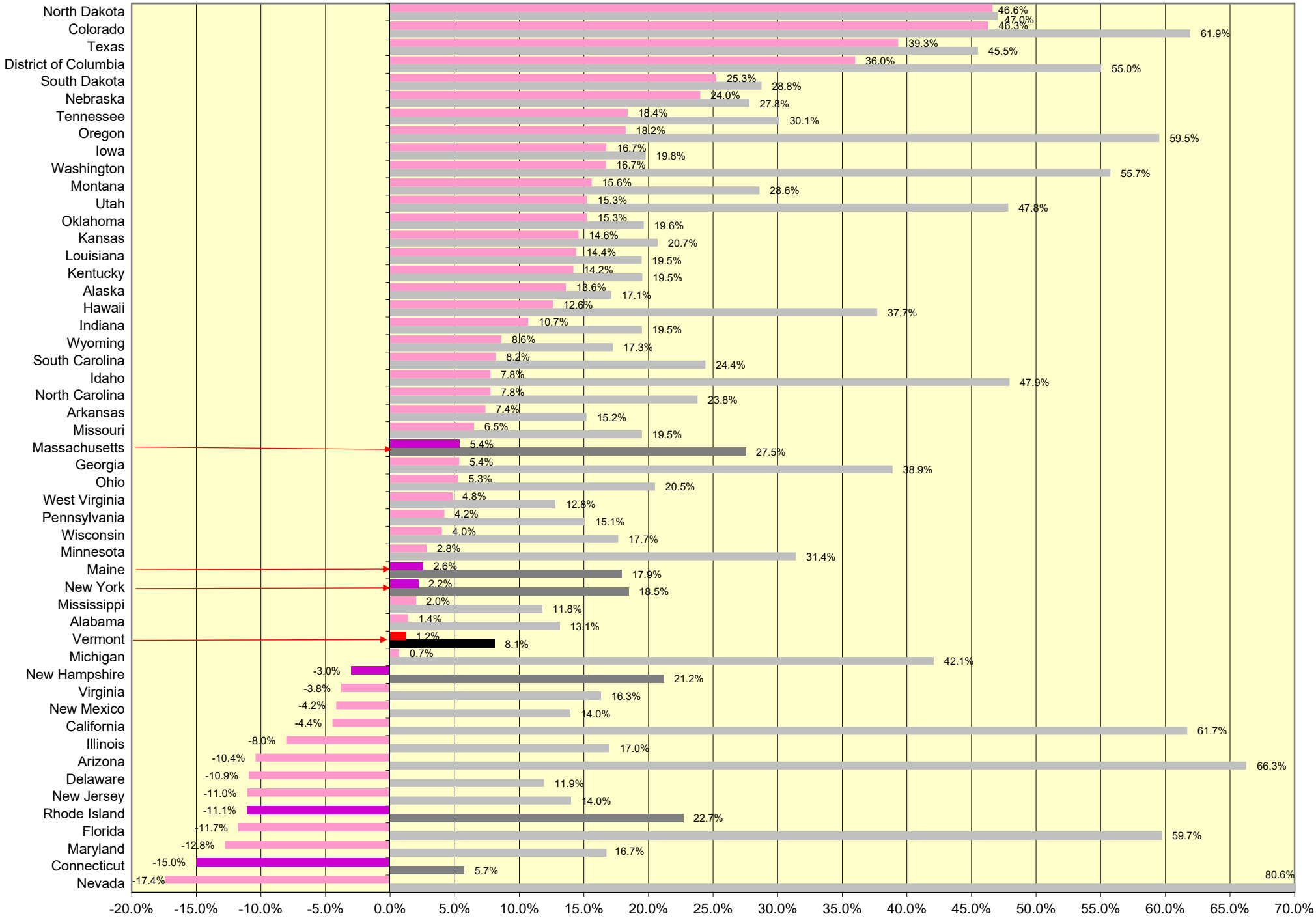


- Much of the Vermont job growth since the last cyclical peak has occurred in lower wage occupations and sectors. Since fiscal year 2009, 12,405 net jobs have been added in industry sectors that pay less than the average FY2017 Vermont wage (such as Accommodation & Food Services and Health Services), whereas in sectors paying above the Vermont average (such as Durable Goods Manufacturing and Utilities), 1,489 jobs have been lost over this same period.

- For the fourteenth consecutive quarter, housing prices increased on a year over year basis in virtually every U.S. state. As of the third quarter of 2017

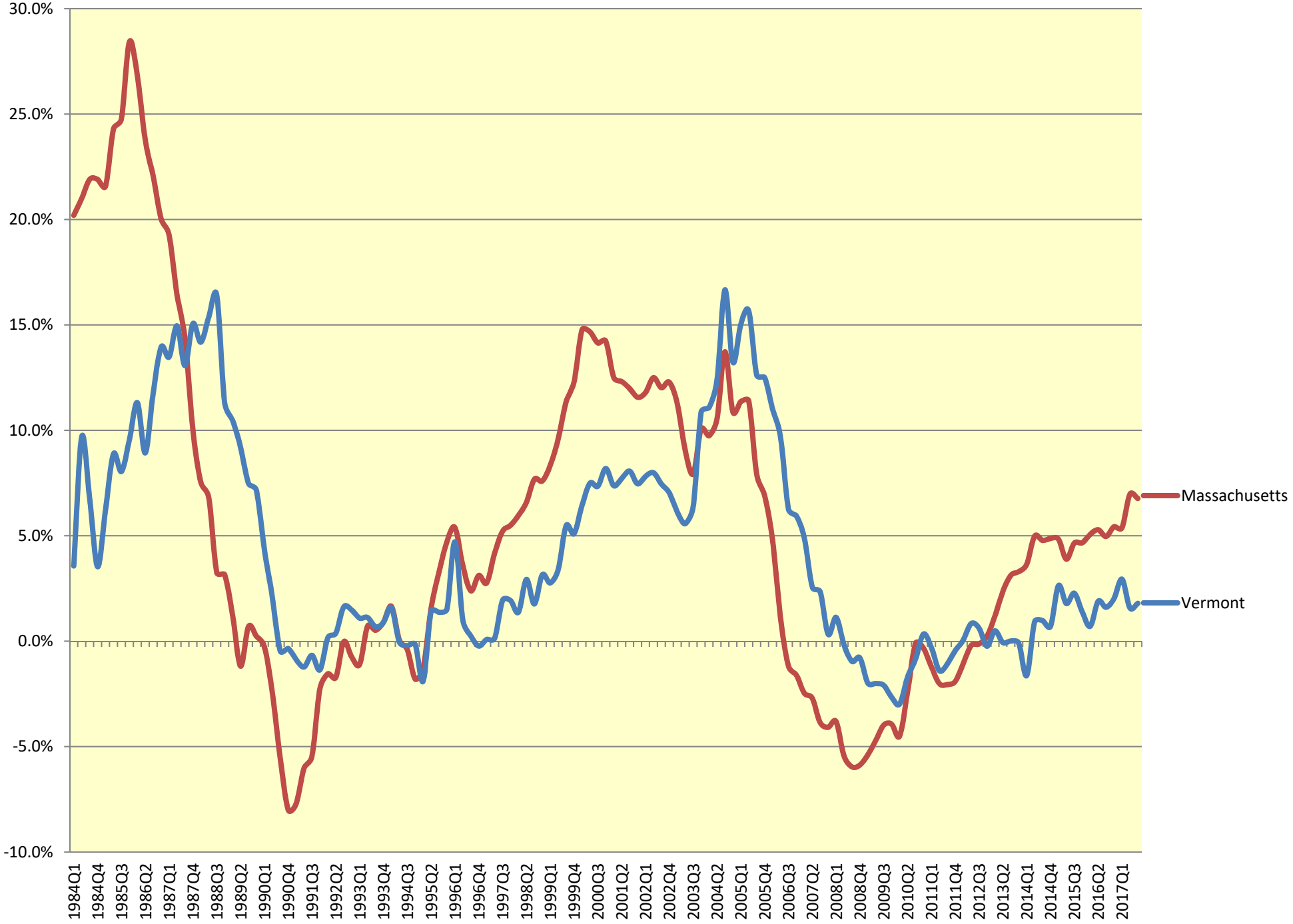
Real Estate Update: Housing Values Relative to Last Peak (pink) and Trough (grey)

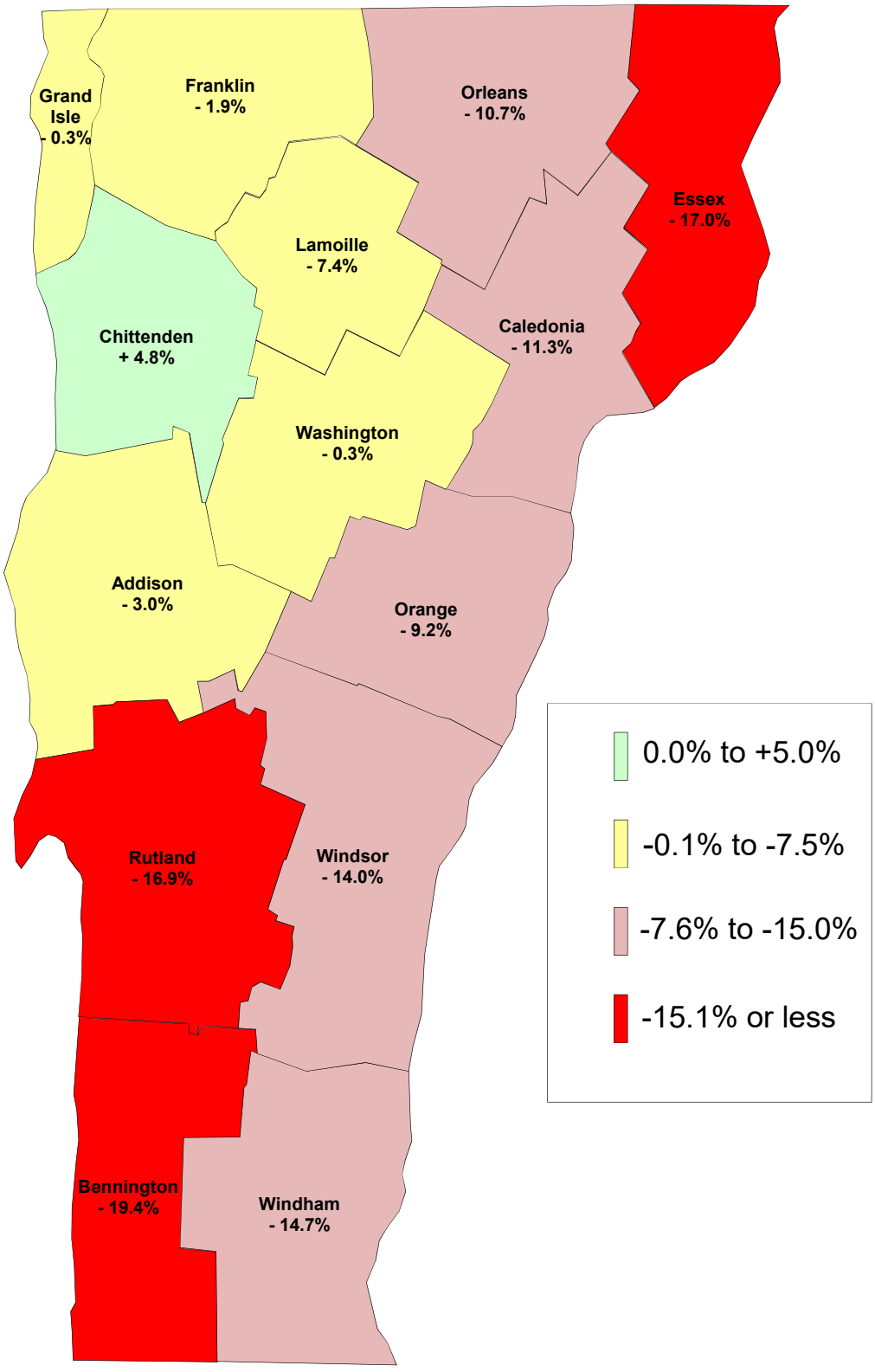
Percent Change, 2017Q3 vs. Peak Price by State Reached Between 2005Q3 and 2009Q2 - Pink and 2017Q3 vs. Trough Price Reached Between 2009Q3 and 2017Q3 - Grey
Source: FHFA Home Price index



Massachusetts Real Estate Markets Often Lead Those in Vermont

(Percent Change Year Ago in Home Prices, FHFA All Transactions Index)

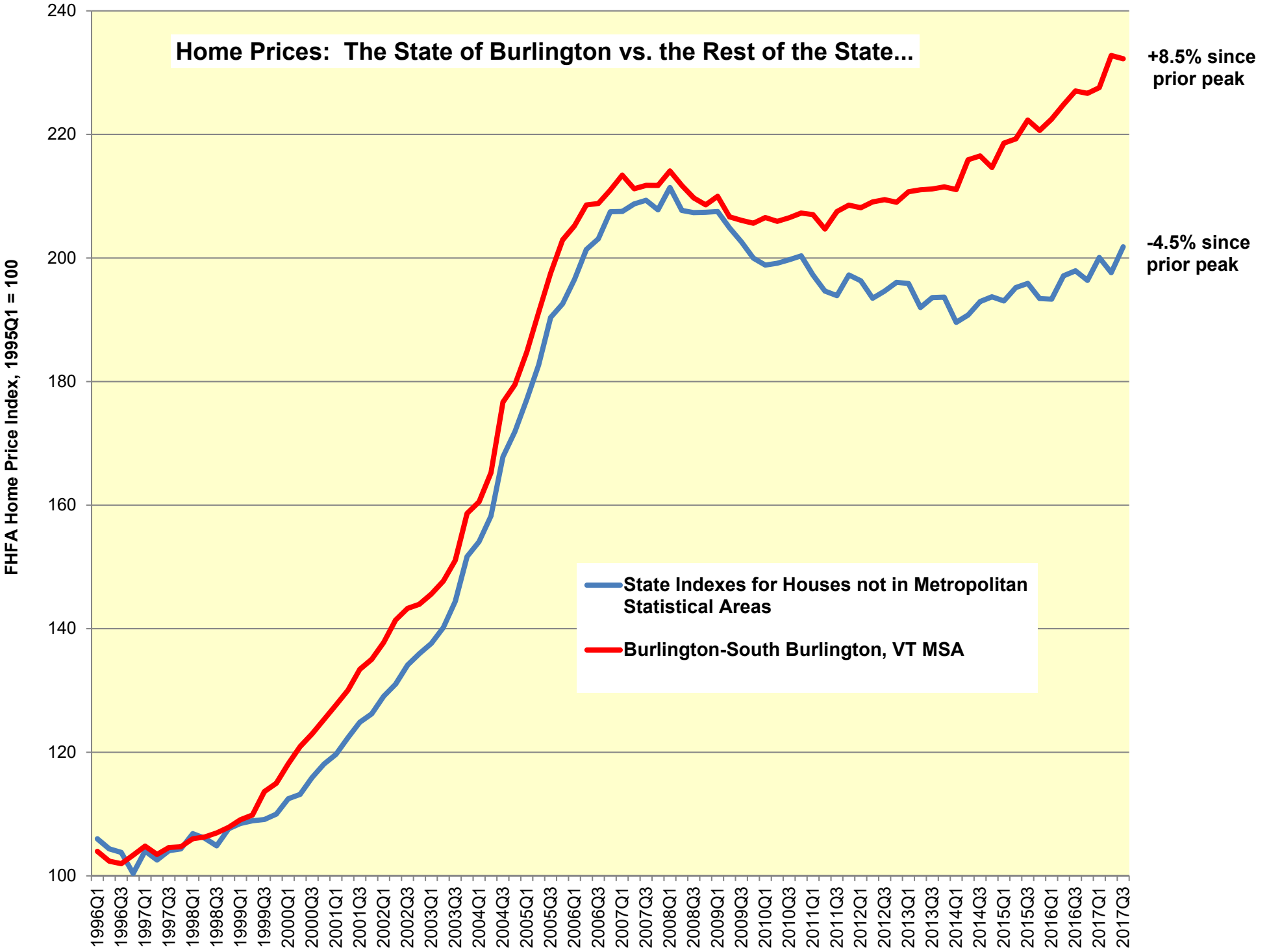




2016 VT Home Prices vs. Prior Peak by County

2016 FHFA Home Price Index versus Peak Price During 2007-2008

Source: FHFA Home Price Index - All Transactions, Developmental Index


Home Prices: The State of Burlington vs. the Rest of the State...
FHFA Home Price Index, 1995Q1 = 100
240
220
200
180
160
140
120
100
1996Q1
1996Q3
1997Q1
1997Q3
1998Q1
1998Q3
1999Q1
1999Q3
2000Q1
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2015Q3
2016Q1
2016Q3
2017Q1
2017Q3
State Indexes for Houses not in Metropolitan Statistical Areas
Burlington-South Burlington, VT MSA
+8.5% since prior peak
-4.5% since prior peak

(the most recent available), 37 states equaled or exceeded their pre-recession peak levels.

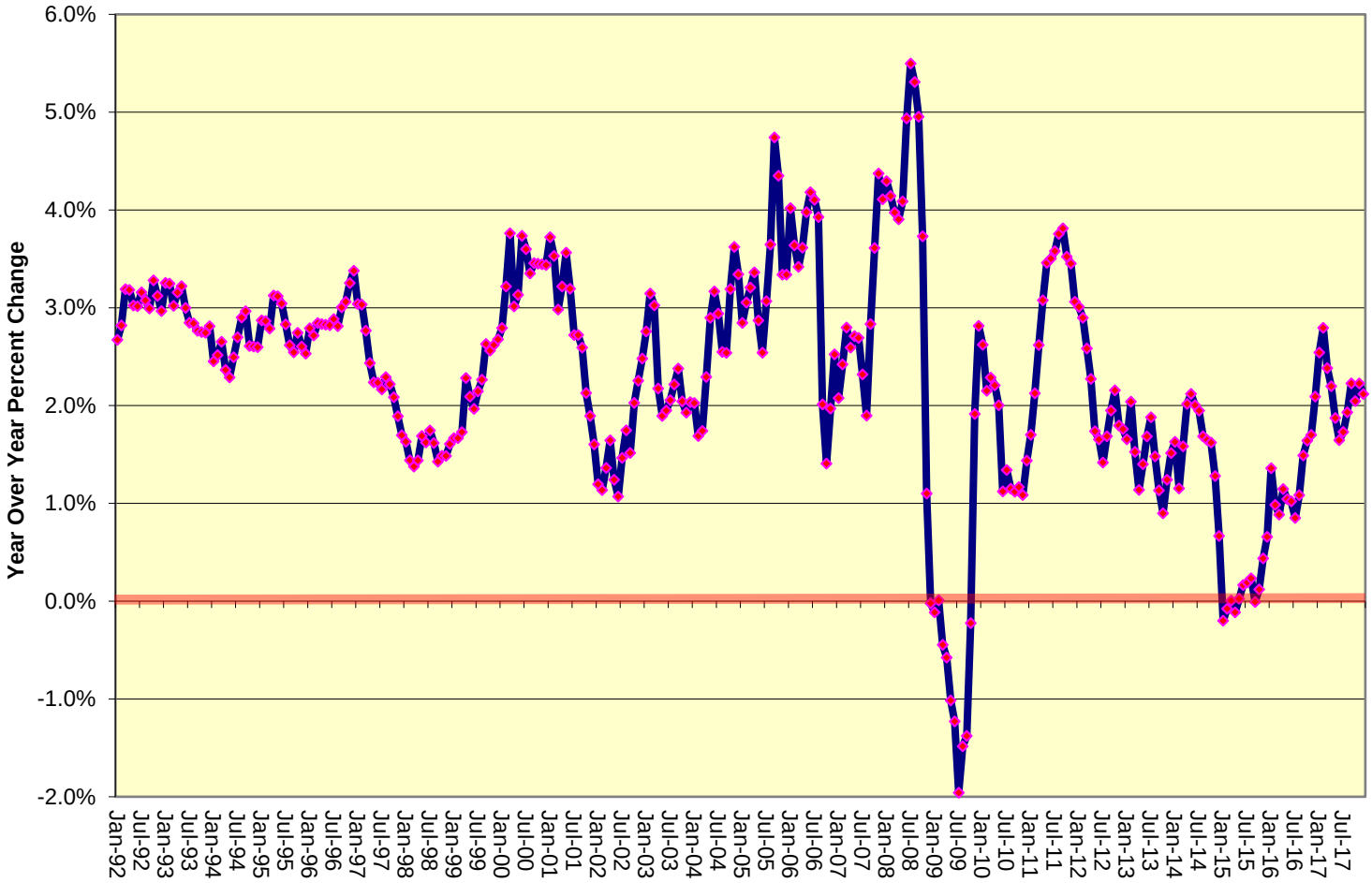
- Massachusetts (+5.4%), Maine (+2.6%) and New York (+2.2%) have now joined Vermont (+1.2%) as regional (New England + NY) states that now exceed their pre-recession home price levels. The sustained and growing housing price gains in Massachusetts are particularly significant, since Massachusetts real estate markets tend to regularly lead those of Vermont (see chart on page 12).

- Real estate markets in Western states, such as CO, OR, WA, UT and ID, have experienced the strongest recent growth, while ND, CO, TX, SD, NE and DC have had the highest peak to peak growth in the recovery thus far.

- Now in its 103rd month, the current economic recovery is currently the third longest expansionary period since business cycle measurement began in 1854. If it continues through May of 2018, it will be the second longest expansion, and if it lasts until July of 2019, would be the longest ever.

- As any economic expansion ages, however, the risks of a downturn become heightened. Although there do not appear to be imbalances in the economy now that would precipitate a near term economic decline (within the 2 year statutory forecast horizon), the consensus macroeconomic forecast that forms the basis of the longer term (non-statutory) revenue forecasts detailed in Appendix A, now calls for a pronounced slowing of growth, though not a recession, in 2020 and 2021, with most revenue impacts concentrated in FY21.

Inflation Ticks Up Above 2% and Could Accelerate With Fiscal Stimulus
(Consumer Price Index - Urban, All Items, Percent Change vs. Year Ago)

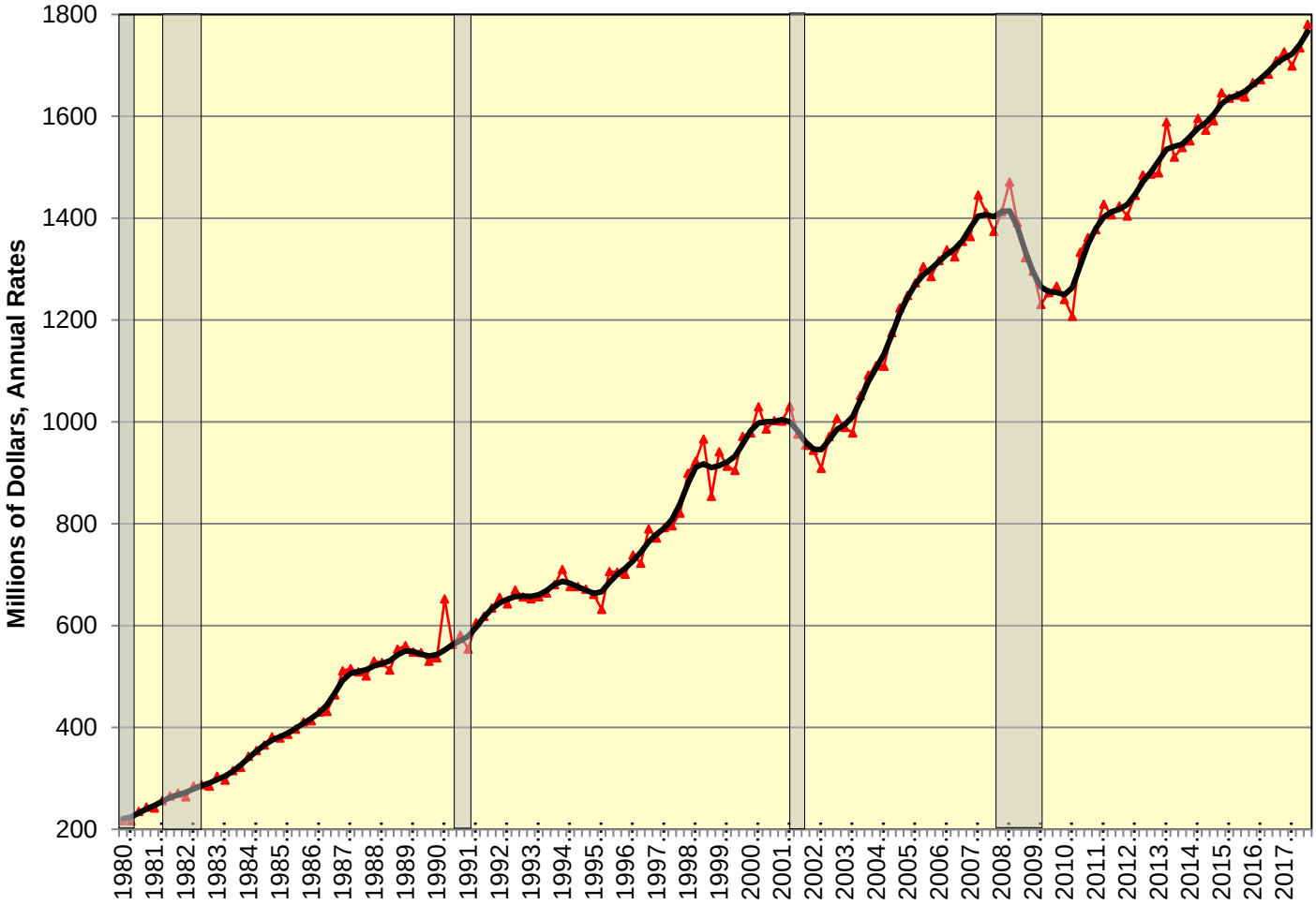


- The primary recessionary risks stem from: 1) Stated international trade goals that could lead to a trade war with Chinese, North American or other key trading partners, and 2) Excessive Federal Reserve interest rate and related monetary tightening in response to accelerating inflation from an overheating economy pumped up via stimulus from deficit-funded tax cuts. These risks in 2018, however, are very low, and the chance that this expansion could be the longest ever are better than even.

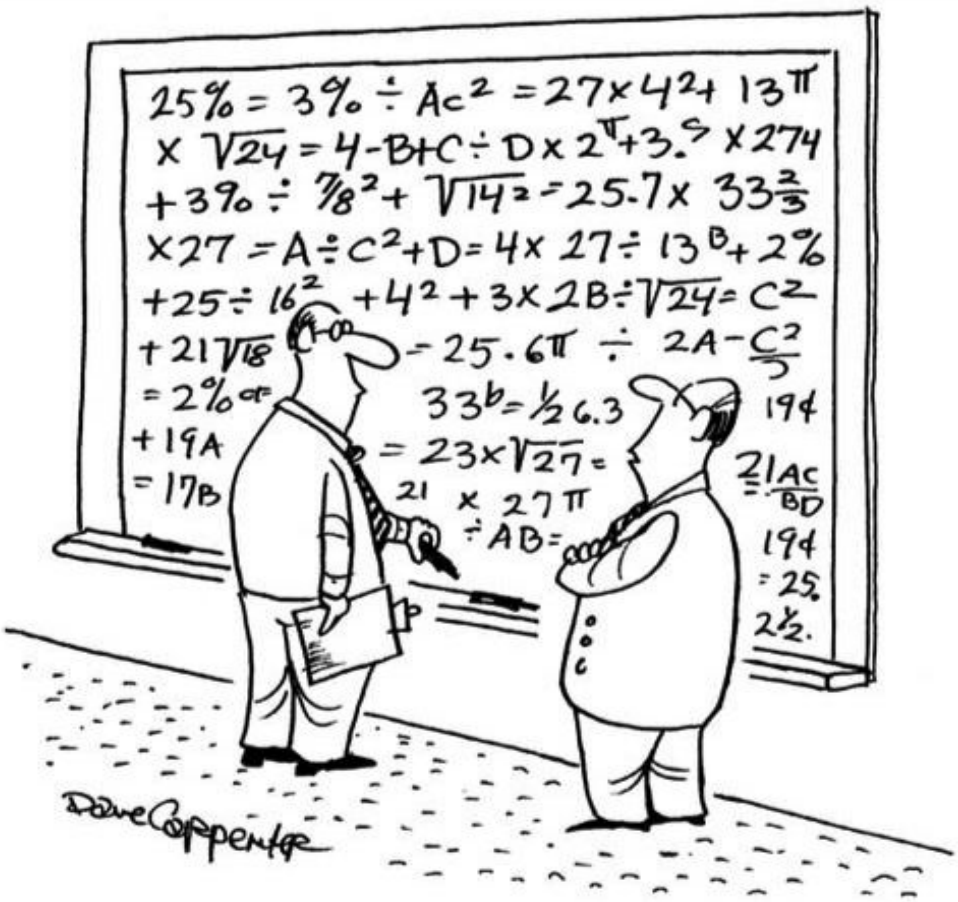
State Revenues

- State tax revenues through the first six months of the fiscal year for all three major funds analyzed herein were about 2% above targets. The General Fund variance, however, was largely the result of accelerated estimated tax payments due to the expiration of the state and local tax exemption for tax year 2018 in the recently enacted federal Tax Act. This created an incentive for early first quarter 2018 tax payment as well as overpayments. Absent this phenomenon, General Fund revenues would have been up about 0.5% above expectations, with the Transportation Fund up about 1.8% and the education fund up about 0.2%.

Total Source General Fund Revenue Approaches $1.8 Billion
(Includes all Revenue Categories before Transfers, Quarterly Seasonally Adjusted Annual Rates (red) and Trend-Cycle (black) Data, with Official U.S. Recessionary Periods Shaded)



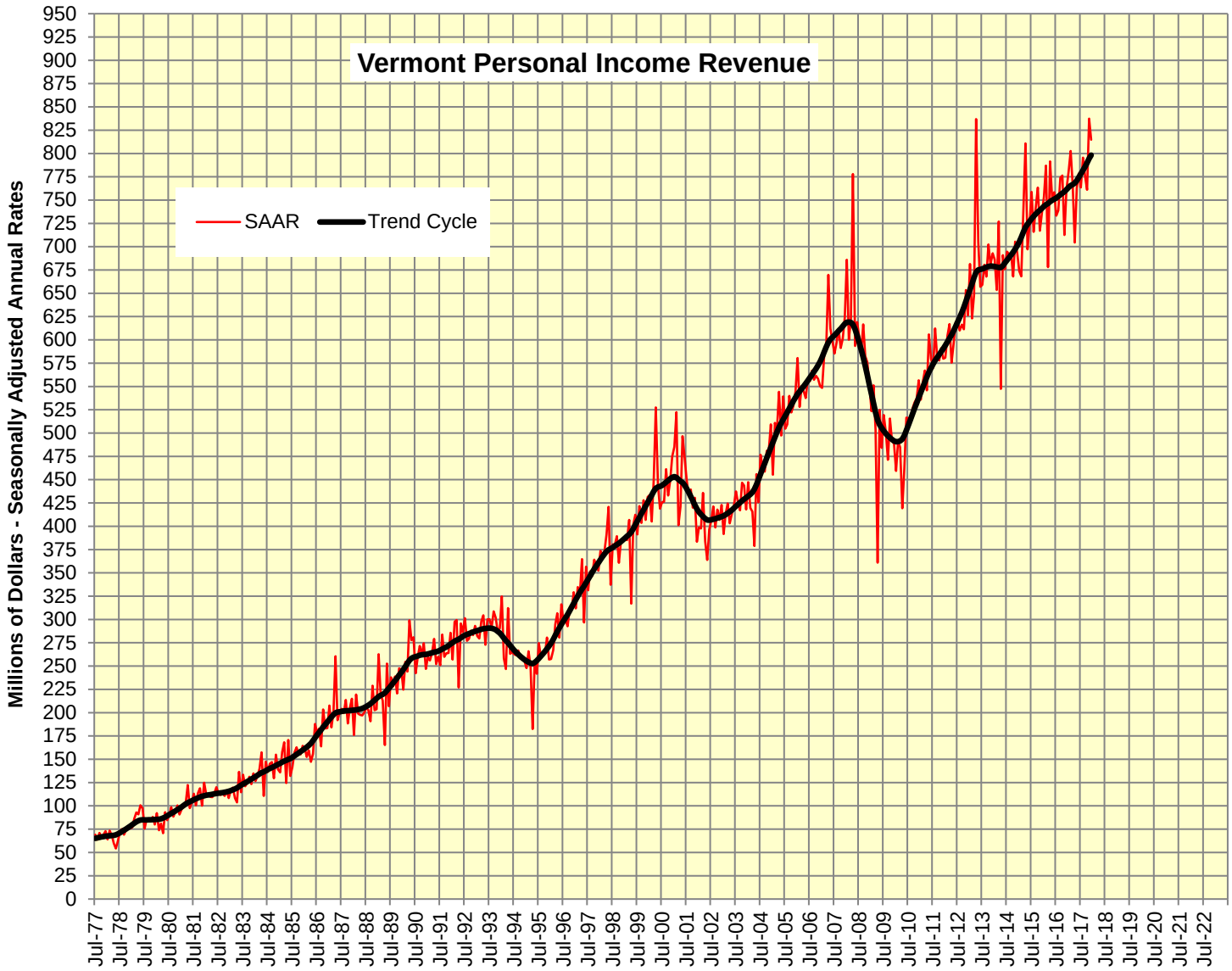
- Corporate tax refunding continued to be volatile in the first half of the fiscal year with both large FY17 events affecting FY18 and improved Tax Department refund processing, which cleared out a backlog of pending refunds and will result in future refunds being processed and paid more quickly. This one-time adjustment could represent as much as $5 million in FY18. The provisions in the new Tax Act affecting corporations are complex and often company-specific, rendering aggregate tax analysis of less value than usual (see Appendix B). There are not only static provisional impacts, but behavioral shifts and complicating timing effects that make fiscal year impact estimation uncertain. We will be pursuing both aggregate and company-specific analysis in the coming weeks so as to anticipate as many of these revenue effects as possible, however, there may be even more volatility ahead in this already erratic revenue source.



"Since you put it that way, it just might be a deduction."

- Sales & Use tax revenues benefitted in the first six months of the fiscal year from strong e-commerce receipts, closing the second quarter almost spot on target. Indications of strong holiday sales should boost January revenues and additional disposable income later in the fiscal year from reduced federal withholding taxes should also provide a slight boost to this sector.

- Personal Income taxes are expected to grow slightly above trend in FY18, due to higher expected capital gains realizations and higher net State tax liabilities for tax year 2018 as a result of the federal Tax Act. Fourth quarter 2017 revenues topped $800 million at seasonally adjusted annual rates for the first time ever (see chart on following page) and FY18 is now expected to close the year above $790M, about $9 million above prior projections. Both payment timing and Tax Department rulemaking could affect personal income revenue growth resulting from federal Tax Act changes over the forecast horizon. As new information becomes available, it will be integrated into ongoing consensus analysis.



- Meals & Rooms tax receipts have been solid through the first half of the fiscal year, up about 1.4% above expectations. Plenty of early snow provided a good start to the winter tourism season, but sustained arctic temperatures followed by rain and then more freezing weather will test the grooming and formidable snow-making capabilities of the State's ski areas. Airbnb receipts, first started in mid-FY17, have also been an important component of M&R revenue growth in FY18.

- Bank revenues benefitted from a change in the second half of FY17 that required monthly tax payments instead of quarterly. Confusion in the implementation of this new provision, however, resulted in additional revenue in both FY17 and FY18, as not all payers responded to the change and monthly payments for some requires estimation of future credits and liabilities. Offsetting this one-time gain across two fiscal years, are steadily increasing tax expenditures that reduce Bank revenues before they are reported. These "invisible" expenditures expanded to more than $3.6 million in FY17 and are

soon expected to top $4 million per year – more than 35% of all Bank revenues.

- Property Transfer Tax revenues have been among the fastest growing revenue sources over the past several years and will continue to grow at rates well above most revenue categories over the forecast period. A change in the allocation formula to the General Fund to support housing bond interest payments, however, will shave $2.5M per year off reported PTT revenues and Available General Fund revenues beginning in this fiscal year. This is a yet another example of an increased expenditure embedded as a revenue reduction.

- The Telephone Property tax continues to decline and is now expected to be less than half its FY14 level in FY18, due to aggressive depreciation being taken by some of the largest payers and statutory ambiguity regarding such depreciation and the applicability of the tax to wireless and VoIP providers. Without statutory clarification, this revenue source will likely continue to decline, generating at least $5 million less than FY14 levels for the foreseeable future.

- Transportation Fund revenues closed the first six months of the fiscal year about 1.8% above targets and should keep most of these gains in the second half of the year. Only Gasoline receipts were behind target levels (-$0.7M), however, this was primarily due to a timing issue that pushed some December revenues into January. Much of the small upgrade to the T-Fund is concentrated in Motor Vehicle Purchase & Use revenues, which have been strong through the first half of the fiscal year and will benefit in coming months from slightly higher near-term disposable income from the tax cuts. Even with this slight upgrade, in no year in the entire forecast period (two years or five) are Transportation Fund revenues expected to even keep pace with inflation.

- The U.S. and Vermont macroeconomic forecasts upon which the revenue forecasts in this Update are based are summarized in Tables A and B at the end of this report, and represent a consensus JFO and Administration forecast developed using internal JFO and Administration State economic models with input from Moody's Analytics December 2017 projections and other major forecasting entities, including the Federal Reserve, EIA, CBO, IMF, The Conference Board and other private forecasting firms.

- Due to the reduced availability of forecasts from the New England Economic Partnership (NEEP), State consensus macroeconomic forecasts were developed using a State on-line modeling capability provided by Moody's Analytics. This forecasting capability allows timely, customized state forecasts with modeling capabilities similar to the prior NEEP capability.

- Five-year revenue projections are included in Appendix A, following Tables A and B at the end of this report. Although these are not required by statute, they have been requested by both the JFO and Administration for several years for longer term planning purposes. During the 2015 legislative session,

there was considerable misinformation and confusion regarding the role these longer term projections played in the recent (though not new) discussions of structural budget deficits. As a result of this, these tables are now published on a regular basis, so as to provide clarity with respect to longer term revenue potential and expectations. As illustrated in these tables, and consistent with virtually all past projections, longer term revenue growth from the mix and structure of the taxes in the three funds analyzed herein is unlikely to keep pace with recent levels of expenditure growth, at current law tax rates.

- Forecast versus actual revenue variance data for the most recent eleven years are illustrated in the chart on the following page. The below table summarizes the same data since FY2001. As would be expected, January projections are generally more accurate than July – though not always. Since fiscal year 2001, there have been 34 regular Consensus 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 102 observations. Over this seventeen year period, there have been 48 variances that were low (under-forecast actuals) and 54 variances that were high (over-forecast actuals). The average absolute value of the variance for these 16 years was about 1.8% for total revenues across all three major funds, with the lowest variance (1.4%) in the Education Fund, due to its reliance on relatively stable consumption taxes, and the highest variance (2.4%) in the General Fund, due to its reliance on more volatile revenue sources such as Personal Income, Corporate and Estate taxes.

TABLE A
Comparison of Recent Consensus U.S. Macroeconomic Forecasts
June 2016 through December 2017, Selected Variables, Calendar Year Basis

	2012	2013	2014	2015	2016	2017	2018	2019	2020
Real GDP Growth									
June-16	*2.2*	*1.5*	*2.4*	*2.4*	*2.2*	*2.9*	*2.6*	*1.8*	*1.6*
December-16	*2.2*	*1.7*	*2.4*	*2.6*	*1.7*	*2.9*	*3.1*	*2.2*	*1.4*
June-17	*2.2*	*1.7*	*2.4*	*2.6*	*1.6*	*2.3*	*2.6*	*2.2*	*1.3*
December-17	*2.2*	*1.7*	*2.6*	*2.9*	*1.5*	*2.3*	*2.8*	*2.5*	*1.1*
S&P 500 Growth (Annual Avg.)									
June-16	*8.7*	*19.1*	*17.5*	*6.8*	*-2.1*	*1.5*	*0.2*	*0.5*	*8.6*
December-16	*8.7*	*19.1*	*17.5*	*6.8*	*1.5*	*5.4*	*-1.6*	*-2.0*	*5.5*
June-17	*8.7*	*19.1*	*17.5*	*6.8*	*1.5*	*5.4*	*-0.7*	*-4.5*	*5.5*
December-17	*8.7*	*19.1*	*17.5*	*6.8*	*1.5*	*17.0*	*7.1*	*-8.4*	*3.5*
Employment Growth (Non-Ag)									
June-16	*1.7*	*1.6*	*0.9*	*2.1*	*1.8*	*1.8*	*1.5*	*1.1*	*0.5*
December-16	*1.7*	*1.6*	*1.9*	*2.1*	*1.7*	*1.6*	*1.6*	*1.3*	*0.5*
June-17	*1.7*	*1.6*	*1.9*	*2.1*	*1.8*	*1.5*	*1.3*	*1.2*	*0.5*
December-17	*1.7*	*1.6*	*1.9*	*2.1*	*1.8*	*1.5*	*1.6*	*1.1*	*.01*
Unemployment Rate									
June-16	*8.1*	*7.4*	*6.2*	*5.3*	*4.7*	*4.6*	*4.5*	*4.6*	*4.8*
December-16	*8.1*	*7.4*	*6.2*	*5.3*	*4.9*	*4.7*	*4.5*	*4.4*	*4.7*
June-17	*8.1*	*7.4*	*6.2*	*5.3*	*4.9*	*4.4*	*4.1*	*3.9*	*4.2*
December-17	*8.1*	*7.4*	*6.2*	*5.3*	*4.9*	*4.3*	*3.8*	*3.7*	*4.5*
West Texas Int. Crude Oil $/Bbl									
June-16	*94*	*98*	*93*	*49*	*43*	*53*	*55*	*69*	*71*
December-16	*94*	*98*	*93*	*49*	*43*	*57*	*63*	*70*	*70*
June-17	*94*	*98*	*93*	*49*	*43*	*51*	*55*	*60*	*68*
December-17	*94*	*98*	*93*	*49*	*43*	*51*	*54*	*60*	*66*
Prime Rate									
June-16	*3.25*	*3.25*	*3.25*	*3.26*	*3.50*	*4.20*	*5.50*	*6.50*	*6.70*
December-16	*3.25*	*3.25*	*3.25*	*3.26*	*3.51*	*4.10*	*5.00*	*6.50*	*6.80*
June-17	*3.25*	*3.25*	*3.25*	*3.26*	*3.51*	*4.08*	*4.80*	*5.70*	*6.20*
December-17	*3.25*	*3.25*	*3.25*	*3.26*	*3.51*	*4.09*	*5.52*	*7.03*	*7.32*
Consumer Price Index Growth									
June-16	*2.1*	*1.5*	*1.6*	*0.1*	*1.2*	*2.1*	*2.4*	*2.6*	*2.9*
December-16	*2.1*	*1.5*	*1.6*	*0.1*	*1.2*	*2.6*	*2.8*	*3.1*	*2.6*
June-17	*2.1*	*1.5*	*1.6*	*0.1*	*1.3*	*2.1*	*2.3*	*2.7*	*2.6*
December-17	*2.1*	*1.5*	*1.6*	*0.1*	*1.3*	*2.1*	*2.5*	*2.9*	*2.8*
Average Home Price Growth									
June-16	*-0.2*	*4.0*	*5.5*	*5.6*	*5.7*	*5.9*	*6.1*	*6.2*	*5.8*
December-16	*-0.2*	*4.0*	*5.4*	*5.5*	*5.6*	*5.9*	*6.3*	*6.1*	*5.6*
June-17	*-0.2*	*4.0*	*5.3*	*5.4*	*5.7*	*5.2*	*5.4*	*4.8*	*3.4*
December-17	*-0.2*	*3.9*	*5.2*	*5.3*	*5.7*	*6.2*	*6.4*	*5.8*	*5.1*

TABLE B
Comparison of Consensus Administration and JFO Vermont State Forecasts
June 2015 through December 2017, Selected Variables, Calendar Year Basis

	2012	2013	2014	2015	2016	2017	2018	2019	2020
Real GSP Growth									
June-15	*1.1*	*1.9*	*1.2*	*2.4*	*3.0*	*2.6*	*2.1*	*1.7*	*1.4*
December-15	*0.4*	*-0.3*	*0.6*	*2.2*	*2.8*	*2.4*	*2.0*	*1.6*	*1.2*
June-16	*0.6*	*-0.9*	*0.3*	*-0.1*	*1.9*	*2.3*	*1.7*	*1.2*	*1.1*
December-16	*0.0*	*-0.4*	*1.5*	*0.2*	*1.8*	*2.4*	*2.0*	*1.5*	*1.0*
June-17	*-0.2*	*-0.2*	*0.3*	*0.9*	*0.8*	*1.1*	*1.3*	*0.8*	*0.3*
December-17	*-0.2*	*-0.2*	*0.5*	*0.9*	*0.7*	*0.9*	*1.4*	*0.8*	*0.1*
Population Growth									
June-15	*0.0*	*0.1*	*0.0*	*0.1*	*0.2*	*0.3*	*0.2*	*0.2*	*0.2*
December-15	*-0.1*	*0.1*	*-0.1*	*-0.1*	*0.2*	*0.2*	*0.3*	*0.3*	*0.3*
June-16	*-0.0*	*0.1*	*-0.1*	*-0.1*	*0.1*	*0.2*	*0.3*	*0.3*	*0.2*
December-16	*-0.1*	*0.1*	*-0.0*	*-0.1*	*-0.2*	*0.2*	*0.2*	*0.2*	*0.1*
June-17	*-0.1*	*0.1*	*-0.0*	*-0.1*	*-0.2*	*0.1*	*0.1*	*0.2*	*0.2*
December-17	*-0.1*	*0.1*	*-0.1*	*-0.2*	*-0.2*	*0.1*	*-0.0*	*0.1*	*0.1*
Employment Growth									
June-15	*1.3*	*0.8*	*1.0*	*1.7*	*1.9*	*1.8*	*1.3*	*0.8*	*0.5*
December-15	*1.3*	*0.8*	*1.0*	*1.6*	*1.7*	*1.8*	*1.6*	*1.0*	*0.6*
June-16	*1.3*	*0.7*	*0.9*	*0.9*	*1.6*	*1.7*	*1.5*	*1.1*	*0.7*
December-16	*1.3*	*0.7*	*0.9*	*0.9*	*1.6*	*1.7*	*1.5*	*1.2*	*0.6*
June-17	*1.2*	*0.7*	*1.0*	*0.8*	*0.3*	*0.9*	*1.0*	*0.8*	*0.3*
December-17	*1.2*	*0.7*	*1.0*	*0.8*	*0.3*	*0.9*	*1.2*	*0.7*	*0.1*
Unemployment Rate									
June-15	*4.9*	*4.4*	*4.1*	*3.6*	*3.2*	*2.9*	*2.8*	*3.0*	*3.2*
December-15	*4.9*	*4.4*	*4.1*	*3.7*	*3.4*	*3.3*	*3.2*	*3.3*	*3.4*
June-16	*4.9*	*4.4*	*4.0*	*3.7*	*3.3*	*3.2*	*3.1*	*3.2*	*3.4*
December-16	*4.9*	*4.4*	*4.0*	*3.7*	*3.2*	*3.1*	*3.0*	*3.0*	*3.4*
June-17	*4.9*	*4.4*	*3.9*	*3.6*	*3.3*	*3.1*	*3.0*	*3.0*	*3.3*
December-17	*4.9*	*4.4*	*3.9*	*3.6*	*3.3*	*3.0*	*2.8*	*2.9*	*3.3*
Personal Income Growth									
June-15	*3.4*	*2.5*	*4.0*	*4.8*	*5.2*	*4.7*	*4.4*	*3.9*	*3.2*
December-15	*3.6*	*1.4*	*3.5*	*4.5*	*5.1*	*4.6*	*4.6*	*3.7*	*2.8*
June-16	*3.6*	*1.4*	*3.5*	*3.0*	*3.3*	*4.1*	*4.2*	*3.4*	*2.8*
December-16	*3.3*	*1.7*	*3.3*	*2.9*	*3.0*	*3.4*	*3.7*	*3.4*	*2.8*
June-17	*3.3*	*1.7*	*3.3*	*2.9*	*3.3*	*2.4*	*2.1*	*2.7*	*2.0*
December-17	*3.3*	*1.7*	*3.3*	*3.6*	*2.0*	*2.4*	*2.0*	*2.5*	*1.9*
Home Price Growth (JFO)									
June-15	*0.4*	*0.2*	*0.7*	*2.3*	*2.8*	*3.4*	*4.1*	*4.8*	*5.9*
December-15	*0.4*	*0.1*	*0.7*	*2.5*	*2.9*	*3.4*	*4.1*	*4.8*	*5.9*
June-16	*0.4*	*0.1*	*0.6*	*2.2*	*2.3*	*3.0*	*3.8*	*4.4*	*5.0*
December-16	*0.4*	*0.1*	*0.5*	*1.9*	*1.4*	*2.4*	*3.1*	*3.7*	*4.1*
June-17	*0.3*	*0.1*	*0.3*	*2.0*	*1.4*	*2.6*	*3.1*	*3.7*	*4.1*
December-17	*0.3*	*0.1*	*0.2*	*2.0*	*1.6*	*2.1*	*3.2*	*3.8*	*4.5*

Methodological Notes and Other Comments

- This analysis has benefited significantly from the input and support of Tax Department and Joint Fiscal Office personnel, as well as Deb Brighton of Ad Hoc Associates. In the Joint Fiscal Office, Graham Campbell, Theresa Utton-Jermaine, Stephanie Barrett, Dan Dickerson, Catherine Benham, Neil Schickner, Chloe Wexler, Joyce Manchester and Mark Perrault have contributed to numerous policy and revenue impact analyses and coordinated JFO forecast production and related legislative committee support functions. They have also painstakingly organized and updated large tax and other databases in support of JFO revenue forecasting activities. In the Tax Department, Sharon Asay, Mary Cox, Jake Feldman, Andrew Stein and Doug Farnham provided important analytic contributions to many tax and revenue forecasts, including recent federal tax law change analyses and statistical and related background information associated with the detailed tax databases they maintain. 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 40 years of data for each of the 25 General Fund categories (three aggregates), 37 years of data for most of the Transportation Fund categories (one aggregate), and 18 to 40 years for each of the Education Fund categories. The analyses employed includes seasonal adjustment using U.S. Census Bureau X-12, X-13-ARIMA-SEATS and TRAMO-SEATS 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 semi-annual macroeconomic models from Moody's Analytics with consensus model adjustments made by JFO and Administration economists using a customized Moody's on-line Vermont model prepared during the month preceding the revenue forecast. 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 and KRA 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
Provisional Consensus JFO and Administration Forecast - January 2018

SOURCE G-FUND

revenues are prior to all E-Fund allocations and other out-transfers; used for analytic and comparative purposes only

	FY 2014 (Actual)	% Change	FY 2015 (Actual)	% Change	FY 2016 (Actual)	% Change	FY 2017 (Actual)	% Change	FY 2018 (Forecast)	% Change	FY 2019 (Forecast)	% Change	FY2020 (Forecast)	% Change
REVENUE SOURCE														
Personal Income	$671.1	1.6%	$705.9	5.2%	$747.0	5.8%	$756.5	1.3%	$793.7	4.9%	$846.9	6.7%	$866.8	2.3%
Sales & Use*	$353.6	2.0%	$364.6	3.1%	$370.7	1.7%	$376.7	1.6%	$391.2	3.8%	$400.9	2.5%	$409.5	2.1%
Corporate	$94.8	-0.1%	$121.9	28.5%	$117.0	-4.0%	$95.8	-18.1%	$79.4	-17.1%	$89.6	12.8%	$96.8	8.0%
Meals and Rooms	$142.7	5.9%	$150.8	5.7%	$154.2	2.2%	$165.3	7.3%	$172.4	4.3%	$178.4	3.5%	$183.9	3.1%
Cigarette and Tobacco**	$71.9	-3.3%	$76.8	6.7%	$80.7	5.2%	$76.7	-5.0%	$71.7	-6.5%	$70.3	-2.0%	$69.3	-1.4%
Liquor	$17.7	4.0%	$18.2	2.9%	$18.3	0.8%	$19.1	4.4%	$19.4	1.4%	$20.1	3.6%	$20.7	3.0%
Insurance	$57.1	3.7%	$55.3	-3.1%	$56.2	1.7%	$57.0	1.3%	$57.8	1.5%	$58.4	1.0%	$59.0	1.0%
Telephone	$9.1	-2.9%	$7.7	-14.9%	$3.2	-59.2%	$5.7	80.6%	$4.5	-21.2%	$4.0	-11.1%	$3.6	-10.0%
Beverage	$6.4	3.6%	$6.7	4.2%	$6.7	0.6%	$6.9	2.9%	$7.0	1.5%	$7.2	2.9%	$7.3	1.4%
Electric***	$13.1	46.9%	$9.4	-28.2%	$0.0	-100.0%	$0.0	NM	$0.0	NM	$0.0	NM	$0.0	NM
Estate	$35.5	131.0%	$9.9	-72.2%	$12.5	26.5%	$16.7	33.3%	$18.6	11.6%	$19.4	4.3%	$20.1	3.6%
Property	$30.9	8.5%	$33.6	8.6%	$35.7	6.2%	$38.7	8.4%	$41.4	7.0%	$44.4	7.2%	$47.0	5.9%
Bank	$11.0	2.7%	$10.7	-2.0%	$10.7	-0.6%	$13.2	24.0%	$12.1	-8.7%	$11.5	-5.0%	$11.7	1.7%
Other Tax	$1.9	9.6%	$2.0	4.5%	$1.8	-9.0%	$2.2	18.0%	$2.0	-8.0%	$2.3	15.0%	$2.6	13.0%
Total Tax Revenue	$1517.0	3.6%	$1573.5	3.7%	$1614.8	2.6%	$1630.4	1.0%	$1671.2	2.5%	$1753.4	4.9%	$1798.3	2.6%
Business Licenses	$1.1	-61.4%	$1.1	0.2%	$1.1	-1.6%	$1.2	16.8%	$1.1	-11.7%	$1.1	1.8%	$1.2	2.7%
Fees	$20.6	-3.4%	$22.1	7.0%	$23.0	4.2%	$48.5	110.8%	$47.8	-1.3%	$48.6	1.7%	$49.4	1.6%
Services	$1.3	-47.3%	$1.5	12.5%	$2.8	86.6%	$3.0	7.9%	$3.2	6.3%	$3.2	0.9%	$3.3	0.9%
Fines	$3.6	-24.2%	$3.5	-3.1%	$3.7	5.5%	$4.4	21.0%	$3.1	-29.9%	$3.2	3.2%	$3.3	3.1%
Interest	$0.2	-59.2%	$0.3	40.4%	$0.7	130.6%	$1.5	111.5%	$2.5	61.6%	$3.2	28.0%	$3.9	20.3%
Special Assessments	$0.0	NM	$0.0	NM	$0.0	NM	$0.0	NM	$0.0	NM	$0.0	NM	$0.0	NM
Lottery	$22.6	-1.6%	$22.8	0.8%	$26.4	16.1%	$25.5	-3.3%	$25.2	-1.3%	$25.6	1.6%	$25.8	0.8%
All Other****	$1.3	-24.0%	$1.0	-20.4%	$1.3	25.9%	$2.9	128.5%	$2.6	-10.5%	$1.5	1.6%	$1.6	6.7%
Total Other Revenue	$50.7	-10.4%	$52.2	3.0%	$58.9	12.9%	$87.1	47.9%	$85.5	-1.8%	$86.5	1.1%	$88.4	2.2%
TOTAL GENERAL FUND	**$1567.6**	**3.1%**	**$1625.7**	**3.7%**	**$1673.7**	**2.9%**	**$1717.5**	**2.6%**	**$1756.7**	**2.3%**	**$1839.9**	**4.7%**	**$1886.7**	**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.

*** Reflects closure of Vermont Yankee in December of 2014, 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 $5 million Vermont Yankee settlement agreement transitional payment in FY2015.

****Includes $2.3 million in one-time payments in FY2017 by tax software vendors for errors related to Personal Income tax deduction changes effective in tax year 2015.

TABLE 1 - STATE OF VERMONT
LEGISLATIVE JOINT FISCAL OFFICE
AVAILABLE GENERAL FUND REVENUE FORECAST UPDATE
Provisional Consensus JFO and Administration Forecast - January 2018

CURRENT LAW BASIS

including all Education Fund allocations and other out-transfers	**FY 2014** *(Actual)*	**%** Change	**FY 2015** *(Actual)*	**%** Change	**FY 2016** *(Actual)*	**%** Change	**FY 2017** *(Actual)*	**%** Change	**FY 2018** *(Forecast)*	**%** Change	**FY 2019** *(Forecast)*	**%** Change	**FY2020** *(Forecast)*	**%** Change
REVENUE SOURCE														
Personal Income	$671.1	1.6%	$705.9	5.2%	$747.0	5.8%	$756.5	1.3%	$793.7	4.9%	$846.9	6.7%	$866.8	2.3%
Sales and Use*	$229.9	-0.6%	$237.0	3.1%	$241.0	1.7%	$244.9	1.6%	$254.3	3.8%	$256.6	0.9%	$262.1	2.1%
Corporate	$94.8	-0.1%	$121.9	28.5%	$117.0	-4.0%	$95.8	-18.1%	$79.4	-17.1%	$89.6	12.8%	$96.8	8.0%
Meals and Rooms	$142.7	5.9%	$150.8	5.7%	$154.2	2.2%	$165.3	7.3%	$172.4	4.3%	$178.4	3.5%	$183.9	3.1%
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	$17.7	4.0%	$18.2	2.9%	$18.3	0.8%	$19.1	4.4%	$19.4	1.4%	$20.1	3.6%	$20.7	3.0%
Insurance	$57.1	3.7%	$55.3	-3.1%	$56.2	1.7%	$57.0	1.3%	$57.8	1.5%	$58.4	1.0%	$59.0	1.0%
Telephone	$9.1	-2.9%	$7.7	-14.9%	$3.2	-59.2%	$5.7	80.6%	$4.5	-21.2%	$4.0	-11.1%	$3.6	-10.0%
Beverage	$6.4	3.6%	$6.7	4.2%	$6.7	0.6%	$6.9	2.9%	$7.0	1.5%	$7.2	2.9%	$7.3	1.4%
Electric**	$13.1	46.9%	$9.4	-28.2%	$0.0	-100.0%	$0.0	NM	$0.0	NM	$0.0	NM	$0.0	NM
Estate***	$35.5	131.0%	$9.9	-72.2%	$12.5	26.5%	$16.7	33.3%	$18.6	11.6%	$19.4	4.3%	$20.1	3.6%
Property	$10.0	9.3%	$10.9	8.7%	$11.5	6.0%	$12.6	9.0%	$12.6	0.2%	$13.6	7.7%	$14.4	6.2%
Bank	$11.0	2.7%	$10.7	-2.0%	$10.7	-0.6%	$13.2	24.0%	$12.1	-8.7%	$11.5	-5.0%	$11.7	1.7%
Other Tax	$1.9	9.6%	$2.0	4.5%	$1.8	-9.0%	$2.2	18.0%	$2.0	-8.0%	$2.3	15.0%	$2.6	13.0%
Total Tax Revenue	$1300.3	3.6%	$1346.4	3.5%	$1380.1	2.5%	$1395.7	1.1%	$1433.8	2.7%	$1507.9	5.2%	$1549.0	2.7%
Business Licenses	$1.1	-61.4%	$1.1	0.2%	$1.1	-1.6%	$1.2	16.8%	$1.1	-11.7%	$1.1	1.8%	$1.2	2.7%
Fees	$20.6	-3.4%	$22.1	7.0%	$23.0	4.2%	$48.5	110.8%	$47.8	-1.3%	$48.6	1.7%	$49.4	1.6%
Services	$1.3	-47.3%	$1.5	12.5%	$2.8	86.6%	$3.0	7.9%	$3.2	6.3%	$3.2	0.9%	$3.3	0.9%
Fines	$3.6	-24.2%	$3.5	-3.1%	$3.7	5.5%	$4.4	21.0%	$3.1	-29.9%	$3.2	3.2%	$3.3	3.1%
Interest	$0.2	-66.6%	$0.2	51.9%	$0.6	136.1%	$1.2	108.2%	$2.0	70.8%	$2.6	30.0%	$3.2	23.1%
All Other****	$1.3	-24.0%	$1.0	-20.4%	$1.3	25.9%	$2.9	128.5%	$2.6	-10.5%	$1.5	-42.3%	$1.6	6.7%
Total Other Revenue	$28.0	-16.4%	$29.4	4.7%	$32.3	10.1%	$61.2	89.3%	$59.8	-2.3%	$60.3	0.8%	$61.9	2.8%
TOTAL GENERAL FUND	**$1328.4**	**3.1%**	**$1375.8**	**3.6%**	**$1412.4**	**2.7%**	**$1457.0**	**3.2%**	**$1493.6**	**2.5%**	**$1568.2**	**5.0%**	**$1610.9**	**2.7%**

* 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 and 35.0% to 36.0% effective in FY19.

** Reflects closure of Vermont Yankee in December of 2014, 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.

**** Excludes $5 million Vermont Yankee settlement agreement transitional payment in FY2015.

****Includes $2.3 million in one-time payments in FY2017 by tax software vendors for errors related to Personal Income tax deduction changes effective in tax year 2015.

TABLE 2A - STATE OF VERMONT
LEGISLATIVE JOINT FISCAL OFFICE
SOURCE TRANSPORTATION FUND REVENUE FORECAST UPDATE
Provisional Consensus JFO and Administration Forecast - January 2018

SOURCE T-FUND

revenues are prior to all E-Fund allocations and other out-transfers; used for analytic and comparative purposes only	**FY 2014** *(Actual)*	% Change	**FY 2015** *(Actual)*	% Change	**FY 2016** *(Actual)*	% Change	**FY 2017** *(Actual)*	% Change	**FY 2018** *(Forecast)*	% Change	**FY 2019** *(Forecast)*	% Change	**FY2020** *(Forecast)*	% Change
REVENUE SOURCE														
Gasoline	$76.5	27.6%	$77.6	1.5%	$78.0	0.5%	$78.2	0.3%	$78.1	-0.2%	$78.0	-0.1%	$77.9	-0.1%
Diesel****	$17.2	9.7%	$19.1	11.5%	$18.3	-4.4%	$18.2	-0.5%	$18.4	1.0%	$18.6	1.1%	$18.7	0.5%
Purchase and Use*	$91.8	9.9%	$97.3	5.9%	$100.1	2.9%	$103.2	3.1%	$107.4	4.0%	$111.8	4.1%	$116.1	3.8%
Motor Vehicle Fees	$79.0	1.5%	$80.1	1.4%	$82.0	2.3%	$86.2	5.2%	$88.0	2.1%	$88.3	0.3%	$89.7	1.6%
Other Revenue**	$19.5	2.3%	$19.7	0.8%	$19.6	-0.5%	$19.9	1.8%	$21.5	7.9%	$21.6	0.5%	$21.8	0.9%
TOTAL TRANS. FUND	**$284.0**	**10.9%**	**$293.8**	**3.5%**	**$298.0**	**1.4%**	**$305.8**	**2.6%**	**$313.4**	**2.5%**	**$318.3**	**1.6%**	**$324.2**	**1.9%**

TABLE 2 - STATE OF VERMONT
LEGISLATIVE JOINT FISCAL OFFICE
AVAILABLE TRANSPORTATION FUND REVENUE FORECAST UPDATE
Provisional Consensus JFO and Administration Forecast - January 2018

CURRENT LAW BASIS

including all Education Fund allocations and other out-transfers	**FY 2014** *(Actual)*	% Change	**FY 2015** *(Actual)*	% Change	**FY 2016** *(Actual)*	% Change	**FY 2017** *(Actual)*	% Change	**FY 2018** *(Forecast)*	% Change	**FY 2019** *(Forecast)*	% Change	**FY2020** *(Forecast)*	% Change
REVENUE SOURCE														
Gasoline	$76.5	27.6%	$77.6	1.5%	$78.0	0.5%	$78.2	0.3%	$78.1	-0.2%	$78.0	-0.1%	$77.9	-0.1%
Diesel****	$17.2	9.7%	$19.1	11.5%	$18.3	-4.4%	$18.2	-0.5%	$18.4	1.0%	$18.6	1.1%	$18.7	0.5%
Purchase and Use*	$61.2	9.9%	$64.8	5.9%	$66.8	2.9%	$68.8	3.1%	$71.6	4.0%	$74.5	4.1%	$77.4	3.8%
Motor Vehicle Fees	$79.0	1.5%	$80.1	1.4%	$82.0	2.3%	$86.2	5.2%	$88.0	2.1%	$88.3	0.3%	$89.7	1.6%
Other Revenue**	$19.5	2.3%	$19.7	0.8%	$19.6	-0.5%	$19.9	1.8%	$21.5	7.9%	$21.6	0.5%	$21.8	0.9%
TOTAL TRANS. FUND	**$253.4**	**11.0%**	**$261.4**	**3.2%**	**$264.6**	**1.2%**	**$271.4**	**2.6%**	**$277.6**	**2.3%**	**$281.0**	**1.2%**	**$285.5**	**1.6%**
OTHER														
TIB Gasoline	$19.2	-9.5%	$18.2	-5.2%	$13.0	-28.4%	$12.6	-3.3%	$12.9	2.4%	$13.7	6.2%	$14.1	2.9%
TIB Diesel and Other***	$1.8	4.0%	$2.1	11.4%	$1.9	-6.1%	$1.7	-11.3%	$2.0	15.3%	$2.0	1.0%	$2.0	1.0%
Total TIB****	$21.0	-8.4%	$20.2	-3.8%	$15.0	-26.1%	$14.5	-2.9%	$14.9	2.4%	$15.7	5.5%	$16.1	2.7%

* 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 (which has never exceeded $20,000 per year).

**** Includes FY17 adjustment of $215,000 from reported TIB Diesel revenue to Diesel revenue due to a data entry error

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)
Provisional Consensus JFO and Administration Forecast - January 2018

CURRENT LAW BASIS

Source General and Transportation Fund taxes allocated to or associated with the Education Fund only	**FY 2014** *(Actual)*	% Change	**FY 2015** *(Actual)*	% Change	**FY 2016** *(Actual)*	% Change	**FY 2017** *(Actual)*	% Change	**FY 2018** *(Forecast)*	% Change	**FY 2019** *(Forecast)*	% Change	**FY2020** *(Forecast)*	% Change
GENERAL FUND														
Sales & Use**	$123.8	7.1%	127.6	3.1%	$129.8	1.7%	$131.8	1.6%	$136.9	3.8%	$144.3	5.4%	$147.4	2.1%
Interest	$0.1	-17.2%	0.1	3.6%	$0.2	135.7%	$0.4	122.7%	$0.5	33.0%	$0.6	20.0%	$0.7	8.3%
Lottery	$22.6	-1.6%	22.8	0.8%	$26.4	16.1%	$25.5	-3.3%	$25.2	-1.3%	$25.6	1.6%	$25.8	0.8%
TRANSPORTATION FUND														
Purchase and Use***	$30.6	9.9%	32.4	5.9%	$33.4	2.9%	$34.4	3.1%	$35.8	4.0%	$37.3	4.1%	$38.7	3.8%
TOTAL EDUCATION FUND	**$177.0**	**6.3%**	**182.9**	**3.3%**	**$189.7**	**3.7%**	**$192.2**	**1.3%**	**$198.4**	**3.3%**	**$207.8**	**4.7%**	**$212.6**	**2.3%**

* Includes only General and Transportation Fund taxes allocated to the Education Fund.

This Table excludes all Education Fund property taxes, which are updated in October/November of each year and are the largest Education Fund tax sources.

** 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 and to 36.0% in F1

*** Includes Motor Vehicle Rental revenues, restated

Appendix A

Five Year Revenue Forecast Tables

January 2018

TABLE 1A - STATE OF VERMONT
LEGISLATIVE JOINT FISCAL OFFICE
SOURCE GENERAL FUND REVENUE FORECAST UPDATE
Provisional Consensus JFO and Administration Forecast - January 2018

SOURCE G-FUND

revenues are prior to all E-Fund allocations and other out-transfers; used for analytic and comparative purposes only	**FY 2014** *(Actual)*	**%** Change	**FY 2015** *(Actual)*	**%** Change	**FY 2016** *(Actual)*	**%** Change	**FY 2017** *(Actual)*	**%** Change	**FY 2018** *(Forecast)*	**%** Change	**FY 2019** *(Forecast)*	**%** Change	**FY2020** *(Forecast)*	**%** Change	**FY2021** *(Forecast)*	**%** Change	**FY2022** *(Forecast)*	**%** Change	**FY2023** *(Forecast)*	**%** Change
REVENUE SOURCE																				
Personal Income	$671.1	1.6%	$705.9	5.2%	$747.0	5.8%	$756.5	1.3%	$793.7	4.9%	$846.9	6.7%	$866.8	2.3%	$882.1	1.8%	$908.4	3.0%	$937.2	3.2%
Sales & Use*	$353.6	2.0%	$364.6	3.1%	$370.7	1.7%	$376.7	1.6%	$391.2	3.8%	$400.9	2.5%	$409.5	2.1%	$417.0	1.8%	$426.8	2.4%	$438.4	2.7%
Corporate	$94.8	-0.1%	$121.9	28.5%	$117.0	-4.0%	$95.8	-18.1%	$79.4	-17.1%	$89.6	12.8%	$96.8	8.0%	$93.7	-3.2%	$97.2	3.7%	$103.5	6.5%
Meals and Rooms	$142.7	5.9%	$150.8	5.7%	$154.2	2.2%	$165.3	7.3%	$172.4	4.3%	$178.4	3.5%	$183.9	3.1%	$187.7	2.1%	$193.9	3.3%	$200.4	3.4%
Cigarette and Tobacco**	$71.9	-3.3%	$76.8	6.7%	$80.7	5.2%	$76.7	-5.0%	$71.7	-6.5%	$70.3	-2.0%	$69.3	-1.4%	$68.4	-1.4%	$67.5	-1.3%	$66.7	-1.2%
Liquor	$17.7	4.0%	$18.2	2.9%	$18.3	0.8%	$19.1	4.4%	$19.4	1.4%	$20.1	3.6%	$20.7	3.0%	$21.2	2.4%	$21.8	2.8%	$22.4	2.8%
Insurance	$57.1	3.7%	$55.3	-3.1%	$56.2	1.7%	$57.0	1.3%	$57.8	1.5%	$58.4	1.0%	$59.0	1.0%	$59.4	0.7%	$60.0	1.0%	$60.7	1.2%
Telephone	$9.1	-2.9%	$7.7	-14.9%	$3.2	-59.2%	$5.7	80.6%	$4.5	-21.2%	$4.0	-11.1%	$3.6	-10.0%	$3.2	-11.1%	$2.9	-9.4%	$2.6	-10.3%
Beverage	$6.4	3.6%	$6.7	4.2%	$6.7	0.6%	$6.9	2.9%	$7.0	1.5%	$7.2	2.9%	$7.3	1.4%	$7.5	2.7%	$7.6	1.3%	$7.7	1.3%
Electric***	$13.1	46.9%	$9.4	-28.2%	$0.0	-100.0%	$0.0	NM	$0.0	NM	$0.0	NM	$0.0	NM	$0.0	NM	$0.0	NM	$0.0	NM
Estate	$35.5	131.0%	$9.9	-72.2%	$12.5	26.5%	$16.7	33.3%	$18.6	11.6%	$19.4	4.3%	$20.1	3.6%	$20.8	3.5%	$21.5	3.4%	$22.2	3.3%
Property	$30.9	8.5%	$33.6	8.6%	$35.7	6.2%	$38.7	8.4%	$41.4	7.0%	$44.4	7.2%	$47.0	5.9%	$48.8	3.8%	$50.2	2.9%	$51.8	3.2%
Bank	$11.0	2.7%	$10.7	-2.0%	$10.7	-0.6%	$13.2	24.0%	$12.1	-8.7%	$11.5	-5.0%	$11.7	1.7%	$11.8	0.9%	$11.9	0.8%	$12.0	0.8%
Other Tax	$1.9	9.6%	$2.0	4.5%	$1.8	-9.0%	$2.2	18.0%	$2.0	-8.0%	$2.3	15.0%	$2.6	13.0%	$2.9	11.5%	$3.0	3.4%	$3.1	3.3%
Total Tax Revenue	$1517.0	3.6%	$1573.5	3.7%	$1614.8	2.6%	$1630.4	1.0%	$1671.2	2.5%	$1753.4	4.9%	$1798.3	2.6%	$1824.5	1.5%	$1872.7	2.6%	$1928.7	3.0%
Business Licenses	$1.1	-61.4%	$1.1	0.2%	$1.1	-1.6%	$1.2	16.8%	$1.1	-11.7%	$1.1	1.8%	$1.2	2.7%	$1.2	2.6%	$1.2	2.5%	$1.2	2.5%
Fees	$20.6	-3.4%	$22.1	7.0%	$23.0	4.2%	$48.5	110.8%	$47.8	-1.3%	$48.6	1.7%	$49.4	1.6%	$50.1	1.4%	$51.0	1.8%	$52.1	2.2%
Services	$1.3	-47.3%	$1.5	12.5%	$2.8	86.6%	$3.0	7.9%	$3.2	6.3%	$3.2	0.9%	$3.3	0.9%	$3.3	0.9%	$3.3	0.9%	$3.4	0.9%
Fines	$3.6	-24.2%	$3.5	-3.1%	$3.7	5.5%	$4.4	21.0%	$3.1	-29.9%	$3.2	3.2%	$3.3	3.1%	$3.4	3.0%	$3.5	2.9%	$3.6	2.9%
Interest	$0.2	-59.2%	$0.3	40.4%	$0.7	130.6%	$1.5	111.5%	$2.5	61.6%	$3.2	28.0%	$3.9	20.3%	$4.0	3.9%	$4.1	3.1%	$4.3	3.0%
Special Assessments	$0.0	NM	$0.0	NM	$0.0	NM	$0.0	NM	$0.0	NM	$0.0	NM	$0.0	NM	$0.0	NM	$0.0	NM	$0.0	NM
Lottery	$22.6	-1.6%	$22.8	0.8%	$26.4	16.1%	$25.5	-3.3%	$25.2	-1.3%	$25.6	1.6%	$25.8	0.8%	$26.0	0.8%	$26.1	0.4%	$26.2	0.4%
All Other****	$1.3	-24.0%	$1.0	-20.4%	$1.3	25.9%	$2.9	128.5%	$2.6	-10.5%	$1.5	1.6%	$1.6	6.7%	$1.7	6.3%	$1.8	5.9%	$1.9	5.6%
Total Other Revenue	$50.7	-10.4%	$52.2	3.0%	$58.9	12.9%	$87.1	47.9%	$85.5	-1.8%	$86.5	1.1%	$88.4	2.2%	$89.7	1.5%	$91.1	1.5%	$92.6	1.7%
TOTAL GENERAL FUND	**$1567.6**	**3.1%**	**$1625.7**	**3.7%**	**$1673.7**	**2.9%**	**$1717.5**	**2.6%**	**$1756.7**	**2.3%**	**$1839.9**	**4.7%**	**$1886.7**	**2.5%**	**$1914.2**	**1.5%**	**$1963.8**	**2.6%**	**$2021.4**	**2.9%**

* 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.

*** Reflects closure of Vermont Yankee in December of 2014, 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 $5 million Vermont Yankee settlement agreement transitional payment in FY2015.

****Includes $2.3 million in one-time payments in FY2017 by tax software vendors for errors related to Personal Income tax deduction changes effective in tax year 2015.

TABLE 1 - STATE OF VERMONT
LEGISLATIVE JOINT FISCAL OFFICE
AVAILABLE GENERAL FUND REVENUE FORECAST UPDATE
Provisional Consensus JFO and Administration Forecast - January 2018

CURRENT LAW BASIS

including all Education Fund allocations and other out-transfers	**FY 2014** *(Actual)*	**%** Change	**FY 2015** *(Actual)*	**%** Change	**FY 2016** *(Actual)*	**%** Change	**FY 2017** *(Actual)*	**%** Change	**FY 2018** *(Forecast)*	**%** Change	**FY 2019** *(Forecast)*	**%** Change	**FY2020** *(Forecast)*	**%** Change	**FY2021** *(Forecast)*	**%** Change	**FY2022** *(Forecast)*	**%** Change	**FY2023** *(Forecast)*	**%** Change
REVENUE SOURCE																				
Personal Income	$671.1	1.6%	$705.9	5.2%	$747.0	5.8%	$756.5	1.3%	$793.7	4.9%	$846.9	6.7%	$866.8	2.3%	$882.1	1.8%	$908.4	3.0%	$937.2	3.2%
Sales and Use*	$229.9	-0.6%	$237.0	3.1%	$241.0	1.7%	$244.9	1.6%	$254.3	3.8%	$256.6	0.9%	$262.1	2.1%	$266.9	1.8%	$273.2	2.4%	$280.6	2.7%
Corporate	$94.8	-0.1%	$121.9	28.5%	$117.0	-4.0%	$95.8	-18.1%	$79.4	-17.1%	$89.6	12.8%	$96.8	8.0%	$93.7	-3.2%	$97.2	3.7%	$103.5	6.5%
Meals and Rooms	$142.7	5.9%	$150.8	5.7%	$154.2	2.2%	$165.3	7.3%	$172.4	4.3%	$178.4	3.5%	$183.9	3.1%	$187.7	2.1%	$193.9	3.3%	$200.4	3.4%
Cigarette and Tobacco	$0.0	NM	$0.0	NM	$0.0	NM	$0.0	NM	$0.0	NM	$0.0	NM	$0.0	NM	$0.0	NM	$0.0	NM	$0.0	NM
Liquor	$17.7	4.0%	$18.2	2.9%	$18.3	0.8%	$19.1	4.4%	$19.4	1.4%	$20.1	3.6%	$20.7	3.0%	$21.2	2.4%	$21.8	2.8%	$22.4	2.8%
Insurance	$57.1	3.7%	$55.3	-3.1%	$56.2	1.7%	$57.0	1.3%	$57.8	1.5%	$58.4	1.0%	$59.0	1.0%	$59.4	0.7%	$60.0	1.0%	$60.7	1.2%
Telephone	$9.1	-2.9%	$7.7	-14.9%	$3.2	-59.2%	$5.7	80.6%	$4.5	-21.2%	$4.0	-11.1%	$3.6	-10.0%	$3.2	-11.1%	$2.9	-9.4%	$2.6	-10.3%
Beverage	$6.4	3.6%	$6.7	4.2%	$6.7	0.6%	$6.9	2.9%	$7.0	1.5%	$7.2	2.9%	$7.3	1.4%	$7.5	2.7%	$7.6	1.3%	$7.7	1.3%
Electric**	$13.1	46.9%	$9.4	-28.2%	$0.0	-100.0%	$0.0	NM	$0.0	NM	$0.0	NM	$0.0	NM	$0.0	NM	$0.0	NM	$0.0	NM
Estate***	$35.5	131.0%	$9.9	-72.2%	$12.5	26.5%	$16.7	33.3%	$18.6	11.6%	$19.4	4.3%	$20.1	3.6%	$20.8	3.5%	$21.5	3.4%	$22.2	3.3%
Property	$10.0	9.3%	$10.9	8.7%	$11.5	6.0%	$12.6	9.0%	$12.6	0.2%	$13.6	7.7%	$14.4	6.2%	$15.0	4.0%	$15.4	3.0%	$15.9	3.4%
Bank	$11.0	2.7%	$10.7	-2.0%	$10.7	-0.6%	$13.2	24.0%	$12.1	-8.7%	$11.5	-5.0%	$11.7	1.7%	$11.8	0.9%	$11.9	0.8%	$12.0	0.8%
Other Tax	$1.9	9.6%	$2.0	4.5%	$1.8	-9.0%	$2.2	18.0%	$2.0	-8.0%	$2.3	15.0%	$2.6	13.0%	$2.9	11.5%	$3.0	3.4%	$3.1	3.3%
Total Tax Revenue	$1300.3	3.6%	$1346.4	3.5%	$1380.1	2.5%	$1395.7	1.1%	$1433.8	2.7%	$1507.9	5.2%	$1549.0	2.7%	$1572.2	1.5%	$1616.8	2.8%	$1668.3	3.2%
Business Licenses	$1.1	-61.4%	$1.1	0.2%	$1.1	-1.6%	$1.2	16.8%	$1.1	-11.7%	$1.1	1.8%	$1.2	2.7%	$1.2	2.6%	$1.2	2.5%	$1.2	2.5%
Fees	$20.6	-3.4%	$22.1	7.0%	$23.0	4.2%	$48.5	110.8%	$47.8	-1.3%	$48.6	1.7%	$49.4	1.6%	$50.1	1.4%	$51.0	1.8%	$52.1	2.2%
Services	$1.3	-47.3%	$1.5	12.5%	$2.8	86.6%	$3.0	7.9%	$3.2	6.3%	$3.2	0.9%	$3.3	0.9%	$3.3	0.9%	$3.3	0.9%	$3.4	0.9%
Fines	$3.6	-24.2%	$3.5	-3.1%	$3.7	5.5%	$4.4	21.0%	$3.1	-29.9%	$3.2	3.2%	$3.3	3.1%	$3.4	3.0%	$3.5	2.9%	$3.6	2.9%
Interest	$0.2	-66.6%	$0.2	51.9%	$0.6	136.1%	$1.2	108.2%	$2.0	70.8%	$2.6	30.0%	$3.2	23.1%	$3.3	3.1%	$3.4	3.0%	$3.5	2.9%
All Other****	$1.3	-24.0%	$1.0	-20.4%	$1.3	25.9%	$2.9	128.5%	$2.6	-10.5%	$1.5	-42.3%	$1.6	6.7%	$1.7	6.3%	$1.8	5.9%	$1.9	5.6%
Total Other Revenue	$28.0	-16.4%	$29.4	4.7%	$32.3	10.1%	$61.2	89.3%	$59.8	-2.3%	$60.3	0.8%	$61.9	2.8%	$63.0	1.7%	$64.2	2.0%	$65.7	2.3%
TOTAL GENERAL FUND	**$1328.4**	**3.1%**	**$1375.8**	**3.6%**	**$1412.4**	**2.7%**	**$1457.0**	**3.2%**	**$1493.6**	**2.5%**	**$1568.2**	**5.0%**	**$1610.9**	**2.7%**	**$1635.1**	**1.5%**	**$1681.0**	**2.8%**	**$1734.0**	**3.2%**

* 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 and 35.0% to 36.0% effective in FY19.

** Reflects closure of Vermont Yankee in December of 2014, 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.

**** Excludes $5 million Vermont Yankee settlement agreement transitional payment in FY2015.

*****Includes $2.3 million in one-time payments in FY2017 by tax software vendors for errors related to Personal Income tax deduction changes effective in tax year 2015.

TABLE 2A - STATE OF VERMONT
LEGISLATIVE JOINT FISCAL OFFICE
SOURCE TRANSPORTATION FUND REVENUE FORECAST UPDATE
Provisional Consensus JFO and Administration Forecast - January 2018

SOURCE T-FUND

revenues are prior to all E-Fund allocations and other out-transfers; used for analytic and comparative purposes only	**FY 2014** *(Actual)*	% Change	**FY 2015** *(Actual)*	% Change	**FY 2016** *(Actual)*	% Change	**FY 2017** *(Actual)*	% Change	**FY 2018** *(Forecast)*	% Change	**FY 2019** *(Forecast)*	% Change	**FY2020** *(Forecast)*	% Change	**FY2021** *(Forecast)*	% Change	**FY2022** *(Forecast)*	% Change	**FY2023** *(Forecast)*	% Change
REVENUE SOURCE																				
Gasoline	$76.5	27.6%	$77.6	1.5%	$78.0	0.5%	$78.2	0.3%	$78.1	-0.2%	$78.0	-0.1%	$77.9	-0.1%	$77.5	-0.5%	$77.1	-0.5%	$76.5	-0.8%
Diesel****	$17.2	9.7%	$19.1	11.5%	$18.3	-4.4%	$18.2	-0.5%	$18.4	1.0%	$18.6	1.1%	$18.7	0.5%	$18.8	0.5%	$18.9	0.5%	$18.9	0.0%
Purchase and Use*	$91.8	9.9%	$97.3	5.9%	$100.1	2.9%	$103.2	3.1%	$107.4	4.0%	$111.8	4.1%	$116.1	3.8%	$118.9	2.4%	$122.0	2.6%	$125.8	3.1%
Motor Vehicle Fees	$79.0	1.5%	$80.1	1.4%	$82.0	2.3%	$86.2	5.2%	$88.0	2.1%	$88.3	0.3%	$89.7	1.6%	$90.1	0.4%	$91.4	1.4%	$91.4	0.0%
Other Revenue**	$19.5	2.3%	$19.7	0.8%	$19.6	-0.5%	$19.9	1.8%	$21.5	7.9%	$21.6	0.5%	$21.8	0.9%	$22.0	0.9%	$22.3	1.4%	$22.6	1.3%
TOTAL TRANS. FUND	**$284.0**	**10.9%**	**$293.8**	**3.5%**	**$298.0**	**1.4%**	**$305.8**	**2.6%**	**$313.4**	**2.5%**	**$318.3**	**1.6%**	**$324.2**	**1.9%**	**$327.3**	**1.0%**	**$331.7**	**1.3%**	**$335.2**	**1.1%**

TABLE 2 - STATE OF VERMONT
LEGISLATIVE JOINT FISCAL OFFICE
AVAILABLE TRANSPORTATION FUND REVENUE FORECAST UPDATE
Provisional Consensus JFO and Administration Forecast - January 2018

CURRENT LAW BASIS

including all Education Fund allocations and other out-transfers	**FY 2014** *(Actual)*	% Change	**FY 2015** *(Actual)*	% Change	**FY 2016** *(Actual)*	% Change	**FY 2017** *(Actual)*	% Change	**FY 2018** *(Forecast)*	% Change	**FY 2019** *(Forecast)*	% Change	**FY2020** *(Forecast)*	% Change	**FY2021** *(Forecast)*	% Change	**FY2022** *(Forecast)*	% Change	**FY2023** *(Forecast)*	% Change
REVENUE SOURCE																				
Gasoline	$76.5	27.6%	$77.6	1.5%	$78.0	0.5%	$78.2	0.3%	$78.1	-0.2%	$78.0	-0.1%	$77.9	-0.1%	$77.5	-0.5%	$77.1	-0.5%	$76.5	-0.8%
Diesel****	$17.2	9.7%	$19.1	11.5%	$18.3	-4.4%	$18.2	-0.5%	$18.4	1.0%	$18.6	1.1%	$18.7	0.5%	$18.8	0.5%	$18.9	0.5%	$18.9	0.0%
Purchase and Use*	$61.2	9.9%	$64.8	5.9%	$66.8	2.9%	$68.8	3.1%	$71.6	4.0%	$74.5	4.1%	$77.4	3.8%	$79.3	2.4%	$81.3	2.6%	$83.9	3.1%
Motor Vehicle Fees	$79.0	1.5%	$80.1	1.4%	$82.0	2.3%	$86.2	5.2%	$88.0	2.1%	$88.3	0.3%	$89.7	1.6%	$90.1	0.4%	$91.4	1.4%	$91.4	0.0%
Other Revenue**	$19.5	2.3%	$19.7	0.8%	$19.6	-0.5%	$19.9	1.8%	$21.5	7.9%	$21.6	0.5%	$21.8	0.9%	$22.0	0.9%	$22.3	1.4%	$22.6	1.3%
TOTAL TRANS. FUND	**$253.4**	**11.0%**	**$261.4**	**3.2%**	**$264.6**	**1.2%**	**$271.4**	**2.6%**	**$277.6**	**2.3%**	**$281.0**	**1.2%**	**$285.5**	**1.6%**	**$287.7**	**0.8%**	**$291.0**	**1.2%**	**$293.3**	**0.8%**
OTHER																				
TIB Gasoline	$19.2	-9.5%	$18.2	-5.2%	$13.0	-28.4%	$12.6	-3.3%	$12.9	2.4%	$13.7	6.2%	$14.1	2.9%	$15.0	6.4%	$16.0	6.7%	$16.8	5.0%
TIB Diesel and Other***	$1.8	4.0%	$2.1	11.4%	$1.9	-6.1%	$1.7	-11.3%	$2.0	15.3%	$2.0	1.0%	$2.0	1.0%	$2.0	0.5%	$2.0	0.0%	$2.0	0.5%
Total TIB****	$21.0	-8.4%	$20.2	-3.8%	$15.0	-26.1%	$14.5	-2.9%	$14.9	2.4%	$15.7	5.5%	$16.1	2.7%	$17.0	5.6%	$18.0	5.9%	$18.8	4.5%

* 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 (which has never exceeded $20,000 per year).

**** Includes FY17 adjustment of $215,000 from reported TIB Diesel revenue to Diesel revenue due to a data entry error

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)
Provisional Consensus JFO and Administration Forecast - January 2018

CURRENT LAW BASIS

Source General and Transportation Fund taxes allocated to or associated with the Education Fund only	**FY 2014** *(Actual)*	% Change	**FY 2015** *(Actual)*	% Change	**FY 2016** *(Actual)*	% Change	**FY 2017** *(Actual)*	% Change	**FY 2018** *(Forecast)*	% Change	**FY 2019** *(Forecast)*	% Change	**FY2020** *(Forecast)*	% Change	**FY2021** *(Forecast)*	% Change	**FY2022** *(Forecast)*	% Change	**FY2023** *(Forecast)*	% Change
GENERAL FUND																				
Sales & Use**	$123.8	7.1%	127.6	3.1%	$129.8	1.7%	$131.8	1.6%	$136.9	3.8%	$144.3	5.4%	$147.4	2.1%	$150.1	1.8%	$153.6	2.4%	$157.8	2.7%
Interest	$0.1	-17.2%	0.1	3.6%	$0.2	135.7%	$0.4	122.7%	$0.5	33.0%	$0.6	20.0%	$0.7	8.3%	$0.7	7.7%	$0.7	3.6%	$0.8	3.4%
Lottery	$22.6	-1.6%	22.8	0.8%	$26.4	16.1%	$25.5	-3.3%	$25.2	-1.3%	$25.6	1.6%	$25.8	0.8%	$26.0	0.8%	$26.1	0.4%	$26.2	0.4%
TRANSPORTATION FUND																				
Purchase and Use***	$30.6	9.9%	32.4	5.9%	$33.4	2.9%	$34.4	3.1%	$35.8	4.0%	$37.3	4.1%	$38.7	3.8%	$39.6	2.4%	$40.7	2.6%	$41.9	3.1%
TOTAL EDUCATION FUND	**$177.0**	**6.3%**	**182.9**	**3.3%**	**$189.7**	**3.7%**	**$192.2**	**1.3%**	**$198.4**	**3.3%**	**$207.8**	**4.7%**	**$212.6**	**2.3%**	**$216.5**	**1.8%**	**$221.1**	**2.2%**	**$226.7**	**2.5%**

* Includes only General and Transportation Fund taxes allocated to the Education Fund.
This Table excludes all Education Fund property taxes, which are updated in October/November of each year and are the largest Education Fund tax sources.
** 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 and to 36.0% in F19.
*** Includes Motor Vehicle Rental revenues, restated

Appendix B

Ongoing Analysis Outline:
Federal Tax Plan and Jobs Act Provisions and Potential Revenue Impacts on the State of Vermont

Prepared by the Joint Fiscal Office and Legislative Council

January 2018

Version as of January 10, 2018. Will be updated as appropriate.	Current federal law	Tax Cuts and Jobs Act	Current Vermont law	Comments/Impact	Preliminary JFO Effect on VT Revenues (Note: Revenue effects are described in isolation; final estimates may be different than the sum of individual provisions, due to interactions among
					Large= Greater than $25 million impact **Medium=Between $10 and $25 million** **Small= Less than $10 million**
INDIVIDUAL INCOME TAX CHANGES					
Personal Exemptions	TPs can deduct $4150 for each personal exemption.	Eliminates personal exemptions.	VTI = AGI with several additions and subtractions. One subtraction is the amount of personal exemptions taken at federal level.	Changes would fall through. If the amount of personal exemptions allowed at the federal level were zero, changes would increase VTI.	**Large, upward effect on VT revenues in FY19 and beyond** Explanation: Removal of the deduction of personal exemptions increases taxable income in FY19 and beyond.
Standard Deduction	TPs can deduct a standard deduction of $6,500 for single filers and $13,000 for married couples; helps create a de facto 0 percent bracket.	Standard deduction is increased to $12,000 for individuals and $24,000 for joint filers.	VTI = AGI with several additions and subtractions. One subtraction is the amount of the standard deduction taken at federal level. A different subtraction caps certain itemized deductions at 2.5 times the federal standard deduction amount.	Changes would fall through, lowering VTI, and likely reducing the number of itemizers. Would increase itemized deduction cap.	**Large, downward effect on VT revenues** Explanation: A larger standard deduction reduces taxable income for those who do not itemize. A larger standard deduction may also cause itemizers who had less than $12,000 (single) or $24,000 (joint) to take the larger standard deduction, further reducing taxable income.
Pass through income	Income earned through a partnership (including LLCs), S Corp, or sole proprietorship is taxed to the individual owner as ordinary income, at the TP's marginal rate.	Allows a deduction of 20% of the amount of "qualified business income", which is generally defined as income earned through a pass through. There are limits based on business types and allocable wages, which start when the pass through income exceeds $315,000 for joint and $157,500 for individuals. The deduction is structured in such a way to be available to both itemizers and non-itemizers.	No preferential treatment for pass though income, but reduces VTI by certain itemized deductions, up to 2.5 times the federal standard deduction.	Changes should not fall through for itemizers and non-itemizers because there is no allowance for the pass through deduction in 32 V.S.A. § 5811(21).	**POTENTIAL downward effect on VT revenues.** Explanation: The deduction should not fall through for either itemizers or non-itemizers. However, there are also behavioral impacts that could affect this estimate long-term. If individuals can "game" the rules and establish themselves as pass-through businesses, there may be a greater downward effect on VT revenues.
Child credit	Child tax credit of $1000 per qualifying child. Phased out a $75,000 for an individual filers, $110,000 for joint filers. Refundable up to 15% of earned income over $3,000.	Increase the amount of the child tax credit to $2,000 per qualifying child. Maximum refundable amount would be $1,400. Create a new nonrefundable $500 credit for qualifying dependents who are not qualifying children. Phased out at $200,000 for single filers, $400,000 for joint return.	Vermont is not linked to this credit.		**No direct impact on VT revenues**
Overall limit on itemized deductions	Total allowed itemized deductions are reduced by 3% of the amount that the TP is over the threshold (in 2017, thresholds were $261,500 for individual filers and $313,800 for joint filers).	Suspends limit for tax years 2018 to 2025.	No specific law on point in Vermont, but the effect of the limitation would fall through, in the sense that some high itemizers may have fewer deductions to claim.	To the extent suspending the limitation increases the amount of itemized deductions taken at the federal level, it may decrease VTI, unless the 2.5 times cap already applies to the TP.	**Small, downward effect on VT revenues** Explanation: If individuals over the previous income thresholds no longer have their itemized deductions limited, then their aggregate deductions may be increased under the new bill. This leads to a decrease in taxable income.
Home mortgage interest	Itemizers can deduct interest on up to $1,000,000 in indebtedness for up to two homes.	Reduces the limit on acquisition indebtedness to $750,000, for new mortgages after December 15, 2017.	Allows TP to reduce VTI by amount of the federal deduction, subject to the 2.5 times cap.	Changes would fall through, and possibly increase VTI, but only to the extent that people with over $750,000 in indebtedness are currently not capped.	**Small, upward effect on VT revenues** Explanation: Individuals with new mortgages over $750,000 would be unable to deduct interest from that mortgage. This lowers the amount of the deduction in aggregate and increases taxable income.
State and local taxes	Itemizers can deduct state and local property taxes and either state and local income taxes or sales taxes.	Itemizers can deduct up to $10,000 of the aggregate of state and local property tax and state and local income taxes.	The federal deduction for state and local income taxes is disallowed, and added back into the calculation of VTI. The federal deduction for state and local property taxes falls through to the calculation of VTI, but is subject to the itemized deduction cap.	Change may result in fewer itemizers. May result in less deducted from AGI, which would mean an increase in VTI. If nothing is changed, there may be an incentive for filers to use all of their property tax first to fill the $10,000 limit, because they would need to add back any state and local income taxes used.	**Small, upward effect on VT revenues** Explanation: Because VT requires the addback of State and local income taxes, individuals are incented to use the $10,000 cap on their property taxes first, then the residual on income taxes. As a result, Federal Taxable Income would increase under this cap (because individuals can deduct less than they could before) but Vermont would see less in state and local income taxes added back, reducing Vermont taxable income. Therefore, the revenue impact is small.
Casualty losses	TPs can deduct losses not compensated by insurance, if they exceed 10% of AGI.	Limits casualty losses to losses incurred during a federally declared emergency.	Allows TP to reduce VTI by amount of the federal deduction, subject to the 2.5 times cap.	To the extent the change reduces itemized deductions for casualty losses, it may increase VTI.	**Small, upward effect on VT revenues** Explanation: Repeal of the deduction (for most cases) increases Vermont taxable income.

Version as of January 10, 2018. Will be updated as appropriate.	Current federal law	Tax Cuts and Jobs Act	Current Vermont law	Comments/Impact	Preliminary JFO Effect on VT Revenues (Note: Revenue effects are described in isolation; final estimates may be different than the sum of individual provisions, due to interactions among
					Large= Greater than $25 million impact Medium=Between $10 and $25 million Small= Less than $10 million
INDIVIDUAL INCOME TAX CHANGES, continued					
Charitable contributions	Itemizers can generally deduct charitable contributions up to 50% of -their AGI.	The bill would increase the income-based percentage limit for charitable contributions of cash to public charities to 60%. It would also deny a charitable deduction for payments made for college athletic event seating rights.	Allows TP to reduce VTI by amount of the federal deduction.	To the extent the change incentivizes more charitable giving, it could result in more federal deductions, and less VTI.	**Small, downward effect on VT revenues** Explanation: JFO, when modeling, assumed that only individuals who gave 50% of their AGI in contributions under current law would increase their giving to 60% of AGI. This increases the aggregate amount of the deduction, lowering taxable income. It should be noted that with fewer taxpayers itemizing deductions, there will be a reduced benefit to charitable giving, which may reduce such giving.
Miscellaneous itemized deductions	TPs may deduct certain miscellaneous deductions, as long as they exceed, in the aggregate, 2% of AGI.	Suspends all miscellaneous deductions subject to the 2% floor from tax year 2018 to tax year 2025.	Allows TP to reduce VTI by amount of the federal deduction, subject to the 2.5 times cap.	To the extent the change reduces itemized deductions for miscellaneous itemized deductions, it should increase VTI.	**Small, upward effect on VT revenues** Explanation: Suspension of the deduction would increase Vermont taxable income.
Medical expenses	Itemizers may deduct unreimbursed medical expenses to the extent they exceed 10% of AGI.	Lowers threshold to 7.5% of AGI.	Allows TP to reduce VTI by amount of the federal deduction.	To the extent the change increases the amount of itemized deductions claimed at the federal level, it may decrease VTI.	**Small, downward effect on VT revenues** Explanation: Increases the aggregate amount of itemized deductions, reducing taxable income.
Moving expenses	TPs are permitted an above the line deduction for work related moving expenses that meet certain requirement of distance and employment status. Qualified moving expense reimbursements from an employer are excluded from the TP's gross income, within limits.	Generally repeals the deduction for expenses paid by an individual or reimbursed by an employer, except for members of the military who move.	Since the deduction is taken about before AGI is calculated, the deduction is automatically incorporated into the calculation of VTI.	Should increase federal AGI, and therefore VTI, to the extent non-military people claimed the deduction in Vermont.	**Small, upward effect on VT revenues** Explanation: Repeal of the deduction increases AGI, and therefore VTI. Note: this is an above-the-line deduction. It is a deduction from gross income, before AGI.
Alternative Minimum Tax	Provides a separate minimum tax calculation for TPs who utilize specific tax preferences and adjustments.	Temporarily increases the exemption amount and exemption amount phaseout thresholds for the AMT, from tax year 2018 to tax year 2026. Basically, raises the thresholds to which the AMT would apply, such that fewer TPs at the lower end are subject to the AMT.	Vermont is not linked to the individual AMT. Vermont has a separate type of alternative minimum tax based on AGI, not on the federal AMT.	Since the AMT is an alternative calculation of the tax due, it does not fall through to the Vermont calculation of VTI.	**No direct impact on Vermont revenues.**
BUSINESS PROVISIONS					
Corporate Rates	The top corporate rate of 35 percent now applies to taxable income over $10 million a year. There are three other corporate tax brackets — 15 percent, 25 percent and 34 percent.	Sets a single corporate tax rate at 21 percent, starting in 2018, up from 20 percent proposed in the House and Senate bills.	8.5 percent for C Corps with more than $25,000 in net income attributable to Vermont; 7% between $10,000 and $25,000; 6% under $10,000. Minimum taxes ranging from $75 to $750 for different categories.	Vermont rates are not linked to federal changes.	**No direct impact on VT revenues, although there may be indirect effects.** Explanation: Although Vermont's corporate tax rates are not linked to the Federal, this provision may affect corporate valuations which would flow through to capital gains. Capital gains would flow through to VTI on the personal income side.
Corporate Alternative Minimum Tax	Provides a separate minimum tax calculation for TPs who utilize specific tax preferences and adjustments.	Repeals corporate AMT.	Vermont is not linked to the federal corporate alternative minimum tax.	Since Vermont is not linked to the federal corporate AMT, there should be little effect on Vermont revenues.	**No direct impact on VT revenues.**
Bonus depreciation	TPs must capitalize the cost of property used in a trade or business or for the production of income through depreciation or amortization. Federal law allows a 50% bonus depreciation in the first year property is put into service.	Increases bonus depreciation to 100% for most property.	Vermont decoupled from the earlier federal decision to allow 50% bonus depreciation. Current law would also be decoupled from the 100% bonus depreciation in the new bill.	Without any changes to Vermont law, the 100% bonus depreciation would not fall through to the State on either the individual or corporate taxes.	**No direct impact on VT revenues.**
Luxury Automobiles	26 U.S.C. 280F limits the amount that can be depreciated for luxury and personal use automobiles.	The act increases the amount of the limits under 26 U.S.C. 280F, allowing more business expense to be claimed for luxury and personal use automobiles.	Changes would fall through to VNI, or VTI if depreciated on a business schedule.	To the extent the raised limits lead to increased amounts of depreciation, there may be less VTI, for both individual based business and corporate filers.	**Small, downward effect on VT revenue**

Version as of January 10, 2018. Will be updated as appropriate.	Current federal law	Tax Cuts and Jobs Act	Current Vermont law	Comments/Impact	Preliminary JFO Effect on VT Revenues (Note: Revenue effects are described in isolation; final estimates may be different than the sum of individual provisions, due to interactions among
					Large= Greater than $25 million impact Medium=Between $10 and $25 million Small= Less than $10 million
BUSINESS PROVISIONS, continued					
Depreciation changes	Businesses must depreciate property over time according to schedules designed by property type and class. Most depreciation schedules span 3 to 50 years.	The act reduces the period required to depreciate certain farm equipment and real estate.	No specific decoupling -- likely falls through to VTI and VNI.	Quicker depreciation typically means less income in the years the depreciation is claimed.	**Unknown downward effect on VT revenue.** Explanation: Quicker depreciation could lead to lower VNI and VTI.
Expensing	TPs may elect to expense in one year, rather than capitalize over time, certain types of property. TPs may expense up to $500,000 for items placed in service, but this amount is reduced by the amount by which total items placed into service exceed $2,000,000.	The act raises the dollar limits for expensing to $1,000,000 and $2,500,000.	No specific decoupling -- likely falls through to VNI, or VTI on a business schedule.	The ability to use more expensing, rather than capitalization, typically means less income in the years the expense is claimed.	**Unclear revenue impact on VT** Explanation: Will largely depend on if and when businesses make investments. If a large amount of businesses invest and expense in any single year, it would lead to lower VNI in that year, but potentially higher VNI in future years.
Interest	Business related interest for borrowing is generally deductible under 26 U.S.C. 163.	Limits the deductibility of business interest generally to (1) the amount of business interest income, or (2) 30% of adjusted taxable income.	Allowed to fall through as an itemized deduction for individuals or as a deduction before VNI for corporate filers.	To the extent the limitation reduces the amount of interest deducted, it may increase VTI or VNI for both individuals and corporations.	**Unclear revenue impact on VT** Explanation: Limits the amount of aggregate amount of deductions for both businesses and individuals, increasing VTI or VNI. However, the interaction between this provision and others (expensing, for example) may change borrowing decisions for businesses.
Net operating losses	A net operating loss is the amount by which business losses exceed taxable income. Business and individuals can deduct operating losses, and can typically carry those losses forward 20 years or back 2 years, although there are numerous exceptions. A net operating loss can be claimed on either a corporate return, or on an individual return, as a subtraction from income on a business schedule.	The act limits net operating losses to 80% of taxable income, and eliminates the 2 year carryback. But it allows carryforwards indefinitely.	Vermont had decoupled from federal net operating losses for corporations, and allows a deduction of an apportioned amount of net operating losses. 32 V.S.A. § 5811(18), 32 V.S.A. § 5888. Since a net operating loss on an individual return is subtracted in the calculation of income, individual net operating losses can fall through.	The limitations may reduce the losses claimed by some individuals, which would increase gross income, and could theoretically increase VTI. Since Vermont is decoupled from the federal corporate net operating loss provisions, the changes will not fall through to VNI.	**No direct impact on VT revenues.**
Deduction for qualified production activities	26 U.S.C. 199 allows a deduction for certain qualified production activities, up to 9% of the expense, or 9% of taxable income. Originally designed to incentivize manufacturing, the deduction has been claimed by many businesses tangentially to manufacturing.	The act repeals this deduction.	Vermont has never decoupled from this deduction, which was passed in 2004, and it falls through on both the individual and corporate sides. To the extent the deduction is claim by an individual, it is an above the line deduction, and reduces federal AGI, and therefore VTI. To the extent it is taken by a corporation, it reduces federal taxable income, and therefore VNI.	The repeal of this deduction should increase VTI and VNI.	**Small, upward impact on VT revenues** Explanation: Repeal of the deduction increases AGI, which increases VTI. Note: this is an above-the line deduction
Carried Interest	Carried interest is the share of the profits from an investment fund that is paid to fund managers. Under current law, it is taxed at the preferential capital gains rate, rather than ordinary income.	The act creates a three year holding period, so that carried interest composed of gains held less than three years is taxed as ordinary income, and carried interest composed of gains held more than three years would get the capital gains rate.	Vermont has not decoupled from 26 U.S.C. 83, which contains the rules for carried interest. Since carried interest is determined at the gross income level, any change would fall through.	Since the limitation would arguably increase federal gross income, the changes would fall through to increase federal AGI and VTI.	**Small, upward effect on VT revenues** Explanation: The provision could increase gross income, which would then increase AGI and VTI, all other provisions held constant.
Employer credit for family or medical leave	No credit for family or medical leave payments.	Creates a credit for employers of 12.5% of the amount of wages paid to a qualifying employee during any period in which the employee is on family and medical leave if the rate of payment under the program is 50% of the wages normally paid to the employee. Applies to tax year 2018 and 2019 only.	Vermont has not decoupled.	Since it applies as a credit against a liability, the effect would likely not fall directly through to Vermont revenues.	**No direct effect on VT revenues**

Version as of January 10, 2018. Will be updated as appropriate.	Current federal law	Tax Cuts and Jobs Act	Current Vermont law	Comments/Impact	Preliminary JFO Effect on VT Revenues (Note: Revenue effects are described in isolation; final estimates may be different than the sum of individual provisions, due to interactions among
					Large= Greater than $25 million impact Medium=Between $10 and $25 million Small= Less than $10 million
TAXATION OF FOREIGN INCOME					
Dividends received deduction	The US has a modified "worldwide" taxing system, where all worldwide income earned by a corporation is considered taxable, but the tax is deferred until the foreign earned profits are brought back to the US.	At a very high level, allows US Corporations to deduct the foreign-source portion of dividends paid by certain foreign corporations to US corporate shareholders owning at least 10% of the foreign corporation. In other words, most foreign earned profits are no longer considered taxable, moving the US to a modified "territorial" system.	Vermont is based on VNI, which used federal corporate taxable income as a base.	Since most foreign profits have been offshored, and not taxed immediately, under the current US worldwide system, it is not obvious that the ability to deduct these profits will significantly change VNI.	**No direct effect on VT revenues**
Repatriation of foreign profits	Under current law, foreign profits are not taxed until they are paid back to a domestic corporation or shareholder.	A transitional rule imposes a one-time tax on US shareholders of certain foreign corporations. The tax is assessed on the US shareholder's share of the foreign corporation's accumulated foreign earnings that have not previously been taxed under the US's system of deferred worldwide taxation. The provision generally requires that, for the last taxable year beginning before January 1, 2018, any U.S. shareholder of a specified foreign corporation must include in gross income its pro rata share of the accumulated post-1986 deferred foreign income of the corporation. A deduction is then allowed on that income at different rates, depending on whether the repatriated profits are cash or asset based. The result is that earnings in the form of cash and cash equivalents will be taxed at a rate of 15.5%; all other earnings will be taxed as 8%. The tax can be paid in installments over 8 years. The tax applies whether the profits are actually returned to the US or not.	VNI is based on federal corporate taxable income, which is calculated as gross income, minus allowable deductions.	The structure of this provision -- requiring the inclusion of repatriated profits in gross income with an allowance for a partial deduction -- will could result in an increase in VNI on a one time basis. However, there may be apportionment issues, timing issues, and tax avoidance strategies, which may limit the increase.	**Unknown upward effect on VT revenues.** Explanation: Will largely depend on the extent to which businesses take advantage of the provision, and whether these businesses have a presence in VT. Because of Vermont's water's edge unitary taxation, VNI would increase if any business with a VT presence repatriates profits.
Base erosion minimum tax	No provision in current law.	Applicable corporations will be subject to a new tax equal to their "base erosion minimum tax amount." The formula for determining this tax is complex, but at a high level, is equal to 10% of the US corporation's modified taxable income (modified by adding back deductible payments to related foreign persons), minus the US corporation's regular tax liability (where the income base is reduced by deductible payments to related foreign persons, and the tax liability itself is reduced by certain credits). This provision is intended to apply to US corporations that reduce their US tax liability by making deductible payments to related foreign persons (e.g., interest on intercompany loans; royalties to affiliated entities).	There is not corresponding Vermont provision.	The base erosion minimum tax is structured as a separate excise tax, outside of the normal federal corporate income tax calculation; therefore, the effects of the tax will likely not directly fall through to Vermont.	**No direct effect on VT revenues**
Minimum tax on passive/mobile undistributed income of CFCs	No current provision.	Under a new provision, US shareholders of a controlled foreign corporation (a CFC) will be taxed currently on their shares of "global intangible low-taxed income" (GILTI). Very generally, GILTI is (i) the US shareholder's pro rata share of the CFC's aggregate net income, minus (ii) a deemed 10% return on the CFC's aggregate basis in depreciable tangible property. Certain income (e.g., subpart F income) is excluded from the determination of (i) in the above formula.	There is no corresponding Vermont provision.	The structure of this provision -- attributing foreign income to a US shareholder and providing a partial deduction -- would seem likely to fall through to either VTI or VNI. These rules are intended to discourage US corporations from holding or moving low-basis business assets in low-tax jurisdictions. However, they do not appear to take away the incentive for a US company to move high-basis assets to such a jurisdiction (e.g., factories, equipment, etc.)	**Unclear effect on VT revenues.**

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					Large= Greater than $25 million impact Medium=Between $10 and $25 million Small= Less than $10 million
ESTATE TAX PROVISIONS					
Exclusion amount	There is a unified estate tax and gift tax at the federal level on estates passed on at death, or gifts made during a lifetime. Excluded from this tax is the first $5 million of the estate or lifetime gifts for an individual, or $10 million for a married couple. This amount is indexed for inflation beginning in 2011, and in 2017, these base amounts were $5.49 million and $10.98 million.	Doubles the unified estate/gift tax exclusion amount to the first $10 million for individuals or $20 million for married couples. Retains the indexing for inflation to 2011, so under the bill, the amounts in 2017 would have been $10.98 million for an individual or $21.96 million for a married couple.	Vermont uses the federal definitions for base amounts, but has a decoupled exclusion amount of $2.75 million.	Although the gap between Vermont's exclusion amount ($2.75 million) and the federal exclusion amount (roughly $11 million and $22 million) will increase, it seems unlikely that the increase in the gap would lead to an increase or decrease in State revenues.	**Unknown effects on VT revenues**
INFLATION METRIC USED FOR FUTURE TAX RATE CHANGES					
Change in Inflation Measure for Indexing Tax Rates	CPI - unchained	CPI- chained	Affects any Vermont tax metric connected to federal inflation adjustment	This affects many federal definitional deductions, range limits and allowances, many of which are now referenced in Vermont tax rules and statute.	**Small upward impact in early years, but incresingly large over time**