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January 2019 Economic Review and Revenue Forecast Update

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

January 22, 2019

Economic Review and Revenue Forecast Update

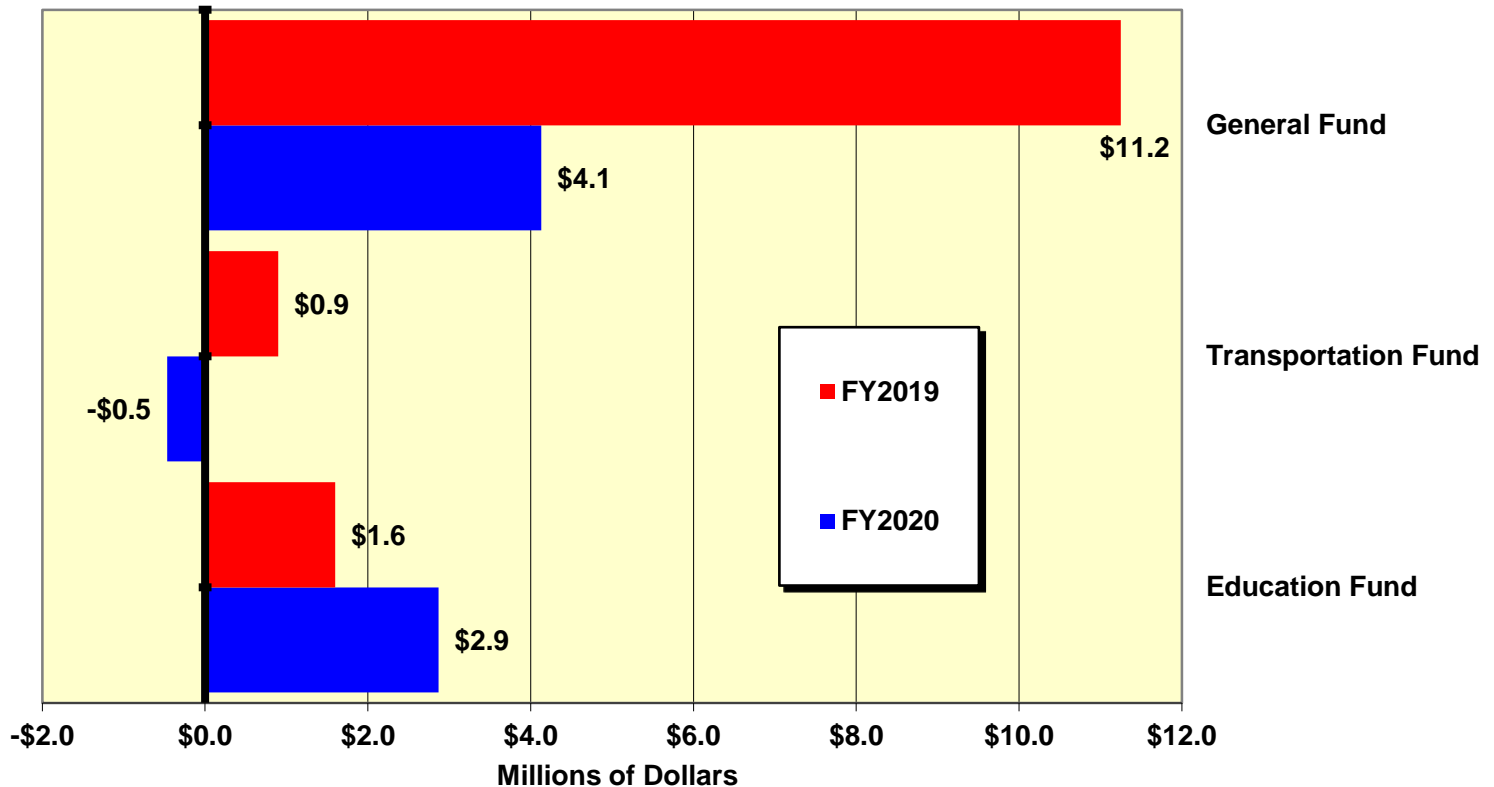
January 2019

Overview

Fueled by more than \$1 trillion in projected federal deficit spending this year, the economy is cranking at full speed, with the current economic expansion almost certain to become the longest on record this summer. This “foot on the gas” fiscal policy, however, has prompted the Fed to push harder on the brakes, eliciting four interest rate hikes in the past year – and probably more to come - that are intended to slow growth to more sustainable long-term levels and avoid the asset bubbles, inflation and other conditions often accompanying excessive growth. This intentional, gradual slowdown is aiming for an economic “soft-landing,” but the “soft” part is rarely achieved.

The vibrant economy has supported solid State revenue flows, which are likely to persist through most of FY19 and FY20. However, in FY21, the combination of Fed tightening, receding fiscal stimulus and potential trade conflict could leave the newly-defined (and smaller) General Fund with virtually no more revenue in FY21 than FY20, the Transportation Fund with slight declines and the newly-defined (and larger) Education Fund with gains of a mere 1-2%. Although these are very close to FY21 levels forecast last July, they were not a part of the officially adopted forecast at that time.

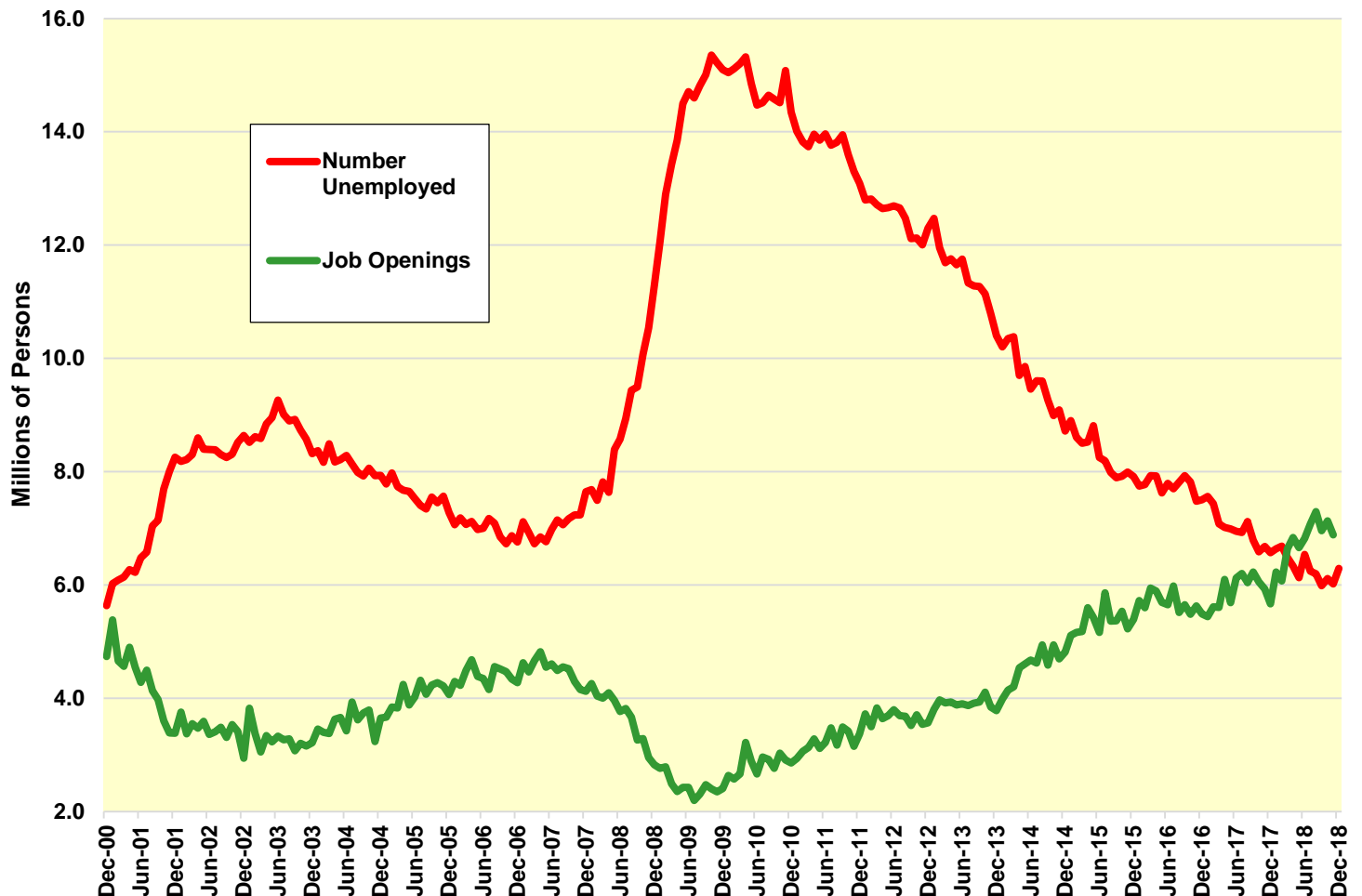
Recommended Net Revenue Changes from July 2018 Forecast



January 2019 Economic and Revenue Forecast Commentary

- The strength of the U.S. economy is evident in a wide range of economic metrics, from corporate profits to labor markets to consumer spending and real estate. The Vermont economy has experienced concomitant benefits, though not with identical timing, trajectory or intensity. While job gains in Vermont were virtually nonexistent in 2018, due primarily to demographic conditions, the unemployment rate in fell to 2.7% in the last two months of the year - within 0.1 percentage point of its lowest level ever and the fifth lowest rate in the nation (see chart on page 3). The U.S. unemployment rate similarly reached its lowest peace-time rate on record in recent months and is expected to decline further in the coming year, approaching 3.5%.

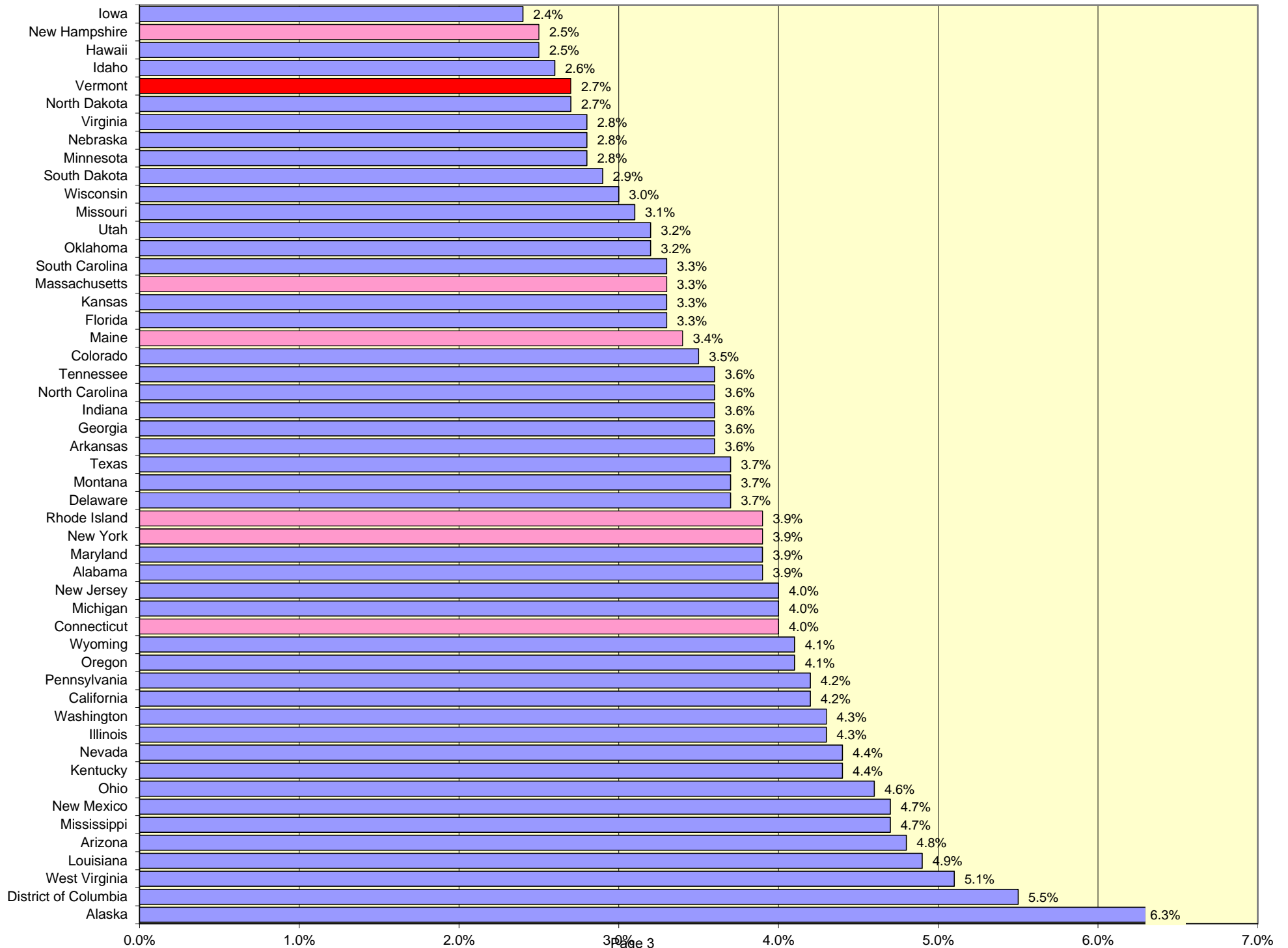
There are Now More Job Openings than People Seeking Them (U.S. Job Openings and Number Unemployed, Source: U.S. Bureau of Labor Statistics)



- The tightness in U.S. labor markets is illustrated in the above chart, which shows a rare inversion in the number of job openings and the number of people unemployed. Consistent with this, the quit rate has more than doubled and is now at its highest level in nearly 18 years. All of these conditions will support stronger wage and income growth in the coming year.

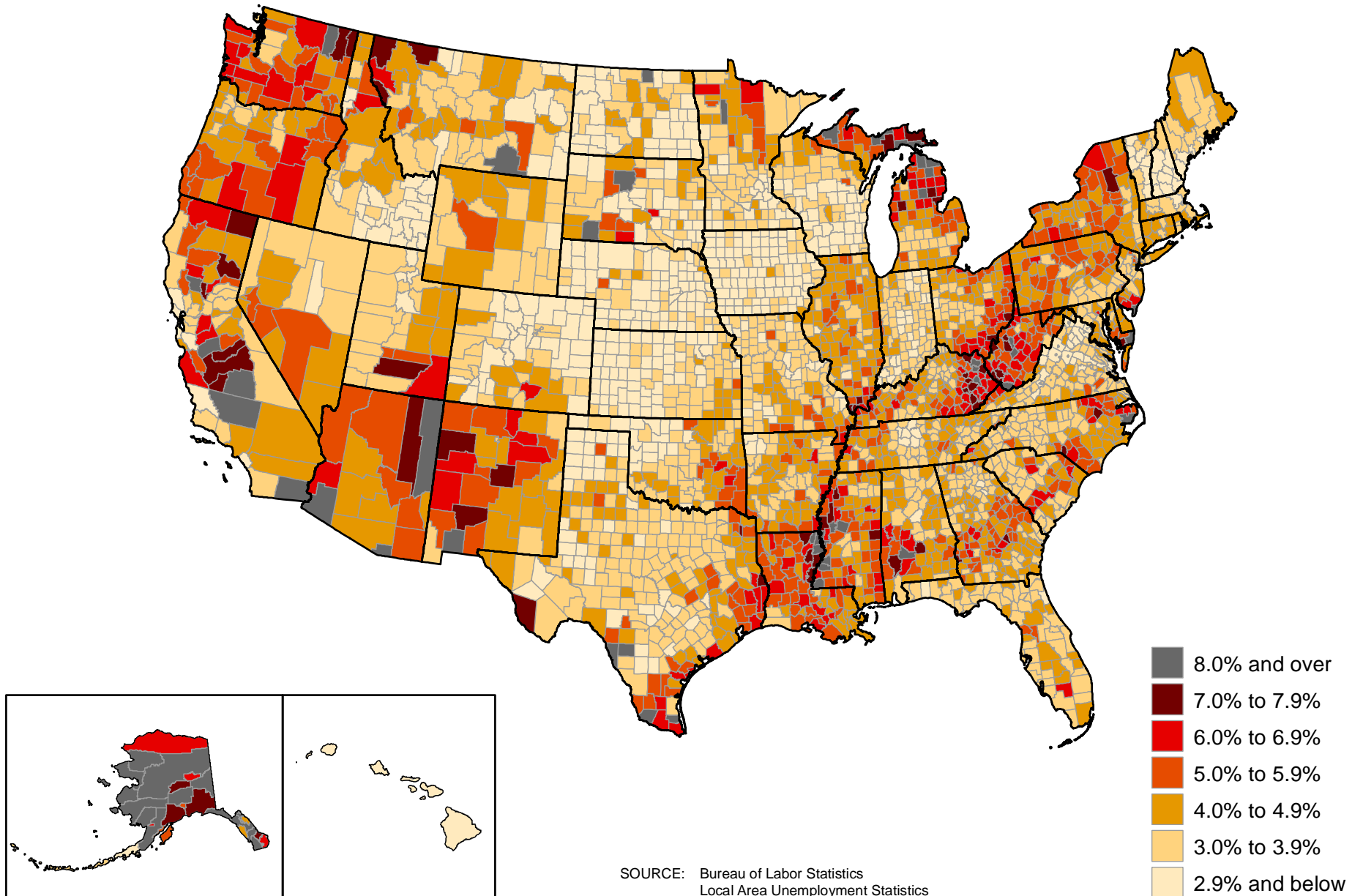
Unemployment Rate by State - December 2018

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



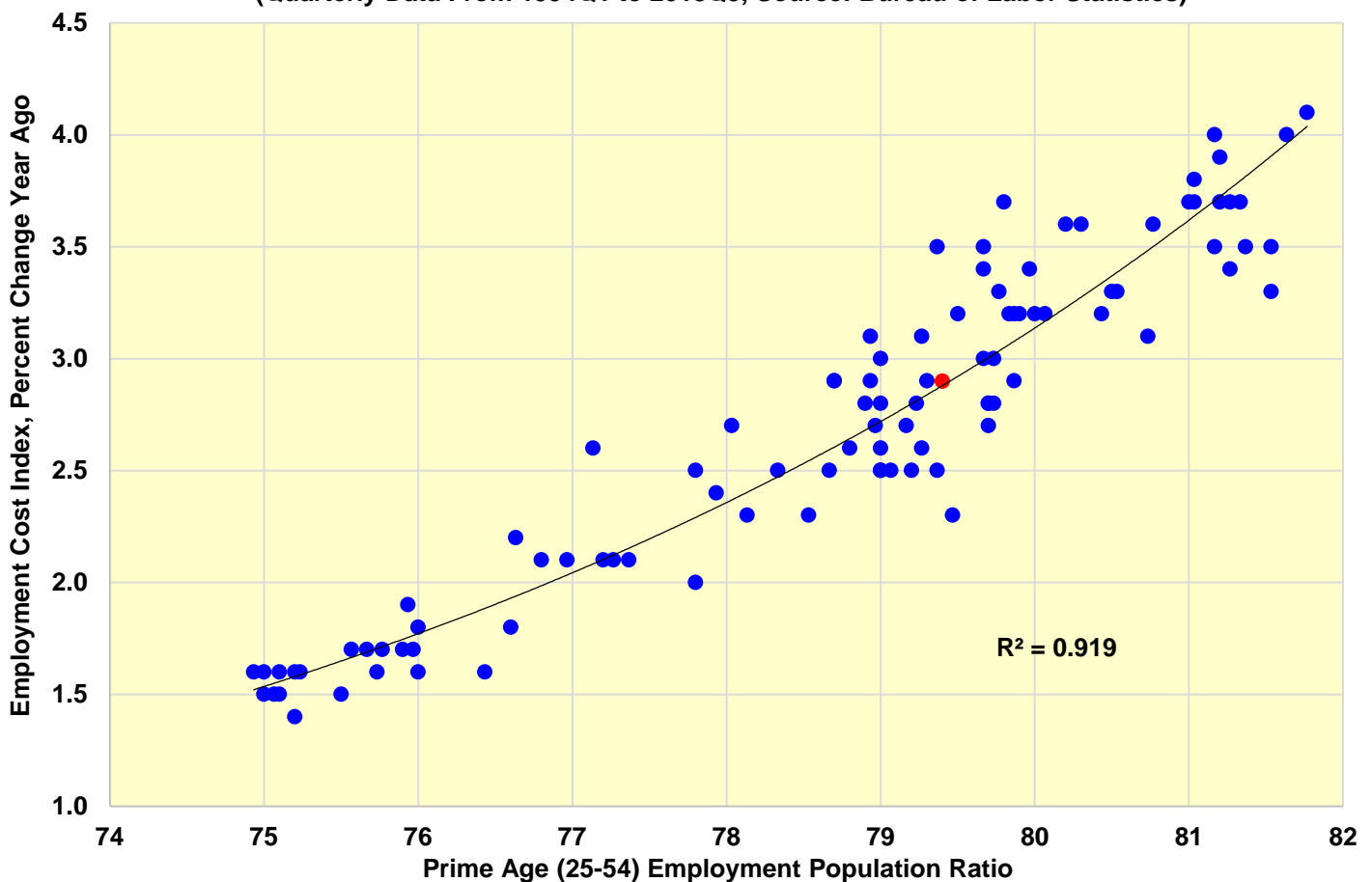
Unemployment rates by county, December 2017-November 2018 averages

(U.S. rate = 3.9 percent)



- The below chart suggests wage growth, as measured by the BLS Employment Cost Index (ECI), should soon rise above 3% and could end the year closer to 3.5% if labor markets continue to tighten as projected. The chart illustrates the relationship between labor utilization as measured by a more expansive metric of total potential employment, the ratio of total employment to the prime working age population (defined as ages 25-54). This measure of labor market tightness does not exclude any working age person for any reason, and has tracked quarterly year over year growth in wages since 1994 with reasonably good accuracy. The current reading as of the third quarter of 2018 is marked with a red dot, close to the predicted level of wage growth at 2.9%. The fourth quarter Employment Population Ratio of 79.7 suggests wage growth should start 2019 at about 3.0%.

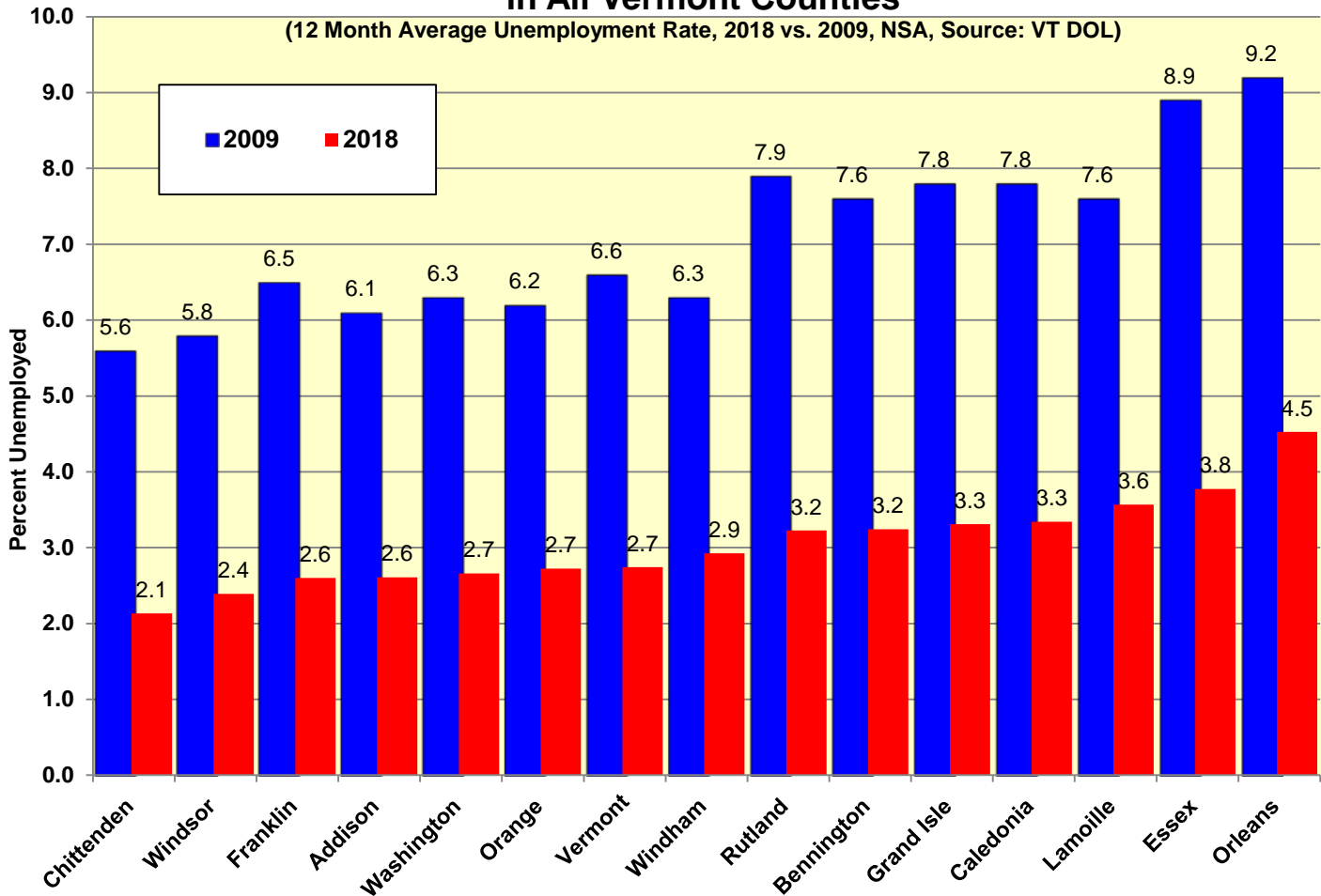
Wage Growth Should Finally Rise Above 3% in 2019
(Quarterly Data From 1994Q1 to 2018Q3, Source: Bureau of Labor Statistics)



- Unemployment rates continued to decline in all Vermont counties in 2018, with Chittenden County, as usual, posting the lowest rate at 2.1%. Windsor, Franklin, Addison, Washington and Orange all registered rates at or below the statewide average (2.7%), with the highest rates, also as usual, in the Northeast Kingdom counties of Orleans (4.5%) and Essex (3.8%). Still, every Vermont county except Orleans experienced unemployment rates below the national average in 2018. The chart on the preceding page depicts improving rates in surrounding NH counties as well, with relatively low rates throughout most of New England.

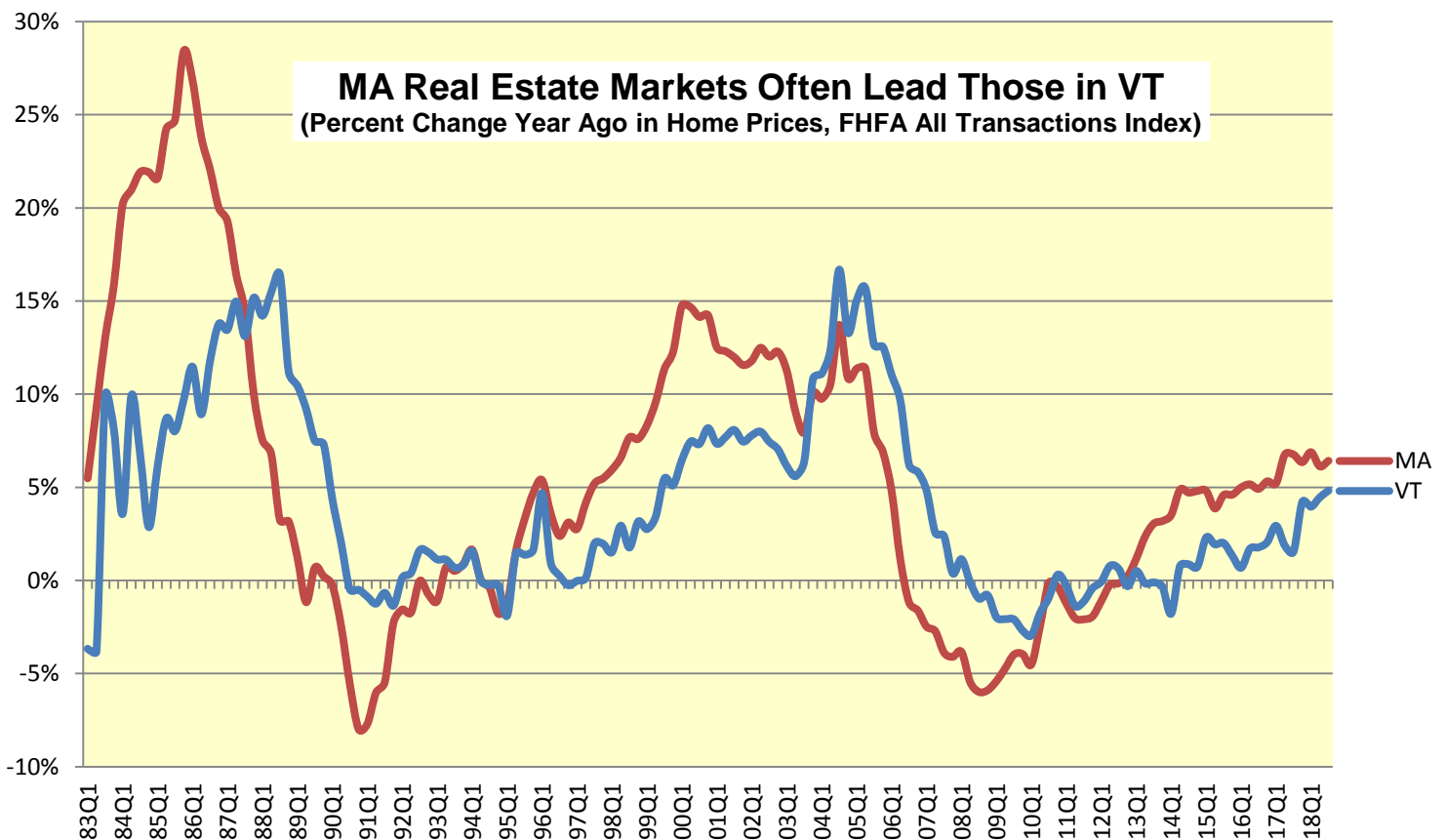
- As shown in the below chart, unemployment rates in all 14 Vermont counties are now less than half of the peak annual recessionary rates reached in 2009. Although the declines are not strictly proportional, they represent an enormous turnaround from the depths of the last recession. Unemployment variation by gender in Vermont also narrowed over this same approximate period, dropping from 7.3%/5.7% male/female in 2009 to 3.1%/3.0% in 2017.

Unemployment Rates are Now Less than Half Their 2009 Levels in All Vermont Counties



- Despite the widespread improvement in unemployment rates throughout the State, these rates have dropped in large part due not to job growth, but labor force declines. Over this same nine year period, based on BLS Local Area Unemployment Statistics (LAUS) household survey data, the State labor force contracted by more than 10,000 people (many of whom reached retirement age during this period), while those reporting being employed declined by about 7,000. The only counties registering labor market growth were Chittenden (+7,578), Franklin (+991) and Washington (+139) counties. These three counties were also the only ones posting employment growth, virtually all of which occurred in Chittenden (+8,412) and nearby Franklin (+1,373) counties, with Washington adding 539 workers. The counties with the largest employment declines included Rutland (-4,575), Windsor (-3,218), Bennington (-2,067), Caledonia (-1,939) and Windham (-1,743).

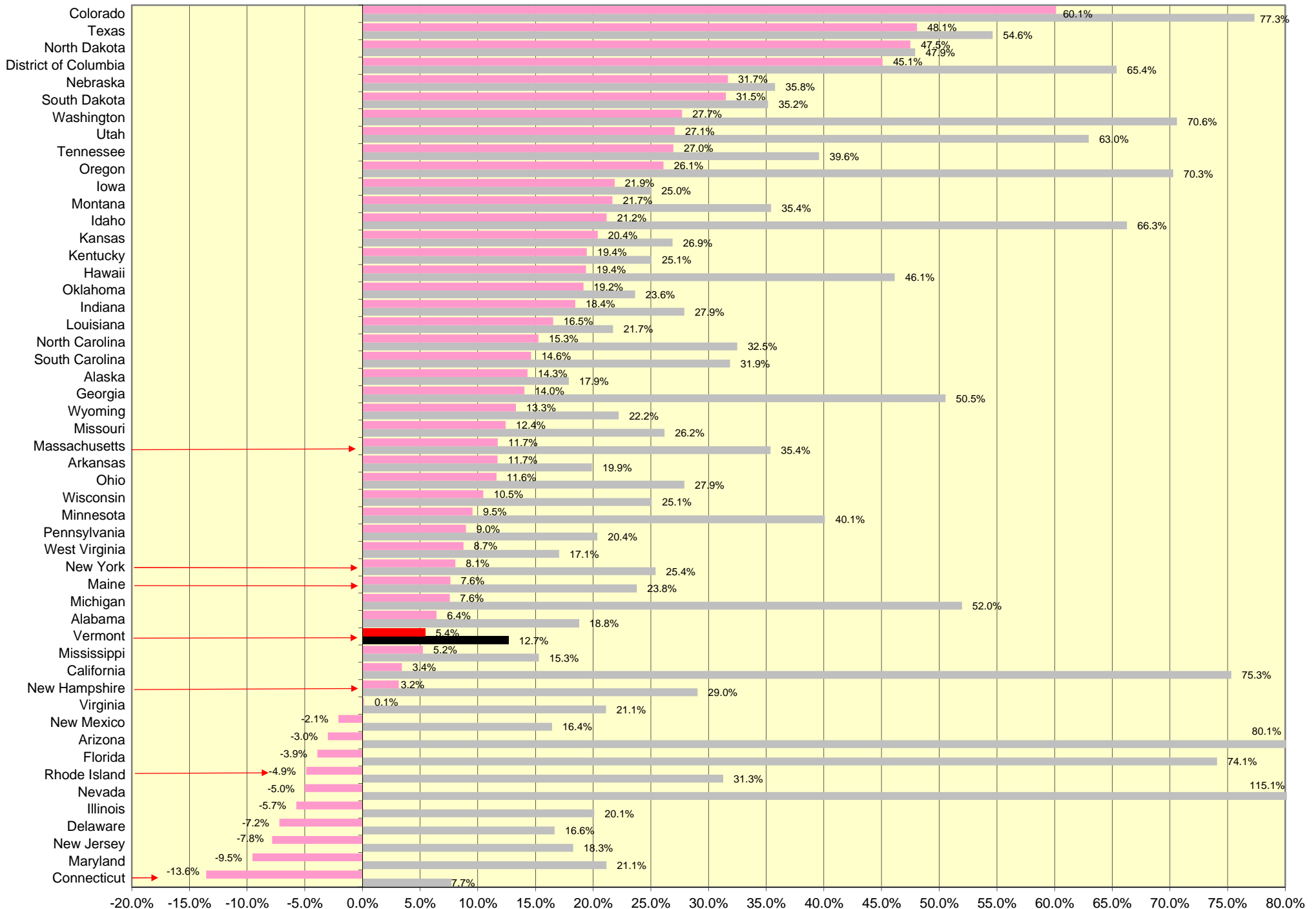
- While the aging Vermont population has dictated much of the labor force and employment changes in recent times, one notable development has been a dramatic increase in the number of people aged 65 years and older remaining in the workforce (men, especially). While overall participation rates have declined slightly over the past 15 years, participation rates among those 65 and older have nearly doubled. In 2017 (the latest available data), more than 26% of all elderly persons were still in the labor force (up from 14.2% in 2001) and 25.5% of this age group were still employed (up from 13.8% in 2001). Among the male elderly population, the shares of both workers in the labor force and those employed are now in excess of 30%. While these shares may decline as the average age of this cohort increases, for the time being, it is an important offset to the declining workforce the State is confronting.
- Equally important in slowing the State's labor force declines are improvements in regional real estate markets that affect migratory flows. During the Great Recession, which was largely precipitated by housing market financial excesses, for the first time on record, home prices declined in every state except one (ND). As a result of this, not only did job growth evaporate, but the ability and cost to relocate became prohibitive. Because residential real estate is the largest single asset for most households, the prospect of realizing home equity losses by selling while home prices were depressed deterred decisions regarding moving. As real estate prices have recovered and now exceed their prior peak levels in most states, this impediment to migration has been removed – and in some cases is now an incentive to relocate – especially to states with lower relative home prices, such as Vermont.

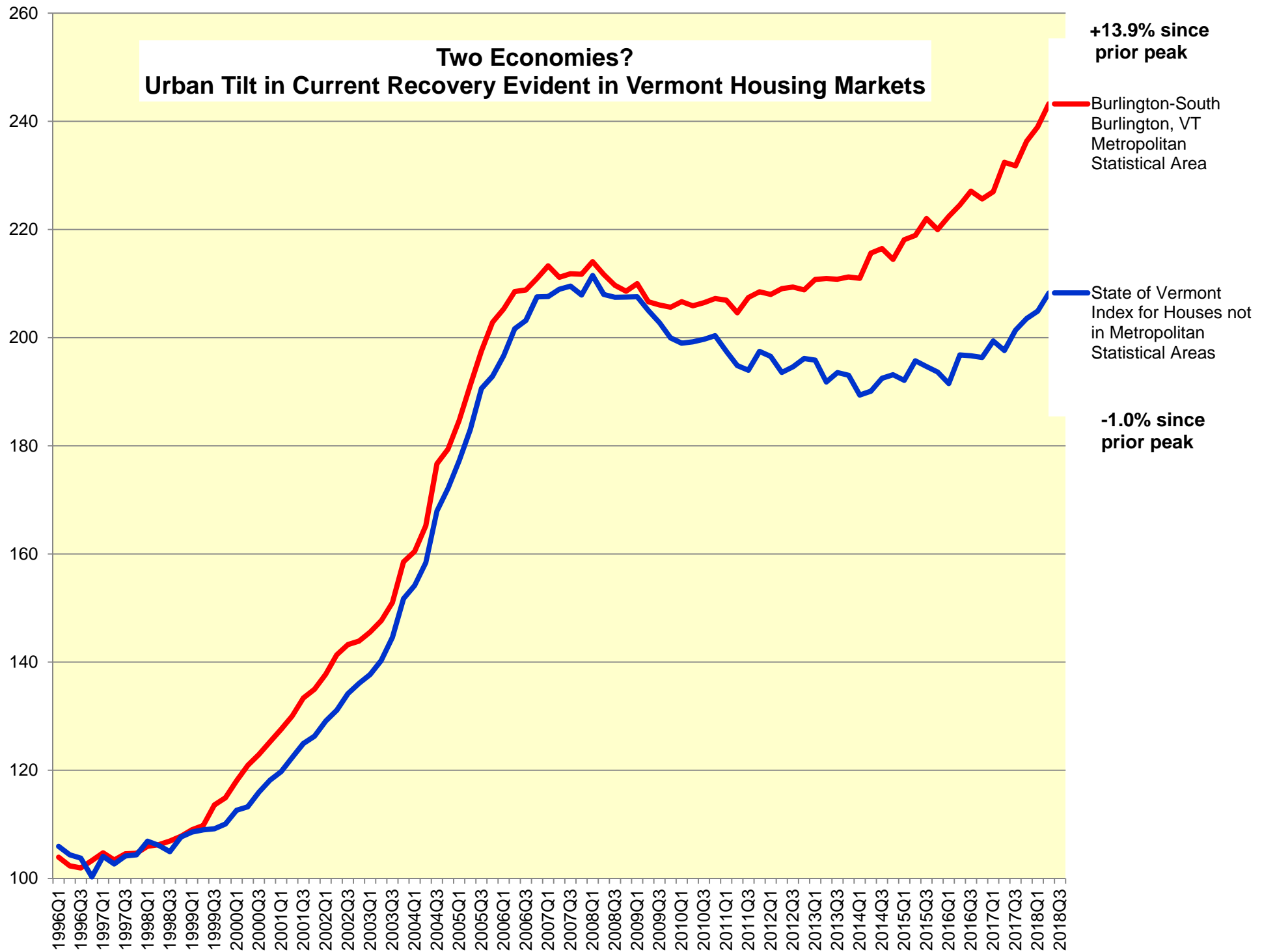


Real Estate Update: Housing Values Relative to Last Peak (pink) and Trough (grey)

Percent Change, 2018Q3 vs. Peak Price by State Reached Between 2005Q3 and 2009Q2 - Pink and 2018Q3 vs. Trough Price Reached Between 2009Q3 and 2018Q3 - Grey

Source: FHFA

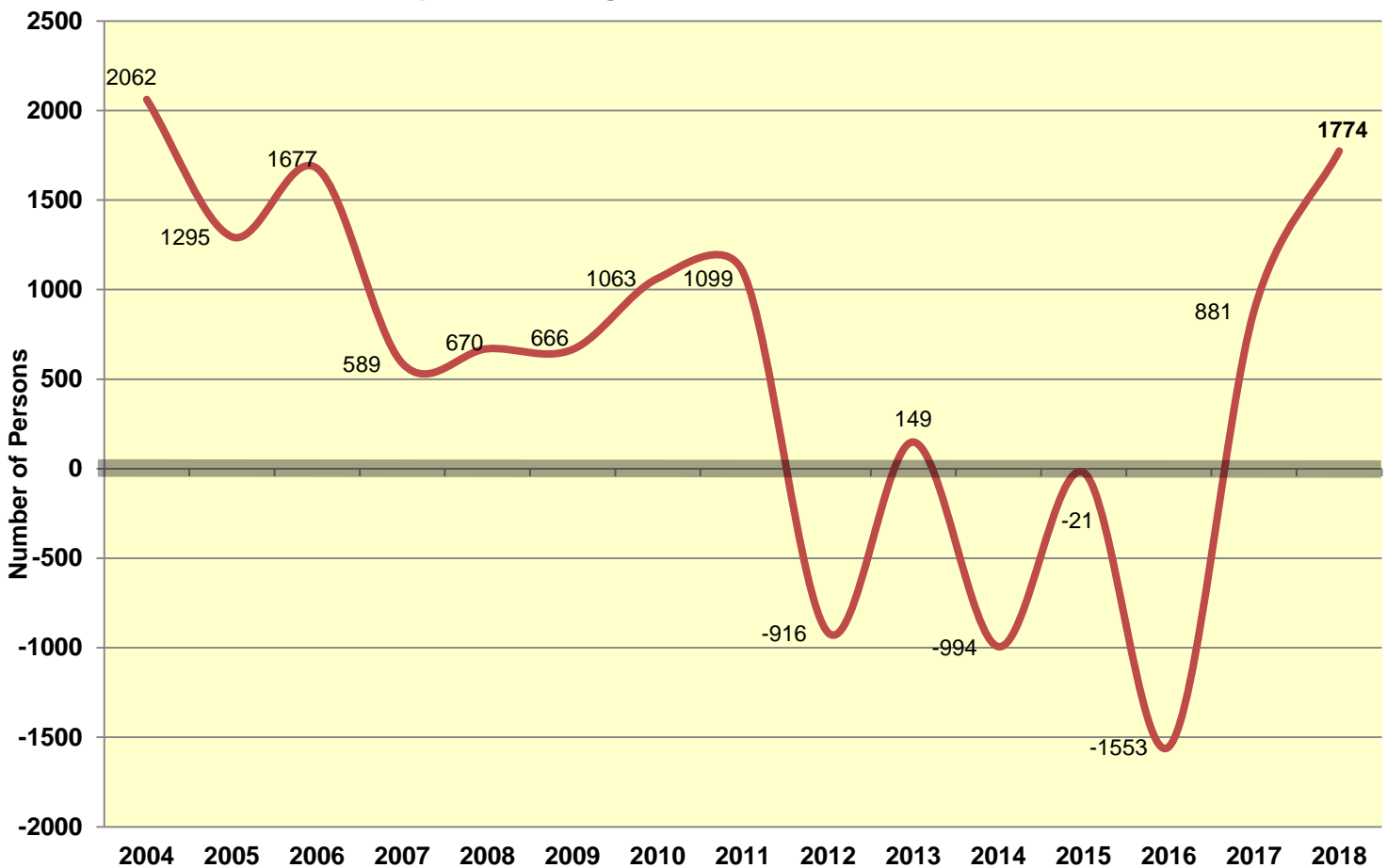




- In the absence of high birth rates, migratory inflows to Vermont are a particularly important component of population change and most net in-migration comes from nearby New England states, especially Massachusetts. In recent years, Massachusetts has represented 15%-20% of all in-migration to Vermont, with net in-migration of about 2,000-4,000 persons per year. Because of this, relative real estate prices in Massachusetts are important to Vermont. As the chart on the bottom of page 7 shows, Massachusetts home prices have been increasing at 5%-7% per year since 2016 and are now almost 12% above their prior peak levels – the highest of any state in New England (see chart on page 8).
- This has enabled and encouraged migratory flows – a likely source of the uptick in 2018 Census population estimates for Vermont.

1774 in 2018:

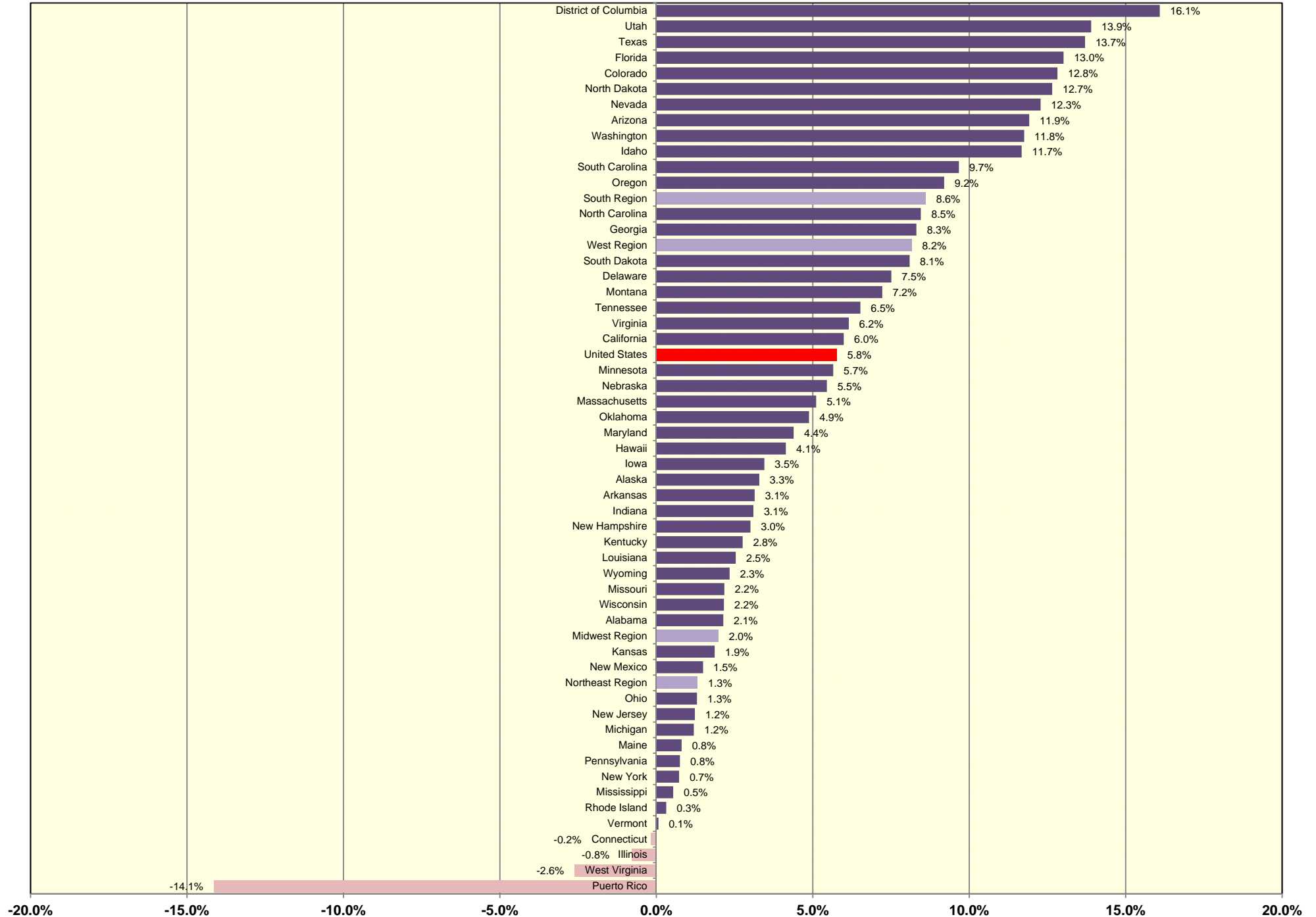
Thawing Regional Real Estate Markets Revive Migratory Flows to Vermont Annual Population Change in Vermont, Source: U.S. Census Bureau



- As the three charts on the following pages illustrate, this small positive population reading, while hopeful, is far from a meaningful demographic turnaround. Vermont population growth between 2010 (the last official Census) and 2018 was a mere 0.1%, lower than every state except Connecticut, Illinois and West Virginia (and non-state, Puerto Rico).

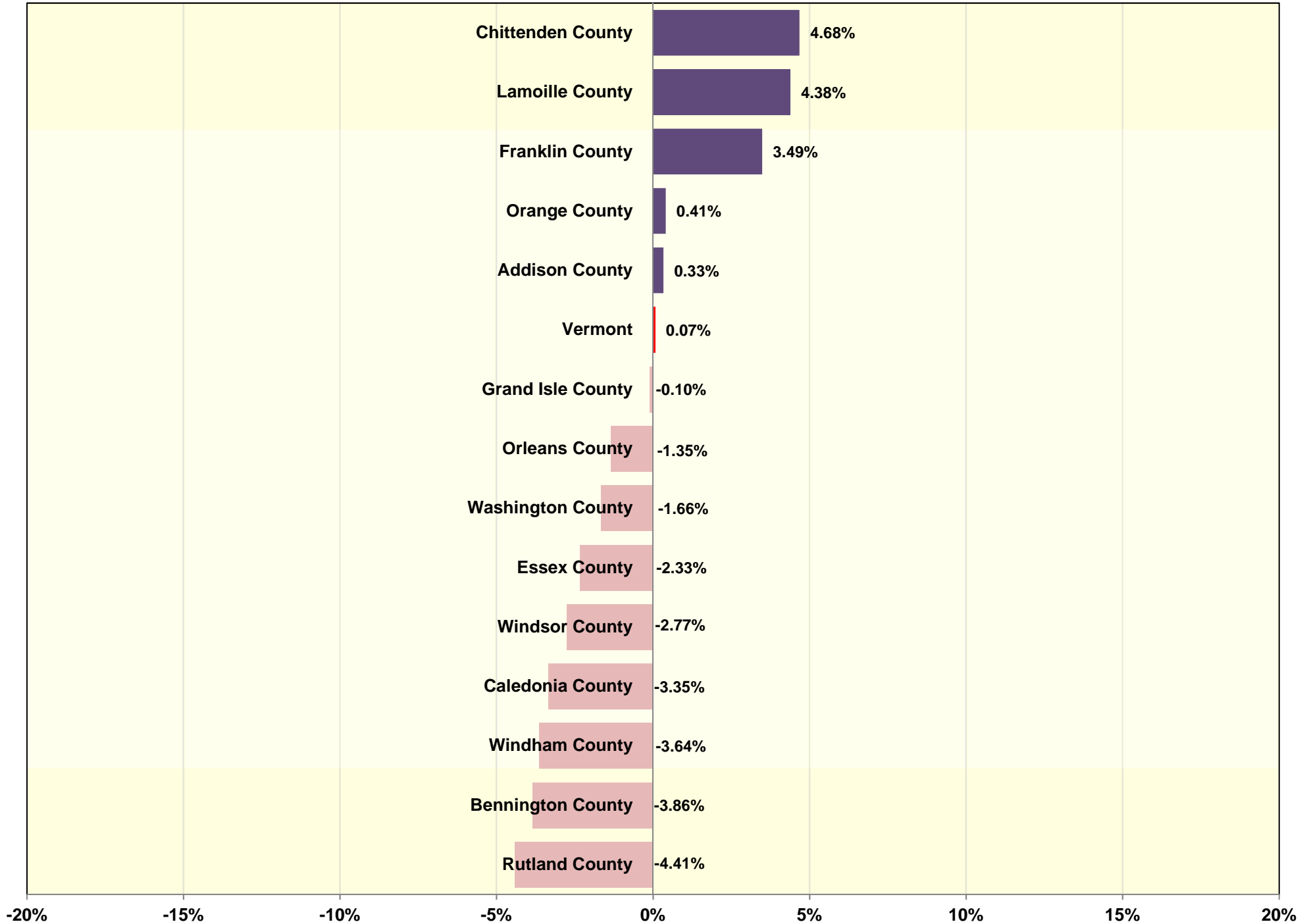
Population Change: 2010 to 2018

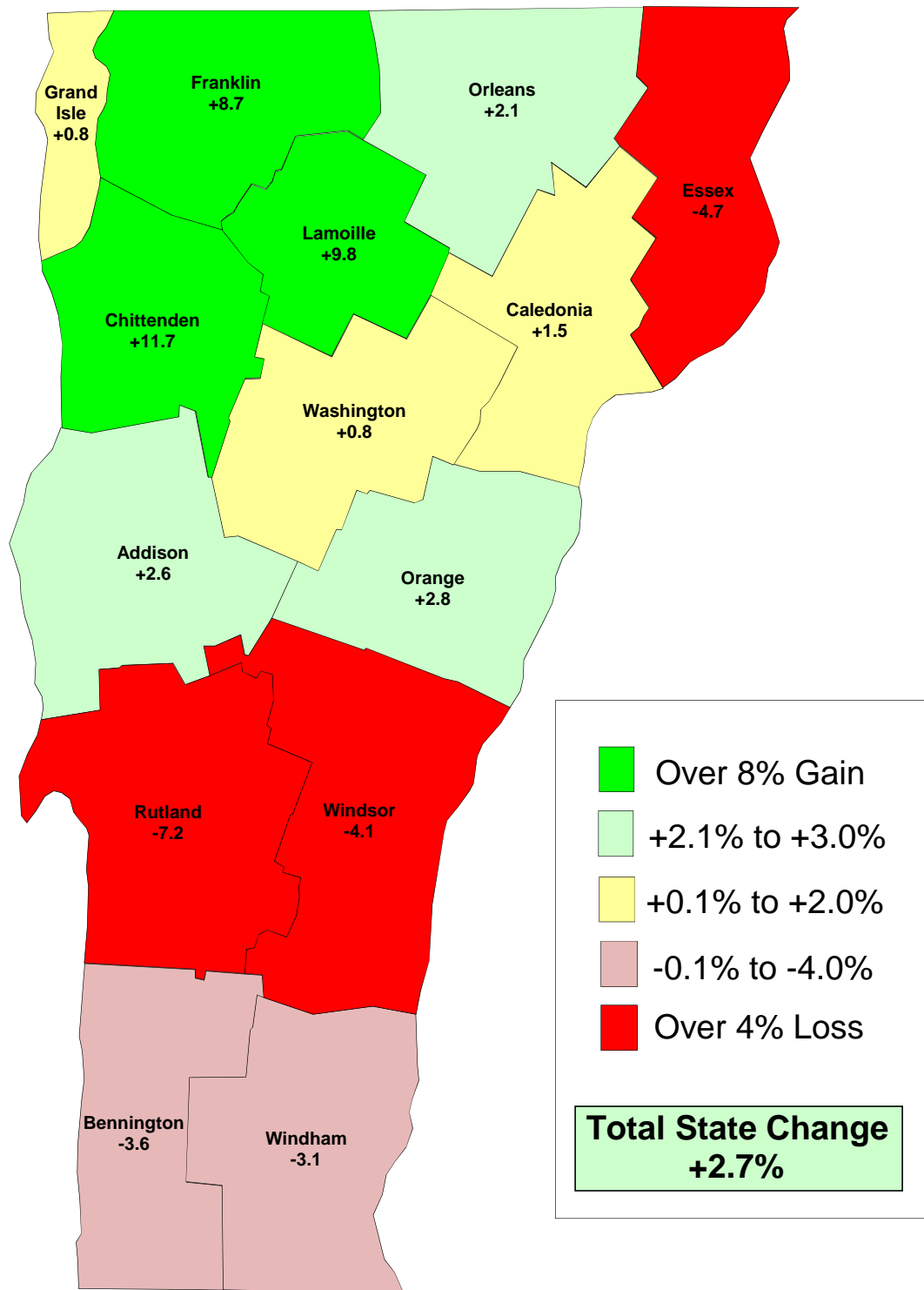
Source: U.S. Census Bureau



Estimated Population Change: 2010 to 2018

Sources: U.S. Census Bureau, VT JFO





Vermont Population Change Since 2000

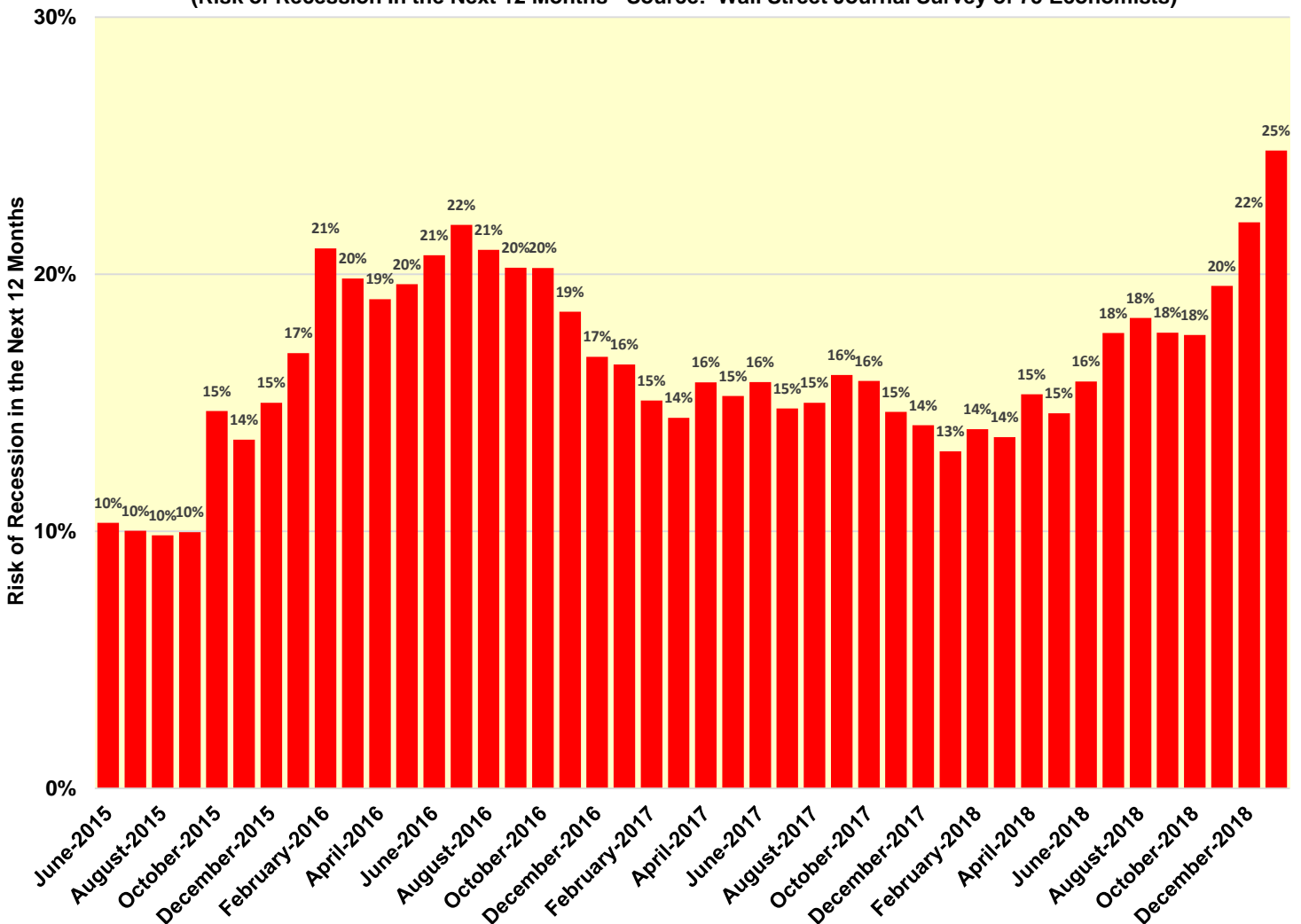
Estimated Percent Change 2018 vs. 2000

Sources: U.S. Census Bureau, Vermont Joint Fiscal Office

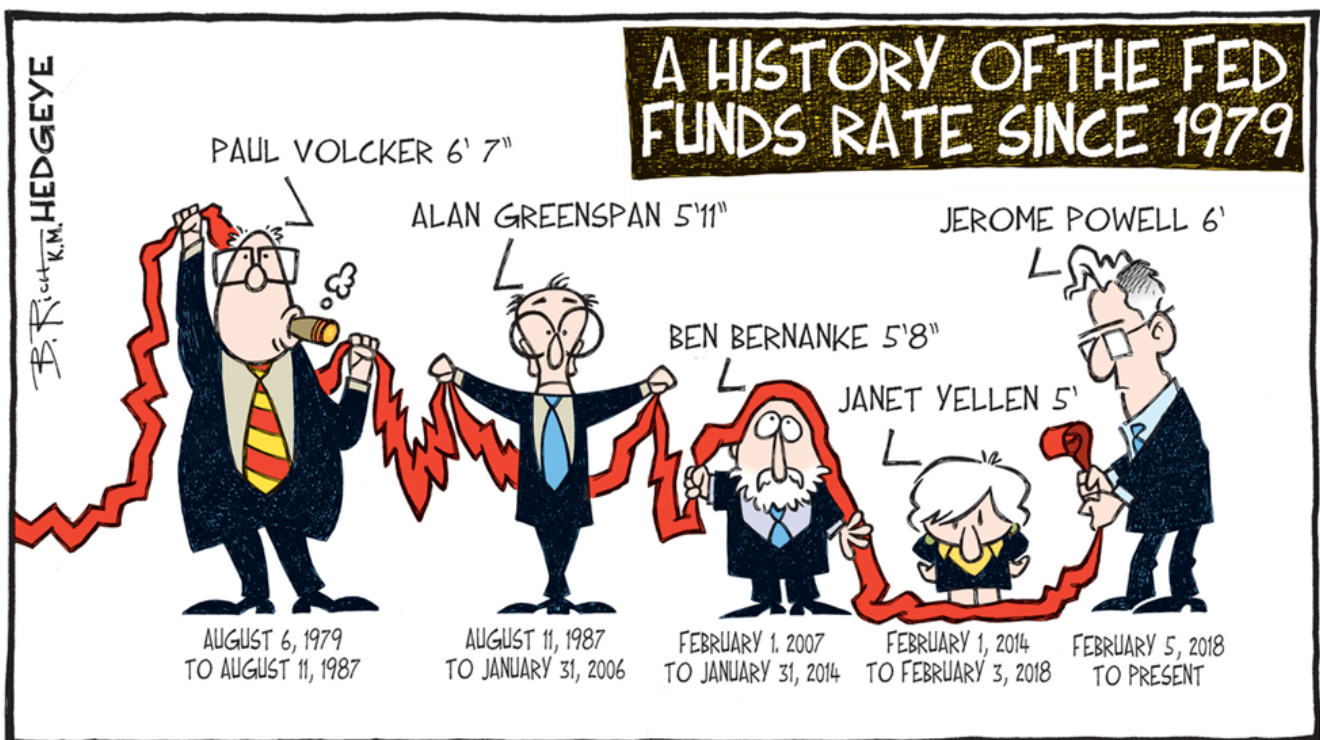
- Population growth within the State, like almost all other metrics, has also been uneven, with the Burlington area experiencing the greatest growth, and southern counties and the NE Kingdom, losing population. Of the 14 Vermont counties, only 5 have registered estimated population gains since 2018: Chittenden (+4.7%), Lamoille (+4.4%), Franklin (+3.5%), Orange (+0.4%) and Addison (+0.3%). The largest declines were in Rutland (-4.4%), Bennington (-3.9%), Windham (-3.6%) and Caledonia (-3.4%) counties.
- As shown on the map on page 13 even when compared to a more extended time period between 2000 and 2018, estimated State growth was only 2.7%, with five counties still registering population declines (Rutland, -7.2%, Essex, -4.7%, Windsor, -4.1%, Bennington, -3.6% and Windham, -3.1%).
- There are a growing list of downside risks to the current economic and revenue projections – many of them potentially self-inflicted. Although the current economic recovery is soon expected to become the longest ever, the slow, steady nature of most of the expansion has left it without obvious economic imbalances that would end it, even at this late stage of the cycle.

2019 Recession Risks Rise to Nearly 1 in 4

(Risk of Recession In the Next 12 Months - Source: Wall Street Journal Survey of 75 Economists)

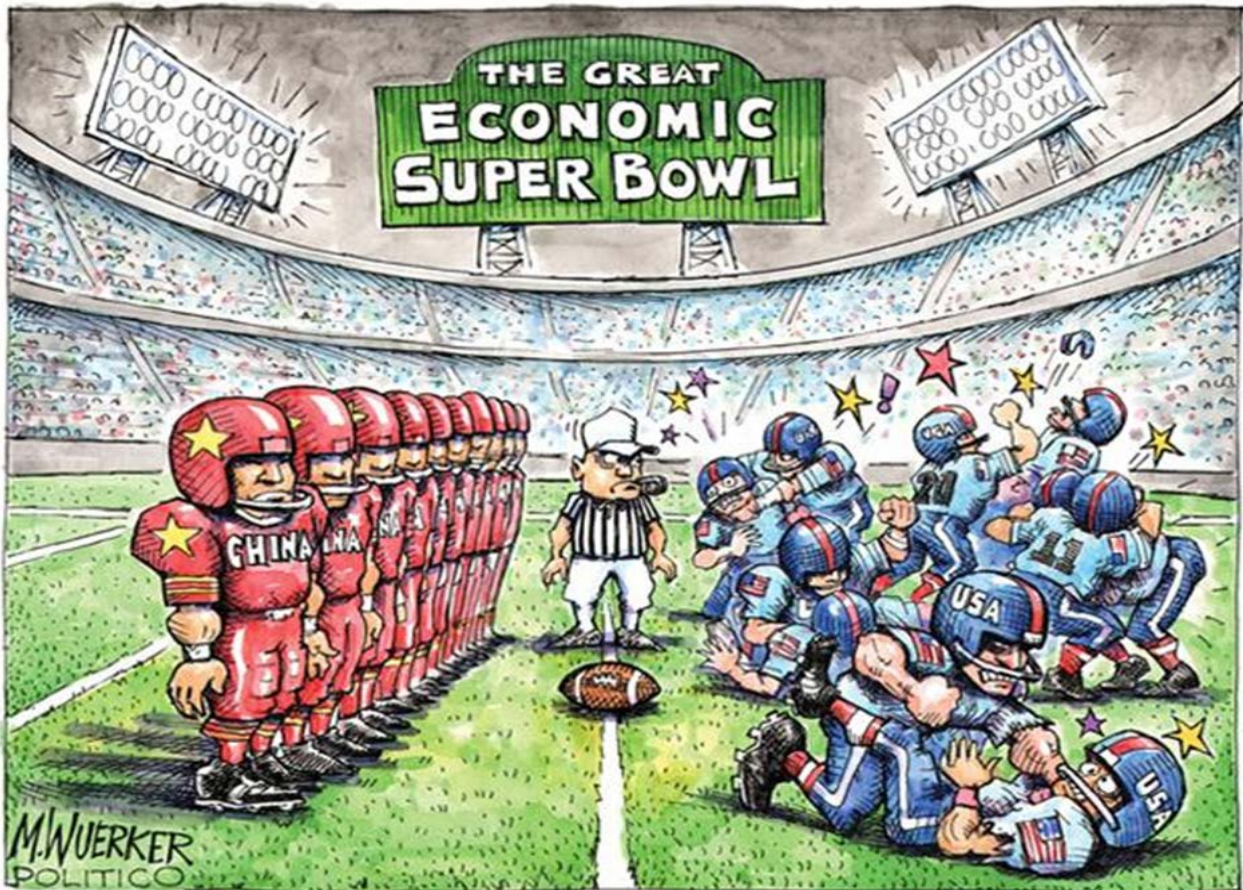


- The primary recessionary threat comes from excessive Federal Reserve monetary tightening, referred to as “monetary policy normalization,” which began in December of 2015, following an unprecedented period of near-zero interest rates from late 2008 to 2015. In addition to small, steady interest rate increases, the Fed also began measured selling of the vast holdings of longer-term securities it had accumulated during the financial crisis in order to influence long term interest rates. These actions aim to raise interest rates across the economy and slow economic activity – though with a wide range of lags – often spanning 18 months or more. These lagged effects, amidst an ever-changing short-term economic landscape, make calibrating the pace of “normalization” difficult. This is especially fraught given the unprecedented monetary intervention and extended period of low interest rates necessary during the Great Recession. If the hoped for “soft-landing” by the Fed comes in “hard,” the projecting slowing of growth in 2020 and 2021 could tip the economy into a recessionary period.



- The second greatest risk to both the short and longer term economy stems from the threatened escalation of the trade war with China and other U.S. trading partners. If resolved along the lines of the NAFTA “redo,” it would be relatively inconsequential, aside from the incendiary bluster and temporary interruption of global supply chains and U.S. agricultural exports. If massive tit-for-tat tariffs are imposed, it could devastate global growth, with heavy damage to both the U.S. and Chinese economies.
- The third area of risk is democratic dysfunction and gridlock in an age of widespread misinformation and partisan rancor. This is most evident in the U.S. in the form of the current government shutdown, which was not a part of

the current forecast, and if lengthy, could result in massive public cost. Scores of so-called “non-essential” government functions are now dormant, not the least of which are the generation of important economic statistics by the Department of Commerce, Census Bureau, Bureau of Economic Analysis and others. Without this information, economic policy is flying blind. Even the Trump administration’s Council of Economic Advisors estimates the shutdown will shave about 0.13 points off quarterly GDP growth for every week it lasts. Deutsche Bank’s Chief International Economist’s take was more dire, stating that, “if the government shutdown continues, it could cause a recession,” with a possible contraction of GDP in the first quarter. Even if some furloughed workers are awarded back pay when the shutdown ends, the lost productivity and reduced output in a myriad of tangential industries will be many times more costly than the border funding now at issue.

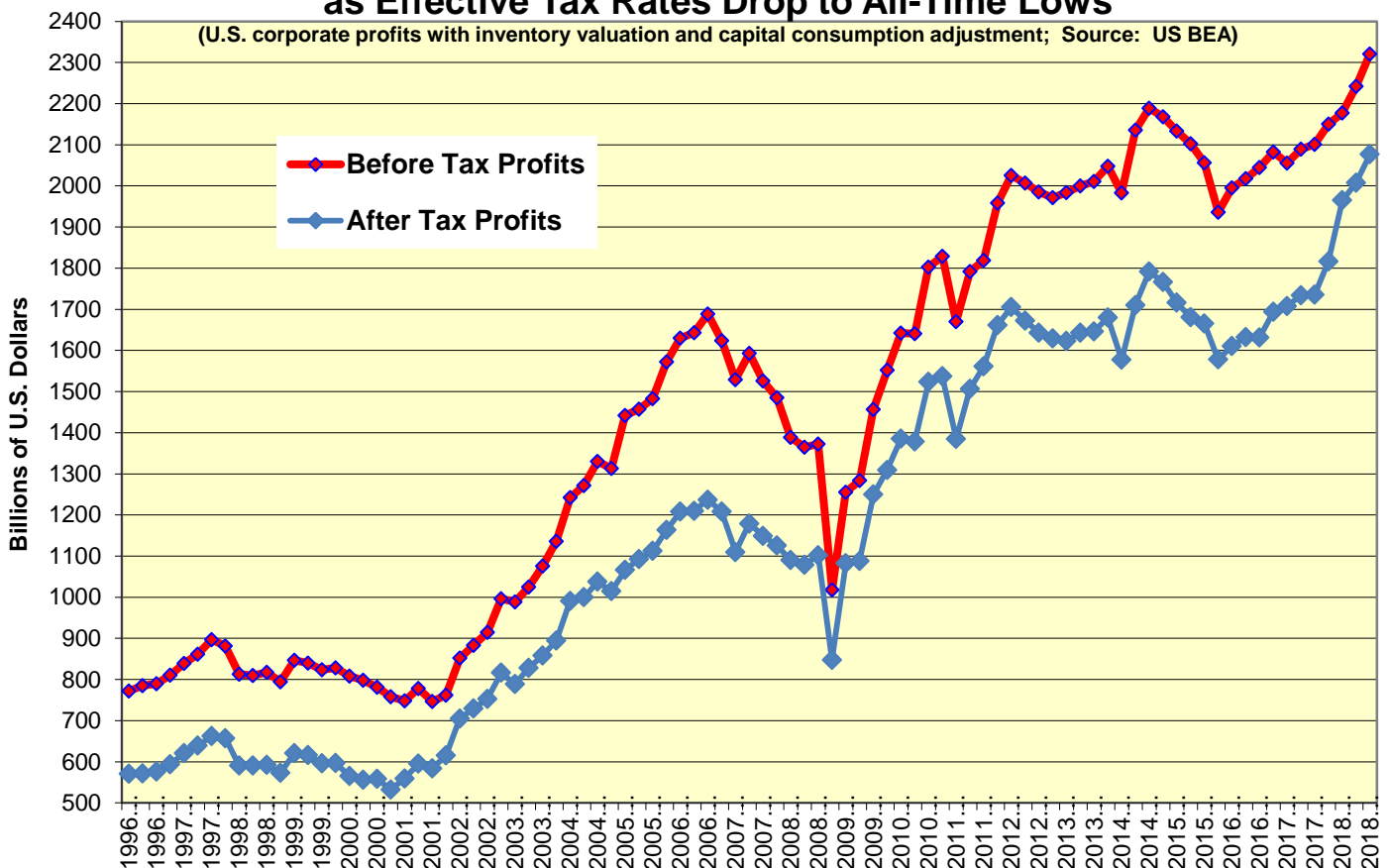


- The U.S., however is not the only democracy contending with economic crisis from political chaos. Great Britain’s inelegant and stalled exit from the European Union could both threaten the British economy and have larger global consequences. While not likely to precipitate a U.S. recession on its own, when coupled with other trade disputes and global economic distress, Brexit could still have material negative impacts on the U.S. economy.

State Revenues

- Revenues through the first six months of the fiscal year were generally at or above expectations, however, both the timing and magnitude of revenue flows have been affected by provisions in the 2017 Tax Cut and Jobs Act (TCJA) and changes to Vermont's Personal Income tax made in 2018 in response to the TCJA. With adjustment for the effects of extraordinary Corporate Income tax receipts from repatriation, incentives for advance 2017 payments for State taxes, and over-withholding from delayed 2018 withholding table updates, total revenues across all three funds would be within 0.5% of targets.
- Corporate tax revenues closed the first half of FY19 about \$12M above targets, due entirely to large payments likely to be from repatriated foreign earnings by large corporations. These ill-defined liabilities were described in the July forecast, and are again detailed in a more fulsome explanation on page 18 of this forecast. Revenues from repatriated foreign earnings are the biggest wild card in the current forecast – and are likely to continue to be so for the next several years. As depicted in the below chart, corporate profits have risen nearly 20% since the tax cut, while the effective combined corporate tax rate is now at its lowest level ever.

Corporate Profits Hit Record Highs, as Effective Tax Rates Drop to All-Time Lows



Repatriation Redux: Still the Biggest Wild Card in the Revenue Forecast

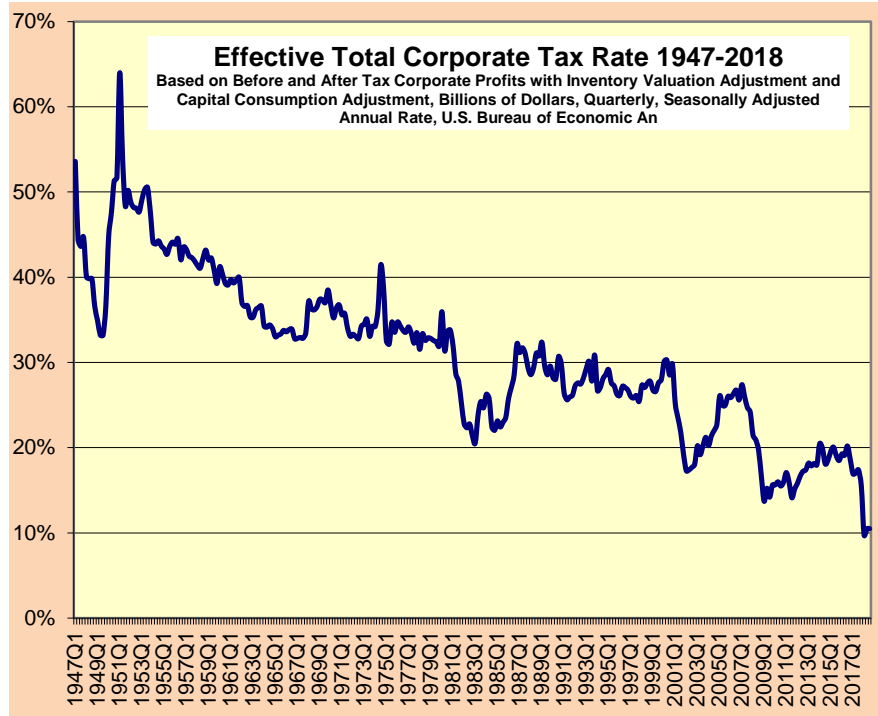
Although outlined in the prior July Revenue Forecast, one of the most important provisions in the 2017 Federal Tax Cut and Jobs Act (TCJA) remains as relevant and uncertain 6 months hence: repatriation of potentially \$1-\$3+ trillion in accumulated U.S. corporate offshore earnings. These profits, sheltered from U.S. taxation in a wide array of global tax havens, have allowed corporations to avoid U.S. and related state income taxes for many years. The Tax Act fundamentally changes the rules of international taxation and provides for repatriation of this accumulated income at a fraction of the prior tax rate (35%), at either 15.5% (for cash) or 8% (for more illiquid holdings), over an eight year period.

It is still the opinion of both the Vermont Tax Department and Legislative Council that this repatriated income is also subject to state income taxation, although despite payments by some firms, others have questioned this liability. Although currently impossible to verify with complete certainty, we estimate that as much as \$15 million in FY2018 and \$24 million in FY19 to date in Corporate tax revenues may have been received in connection with repatriated earnings – about 30% of all corporate revenues collected during calendar year 2018.

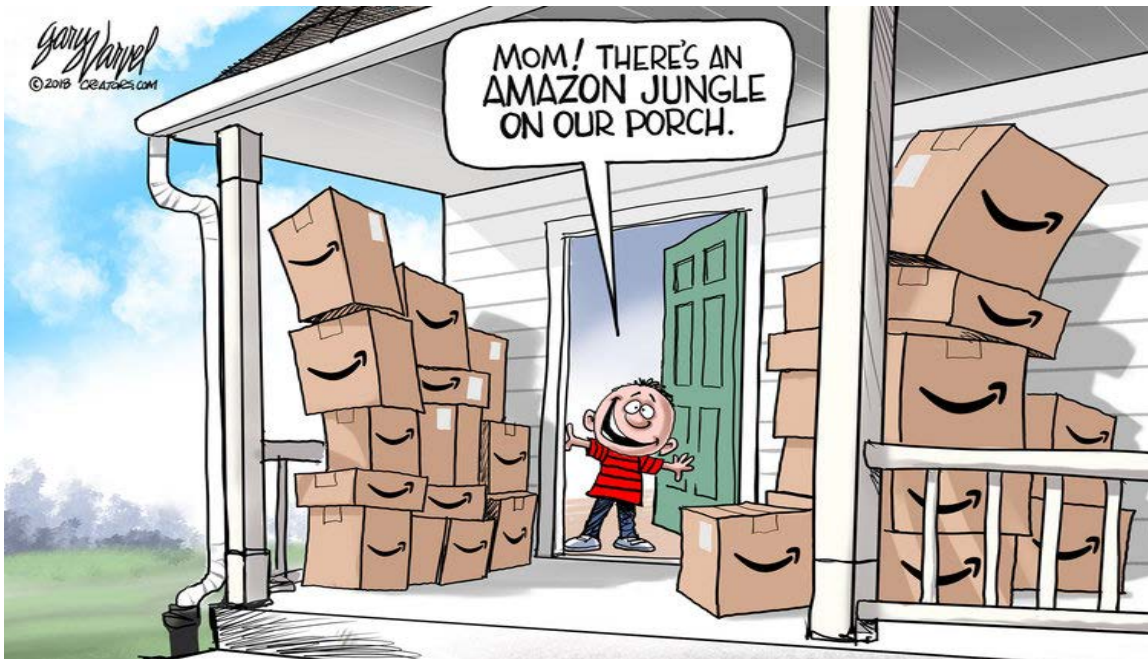
We are working closely with the Tax Department to identify possible payments associated with repatriation and as formal returns are filed, will be evaluating these so as to inform and refine further estimates. From public information in 10K and 10Q corporate filings reviewed to date, two things are clear: 1) There is a great deal of confusion over application of the law; and 2) Many firms are electing to repatriate earnings over time, despite Vermont law requiring immediate payment of the entire liability. The complexity of the law, absence of final IRS guidance in many areas, and the technical and legal resources available to the affected firms, may mean some payments and Vermont liabilities could be litigated for many years. The IRS has promised to complete final guidance and rulemaking by June 2019, however personnel assigned to this work have been sidelined by the recent government shutdown.

From what we now know, we expect revenue flows to be slightly larger over the balance of FY19 and FY20 and a more extended tail of contested revenues that could be large and random in their resolution. Although refunding could occur if a legal challenge to states' claim to this revenue is successful, until such a challenge is credibly posed, we do not currently have any provision for this in the current revenue forecasts.

We will continue to track this at the individual firm level in FY19 and beyond, since it is likely to contribute to enormous revenue variation - up or down - over an extended period of time.



- Personal Income taxes in the first half of the year were relatively strong, but some of this stems from over-withholding due to 2017 State withholding tables used in tax year 2018. The rushed nature of the TCJA passage late in 2017 caused delays in IRS guidance on new withholding tables in early 2018. Later in the year, when new IRS tables were issued, the Vermont Tax Department delayed issuing revised tables in anticipation of Vermont Personal Income tax changes in response to the TCJA. When these final changes were enacted, Tax felt it would be confusing to make changes to the tables mid-year and so the 2017 tables were retained. This resulted in about \$10 million in tax year 2018 over-withholding, about half of which was in FY18 and half in FY19. All of this, however, will be refunded in FY19. Similarly, there was a flood of estimated tax payments at the end of 2017 following TCJA passage by those hoping to maximize their State tax deductibility. This also served to boost FY18 revenues at the expense of FY19. These combined events impact the year to year changes in the FY17-FY19 period.
- FY19 Sales and Use tax revenues, now allocated entirely to the Education Fund, have benefitted from enhanced e-commerce compliance as a result of the recent Supreme Court decision in the so-called Wayfair case (Wayfair v. South Dakota) which opened the door to state e-commerce sales taxation by overturning a 25 year old decision, Quill v. North Dakota. As a result of this, Vermont has added hundreds of new e-commerce accounts in the past six months and generated nearly \$2 million in additional revenue – close to expectations. While it is expected to take years to fully realize potential revenues from this change, it will significantly add to e-commerce revenue the State had been previously collecting and provide an important source of growth to a revenue category that had been lagging due to tax base erosion.



- Meals & Rooms tax receipts were solid in the first half of FY19, with early snows benefiting visitation and spending. Better than anticipated home rental receipts through entities such as Airbnb have led to a slight revenue upgrade over the forecast period.
- FY19 Cigarette tax revenues were revised upward after some inventory adjustment and large advance orders, but remain on a declining longer term trajectory due both to higher e-cigarette substitution and the effects of anti-smoking measures.
- Source Property Transfer Tax revenues remain one of the fastest growing revenue sources as State real estate markets recover and prices begin to accelerate. As detailed in the chart on page 8, Vermont home prices are now growing well above inflation at close to 5% (year over year) and should support more property transactions at higher prices - with more PTT revenue as a result.
- The Telephone Property tax continues to decline as projected and is still expected to be less than half its FY14 level in FY19, 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.
- Despite wild swings in gasoline prices during the past 6 months, Transportation Fund revenues were very close to targets through the first half of FY19, with only minor changes made to the prior July forecast. Higher gasoline prices early in the fiscal year were offset by steep declines in the last few months, leading to higher consumption (benefitting the gasoline tax) and lower prices (hurting Motor Fuel Assessment and Transportation Infrastructure Bond revenues).



- 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 2018 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.
- The standard revenue tables at the end of this report have been changed due to major revenue source reallocations mandated by H.911, enacted in the 2018 legislative session. This change directs 100% of the Sales and Use tax and 25% of the Meals and Rooms tax to the Education Fund, in addition to existing allocations of 100% of the Lottery and one-third of the Motor Vehicle Purchase and Use tax. Accordingly, new current law Available Fund totals are still labelled as Tables 1-3 (General, Transportation and Education Funds, respectively), but have significant discontinuities due to these definitional changes. For purposes of comparison, Tables 1A (General) and 2A (Transportation), show "source" revenues (from which all allocations are derived), and are consistent measures of the key revenue categories over time.
- 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.

TABLE A
Comparison of Recent Consensus U.S. Macroeconomic Forecasts
June 2017 through December 2018, Selected Variables, Calendar Year Basis

| | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
|---|------|------|------|------|------|------|------|------|------|
| Real GDP Growth | | | | | | | | | |
| June-17 | 1.7 | 2.4 | 2.6 | 1.6 | 2.3 | 2.6 | 2.2 | 1.3 | 1.5 |
| December-17 | 1.7 | 2.6 | 2.9 | 1.5 | 2.3 | 2.8 | 2.5 | 1.1 | 2.2 |
| June-18 | 1.7 | 2.6 | 2.9 | 1.5 | 2.3 | 3.0 | 2.6 | 0.9 | 2.3 |
| December-18 | 1.8 | 2.5 | 2.9 | 1.6 | 2.2 | 3.0 | 2.4 | 1.1 | 1.9 |
| S&P 500 Growth (Annual Avg.) | | | | | | | | | |
| June-17 | 19.1 | 17.5 | 6.8 | 1.5 | 5.4 | -0.7 | -4.5 | 5.5 | 7.8 |
| December-17 | 19.1 | 17.5 | 6.8 | 1.5 | 17.0 | 7.1 | -8.4 | 3.5 | 11.6 |
| June-18 | 19.1 | 17.5 | 6.8 | 1.5 | 17.0 | 9.5 | -9.7 | 2.3 | 10.3 |
| December-18 | 19.1 | 17.5 | 6.8 | 1.5 | 17.0 | 12.2 | -2.5 | -4.7 | 9.0 |
| Employment Growth (Non-Ag) | | | | | | | | | |
| June-17 | 1.6 | 1.9 | 2.1 | 1.8 | 1.5 | 1.3 | 1.2 | 0.5 | 0.2 |
| December-17 | 1.6 | 1.9 | 2.1 | 1.8 | 1.5 | 1.6 | 1.1 | 0.1 | 0.5 |
| June-18 | 1.6 | 1.9 | 2.1 | 1.8 | 1.6 | 1.6 | 1.4 | 0.2 | 0.0 |
| December-18 | 1.6 | 1.9 | 2.1 | 1.8 | 1.6 | 1.6 | 1.3 | 0.5 | 0.0 |
| Unemployment Rate | | | | | | | | | |
| June-17 | 7.4 | 6.2 | 5.3 | 4.9 | 4.4 | 4.1 | 3.9 | 4.2 | 4.8 |
| December-17 | 7.4 | 6.2 | 5.3 | 4.9 | 4.3 | 3.8 | 3.7 | 4.5 | 5.1 |
| June-18 | 7.4 | 6.2 | 5.3 | 4.9 | 4.4 | 3.8 | 3.3 | 4.0 | 4.8 |
| December-18 | 7.4 | 6.2 | 5.3 | 4.9 | 4.4 | 3.8 | 3.6 | 3.9 | 4.5 |
| West Texas Int. Crude Oil \$/Bbl | | | | | | | | | |
| June-17 | 98 | 93 | 49 | 43 | 51 | 55 | 60 | 68 | 71 |
| December-17 | 98 | 93 | 49 | 43 | 51 | 54 | 60 | 66 | 72 |
| June-18 | 98 | 93 | 49 | 43 | 51 | 65 | 62 | 70 | 76 |
| December-18 | 98 | 93 | 49 | 43 | 51 | 65 | 60 | 68 | 72 |
| Prime Rate | | | | | | | | | |
| June-17 | 3.25 | 3.25 | 3.26 | 3.51 | 4.08 | 4.80 | 5.70 | 6.20 | 6.00 |
| December-17 | 3.25 | 3.25 | 3.26 | 3.51 | 4.09 | 5.52 | 7.03 | 7.32 | 6.71 |
| June-18 | 3.25 | 3.25 | 3.26 | 3.51 | 4.10 | 4.97 | 6.56 | 6.81 | 6.46 |
| December-18 | 3.25 | 3.25 | 3.26 | 3.51 | 4.10 | 4.90 | 5.98 | 6.54 | 6.31 |
| Consumer Price Index Growth | | | | | | | | | |
| June-17 | 1.5 | 1.6 | 0.1 | 1.3 | 2.1 | 2.3 | 2.7 | 2.6 | 2.3 |
| December-17 | 1.5 | 1.6 | 0.1 | 1.3 | 2.1 | 2.5 | 2.9 | 2.8 | 2.5 |
| June-18 | 1.5 | 1.6 | 0.1 | 1.3 | 2.1 | 2.7 | 2.5 | 2.4 | 2.3 |
| December-18 | 1.5 | 1.6 | 0.1 | 1.3 | 2.1 | 2.4 | 2.5 | 2.1 | 2.3 |
| Average Home Price Growth | | | | | | | | | |
| June-17 | 4.0 | 5.3 | 5.4 | 5.7 | 5.2 | 5.4 | 4.8 | 3.4 | 3.1 |
| December-17 | 3.9 | 5.2 | 5.3 | 5.7 | 6.2 | 6.4 | 5.8 | 5.1 | 3.1 |
| June-18 | 3.9 | 5.2 | 5.3 | 5.6 | 6.3 | 6.5 | 6.8 | 5.6 | 4.8 |
| December-18 | 3.9 | 5.2 | 5.2 | 5.6 | 6.2 | 6.5 | 6.8 | 5.8 | 5.1 |

TABLE B
Comparison of Consensus Administration and JFO Vermont State Forecasts
June 2016 through December 2018, Selected Variables, Calendar Year Basis

| | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
|--------------------------------|------|------|------|------|------|------|------|------|------|
| Real GSP Growth | | | | | | | | | |
| June-16 | -0.9 | 0.3 | -0.1 | 1.9 | 2.3 | 1.7 | 1.2 | 1.1 | 1.3 |
| December-16 | -0.4 | 1.5 | 0.2 | 1.8 | 2.4 | 2.0 | 1.5 | 1.0 | 1.3 |
| June-17 | -0.2 | 0.3 | 0.9 | 0.8 | 1.1 | 1.3 | 0.8 | 0.3 | 0.8 |
| December-17 | -0.2 | 0.5 | 0.9 | 0.7 | 0.9 | 1.4 | 0.8 | 0.1 | 0.9 |
| June-18 | -0.2 | 0.5 | 0.7 | 1.5 | 1.1 | 1.9 | 1.6 | 0.3 | 2.1 |
| December-18 | -0.2 | 0.5 | 0.7 | 1.5 | 1.1 | 2.2 | 1.9 | 0.6 | 1.9 |
| Population Growth | | | | | | | | | |
| June-16 | 0.1 | -0.1 | -0.1 | 0.1 | 0.2 | 0.3 | 0.3 | 0.2 | 0.2 |
| December-16 | 0.1 | -0.0 | -0.1 | -0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 |
| June-17 | 0.1 | -0.0 | -0.1 | -0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 |
| December-17 | 0.1 | -0.1 | -0.2 | -0.2 | 0.1 | -0.0 | 0.1 | 0.1 | 0.1 |
| June-18 | 0.1 | -0.1 | -0.2 | -0.2 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 |
| December-18 | 0.0 | -0.2 | 0.0 | -0.2 | 0.1 | 0.3 | 0.1 | 0.2 | 0.2 |
| Employment Growth | | | | | | | | | |
| June-16 | 0.7 | 0.9 | 0.9 | 1.6 | 1.7 | 1.5 | 1.1 | 0.7 | 0.5 |
| December-16 | 0.7 | 0.9 | 0.9 | 1.6 | 1.7 | 1.5 | 1.2 | 0.6 | 0.1 |
| June-17 | 0.7 | 1.0 | 0.8 | 0.3 | 0.9 | 1.0 | 0.8 | 0.3 | 0.1 |
| December-17 | 0.7 | 1.0 | 0.8 | 0.3 | 0.9 | 1.2 | 0.7 | 0.1 | 0.4 |
| June-18 | 0.7 | 1.0 | 0.8 | 0.3 | 0.3 | 0.5 | 0.9 | 0.1 | 0.0 |
| December-18 | 0.7 | 1.0 | 0.8 | 0.3 | 0.3 | -0.1 | 0.4 | 0.2 | -0.2 |
| Unemployment Rate | | | | | | | | | |
| June-16 | 4.4 | 4.0 | 3.7 | 3.3 | 3.2 | 3.1 | 3.2 | 3.4 | 3.6 |
| December-16 | 4.4 | 4.0 | 3.7 | 3.2 | 3.1 | 3.0 | 3.0 | 3.4 | 3.7 |
| June-17 | 4.4 | 3.9 | 3.6 | 3.3 | 3.1 | 3.0 | 3.0 | 3.3 | 3.7 |
| December-17 | 4.4 | 3.9 | 3.6 | 3.3 | 3.0 | 2.8 | 2.9 | 3.3 | 3.7 |
| June-18 | 4.4 | 4.0 | 3.6 | 3.2 | 3.0 | 2.7 | 2.6 | 3.2 | 3.8 |
| December-18 | 4.4 | 4.0 | 3.6 | 3.2 | 3.0 | 2.8 | 2.7 | 3.2 | 3.6 |
| Personal Income Growth | | | | | | | | | |
| June-16 | 1.4 | 3.5 | 3.0 | 3.3 | 4.1 | 4.2 | 3.4 | 2.8 | 3.0 |
| December-16 | 1.7 | 3.3 | 2.9 | 3.0 | 3.4 | 3.7 | 3.4 | 2.8 | 2.4 |
| June-17 | 1.7 | 3.3 | 2.9 | 3.3 | 2.4 | 2.1 | 2.7 | 2.0 | 1.8 |
| December-17 | 1.7 | 3.3 | 3.6 | 2.0 | 2.4 | 2.0 | 2.5 | 1.9 | 2.1 |
| June-18 | 1.7 | 3.3 | 3.6 | 2.0 | 2.1 | 3.4 | 3.4 | 2.8 | 2.9 |
| December-18 | 1.4 | 3.9 | 3.5 | 2.3 | 3.2 | 3.0 | 2.8 | 2.6 | 2.5 |
| Home Price Growth (JFO) | | | | | | | | | |
| June-16 | 0.1 | 0.6 | 2.2 | 2.3 | 3.0 | 3.8 | 4.4 | 5.0 | 5.6 |
| December-16 | 0.1 | 0.5 | 1.9 | 1.4 | 2.4 | 3.1 | 3.7 | 4.1 | 4.3 |
| June-17 | 0.1 | 0.3 | 2.0 | 1.4 | 2.6 | 3.1 | 3.7 | 4.1 | 4.3 |
| December-17 | 0.1 | 0.2 | 2.0 | 1.6 | 2.1 | 3.2 | 3.8 | 4.5 | 5.4 |
| June-18 | 0.0 | 0.2 | 2.0 | 1.5 | 2.7 | 3.4 | 4.2 | 5.1 | 5.4 |
| December-18 | 0.0 | 0.1 | 1.9 | 1.6 | 2.6 | 4.5 | 5.3 | 6.2 | 6.1 |

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 41 years of data for each of the 25 General Fund categories (three aggregates), 38 years of data for most of the Transportation Fund categories (one aggregate), and 19 to 41 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 economists.

TABLE 1A - STATE OF VERMONT
LEGISLATIVE JOINT FISCAL OFFICE
SOURCE GENERAL FUND REVENUE FORECAST UPDATE
Consensus JFO and Administration Forecast - January 2019

SOURCE G-FUND

revenues are prior to all E-Fund allocations

and other out-transfers; used for

analytic and comparative purposes only

| | FY 2015 | % | FY 2016 | % | FY 2017 | % | FY 2018 | % | FY 2019 | % | FY2020 | % | FY2021 | % |
|----------------------------|-----------------|-------------|-----------------|--------------|-----------------|--------------|-----------------|--------------|-----------------|-------------|-----------------|-------------|-----------------|-------------|
| | (Actual) | Change | (Actual) | Change | (Actual) | Change | (Actual) | Change | (Forecast) | Change | (Forecast) | Change | (Forecast) | Change |
| REVENUE SOURCE | | | | | | | | | | | | | | |
| Personal Income | \$705.9 | 5.2% | \$747.0 | 5.8% | \$756.5 | 1.3% | \$832.0 | 10.0% | \$824.9 | -0.8% | \$853.2 | 3.4% | \$858.7 | 0.6% |
| Sales & Use* | \$364.6 | 3.1% | \$370.7 | 1.7% | \$376.7 | 1.6% | \$397.8 | 5.6% | \$415.1 | 4.3% | \$429.5 | 3.5% | \$435.3 | 1.4% |
| Corporate | \$121.9 | 28.5% | \$117.0 | -4.0% | \$95.8 | -18.1% | \$96.4 | 0.6% | \$122.5 | 27.2% | \$97.5 | -20.4% | \$85.2 | -12.6% |
| Meals and Rooms | \$150.8 | 5.7% | \$154.2 | 2.2% | \$165.3 | 7.3% | \$173.2 | 4.8% | \$181.5 | 4.8% | \$187.6 | 3.4% | \$192.5 | 2.6% |
| Cigarette and Tobacco** | \$76.8 | 6.7% | \$80.7 | 5.2% | \$76.7 | -5.0% | \$71.1 | -7.3% | \$71.1 | 0.0% | \$68.4 | -3.8% | \$65.9 | -3.7% |
| Liquor | \$18.2 | 2.9% | \$18.3 | 0.8% | \$19.1 | 4.4% | \$19.8 | 3.6% | \$20.2 | 1.9% | \$20.7 | 2.5% | \$21.1 | 1.9% |
| Insurance | \$55.3 | -3.1% | \$56.2 | 1.7% | \$57.0 | 1.3% | \$57.5 | 1.0% | \$57.8 | 0.5% | \$58.3 | 0.9% | \$58.7 | 0.7% |
| Telephone | \$7.7 | -14.9% | \$3.2 | -59.2% | \$5.7 | 80.6% | \$4.7 | -16.8% | \$4.1 | -13.7% | \$3.6 | -12.2% | \$3.2 | -11.1% |
| Beverage | \$6.7 | 4.2% | \$6.7 | 0.6% | \$6.9 | 2.9% | \$7.1 | 2.5% | \$7.2 | 1.3% | \$7.4 | 2.7% | \$7.5 | 2.0% |
| Electric*** | \$9.4 | -28.2% | \$0.0 | NM | \$0.0 | NM | \$0.0 | NM | \$0.0 | NM | \$0.0 | NM | \$0.0 | NM |
| Estate | \$9.9 | -72.2% | \$12.5 | 26.5% | \$16.7 | 33.3% | \$22.9 | 37.6% | \$19.1 | -16.7% | \$20.9 | 9.4% | \$21.8 | 4.3% |
| Property | \$33.6 | 8.6% | \$35.7 | 6.2% | \$38.7 | 8.4% | \$40.9 | 5.6% | \$44.1 | 7.9% | \$47.1 | 6.8% | \$49.1 | 4.2% |
| Bank | \$10.7 | -2.0% | \$10.7 | -0.6% | \$13.2 | 24.0% | \$13.1 | -1.3% | \$12.4 | -5.2% | \$12.6 | 1.6% | \$12.8 | 1.6% |
| Other Tax | \$2.0 | 4.5% | \$1.8 | -9.0% | \$2.2 | 18.0% | \$1.8 | -15.2% | \$2.4 | 30.3% | \$2.5 | 4.2% | \$2.6 | 4.0% |
| Total Tax Revenue | \$1573.5 | 3.7% | \$1614.8 | 2.6% | \$1630.4 | 1.0% | \$1738.3 | 6.6% | \$1782.4 | 2.5% | \$1809.2 | 1.5% | \$1814.4 | 0.3% |
| Business Licenses | \$1.1 | 0.2% | \$1.1 | -1.6% | \$1.2 | 16.8% | \$1.2 | -2.9% | \$1.0 | -17.3% | \$1.1 | 12.0% | \$1.1 | 1.2% |
| Fees | \$22.1 | 7.0% | \$23.0 | 4.2% | \$48.5 | 110.8% | \$47.1 | -2.9% | \$47.6 | 1.1% | \$48.4 | 1.7% | \$49.1 | 1.4% |
| Services | \$1.5 | 12.5% | \$2.8 | 86.6% | \$3.0 | 7.9% | \$2.9 | -4.2% | \$3.3 | 14.5% | \$3.4 | 3.0% | \$3.5 | 2.9% |
| Fines | \$3.5 | -3.1% | \$3.7 | 5.5% | \$4.4 | 21.0% | \$3.5 | -19.8% | \$3.6 | 1.0% | \$3.6 | 1.7% | \$3.7 | 1.1% |
| Interest | \$0.3 | 40.4% | \$0.7 | 130.6% | \$1.5 | 111.5% | \$2.8 | 80.1% | \$6.1 | 118.9% | \$6.5 | 6.6% | \$6.8 | 3.8% |
| Lottery | \$22.8 | 0.8% | \$26.4 | 16.1% | \$25.5 | -3.3% | \$27.1 | 6.4% | \$28.2 | 3.9% | \$28.5 | 1.1% | \$28.9 | 1.4% |
| All Other**** | \$1.0 | -20.4% | \$1.3 | 25.9% | \$2.9 | 128.5% | \$2.4 | -18.8% | \$1.1 | -53.4% | \$1.3 | 18.2% | \$1.4 | 7.7% |
| Total Other Revenue | \$52.2 | 3.0% | \$58.9 | 12.9% | \$87.1 | 47.9% | \$87.0 | -0.1% | \$90.88 | 4.5% | \$92.86 | 2.2% | \$94.47 | 1.7% |
| TOTAL GENERAL FUND | \$1625.7 | 3.7% | \$1673.7 | 2.9% | \$1717.5 | 2.6% | \$1825.3 | 6.3% | \$1873.3 | 2.6% | \$1902.1 | 1.5% | \$1908.9 | 0.4% |

* 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 (POST- H.911 REVENUE ALLOCATIONS)
LEGISLATIVE JOINT FISCAL OFFICE
AVAILABLE GENERAL FUND REVENUE FORECAST UPDATE
Consensus JFO and Administration Forecast - January 2019

CURRENT LAW BASIS

including all Education Fund

allocations and other out-transfers

| | FY 2015 | % | FY 2016 | % | FY 2017 | % | FY 2018 | % | FY 2019 | % | FY2020 | % | FY2021 | % |
|----------------------------|-----------------|---------------|-----------------|---------------|-----------------|---------------|-----------------|---------------|-------------------|---------------|-------------------|---------------|-------------------|---------------|
| | <i>(Actual)</i> | <i>Change</i> | <i>(Actual)</i> | <i>Change</i> | <i>(Actual)</i> | <i>Change</i> | <i>(Actual)</i> | <i>Change</i> | <i>(Forecast)</i> | <i>Change</i> | <i>(Forecast)</i> | <i>Change</i> | <i>(Forecast)</i> | <i>Change</i> |
| REVENUE SOURCE | | | | | | | | | | | | | | |
| Personal Income | \$705.9 | 5.2% | \$747.0 | 5.8% | \$756.5 | 1.3% | \$832.0 | 10.0% | \$824.9 | -0.8% | \$853.2 | 3.4% | \$858.7 | 0.6% |
| Sales and Use* | \$237.0 | 3.1% | \$241.0 | 1.7% | \$244.9 | 1.6% | \$258.6 | 5.6% | \$0.0 | NM | \$0.0 | NM | \$0.0 | NM |
| Corporate | \$121.9 | 28.5% | \$117.0 | -4.0% | \$95.8 | -18.1% | \$96.4 | 0.6% | \$122.5 | 27.2% | \$97.5 | -20.4% | \$85.2 | -12.6% |
| Meals and Rooms | \$150.8 | 5.7% | \$154.2 | 2.2% | \$165.3 | 7.3% | \$173.2 | 4.8% | \$136.1 | -21.4% | \$140.7 | 3.4% | \$144.4 | 2.6% |
| 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 | \$18.2 | 2.9% | \$18.3 | 0.8% | \$19.1 | 4.4% | \$19.8 | 3.6% | \$20.2 | 1.9% | \$20.7 | 2.5% | \$21.1 | 1.9% |
| Insurance | \$55.3 | -3.1% | \$56.2 | 1.7% | \$57.0 | 1.3% | \$57.5 | 1.0% | \$57.8 | 0.5% | \$58.3 | 0.9% | \$58.7 | 0.7% |
| Telephone | \$7.7 | -14.9% | \$3.2 | -59.2% | \$5.7 | 80.6% | \$4.7 | -16.8% | \$4.1 | -13.7% | \$3.6 | -12.2% | \$3.2 | -11.1% |
| Beverage | \$6.7 | 4.2% | \$6.7 | 0.6% | \$6.9 | 2.9% | \$7.1 | 2.5% | \$7.2 | 1.3% | \$7.4 | 2.7% | \$7.5 | 2.0% |
| Electric** | \$9.4 | -28.2% | \$0.0 | NM | \$0.0 | NM | \$0.0 | NM | \$0.0 | NM | \$0.0 | NM | \$0.0 | NM |
| Estate*** | \$9.9 | -72.2% | \$12.5 | 26.5% | \$16.7 | 33.3% | \$22.9 | 37.6% | \$19.1 | -16.7% | \$20.9 | 9.4% | \$21.8 | 4.3% |
| Property | \$10.9 | 8.7% | \$11.5 | 6.0% | \$12.6 | 9.0% | \$12.4 | -1.5% | \$13.5 | 8.8% | \$14.4 | 7.2% | \$15.1 | 4.5% |
| Bank | \$10.7 | -2.0% | \$10.7 | -0.6% | \$13.2 | 24.0% | \$13.1 | -1.3% | \$12.4 | -5.2% | \$12.6 | 1.6% | \$12.8 | 1.6% |
| Other Tax | \$2.0 | 4.5% | \$1.8 | -9.0% | \$2.2 | 18.0% | \$1.8 | -15.2% | \$2.4 | 30.3% | \$2.5 | 4.2% | \$2.6 | 4.0% |
| Total Tax Revenue | \$1346.4 | 3.5% | \$1380.1 | 2.5% | \$1395.7 | 1.1% | \$1499.5 | 7.4% | \$1220.2 | -18.6% | \$1231.8 | 0.9% | \$1231.1 | -0.1% |
| Business Licenses | \$1.1 | 0.2% | \$1.1 | -1.6% | \$1.2 | 16.8% | \$1.2 | -2.9% | \$1.0 | -17.3% | \$1.1 | 12.0% | \$1.1 | 1.8% |
| Fees | \$22.1 | 7.0% | \$23.0 | 4.2% | \$48.5 | 110.8% | \$47.1 | -2.9% | \$47.6 | 1.1% | \$48.4 | 1.7% | \$49.1 | 1.4% |
| Services | \$1.5 | 12.5% | \$2.8 | 86.6% | \$3.0 | 7.9% | \$2.9 | -4.2% | \$3.3 | 14.5% | \$3.4 | 3.0% | \$3.5 | 2.9% |
| Fines | \$3.5 | -3.1% | \$3.7 | 5.5% | \$4.4 | 21.0% | \$3.5 | -19.8% | \$3.6 | 1.0% | \$3.6 | 1.7% | \$3.7 | 1.1% |
| Interest | \$0.2 | 51.9% | \$0.6 | 136.1% | \$1.2 | 108.2% | \$2.3 | 96.1% | \$5.2 | 126.4% | \$5.5 | 5.8% | \$5.7 | 3.6% |
| All Other**** | \$1.0 | -20.4% | \$1.3 | 25.9% | \$2.9 | 128.5% | \$2.4 | -18.8% | \$1.1 | -53.4% | \$1.3 | 18.2% | \$1.4 | 7.7% |
| Total Other Revenue | \$29.4 | 4.7% | \$32.3 | 10.1% | \$61.2 | 89.3% | \$59.4 | -3.0% | \$61.8 | 4.1% | \$63.4 | 2.6% | \$64.5 | 1.8% |
| TOTAL GENERAL FUND | \$1375.8 | 3.6% | \$1412.4 | 2.7% | \$1457.0 | 3.2% | \$1558.9 | 7.0% | \$1282.0 | -17.8% | \$1295.1 | 1.0% | \$1295.6 | 0.0% |

* 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
Consensus JFO and Administration Forecast - January 2019

SOURCE T-FUND

revenues are prior to all E-Fund allocations

and other out-transfers; used for

analytic and comparative purposes only

| | FY 2015 | % | FY 2016 | % | FY 2017 | % | FY 2018 | % | FY 2019 | % | FY2020 | % | FY2021 | % |
|--------------------------|----------------|-------------|----------------|-------------|----------------|-------------|----------------|-------------|----------------|-------------|----------------|-------------|----------------|--------------|
| | (Actual) | Change | (Actual) | Change | (Actual) | Change | (Actual) | Change | (Forecast) | Change | (Forecast) | Change | (Forecast) | Change |
| REVENUE SOURCE | | | | | | | | | | | | | | |
| Gasoline | \$77.6 | 1.5% | \$78.0 | 0.5% | \$78.2 | 0.3% | \$78.2 | 0.0% | \$78.2 | 0.0% | \$78.1 | -0.1% | \$77.6 | -0.6% |
| Diesel**** | \$19.1 | 11.5% | \$18.3 | -4.4% | \$18.2 | -0.5% | \$18.9 | 3.6% | \$19.1 | 1.3% | \$19.2 | 0.5% | \$19.1 | -0.5% |
| Purchase and Use* | \$97.3 | 5.9% | \$100.1 | 2.9% | \$103.2 | 3.1% | \$109.4 | 6.0% | \$114.1 | 4.3% | \$115.6 | 1.3% | \$115.1 | -0.4% |
| Motor Vehicle Fees | \$80.1 | 1.4% | \$82.0 | 2.3% | \$86.2 | 5.2% | \$86.0 | -0.3% | \$86.3 | 0.4% | \$87.4 | 1.3% | \$87.9 | 0.6% |
| Other Revenue** | \$19.7 | 0.8% | \$19.6 | -0.5% | \$19.9 | 1.8% | \$23.0 | 15.3% | \$24.4 | 6.2% | \$24.8 | 1.6% | \$25.0 | 0.8% |
| TOTAL TRANS. FUND | \$293.8 | 3.5% | \$298.0 | 1.4% | \$305.8 | 2.6% | \$315.4 | 3.1% | \$322.1 | 2.1% | \$325.1 | 0.9% | \$324.7 | -0.1% |

TABLE 2 - STATE OF VERMONT
LEGISLATIVE JOINT FISCAL OFFICE
AVAILABLE TRANSPORTATION FUND REVENUE FORECAST UPDATE
Consensus JFO and Administration Forecast - January 2019

CURRENT LAW BASIS

including all Education Fund

allocations and other out-transfers

| | FY 2015 | % | FY 2016 | % | FY 2017 | % | FY 2018 | % | FY 2019 | % | FY2020 | % | FY2021 | % |
|--------------------------|----------------|-------------|----------------|-------------|----------------|-------------|----------------|-------------|----------------|-------------|----------------|-------------|----------------|--------------|
| | (Actual) | Change | (Actual) | Change | (Actual) | Change | (Actual) | Change | (Forecast) | Change | (Forecast) | Change | (Forecast) | Change |
| REVENUE SOURCE | | | | | | | | | | | | | | |
| Gasoline | \$77.6 | 1.5% | \$78.0 | 0.5% | \$78.2 | 0.3% | \$78.2 | 0.0% | \$78.2 | 0.0% | \$78.1 | -0.1% | \$77.6 | -0.6% |
| Diesel**** | \$19.1 | 11.5% | \$18.3 | -4.4% | \$18.2 | -0.5% | \$18.9 | 3.6% | \$19.1 | 1.3% | \$19.2 | 0.5% | \$19.1 | -0.5% |
| Purchase and Use* | \$64.8 | 5.9% | \$66.8 | 2.9% | \$68.8 | 3.1% | \$73.0 | 6.0% | \$76.1 | 4.3% | \$77.1 | 1.3% | \$76.7 | -0.4% |
| Motor Vehicle Fees | \$80.1 | 1.4% | \$82.0 | 2.3% | \$86.2 | 5.2% | \$86.0 | -0.3% | \$86.3 | 0.4% | \$87.4 | 1.3% | \$87.9 | 0.6% |
| Other Revenue** | \$19.7 | 0.8% | \$19.6 | -0.5% | \$19.9 | 1.8% | \$23.0 | 15.3% | \$24.4 | 6.2% | \$24.8 | 1.6% | \$25.0 | 0.8% |
| TOTAL TRANS. FUND | \$261.4 | 3.2% | \$264.6 | 1.2% | \$271.4 | 2.6% | \$279.0 | 2.8% | \$284.1 | 1.8% | \$286.6 | 0.9% | \$286.3 | -0.1% |

OTHER (TIB*)**

| | | | | | | | | | | | | | | |
|--------------------------|---------------|--------------|---------------|---------------|---------------|--------------|---------------|-------------|---------------|--------------|---------------|--------------|---------------|--------------|
| TIB Gasoline | \$18.2 | -5.2% | \$13.0 | -28.4% | \$12.6 | -3.3% | \$12.9 | 2.2% | \$14.3 | 11.1% | \$13.8 | -3.6% | \$16.1 | 16.6% |
| TIB Diesel and Other**** | \$2.1 | 11.4% | \$1.9 | -6.1% | \$1.7 | -11.3% | \$2.0 | 16.1% | \$2.0 | 3.1% | \$2.1 | 0.5% | \$2.0 | -0.5% |
| TOTAL OTHER (TIB) | \$20.2 | -3.8% | \$15.0 | -26.1% | \$14.5 | -2.9% | \$14.9 | 2.4% | \$16.3 | 10.0% | \$15.8 | -3.1% | \$18.1 | 14.4% |

* 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.

*** Transportation Infrastructure Bond revenues

**** Includes TIB Fund interest income (which has never exceeded \$35,000 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 (POST- H.911 REVENUE ALLOCATIONS)
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 - January 2019

CURRENT LAW BASIS

Source General and Transportation

| <i>Fund taxes allocated to or associated with the Education Fund only</i> | FY 2015 <i>(Actual)</i> | % <i>Change</i> | FY 2016 <i>(Actual)</i> | % <i>Change</i> | FY 2017 <i>(Actual)</i> | % <i>Change</i> | FY 2018 <i>(Actual)</i> | % <i>Change</i> | FY 2019 <i>(Forecast)</i> | % <i>Change</i> | FY2020 <i>(Forecast)</i> | % <i>Change</i> | FY2021 <i>(Forecast)</i> | % <i>Change</i> |
|---|-----------------------------------|---------------------------|-----------------------------------|---------------------------|-----------------------------------|---------------------------|-----------------------------------|---------------------------|-------------------------------------|---------------------------|------------------------------------|---------------------------|------------------------------------|---------------------------|
| GENERAL FUND | | | | | | | | | | | | | | |
| Meals and Rooms | \$0.0 | NM | \$0.0 | NM | \$0.0 | NM | \$0.0 | NM | \$45.4 | NM | \$46.9 | 3.4% | \$48.1 | 2.6% |
| Sales & Use** | 127.6 | 3.1% | \$129.8 | 1.7% | \$131.8 | 1.6% | \$139.2 | 5.6% | \$415.1 | 198.1% | \$429.5 | 3.5% | \$435.3 | 1.4% |
| Interest | 0.1 | 3.6% | \$0.2 | 135.7% | \$0.4 | 122.7% | \$0.5 | 30.3% | \$0.9 | 83.8% | \$1.0 | 11.1% | \$1.1 | 5.0% |
| Lottery | 22.8 | 0.8% | \$26.4 | 16.1% | \$25.5 | -3.3% | \$27.1 | 6.4% | \$28.2 | 3.9% | \$28.5 | 1.1% | \$28.9 | 1.4% |
| TRANSPORTATION FUND | | | | | | | | | | | | | | |
| Purchase and Use*** | 32.4 | 5.9% | \$33.4 | 2.9% | \$34.4 | 3.1% | \$36.5 | 6.0% | \$38.0 | 4.3% | \$38.5 | 1.3% | \$38.4 | -0.4% |
| TOTAL EDUCATION FUND | 182.9 | 3.3% | \$189.7 | 3.7% | \$192.2 | 1.3% | \$203.3 | 5.8% | \$527.6 | 159.5% | \$544.4 | 3.2% | \$551.8 | 1.3% |

* 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 F19

*** Includes Motor Vehicle Rental revenues, restated

Appendix A

Five Year Revenue Forecast Tables

January 2019

TABLE 1A - STATE OF VERMONT
LEGISLATIVE JOINT FISCAL OFFICE
SOURCE GENERAL FUND REVENUE FORECAST UPDATE
Consensus JFO and Administration Forecast - January 2019

SOURCE G-FUND

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

| | FY 2015 | % | FY 2016 | % | FY 2017 | % | FY 2018 | % | FY 2019 | % | FY2020 | % | FY2021 | % | FY2022 | % | FY2023 | % | FY2024 | % |
|----------------------------|-----------------|-------------|-----------------|--------------|-----------------|--------------|-----------------|--------------|-----------------|-------------|-----------------|-------------|-----------------|-------------|-----------------|-------------|-----------------|-------------|-----------------|-------------|
| | (Actual) | Change | (Actual) | Change | (Actual) | Change | (Actual) | Change | (Forecast) | Change | (Forecast) | Change | (Forecast) | Change | (Forecast) | Change | (Forecast) | Change | (Forecast) | Change |
| REVENUE SOURCE | | | | | | | | | | | | | | | | | | | | |
| Personal Income | \$705.9 | 5.2% | \$747.0 | 5.8% | \$756.5 | 1.3% | \$832.0 | 10.0% | \$824.9 | -0.8% | \$853.2 | 3.4% | \$858.7 | 0.6% | \$881.3 | 2.6% | \$912.6 | 3.6% | \$944.8 | 3.5% |
| Sales & Use* | \$364.6 | 3.1% | \$370.7 | 1.7% | \$376.7 | 1.6% | \$397.8 | 5.6% | \$415.1 | 4.3% | \$429.5 | 3.5% | \$435.3 | 1.4% | \$444.7 | 2.1% | \$457.7 | 2.9% | \$474.8 | 3.7% |
| Corporate | \$121.9 | 28.5% | \$117.0 | -4.0% | \$95.8 | -18.1% | \$96.4 | 0.6% | \$122.5 | 27.2% | \$97.5 | -20.4% | \$85.2 | -12.6% | \$88.5 | 3.9% | \$95.7 | 8.0% | \$100.4 | 4.9% |
| Meals and Rooms | \$150.8 | 5.7% | \$154.2 | 2.2% | \$165.3 | 7.3% | \$173.2 | 4.8% | \$181.5 | 4.8% | \$187.6 | 3.4% | \$192.5 | 2.6% | \$198.8 | 3.3% | \$206.3 | 3.8% | \$214.7 | 4.1% |
| Cigarette and Tobacco** | \$76.8 | 6.7% | \$80.7 | 5.2% | \$76.7 | -5.0% | \$71.1 | -7.3% | \$71.1 | 0.0% | \$68.4 | -3.8% | \$65.9 | -3.7% | \$63.7 | -3.4% | \$61.6 | -3.2% | \$59.7 | -3.1% |
| Liquor | \$18.2 | 2.9% | \$18.3 | 0.8% | \$19.1 | 4.4% | \$19.8 | 3.6% | \$20.2 | 1.9% | \$20.7 | 2.5% | \$21.1 | 1.9% | \$21.7 | 2.8% | \$22.3 | 2.8% | \$22.9 | 2.7% |
| Insurance | \$55.3 | -3.1% | \$56.2 | 1.7% | \$57.0 | 1.3% | \$57.5 | 1.0% | \$57.8 | 0.5% | \$58.3 | 0.9% | \$58.7 | 0.7% | \$59.2 | 0.9% | \$59.7 | 0.8% | \$60.1 | 0.7% |
| Telephone | \$7.7 | -14.9% | \$3.2 | -59.2% | \$5.7 | 80.6% | \$4.7 | -16.8% | \$4.1 | -13.7% | \$3.6 | -12.2% | \$3.2 | -11.1% | \$3.0 | -6.3% | \$2.8 | -6.7% | \$2.6 | -7.1% |
| Beverage | \$6.7 | 4.2% | \$6.7 | 0.6% | \$6.9 | 2.9% | \$7.1 | 2.5% | \$7.2 | 1.3% | \$7.4 | 2.7% | \$7.5 | 2.0% | \$7.7 | 2.7% | \$7.9 | 2.6% | \$8.1 | 2.5% |
| Electric*** | \$9.4 | -28.2% | \$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 |
| Estate | \$9.9 | -72.2% | \$12.5 | 26.5% | \$16.7 | 33.3% | \$22.9 | 37.6% | \$19.1 | -16.7% | \$20.9 | 9.4% | \$21.8 | 4.3% | \$22.7 | 4.1% | \$23.5 | 3.5% | \$24.3 | 3.4% |
| Property | \$33.6 | 8.6% | \$35.7 | 6.2% | \$38.7 | 8.4% | \$40.9 | 5.6% | \$44.1 | 7.9% | \$47.1 | 6.8% | \$49.1 | 4.2% | \$50.8 | 3.5% | \$52.5 | 3.3% | \$54.2 | 3.2% |
| Bank | \$10.7 | -2.0% | \$10.7 | -0.6% | \$13.2 | 24.0% | \$13.1 | -1.3% | \$12.4 | -5.2% | \$12.6 | 1.6% | \$12.8 | 1.6% | \$12.9 | 0.8% | \$13.0 | 0.8% | \$13.2 | 1.5% |
| Other Tax | \$2.0 | 4.5% | \$1.8 | -9.0% | \$2.2 | 18.0% | \$1.8 | -15.2% | \$2.4 | 30.3% | \$2.5 | 4.2% | \$2.6 | 4.0% | \$2.7 | 3.8% | \$2.8 | 3.7% | \$2.9 | 3.6% |
| Total Tax Revenue | \$1573.5 | 3.7% | \$1614.8 | 2.6% | \$1630.4 | 1.0% | \$1738.3 | 6.6% | \$1782.4 | 2.5% | \$1809.2 | 1.5% | \$1814.4 | 0.3% | \$1857.7 | 2.4% | \$1918.4 | 3.3% | \$1982.7 | 3.4% |
| Business Licenses | \$1.1 | 0.2% | \$1.1 | -1.6% | \$1.2 | 16.8% | \$1.2 | -2.9% | \$1.0 | -17.3% | \$1.1 | 12.0% | \$1.1 | 1.2% | \$1.2 | 1.8% | \$1.2 | 1.7% | \$1.2 | 1.7% |
| Fees | \$22.1 | 7.0% | \$23.0 | 4.2% | \$48.5 | 110.8% | \$47.1 | -2.9% | \$47.6 | 1.1% | \$48.4 | 1.7% | \$49.1 | 1.4% | \$50.0 | 1.8% | \$50.9 | 1.8% | \$51.7 | 1.6% |
| Services | \$1.5 | 12.5% | \$2.8 | 86.6% | \$3.0 | 7.9% | \$2.9 | -4.2% | \$3.3 | 14.5% | \$3.4 | 3.0% | \$3.5 | 2.9% | \$3.6 | 2.9% | \$3.7 | 2.8% | \$3.8 | 2.7% |
| Fines | \$3.5 | -3.1% | \$3.7 | 5.5% | \$4.4 | 21.0% | \$3.5 | -19.8% | \$3.6 | 1.0% | \$3.6 | 1.7% | \$3.7 | 1.1% | \$3.7 | 1.6% | \$3.8 | 1.9% | \$3.9 | 2.1% |
| Interest | \$0.3 | 40.4% | \$0.7 | 130.6% | \$1.5 | 111.5% | \$2.8 | 80.1% | \$6.1 | 118.9% | \$6.5 | 6.6% | \$6.8 | 3.8% | \$7.0 | 3.7% | \$7.2 | 2.1% | \$7.3 | 2.1% |
| Lottery | \$22.8 | 0.8% | \$26.4 | 16.1% | \$25.5 | -3.3% | \$27.1 | 6.4% | \$28.2 | 3.9% | \$28.5 | 1.1% | \$28.9 | 1.4% | \$29.4 | 1.7% | \$29.9 | 1.7% | \$30.4 | 1.7% |
| All Other**** | \$1.0 | -20.4% | \$1.3 | 25.9% | \$2.9 | 128.5% | \$2.4 | -18.8% | \$1.1 | -53.4% | \$1.3 | 18.2% | \$1.4 | 7.7% | \$1.5 | 7.1% | \$1.6 | 6.7% | \$1.7 | 6.3% |
| Total Other Revenue | \$52.2 | 3.0% | \$58.9 | 12.9% | \$87.1 | 47.9% | \$87.0 | -0.1% | \$90.88 | 4.5% | \$92.86 | 2.2% | \$94.47 | 1.7% | \$96.40 | 2.0% | \$98.24 | 1.9% | \$99.99 | 1.8% |
| TOTAL GENERAL FUND | \$1625.7 | 3.7% | \$1673.7 | 2.9% | \$1717.5 | 2.6% | \$1825.3 | 6.3% | \$1873.3 | 2.6% | \$1902.1 | 1.5% | \$1908.9 | 0.4% | \$1954.1 | 2.4% | \$2016.6 | 3.2% | \$2082.7 | 3.3% |

* 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 (POST- H.911 REVENUE ALLOCATIONS)
LEGISLATIVE JOINT FISCAL OFFICE
AVAILABLE GENERAL FUND REVENUE FORECAST UPDATE
Consensus JFO and Administration Forecast - January 2019**

CURRENT LAW BASIS

*including all Education Fund
allocations and other out-transfers*

| | FY 2015 | % | FY 2016 | % | FY 2017 | % | FY 2018 | % | FY 2019 | % | FY2020 | % | FY2021 | % | FY2022 | % | FY2023 | % | FY2024 | % |
|----------------------------|-----------------|---------------|-----------------|---------------|-----------------|---------------|-----------------|---------------|-------------------|---------------|-------------------|---------------|-------------------|---------------|-------------------|---------------|-------------------|---------------|-------------------|---------------|
| | <i>(Actual)</i> | <i>Change</i> | <i>(Actual)</i> | <i>Change</i> | <i>(Actual)</i> | <i>Change</i> | <i>(Actual)</i> | <i>Change</i> | <i>(Forecast)</i> | <i>Change</i> | <i>(Forecast)</i> | <i>Change</i> | <i>(Forecast)</i> | <i>Change</i> | <i>(Forecast)</i> | <i>Change</i> | <i>(Forecast)</i> | <i>Change</i> | <i>(Forecast)</i> | <i>Change</i> |
| REVENUE SOURCE | | | | | | | | | | | | | | | | | | | | |
| Personal Income | \$705.9 | 5.2% | \$747.0 | 5.8% | \$756.5 | 1.3% | \$832.0 | 10.0% | \$824.9 | -0.8% | \$853.2 | 3.4% | \$858.7 | 0.6% | \$881.3 | 2.6% | \$912.6 | 3.6% | \$944.8 | 3.5% |
| Sales and Use* | \$237.0 | 3.1% | \$241.0 | 1.7% | \$244.9 | 1.6% | \$258.6 | 5.6% | \$0.0 | NM | \$0.0 | NM | \$0.0 | NM | \$0.0 | NM | \$0.0 | NM | \$0.0 | NM |
| Corporate | \$121.9 | 28.5% | \$117.0 | -4.0% | \$95.8 | -18.1% | \$96.4 | 0.6% | \$122.5 | 27.2% | \$97.5 | -20.4% | \$85.2 | -12.6% | \$88.5 | 3.9% | \$95.7 | 8.0% | \$100.4 | 4.9% |
| Meals and Rooms | \$150.8 | 5.7% | \$154.2 | 2.2% | \$165.3 | 7.3% | \$173.2 | 4.8% | \$136.1 | -21.4% | \$140.7 | 3.4% | \$144.4 | 2.6% | \$149.1 | 3.3% | \$154.7 | 3.8% | \$161.0 | 4.1% |
| Cigarette and Tobacco | \$0.0 | NM | \$0.0 | NM | \$0.0 | NM | \$0.0 | NM | \$0.0 | NM | \$0.0 | NM | \$0.0 | NM | \$0.0 | NM | \$0.0 | NM | \$0.0 | NM |
| Liquor | \$18.2 | 2.9% | \$18.3 | 0.8% | \$19.1 | 4.4% | \$19.8 | 3.6% | \$20.2 | 1.9% | \$20.7 | 2.5% | \$21.1 | 1.9% | \$21.7 | 2.8% | \$22.3 | 2.8% | \$22.9 | 2.7% |
| Insurance | \$55.3 | -3.1% | \$56.2 | 1.7% | \$57.0 | 1.3% | \$57.5 | 1.0% | \$57.8 | 0.5% | \$58.3 | 0.9% | \$58.7 | 0.7% | \$59.2 | 0.9% | \$59.7 | 0.8% | \$60.1 | 0.7% |
| Telephone | \$7.7 | -14.9% | \$3.2 | -59.2% | \$5.7 | 80.6% | \$4.7 | -16.8% | \$4.1 | -13.7% | \$3.6 | -12.2% | \$3.2 | -11.1% | \$3.0 | -6.3% | \$2.8 | -6.7% | \$2.6 | -7.1% |
| Beverage | \$6.7 | 4.2% | \$6.7 | 0.6% | \$6.9 | 2.9% | \$7.1 | 2.5% | \$7.2 | 1.3% | \$7.4 | 2.7% | \$7.5 | 2.0% | \$7.7 | 2.7% | \$7.9 | 2.6% | \$8.1 | 2.5% |
| Electric** | \$9.4 | -28.2% | \$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 |
| Estate*** | \$9.9 | -72.2% | \$12.5 | 26.5% | \$16.7 | 33.3% | \$22.9 | 37.6% | \$19.1 | -16.7% | \$20.9 | 9.4% | \$21.8 | 4.3% | \$22.7 | 4.1% | \$23.5 | 3.5% | \$24.3 | 3.4% |
| Property | \$10.9 | 8.7% | \$11.5 | 6.0% | \$12.6 | 9.0% | \$12.4 | -1.5% | \$13.5 | 8.8% | \$14.4 | 7.2% | \$15.1 | 4.5% | \$15.6 | 3.6% | \$16.2 | 3.5% | \$16.7 | 3.4% |
| Bank | \$10.7 | -2.0% | \$10.7 | -0.6% | \$13.2 | 24.0% | \$13.1 | -1.3% | \$12.4 | -5.2% | \$12.6 | 1.6% | \$12.8 | 1.6% | \$12.9 | 0.8% | \$13.0 | 0.8% | \$13.2 | 1.5% |
| Other Tax | \$2.0 | 4.5% | \$1.8 | -9.0% | \$2.2 | 18.0% | \$1.8 | -15.2% | \$2.4 | 30.3% | \$2.5 | 4.2% | \$2.6 | 4.0% | \$2.7 | 3.8% | \$2.8 | 3.7% | \$2.9 | 3.6% |
| Total Tax Revenue | \$1346.4 | 3.5% | \$1380.1 | 2.5% | \$1395.7 | 1.1% | \$1499.5 | 7.4% | \$1220.2 | -18.6% | \$1231.8 | 0.9% | \$1231.1 | -0.1% | \$1264.5 | 2.7% | \$1311.2 | 3.7% | \$1357.0 | 3.5% |
| Business Licenses | \$1.1 | 0.2% | \$1.1 | -1.6% | \$1.2 | 16.8% | \$1.2 | -2.9% | \$1.0 | -17.3% | \$1.1 | 12.0% | \$1.1 | 1.8% | \$1.2 | 1.8% | \$1.2 | 1.7% | \$1.2 | 1.7% |
| Fees | \$22.1 | 7.0% | \$23.0 | 4.2% | \$48.5 | 110.8% | \$47.1 | -2.9% | \$47.6 | 1.1% | \$48.4 | 1.7% | \$49.1 | 1.4% | \$50.0 | 1.8% | \$50.9 | 1.8% | \$51.7 | 1.6% |
| Services | \$1.5 | 12.5% | \$2.8 | 86.6% | \$3.0 | 7.9% | \$2.9 | -4.2% | \$3.3 | 14.5% | \$3.4 | 3.0% | \$3.5 | 2.9% | \$3.6 | 2.9% | \$3.7 | 2.8% | \$3.8 | 2.7% |
| Fines | \$3.5 | -3.1% | \$3.7 | 5.5% | \$4.4 | 21.0% | \$3.5 | -19.8% | \$3.6 | 1.0% | \$3.6 | 1.7% | \$3.7 | 1.1% | \$3.7 | 1.6% | \$3.8 | 1.9% | \$3.9 | 2.1% |
| Interest | \$0.2 | 51.9% | \$0.6 | 136.1% | \$1.2 | 108.2% | \$2.3 | 96.1% | \$5.2 | 126.4% | \$5.5 | 5.8% | \$5.7 | 3.6% | \$5.9 | 3.5% | \$6.0 | 1.7% | \$6.1 | 1.7% |
| All Other**** | \$1.0 | -20.4% | \$1.3 | 25.9% | \$2.9 | 128.5% | \$2.4 | -18.8% | \$1.1 | -53.4% | \$1.3 | 18.2% | \$1.4 | 7.7% | \$1.5 | 7.1% | \$1.6 | 6.7% | \$1.7 | 6.3% |
| Total Other Revenue | \$29.4 | 4.7% | \$32.3 | 10.1% | \$61.2 | 89.3% | \$59.4 | -3.0% | \$61.8 | 4.1% | \$63.4 | 2.6% | \$64.5 | 1.8% | \$65.9 | 2.1% | \$67.2 | 2.0% | \$68.4 | 1.8% |
| TOTAL GENERAL FUND | \$1375.8 | 3.6% | \$1412.4 | 2.7% | \$1457.0 | 3.2% | \$1558.9 | 7.0% | \$1282.0 | -17.8% | \$1295.1 | 1.0% | \$1295.6 | 0.0% | \$1330.4 | 2.7% | \$1378.3 | 3.6% | \$1425.4 | 3.4% |

* 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
Consensus JFO and Administration Forecast - January 2019**

SOURCE T-FUND

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

| | FY 2015 | % | FY 2016 | % | FY 2017 | % | FY 2018 | % | FY 2019 | % | FY2020 | % | FY2021 | % | FY2022 | % | FY2023 | % | FY2024 | % |
|--------------------------|----------------|-------------|----------------|-------------|----------------|-------------|----------------|-------------|----------------|-------------|----------------|-------------|----------------|--------------|----------------|-------------|----------------|-------------|----------------|-------------|
| | (Actual) | Change | (Actual) | Change | (Actual) | Change | (Actual) | Change | (Forecast) | Change | (Forecast) | Change | (Forecast) | Change | (Forecast) | Change | (Forecast) | Change | (Forecast) | Change |
| REVENUE SOURCE | | | | | | | | | | | | | | | | | | | | |
| Gasoline | \$77.6 | 1.5% | \$78.0 | 0.5% | \$78.2 | 0.3% | \$78.2 | 0.0% | \$78.2 | 0.0% | \$78.1 | -0.1% | \$77.6 | -0.6% | \$77.3 | -0.4% | \$76.8 | -0.6% | \$76.3 | -0.7% |
| Diesel**** | \$19.1 | 11.5% | \$18.3 | -4.4% | \$18.2 | -0.5% | \$18.9 | 3.6% | \$19.1 | 1.3% | \$19.2 | 0.5% | \$19.1 | -0.5% | \$19.2 | 0.5% | \$19.4 | 1.0% | \$19.7 | 1.5% |
| Purchase and Use* | \$97.3 | 5.9% | \$100.1 | 2.9% | \$103.2 | 3.1% | \$109.4 | 6.0% | \$114.1 | 4.3% | \$115.6 | 1.3% | \$115.1 | -0.4% | \$117.6 | 2.2% | \$121.1 | 3.0% | \$124.9 | 3.1% |
| Motor Vehicle Fees | \$80.1 | 1.4% | \$82.0 | 2.3% | \$86.2 | 5.2% | \$86.0 | -0.3% | \$86.3 | 0.4% | \$87.4 | 1.3% | \$87.9 | 0.6% | \$89.2 | 1.5% | \$89.8 | 0.7% | \$90.9 | 1.2% |
| Other Revenue** | \$19.7 | 0.8% | \$19.6 | -0.5% | \$19.9 | 1.8% | \$23.0 | 15.3% | \$24.4 | 6.2% | \$24.8 | 1.6% | \$25.0 | 0.8% | \$25.3 | 1.2% | \$25.7 | 1.6% | \$26.1 | 1.6% |
| TOTAL TRANS. FUND | \$293.8 | 3.5% | \$298.0 | 1.4% | \$305.8 | 2.6% | \$315.4 | 3.1% | \$322.1 | 2.1% | \$325.1 | 0.9% | \$324.7 | -0.1% | \$328.6 | 1.2% | \$332.8 | 1.3% | \$337.9 | 1.5% |

**TABLE 2 - STATE OF VERMONT
LEGISLATIVE JOINT FISCAL OFFICE
AVAILABLE TRANSPORTATION FUND REVENUE FORECAST UPDATE
Consensus JFO and Administration Forecast - January 2019**

CURRENT LAW BASIS

including all Education Fund
allocations and other out-transfers

| | FY 2015 | % | FY 2016 | % | FY 2017 | % | FY 2018 | % | FY 2019 | % | FY2020 | % | FY2021 | % | FY2022 | % | FY2023 | % | FY2024 | % |
|--------------------------|----------------|-------------|----------------|-------------|----------------|-------------|----------------|-------------|----------------|-------------|----------------|-------------|----------------|--------------|----------------|-------------|----------------|-------------|----------------|-------------|
| | (Actual) | Change | (Actual) | Change | (Actual) | Change | (Actual) | Change | (Forecast) | Change | (Forecast) | Change | (Forecast) | Change | (Forecast) | Change | (Forecast) | Change | (Forecast) | Change |
| REVENUE SOURCE | | | | | | | | | | | | | | | | | | | | |
| Gasoline | \$77.6 | 1.5% | \$78.0 | 0.5% | \$78.2 | 0.3% | \$78.2 | 0.0% | \$78.2 | 0.0% | \$78.1 | -0.1% | \$77.6 | -0.6% | \$77.3 | -0.4% | \$76.8 | -0.6% | \$76.3 | -0.7% |
| Diesel**** | \$19.1 | 11.5% | \$18.3 | -4.4% | \$18.2 | -0.5% | \$18.9 | 3.6% | \$19.1 | 1.3% | \$19.2 | 0.5% | \$19.1 | -0.5% | \$19.2 | 0.5% | \$19.4 | 1.0% | \$19.7 | 1.5% |
| Purchase and Use* | \$64.8 | 5.9% | \$66.8 | 2.9% | \$68.8 | 3.1% | \$73.0 | 6.0% | \$76.1 | 4.3% | \$77.1 | 1.3% | \$76.7 | -0.4% | \$78.4 | 2.2% | \$80.7 | 3.0% | \$83.3 | 3.1% |
| Motor Vehicle Fees | \$80.1 | 1.4% | \$82.0 | 2.3% | \$86.2 | 5.2% | \$86.0 | -0.3% | \$86.3 | 0.4% | \$87.4 | 1.3% | \$87.9 | 0.6% | \$89.2 | 1.5% | \$89.8 | 0.7% | \$90.9 | 1.2% |
| Other Revenue** | \$19.7 | 0.8% | \$19.6 | -0.5% | \$19.9 | 1.8% | \$23.0 | 15.3% | \$24.4 | 6.2% | \$24.8 | 1.6% | \$25.0 | 0.8% | \$25.3 | 1.2% | \$25.7 | 1.6% | \$26.1 | 1.6% |
| TOTAL TRANS. FUND | \$261.4 | 3.2% | \$264.6 | 1.2% | \$271.4 | 2.6% | \$279.0 | 2.8% | \$284.1 | 1.8% | \$286.6 | 0.9% | \$286.3 | -0.1% | \$289.4 | 1.1% | \$292.4 | 1.0% | \$296.3 | 1.3% |

OTHER (TIB*)**

| | FY 2015 | % | FY 2016 | % | FY 2017 | % | FY 2018 | % | FY 2019 | % | FY2020 | % | FY2021 | % | FY2022 | % | FY2023 | % | FY2024 | % |
|--------------------------|---------------|--------------|---------------|---------------|---------------|--------------|---------------|-------------|---------------|--------------|---------------|--------------|---------------|--------------|---------------|-------------|---------------|-------------|---------------|-------------|
| | (Actual) | Change | (Actual) | Change | (Actual) | Change | (Actual) | Change | (Forecast) | Change | (Forecast) | Change | (Forecast) | Change | (Forecast) | Change | (Forecast) | Change | (Forecast) | Change |
| TIB Gasoline | \$18.2 | -5.2% | \$13.0 | -28.4% | \$12.6 | -3.3% | \$12.9 | 2.2% | \$14.3 | 11.1% | \$13.8 | -3.6% | \$16.1 | 16.6% | \$17.7 | 9.9% | \$18.7 | 5.7% | \$19.6 | 4.8% |
| TIB Diesel and Other**** | \$2.1 | 11.4% | \$1.9 | -6.1% | \$1.7 | -11.3% | \$2.0 | 16.1% | \$2.0 | 3.1% | \$2.1 | 0.5% | \$2.0 | -0.5% | \$2.1 | 0.5% | \$2.1 | 1.1% | \$2.1 | 1.5% |
| TOTAL OTHER (TIB) | \$20.2 | -3.8% | \$15.0 | -26.1% | \$14.5 | -2.9% | \$14.9 | 2.4% | \$16.3 | 10.0% | \$15.8 | -3.1% | \$18.1 | 14.4% | \$19.7 | 8.8% | \$20.7 | 5.2% | \$21.7 | 4.4% |

* 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.

*** Transportation Infrastructure Bond revenues

**** Includes TIB Fund interest income (which has never exceeded \$35,000 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 (POST- H.911 REVENUE ALLOCATIONS)
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 - January 2019

CURRENT LAW BASIS

Source General and Transportation

Fund taxes allocated to or associated
with the Education Fund only

| | FY 2015 | % | FY 2016 | % | FY 2017 | % | FY 2018 | % | FY 2019 | % | FY 2020 | % | FY 2021 | % | FY 2022 | % | FY 2023 | % | FY 2024 | % |
|-----------------------------|--------------|-------------|----------------|-------------|----------------|-------------|----------------|-------------|----------------|---------------|----------------|-------------|----------------|-------------|----------------|-------------|----------------|-------------|----------------|-------------|
| | (Actual) | Change | (Actual) | Change | (Actual) | Change | (Actual) | Change | (Forecast) | Change | (Forecast) | Change | (Forecast) | Change | (Forecast) | Change | (Forecast) | Change | (Forecast) | Change |
| GENERAL FUND | | | | | | | | | | | | | | | | | | | | |
| Meals and Rooms | \$0.0 | NM | \$0.0 | NM | \$0.0 | NM | \$0.0 | NM | \$45.4 | NM | \$46.9 | 3.4% | \$48.1 | 2.6% | \$49.7 | 3.3% | \$51.6 | 3.8% | \$53.7 | 4.1% |
| Sales & Use** | 127.6 | 3.1% | \$129.8 | 1.7% | \$131.8 | 1.6% | \$139.2 | 5.6% | \$415.1 | 198.1% | \$429.5 | 3.5% | \$435.3 | 1.4% | \$444.7 | 2.1% | \$457.7 | 2.9% | \$474.8 | 3.7% |
| Interest | 0.1 | 3.6% | \$0.2 | 135.7% | \$0.4 | 122.7% | \$0.5 | 30.3% | \$0.9 | 83.8% | \$1.0 | 11.1% | \$1.1 | 5.0% | \$1.1 | 4.8% | \$1.2 | 4.5% | \$1.2 | 4.3% |
| Lottery | 22.8 | 0.8% | \$26.4 | 16.1% | \$25.5 | -3.3% | \$27.1 | 6.4% | \$28.2 | 3.9% | \$28.5 | 1.1% | \$28.9 | 1.4% | \$29.4 | 1.7% | \$29.9 | 1.7% | \$30.4 | 1.7% |
| TRANSPORTATION FUND | | | | | | | | | | | | | | | | | | | | |
| Purchase and Use*** | 32.4 | 5.9% | \$33.4 | 2.9% | \$34.4 | 3.1% | \$36.5 | 6.0% | \$38.0 | 4.3% | \$38.5 | 1.3% | \$38.4 | -0.4% | \$39.2 | 2.2% | \$40.4 | 3.0% | \$41.6 | 3.1% |
| TOTAL EDUCATION FUND | 182.9 | 3.3% | \$189.7 | 3.7% | \$192.2 | 1.3% | \$203.3 | 5.8% | \$527.6 | 159.5% | \$544.4 | 3.2% | \$551.8 | 1.3% | \$564.1 | 2.2% | \$580.7 | 3.0% | \$601.7 | 3.6% |

* 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 FY19.

*** Includes Motor Vehicle Rental revenues, restated