

## 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

# July 2019 Economic Review and Revenue Forecast Update

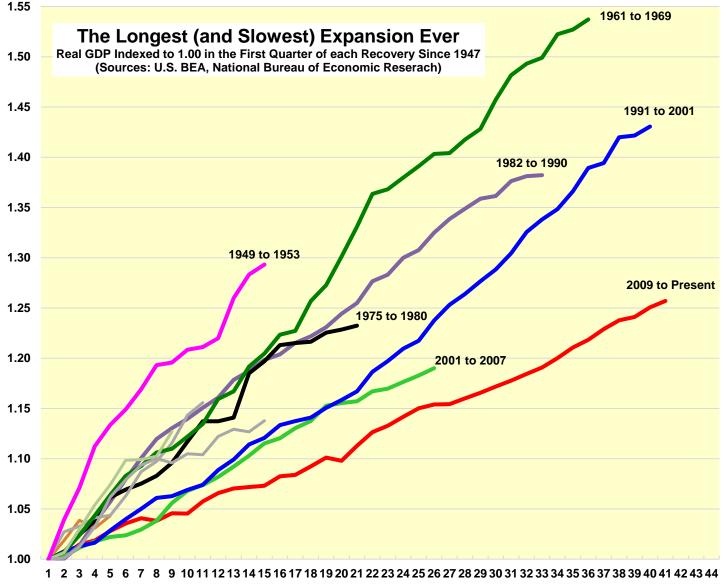
Prepared for the State of Vermont Emergency Board and Legislative Joint Fiscal Office

July 29, 2019

## Economic Review and Revenue Forecast Update July 2019

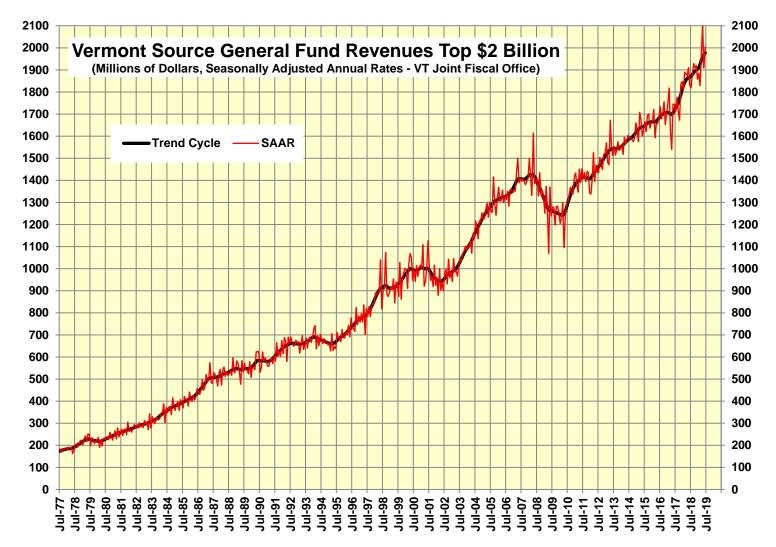
## Overview

With both federal fiscal and monetary policy now favorably aligned, and deficit hawks an endangered species, the U.S. economy celebrated its longest expansion in recorded economic history (since 1854) this month and will likely continue to expand through the next fiscal year. After seven interest rate hikes in 2017 and 2018 that had slowed credit-sensitive industries like housing and autos, the Fed reversed course in 2019, cancelling expected further hikes and signaling possible interest rate cuts in order to sustain the expansion – the first of which may occur in a few days.



Number of Quarters After Recession Trough

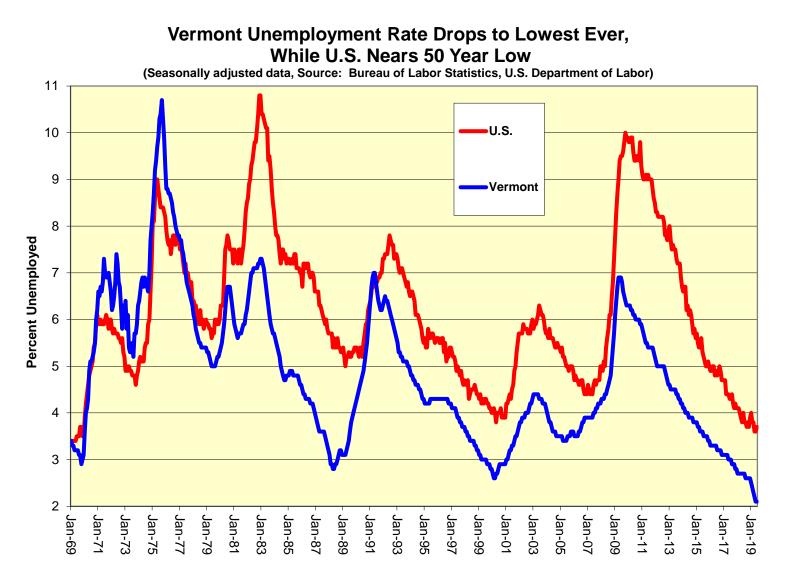
Meanwhile, fiscal policy has been powerfully stimulative, with deficit-funded tax cuts inflating corporate profits and personal income while bipartisan budget deals look to add more than \$2 trillion in debt through 2029. The combined effect of all this represents more than \$4 trillion in additional deficit spending over this period. The current year federal deficit is expected to be nearly \$1 trillion, pumping up near-term growth at the expense of longer-term borrowing capacity and soaring future debt payment liabilities (see chart on page 6).



With the economy humming, both corporate and personal income tax receipts in Vermont were extremely strong in FY19, lifting Source G-Fund revenues over \$2 billion in both April and June (at seasonally adjusted annual rates) for the first time ever. Total FY19 revenues across all three major funds ended the year about 2.5% above prior January forecasts, with the G-Fund up about 4.5%, the T-Fund down about 1.2% and the E-Fund 0.4% below target. Much of this strength is expected to continue into FY20 and FY21, though at slower rates of growth. Allocative and other tax changes to the various funds enacted during the 2019 legislative session make comparisons to January projections difficult, but revenue impacts associated with macroeconomic changes will add about \$20-\$30 million per year (approximately 1%) across all three funds relative to prior estimates.

## July 2019 Economic and Revenue Forecast Commentary

Since the recession's low point more than 9 years ago, the U.S. has added 23.6 million jobs (+16.6%), including a span of 105 consecutive months – and counting. Although job growth in Vermont since its recessionary trough has only been about half the U.S. rate (totaling 8.1% through June), the State has added 23,900 nonagricultural payroll jobs. This growth has pushed the Vermont unemployment rate to an all-time record low and the U.S, rate to its lowest level in nearly five decades. As illustrated in the chart on the following page, Vermont's 2.1% unemployment rate in both May and June was the lowest in the nation.



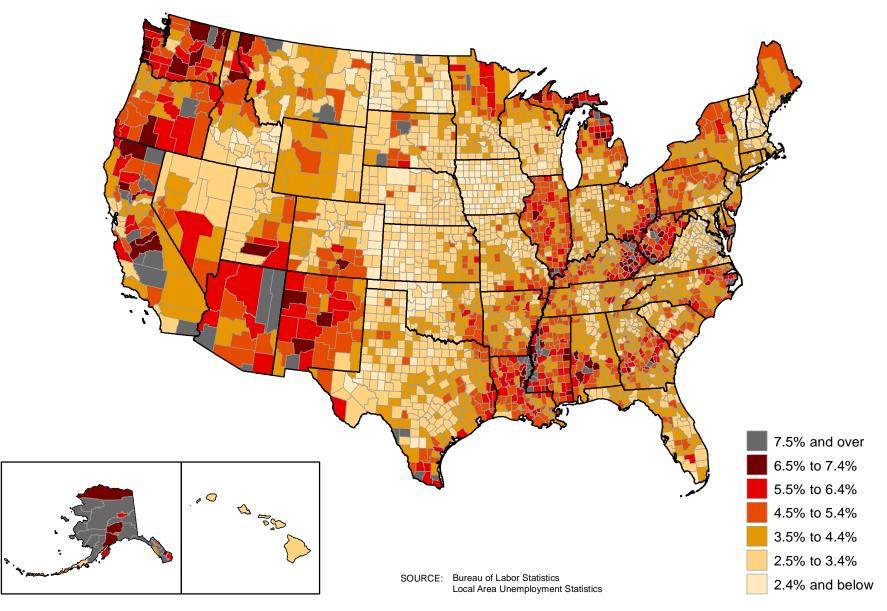
As a coincident economic indicator, the unemployment rate is a key measure of economic health. Because it is a relatively stable metric, any sustained increase in the unemployment rate can also flag the start of a downturn. If the rate increases by more than a quarter percentage point in a three-month period, a recession is likely. All 10 of the recessions since World War II have begun with such an increase in the U.S. unemployment rate.

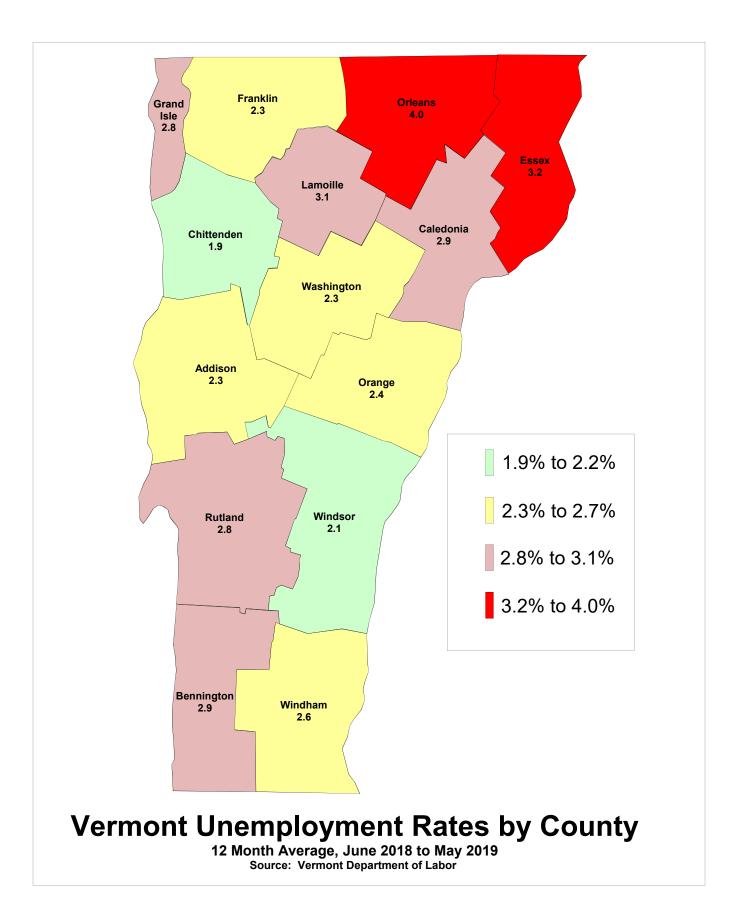
# Unemployment Rate by State - June 2019 Seasonally Adjusted Data, Source: U.S. Bureau of Labor Statistics

Vermont		2.1%				
North Dakota		2.3%				
Iowa		2.4%				
New Hampshire		2.5%				
Utah		2.8	%			
Idaho		2.8	%			
Hawaii		2.8	%			
Wisconsin		2	.9%			
Virginia			.9%			
South Dakota		2	.9%			
Nebraska			3.0%			
Massachusetts			3.0%			
Colorado			3.0%			
Oklahoma			3.2%			
Maine			3.2%			
Delaware			3.2%			
Missouri			3.3%			
Minnesota			3.3%			
Texas			3.4%			
Tennessee			3.4%			
Kansas			3.4%			
Florida			3.4%			
Wyoming			3.5%			
South Carolina			3.5%			
New Jersey			3.5%			
Montana			3.5%			
Indiana			3.5%			
Arkansas			3.5%			
Alabama			3.5%			
Rhode Island			3.6%			
Georgia						
Connecticut			3.7% 3.7%			
			3.8			
Pennsylvania						
Maryland			3.8			
Ohio			<del>.</del>	4.0%		
New York			1	4.0%		
Nevada			<del>.</del>	4.0%		
Oregon			1	4.1%		
North Carolina				4.1%		
Kentucky			I	4.1%		
Michigan			I.	4.2%		
California			1	4.2%		
Louisiana			I.	4.3%		
Illinois			1	4.3%		
Washington			1	4.6%		
West Virginia			1	4.7%		
New Mexico			T	1	4.9%	
Arizona			The second se	I	4.9%	
Mississippi			T	I	5.0%	
District of Columbia					5.6%	
Alaska				1		6.4%
0.0	0% 1.0% 2.0%	6 3 <b>d</b>	9åge 4 4.	0% 5.	0% 6.	0% 7.0%

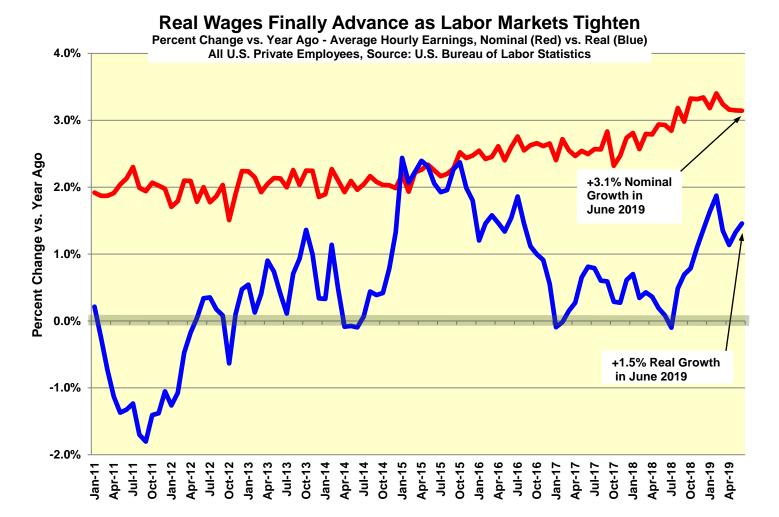
## Unemployment rates by county, June 2018-May 2019 averages

(U.S. rate = 3.8 percent)





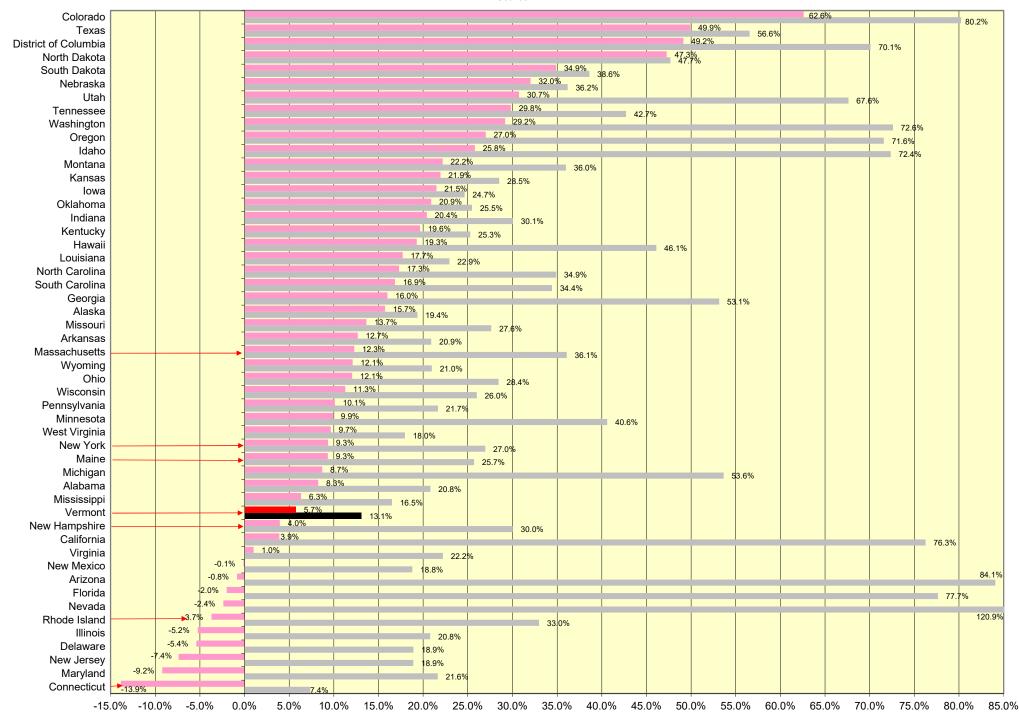
- Sub-state unemployment rates have also dropped and narrowed throughout the U.S. and Vermont, as illustrated in the charts on pages 5 and 6. In Vermont, the highest county unemployment rate is now in Orleans County, at just 4%, with the lowest, as almost always, in Chittenden County, at 1.9%. Even Essex County, which experienced unemployment rates of nearly 10% during the worst of the last recession, registered an unemployment rate during the 12 months between June of 2018 and May of 2019 of only 3.2%. 11 of Vermont's 14 counties now have average annualized unemployment rates below 3%.
- The tightness in U.S. labor markets is finally manifesting in real wage growth. After nearly two years of flat or negative real wage changes, nominal wage growth accelerated to more than 3% during most of the last year and inflationadjusted growth has been between 1% and 2% since November of 2018.



 As illustrated in the chart on the following page, real estate markets continue to improve throughout the nation – though with stark regional differences. Home prices have now exceeded their pre-recession peaks in all but 10 states – roughly characterized by a group that experienced huge speculative excesses (AZ, NV and FL) and associated pre-recession price spikes and those with fundamental or sectoral economic weakness (CT, RI, IL, MD, NJ, DE, NM). Despite these pockets of weaker relative performance, virtually

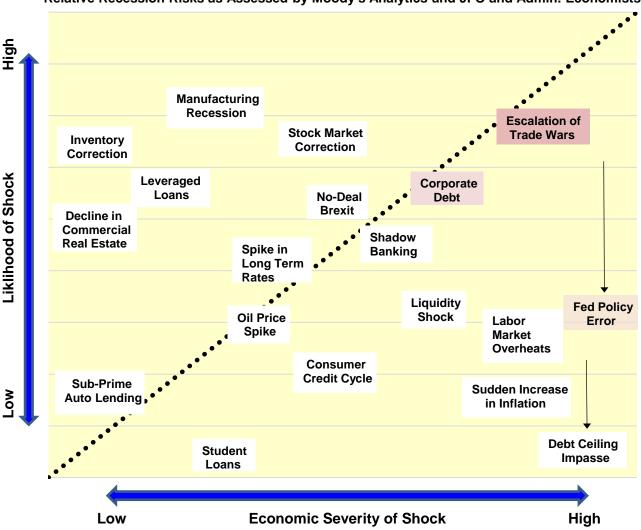
## Real Estate Update: Housing Values Relative to Last Peak (pink) and Trough (grey)

Percent Change, 2019Q1vs. Peak Price by State Reached Between 2005Q3 and 2009Q2 - Pink and 2019Q1 vs. Trough Price Reached Between 2009Q3 and 2019Q1 - Grey Source: FHFA



every state has experienced home price growth in each of the last 20 quarters.

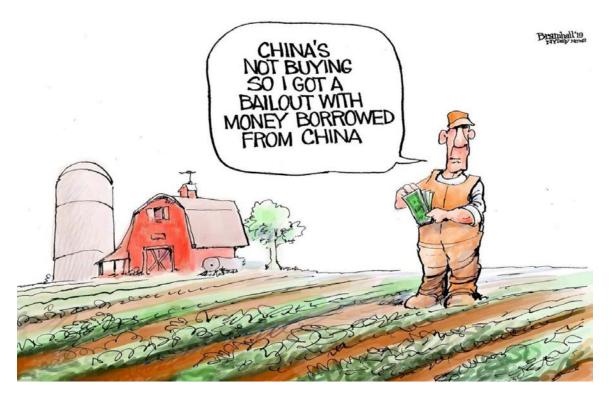
- Vermont home prices are now about 5.4% above their prior peak and 12.7% above their lowest levels during the last recession. However, within the State, as is true with many State economic metrics, the Burlington metropolitan area has dramatically outperformed the rest of the State. Home prices in the Burlington MSA through the first quarter of 2019 (the latest data available) exceeded their prior cyclical peak by 13.9%, while prices in the balance of the State were still 1.2% *below* their prior peak level, reached in the first quarter of 2008.
- Although home prices in the first quarter of 2019 rose in every state relative to year-ago levels, there has been a noticeable price deceleration in most states, due to steadily increasing home mortgage rates through 2018 and tax deductibility changes in the TCJA that effectively raised the cost of property ownership in many states. This also acted to slow new residential construction, with Vermont housing starts down 24% in the first half of 2019.



## What Could Go Wrong?

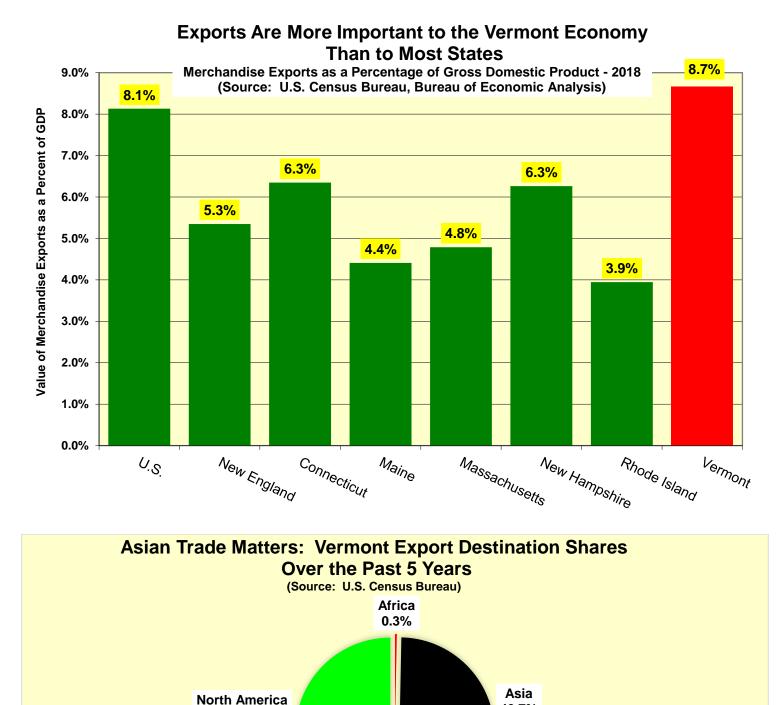
Relative Recession Risks as Assessed by Moody's Analytics and JFO and Admin. Economists

At this stage of the business cycle, forecast risks abound. The chart on the preceding page outlines a number of events (many of which are interrelated) that could dent or terminate the current expansion. Prominent in this risk matrix, is the rising likelihood of trade war escalation, particularly with China. To date, trade rhetoric with Mexico, Canada, the E.U. and Japan has been more bark than bite, with a revised NAFTA agreement that is not meaningfully different than its predecessor. The tariffs imposed on China have been much more impactful, but have mostly been limited to intermediate goods that have not yet fully hit U.S. consumers, who will ultimately pay most of this cost. If further escalation occurs, it may destabilize portions of the global economy that could lead to recession and ultimately weaken U.S. global economic strength and influence. The use of punitive tariffs as an instrument of foreign policy for non-economic purposes (such as with Turkey and Mexico) also threatens to undermine the U.S. economy and harm long-term relationships with both allies and adversaries.



- Ironically, one of the reasons this economic cycle may still have room to grow despite being the longest ever, is its tepid growth trajectory. As shown in the chart on page 1, this expansion is both the longest and slowest on record. This slow, steady pace, and the institutional memory of the deep recent recession, have contributed to the avoidance of major economic imbalances, despite the recovery's longevity. Although near-term recession risks have risen, according to the Wall Street Journal's Economic Forecasting Survey, from about 20% to 30%, there are not obvious imbalances that suggest an imminent decline.
- If there is an expanded trade war, the Vermont economy is not likely to be spared. Despite declining trade as a share of State GDP, Vermont still has the highest reliance on exports in the New England region and is above the

national average, as shown in the below chart. Vermont also has a relatively high trade dependence on Asia and North America, regions in which trade hostility could be especially severe.



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Europe 14.0%

43.1%

South/Central America

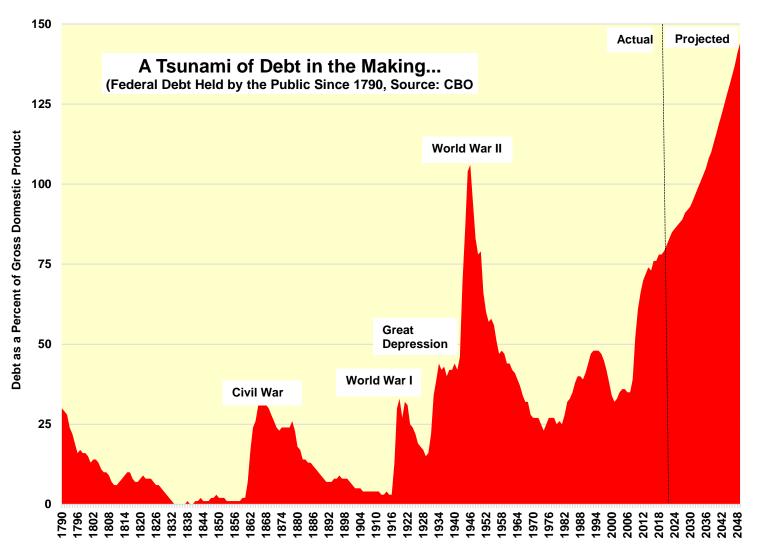
1.3%

40.7%

Australia and Oceania

0.6%

 Though not an imminent recession risk, the ballooning federal debt as a share of Gross Domestic Product – especially during a time of economic vigor, when debt levels normally recede – represents a serious longer-term economic risk and one that could, as the Congressional Budget Office recently warned, provoke a sudden fiscal and economic crisis. As illustrated in the below chart, recent projections from the CBO show current law U.S. debt as a percentage of GDP rising from about 78% in Federal FY19 – the highest peacetime level ever - to 144% in 2049.

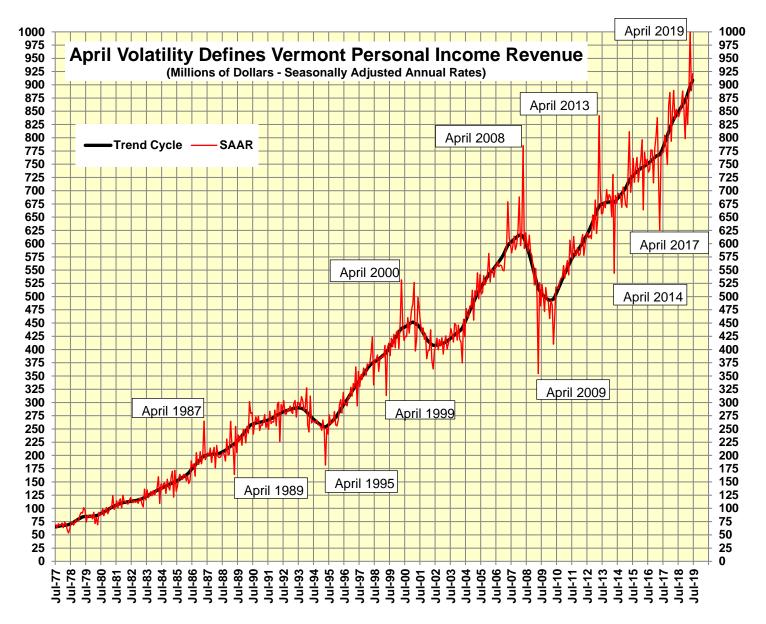


While deficit spending can stimulate the economy and is an important countercyclical policy tool (as illustrated in the chart on page 35 that illustrates pre- and post-Great Depression economic cycle lengths), it is rarely beneficial in an economy operating close to or at its full potential. The political restraint controlling such borrowing seems to have evaporated amidst the abbreviated political time horizon within which such issues are evaluated and the ease with which the U.S. can currently borrow due to the widespread use of the U.S. dollar as a global currency. Like the pension funding issues now plaguing our State budgetary processes, however, someone in the future will pay for these policy mistakes. Without a change of course, CBO projects annual interest costs alone will exceed the primary debt starting in FY20.

## State Revenues

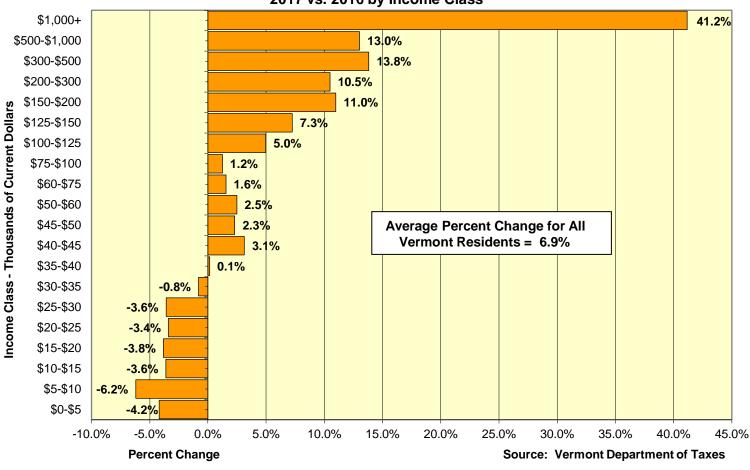
- Aggregate revenues across all three major funds forecast herein closed the fiscal year more than \$50 million (2.5%) above prior January expectations. Revenues benefitted from a strong economy, continued concentrations of wealth and income among high-income taxpayers, and provisions in the Tax Cuts and Jobs Act that resulted in both effective personal income tax rate increases for some and one-time revenues from repatriation of corporate earnings placed in foreign tax jurisdictions that had avoided prior taxation. These two income tax sources alone closed the fiscal year about \$60 million over target, offsetting net misses in smaller revenue categories, including a \$6.5M shortfall in volatile Estate tax revenues.
- Major definitional changes were made to various funds and revenue sources • in this forecast update that make comparisons with prior data and projections moot. Notable among these, selected healthcare-related taxes totaling about \$270M, previously in other funds, were transferred to the Available General Fund in an effort to offset prior year out-transfers to other funds. These revenues are not new to the State, nor do they increase its financial capacity in any way. They are included in both Tables 1 and 1A as subtotals and detailed in Tables 1B and 1C. In other such changes, the allocation of Meals and Rooms revenues to the Available General Fund, after being reduced from 100% to 75% in FY19, was further reduced by \$7.5M in FY20 and thereafter from 75% to 69%. Other budgetary maneuvers will leave Liquor revenues in the Available General Fund reported herein about \$18M per year below prior estimates, even though these funds will still ultimately end up as "available" to the General Fund via transfers from the "Enterprise Fund" to the General Fund.
- Corporate tax revenues closed the fiscal year \$11.7M over target, due primarily to one-time payments associated with repatriation liabilities. Unfortunately, after 18 months and a great deal of Tax Department effort following passage of the TCJA, we have very little additional hard information on exactly which corporate payments may be associated with repatriation liabilities and what liabilities may remain. Initial FY estimates put potential corporate repatriation revenues between \$17M and \$46M, with expectations for continued FY20 payments of about half this amount. FY21 could still benefit from lingering repatriation payments, but these are expected to largely disappear by FY22, resulting in a three-year decline between FY19 and FY22 of more than \$40M. As noted in detail in the past two forecast updates, there is still considerable uncertainty regarding the payment, legal liability, timing and rule-making associated with repatriation payments at both the federal and state levels.
- Personal income tax receipts were exceptionally strong in April, topping \$1 billion at seasonally adjusted annual rates for the first time ever. As shown in the chart on the following page, this revenue source is notoriously volatile and becoming more so over time. The chart illustrates seasonally adjusted monthly data and the sharp variations that can occur with April tax filings.

FY19 represented one of the largest such deviations, resulting in about \$37M in additional revenue in April, and closing the fiscal year about \$50M (6%) above expectations. Although we will not know the full story behind FY19 PI revenues until the filing year is closed in October, early information indicates a continuation of significant capital gains and AGI growth among the highest income classes. As shown in the charts on the following two pages for tax year 2017 (the latest complete annual data available), more AGI among high income groups results in greater State revenue, since the effective tax rates for these groups are also higher. While this is positive for State revenues, it is also exacerbates revenue volatility and uncertainty. This component of personal income tax revenue is capable of dropping precipitously during a downturn and spiking in random years during expansions.

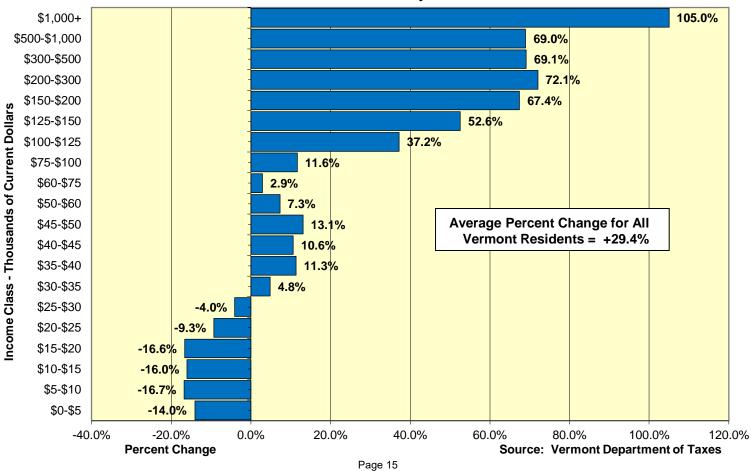


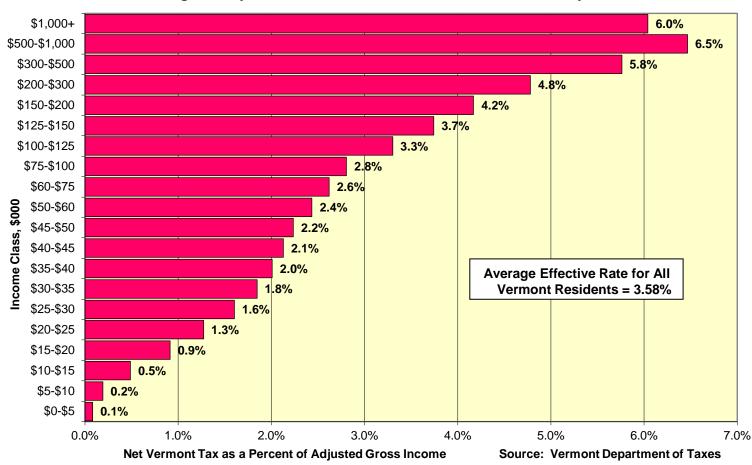
 Some of the FY19 strength in personal income taxes is due to effective Sate tax increases from the TCJA that affected a limited subset of filers. Although these effects may diminish over time, there are still aspects of the legislation

Percent Change in Adjusted Gross Income in Vermont 2017 vs. 2016 by Income Class



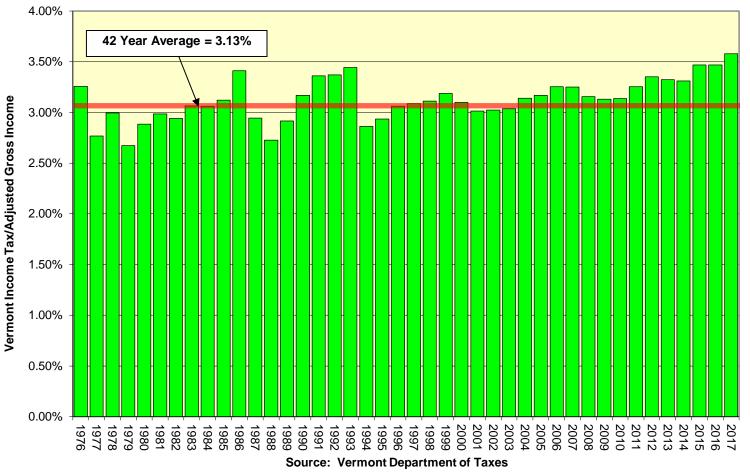
Percent Change in Adjusted Gross Income in Vermont 2017 vs. 2010 by Income Class





## Tax Progressivity: Effective Vermont Income Tax Rates in 2017 by Income Class

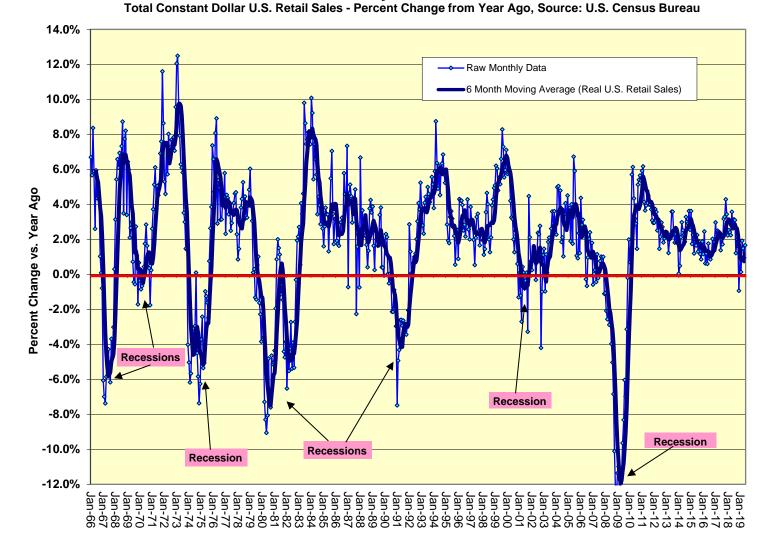
Effective Vermont Personal Income Tax Rate



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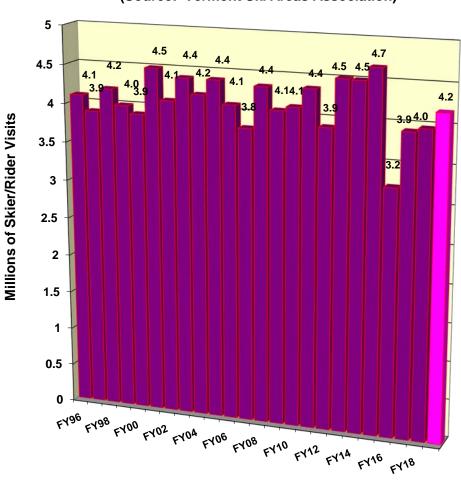
we are analyzing with respect to the FY19 returns, such as the treatment of loss limitations (referred to as "excess business losses") that could end up being be substantial. In addition to trailing TCJA impacts, legislative changes in the 2019 session will net out to about +\$0.2M in FY20 and +\$2M in FY21 to this revenue category. Because of the concentration of a small number of "one-time" high-income tax events in FY19, net growth in FY20 may be subdued, before advancing in FY21 at about 2% and higher thereafter.

 Brick and mortar Sales and Use tax revenues were sluggish in FY19, as higher interest rates affected purchases of consumer durables and rising trade war fears dampened consumer sentiment. Inflation-adjusted retail sales have recently recovered, but have been stuck below 2% for most of the last year (see below chart). Despite generating significant additional revenue in FY19 from both existing and new e-commerce vendors as a result of the Supreme Court decision in the Wayfair case, Sales and Use receipts ended the year slightly below (-0.6%) projections. In FY20, S&U tax revenues are expected to accelerate, as marketplace facilitators join the growing ranks of new e-commerce filers – ultimately contributing between about 8% to 10% of total sales and use tax revenue over the forecast horizon.



Real Retail Sales Pause in Early 2019, but Recover in Recent Months

Meals & Rooms tax receipts continued to be solid in FY19, with a healthy winter skiing season supporting visitation and spending. Total year-end revenues were about 0.3% above targets, in part due to strong rental receipts from Airbnb. With the same fundamentals in FY20 (favorable demographics, a robust economy, accommodating winter weather and high regional income), and new revenue from other e-commerce market participants, Source Meals & Rooms revenue growth could approach 6%. Statutory changes in the last legislative session, however, will shave \$7.5M from this for the Clean Water Fund and send portions of the remainder to the Available General and Education Funds. This allocation will change to a fixed transfer of 69% to the G-Fund, 25% to the E-Fund and 6% to the CW-Fund in FY21.

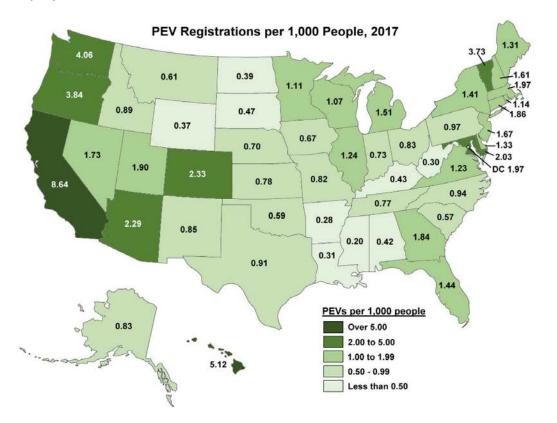


Skier Visitation in FY19 Close to 24 Year Average (Source: Vermont Ski Areas Association)

Cigarette and Tobacco Products revenue closed FY19 almost exactly as forecast in the earlier July 2018 Revenue Update (-0.1%), however, an unprecedented inventory build-up in December prompted a January upgrade to the forecast that ended up being 4% above final year-end revenues. Other Tobacco Products also registered their first annual decline ever in FY19. In FY20 and beyond, Cigarette tax revenues have been moved to a new Healthcare Revenue sub-category within the Available General Fund, and will be supplemented by a new tax on vaping products - and diminished by a new 21 year old (from 18) age restriction for legal purchase. These two changes will result in slightly higher net revenues, but will be imperceptible amidst the declining longer term trajectory of cigarette sales caused by persistent antismoking measures.

- The Estate tax ended the fiscal year \$6.4 million below target the largest percentage miss of any tax category (-34%) but well within its "normal" year to year variation. Because of the exceedingly small number of affected taxpayers in any given year, this revenue category is among the most volatile of all revenue sources. The sum of any consecutive 4 quarters over the past 10 years has ranged from \$10M to \$40M, with very little correlation with short-term external economic events. This will continue in FY20, however, statutory changes effective January 1, 2020 that raise the Estate tax exclusion from \$3.25M to \$4.25M will reduce revenues by about \$4.5M in FY21. A further increase in the exclusion to \$5 million, effective January 1, 2021, is expected to reduce FY22 revenues by about \$7.5M. As equity markets, real estate prices and business valuations increase, the potential for large estate remittances will continue, however, in any given year, actual revenues could vary significantly from projections.
- Property Transfer Tax revenues in FY19 were affected by rising mortgage rates throughout 2018, slowing both property price appreciation and the volume of transactions, and leading to a \$1M year-end shortfall. Lower mortgage rates heading into FY20 and legislation in the last session that extends taxation to controlling interest ownership transfers should result in growth of more than 10% in FY20 and about 8% in FY21.
- The Telephone Property tax continues to decline as projected and ended FY19 at less than half its FY14 level, 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 to \$6 million less than FY14 levels for the foreseeable future.
- Other General Fund Tax revenue, which primarily consists of the Land Gains tax, was almost exactly on target in FY19 at \$2.4M. Statutory changes to this tax in the last legislative session, however, will reduce FY20 revenues by about 30% and FY21 revenues by more than 60% (about \$1.6M).
- Transportation Fund revenues were very close to targets through the first 11 months of FY19, but fell short in June by \$2.6M, ending the year 1.2% below target. The June miss was spread across virtually every T-Fund revenue source, suggesting a possible administrative or processing cause. The largest percentage miss was in the Diesel tax, -2.8%, but this tax is affected by various transfers and inventory fluctuations that make it irregular on a monthly basis. Motor Vehicle Purchase and Use revenues were also down 2.0% in FY19, but this category had been affected by rising interest rates through much of 2018 and the slowdown in consumer spending in early 2019.

Motor Vehicle Fees were off by 1.0%, but new registrations (about half of the revenue in this category) in FY19 were strong and all of the shortfall was due to higher than expected out-transfers of other fees. Gasoline revenue was very close to expectations with a 0.5% miss, but relatively low gas prices and continued sluggish volume demand during the forecast period will keep revenues from both gasoline-derived taxes relatively flat. Electric vehicle market penetration, although growing (see below map) and relatively high on a per capita basis in Vermont, is still a very small percentage of vehicles on the road and not yet a major factor in FY20 and FY21 gasoline revenue projections.



- 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 June 2019 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.

## TABLE A

## Comparison of Recent Consensus U.S. Macroeconomic Forecasts December 2017 through June 2019, Selected Variables, Calendar Year Basis

	2013	2014	2015	2016	2017	2018	2019	2020	2021
Real GDP Growth									
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
June-19	1.8	2.5	2.9	1.6	2.2	2.9	2.3	1.8	1.9
S&P 500 Growth (Annual Avg.)									
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
June-19	19.1	17.5	6.8	1.5	17.0	12.1	6.4	-7.6	4.4
Employment Growth (Non-Ag)									
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
June-19	1.6	1.9	2.1	1.8	1.6	1.7	1.6	0.9	-0.1
Unemployment Rate									
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
June-19	7.4	6.2	5.3	4.9	4.4	3.9	3.6	3.7	4.1
West Texas Int. Crude Oil \$/Bbl									
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
June-19	98	93	49	43	51	65	59	63	63
Prime Rate									
December-17	3.25	3.25		3.51		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
June-19	3.25	3.25	3.26	3.51	4.10	4.90	5.55	5.58	5.78
Consumer Price Index Growth									
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			2.5	2.1	2.3
June-19	1.5	1.6	0.1	1.3	2.1	2.4	1.9	2.1	2.3
Average Home Price Growth								_ /	
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
June-19	3.9	5.1	5.2	5.5	6.1	6.6	4.8	4.0	3.1

## TABLE B

Comparison of Consensus Administration and JFO Vermont State Forecasts December 2016 through June 2019, Selected Variables, Calendar Year Basis

	2013	2014	2015	2016	2017	2018	2019	2020	2021
Real GSP Growth									
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
June-19	-1.3	0.0	1.1	1.6	1.3	1.2	1.1	1.4	1.8
Population Growth									
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
June-19	0.0	-0.2	0.0	-0.3	0.1	0.3	0.1	0.2	0.2
Employment Growth									
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
June-19	0.7	0.9	0.8	0.3	0.6	0.1	0.8	0.6	-0.2
Unemployment Rate									
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
June-19	4.4	3.9	3.6	3.2	3.0	2.7	2.4	2.6	3.3
Personal Income Growth									
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
June-19	1.4	3.9	3.5	2.3	3.2	3.1	2.5	3.0	2.2
Home Price Growth (JFO)									
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
June-19	0.0	0.1	1.9	1.5	2.6	3.4	4.1	5.6	5.3
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## 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, Steve Klein, 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, Rebecca Sameroff, Erin Hicks-Tibbles 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 42 years of data for each of the 25 General Fund categories (three aggregates), 39 years of data for most of the Transportation Fund categories (one aggregate), and 20 to 42 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, comparablepattern 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. macroeconomic 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 - July 2019** 

SOURCE G-FUND										•				
revenues are prior to all E-Fund allocations	EV 204 E	0/	FY 2016	0/	FY 2017	0/	FY 2018	0/	FY 2019	0/	FY2020	%	FY2021	0/
and other out-transfers; used for	FY 2015	% Change		% Change		% Change	(Actual)	% Change		% Change	(Forecast)	7₀ Change		% Change
analytic and comparative purposes only	(Actual)	Change	(Actual)	Change	(Actual)	Change	(Actual)	Change	(Preliminary)	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%	\$875.4	5.2%	\$876.9	0.2%	\$893.4	1.9%
Sales & Use <sup>1</sup>	\$364.6	3.1%	\$370.7	1.7%	\$376.7	1.6%	\$397.8	5.6%	\$412.5	3.7%	\$436.2	5.7%	\$448.2	2.8%
Corporate	\$121.9	28.5%	\$117.0	-4.0%	\$95.8	-18.1%	\$96.4	0.6%	\$134.2	39.3%	\$108.4	-19.2%	\$95.1	-12.3%
Meals and Rooms	\$150.8	5.7%	\$154.2	2.2%	\$165.3	7.3%	\$173.2	4.8%	\$182.1	5.1%	\$192.6	5.8%	\$200.1	3.9%
Liquor	\$18.2	2.9%	\$18.3	0.8%	\$19.1	4.4%	\$19.8	3.6%	\$21.4	8.1%	\$21.6	0.8%	\$22.1	2.3%
Insurance	\$55.3	-3.1%	\$56.2	1.7%	\$57.0	1.3%	\$57.5	1.0%	\$56.9	-1.2%	\$57.2	0.6%	\$57.5	0.5%
Telephone	\$7.7	-14.9%	\$3.2	-59.2%	\$5.7	80.6%	\$4.7	-16.8%	\$4.3	-8.8%	\$4.0	-7.6%	\$3.7	-7.5%
Beverage	\$6.7	4.2%	\$6.7	0.6%	\$6.9	2.9%	\$7.1	2.5%	\$7.6	6.9%	\$7.6	0.6%	\$7.8	2.6%
Electric <sup>2</sup>	\$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%	\$12.6	-44.9%	\$20.9	65.5%	\$17.3	-17.2%
Property	\$33.6	8.6%	\$35.7	6.2%	\$38.7	8.4%	\$40.9	5.6%	\$41.1	0.6%	\$45.58	10.9%	\$49.16	7.9%
Bank	\$10.7	-2.0%	\$10.7	-0.6%	\$13.2	24.0%	\$13.1	-1.3%	\$12.5	-4.6%	\$12.53	0.4%	\$12.58	0.4%
Other Tax	\$2.0	4.5%	\$1.8	-9.0%	\$2.2	18.0%	\$1.8	-15.2%	\$2.4	32.9%	\$1.72	-29.7%	\$1.00	-41.9%
Total Tax Revenue	\$1496.8	3.6%	\$1534.0	2.5%	\$1553.7	1.3%	\$1667.2	7.3%	\$1763.0	5.7%	\$1785.2	1.3%	\$1807.9	1.3%
Business Licenses	\$1.1	0.2%	\$1.1	-1.6%	\$1.2	16.8%	\$1.2	-2.9%	\$1.2	-1.0%	\$1.19	-0.6%	\$1.21	1.2%
Fees	\$22.1	7.0%	\$23.0	4.2%	\$48.5	110.8%	\$47.1	-2.9%	\$47.0	-0.2%	\$46.9	-0.2%	\$46.8	-0.2%
Services	\$1.5	12.5%	\$2.8	86.6%	\$3.0	7.9%	\$2.9	-4.2%	\$3.4	16.4%	\$3.4	1.3%	\$3.5	2.9%
Fines	\$3.5	-3.1%	\$3.7	5.5%	\$4.4	21.0%	\$3.5	-19.8%	\$3.6	0.6%	\$3.6	2.0%	\$3.7	1.1%
Interest	\$0.3	40.4%	\$0.7	130.6%	\$1.5	111.5%	\$2.8	80.1%	\$5.0	79.1%	\$5.2	4.2%	\$5.5	5.8%
Lottery	\$22.8	0.8%	\$26.4	16.1%	\$25.5	-3.3%	\$27.1	6.4%	\$29.5	8.6%	\$29.4	-0.2%	\$30.2	2.7%
All Other <sup>3</sup>	\$1.0	-20.4%	\$1.3	25.9%	\$2.9	128.5%	\$2.4	-18.8%	\$4.6	92.7%	\$1.9	-58.3%	\$1.5	-21.1%
Total Other Revenue	\$52.2	3.0%	\$58.9	12.9%	\$87.1	47.9%	\$87.0	-0.1%	\$94.11	8.2%	\$91.63	-2.6%	\$92.39	0.8%
Healthcare Revenue⁴	\$256.2	5.4%	\$269.2	5.1%	\$276.6	2.8%	\$275.6	-0.4%	\$276.3	0.2%	\$274.4	-0.7%	\$277.8	1.2%
TOTAL GENERAL FUND	\$1805.2	3.8%	\$1862.1	3.2%	\$1917.4	3.0%	\$2029.8	5.9%	\$2133.4	5.1%	\$2151.3	0.8%	\$2178.1	1.2%

1) Includes Telecommunications Tax; includes \$3.76M transfer in FY08 to the T-Fund for prior years Jet Fuel tax processing error.

2) 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 E-Fund. 3) 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.

4) Heathcare Related Taxes - Act 6 of 2019 (BAA) moved selected revenue sources from the State Health Care Resources Fund to the General Fund, effective in FY20. With the exception of the cigarette, tobacco products and vaping tax, which has historically been part of the General Fund forecast, the forecasts for the other Healthcare related taxes are provided by the a healthcare consensus forecasting group, which includes JFO. F&M and AHS staff. See Tables 1B and 1C for details.

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

Consensus JFO and Administration Forecast - July 2019

CURRENT LAW BASIS														
including all Education Fund	FY 2015	%	FY 2016	%	FY 2017	%	FY 2018	%	FY 2019	%	FY2020	%	FY2021	%
allocations and other out-transfers	(Actual)	Change	(Actual)	Change	(Actual)	Change	(Actual)	Change	(Preliminary)	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%	\$875.4	5.2%	\$876.9	0.2%	\$893.4	1.9%
Sales and Use <sup>1</sup>	\$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%	\$134.2	39.3%	\$108.4	-19.2%	\$95.1	-12.3%
Meals and Rooms	\$150.8	5.7%	\$154.2	2.2%	\$165.3	7.3%	\$173.2	4.8%	\$136.5	-21.2%	\$137.0	0.3%	\$138.1	0.8%
Liquor <sup>6</sup>	\$18.2	2.9%	\$18.3	0.8%	\$19.1	4.4%	\$19.8	3.6%	\$21.4	8.1%	\$4.14	-80.7%	\$4.2	1.4%
Insurance	\$55.3	-3.1%	\$56.2	1.7%	\$57.0	1.3%	\$57.5	1.0%	\$56.9	-1.2%	\$57.2	0.6%	\$57.5	0.5%
Telephone	\$7.7	-14.9%	\$3.2	-59.2%	\$5.7	80.6%	\$4.7	-16.8%	\$4.3	-8.8%	\$4.0	-7.6%	\$3.7	-7.5%
Beverage	\$6.7	4.2%	\$6.7	0.6%	\$6.9	2.9%	\$7.1	2.5%	\$7.6	6.9%	\$7.6	0.6%	\$7.8	2.6%
Electric <sup>2</sup>	\$9.4	-28.2%	\$0.0	NM	\$0.0	NM	\$0.0	NM	\$0.0	NM	\$0.0	NM	\$0.0	NM
Estate <sup>3</sup>	\$9.9	-72.2%	\$12.5	26.5%	\$16.7	33.3%	\$22.9	37.6%	\$12.6	-44.9%	\$20.9	65.5%	\$17.3	-17.2%
Property	\$10.9	8.7%	\$11.5	6.0%	\$12.6	9.0%	\$12.4	-1.5%	\$12.5	0.9%	\$13.9	11.6%	\$15.1	8.3%
Bank	\$10.7	-2.0%	\$10.7	-0.6%	\$13.2	24.0%	\$13.1	-1.3%	\$12.5	-4.6%	\$12.5	0.4%	\$12.6	0.4%
Other Tax	\$2.0	4.5%	\$1.8	-9.0%	\$2.2	18.0%	\$1.8	-15.2%	\$2.4	32.9%	\$1.7	-29.7%	\$1.0	-41.9%
Total Tax Revenue	\$1346.4	3.5%	\$1380.1	2.5%	\$1395.7	1.1%	\$1499.5	7.4%	\$1276.4	-14.9%	\$1244.3	-2.5%	\$1245.7	0.1%
Business Licenses	\$1.1	0.2%	\$1.1	-1.6%	\$1.2	16.8%	\$1.2	-2.9%	\$1.2	-1.0%	\$1.2	-0.6%	\$1.2	1.7%
Fees	\$22.1	7.0%	\$23.0	4.2%	\$48.5	110.8%	\$47.1	-2.9%	\$47.0	-0.2%	\$46.9	-0.2%	\$46.8	-0.2%
Services	\$1.5	12.5%	\$2.8	86.6%	\$3.0	7.9%	\$2.9	-4.2%	\$3.4	16.4%	\$3.4	1.3%	\$3.5	2.9%
Fines	\$3.5	-3.1%	\$3.7	5.5%	\$4.4	21.0%	\$3.5	-19.8%	\$3.6	0.6%	\$3.6	2.0%	\$3.7	1.1%
Interest	\$0.2	51.9%	\$0.6	136.1%	\$1.2	108.2%	\$2.3	96.1%	\$4.3	87.8%	\$4.5	4.3%	\$4.7	4.4%
All Other⁴	\$1.0	-20.4%	\$1.3	25.9%	\$2.9	128.5%	\$2.4	-18.8%	\$4.6	92.7%	\$1.9	-58.3%	\$1.5	-21.1%
Total Other Revenue	\$29.4	4.7%	\$32.3	10.1%	\$61.2	89.3%	\$59.4	-3.0%	\$64.0	7.8%	\$61.5	-3.8%	\$61.4	-0.2%
Healthcare Revenue⁵	\$0.0		\$0.0		\$0.0		\$0.0		\$272.3	NM	\$270.4	-0.7%	\$273.7	1.2%
TOTAL GENERAL FUND	\$1375.8	3.6%	\$1412.4	2.7%	\$1457.0	3.2%	\$1558.9	7.0%	\$1612.7	3.5%	\$1576.2	-2.3%	\$1580.8	0.3%

1) 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.

2) 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.
- 3) Excludes transfer to the Higher Education Trust Fund of \$2.4M in FY05, \$5.2M in FY06 and \$11.0M in FY11.

4) 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.

5) Heathcare Related Taxes - Act 6 of 2019 (BAA) moved selected revenue sources from the State Health Care Resources Fund to the General Fund, effective in FY20. With the exception of the cigarette, tobacco products and vaping tax, which has historically been part of the General Fund forecast, the forecasts for the other Healthcare related taxes are provided by the a healthcare consensus forecasting group, which includes JFO, F&M and AHS staff. See Tables 1B and 1C for details.

6) Series is discontinuous beginning in FY20 due to fund allocation changes associated with Act 73 of the 2019 Session.

## TABLE 1B - STATE OF VERMONT LEGISLATIVE JOINT FISCAL OFFICE SOURCE HEALTHCARE REVENUE FORECAST UPDATE

**Consensus JFO and Administration Forecast - July 2019** 

#### SOURCE HEALTHCARE<sup>1</sup>

revenues are prior to all allocations														
and other out-transfers; used for	FY 2015	%	FY 2016	%	FY 2017	%	FY 2018	%	FY 2019	%	FY2020	%	FY2021	%
analytic and comparative purposes only	(Actual)	Change	(Actual)	Change	(Actual)	Change	(Actual)	Change	(Preliminary)	Change	(Forecast)	Change	(Forecast)	Change
REVENUE SOURCE														
Cigarette, Tobacco, E-Cig	\$76.8	6.7%	\$80.7	5.2%	\$76.7	-5.0%	\$71.1	-7.3%	\$68.4	-3.7%	\$66.9	-2.2%	\$65.6	-2.0%
Claims Assessment	\$17.5	6.8%	\$17.2	-1.5%	\$17.7	2.9%	\$19.8	12.1%	\$19.6	-1.3%	\$20.0	2.2%	\$20.4	2.2%
Employer Assessment	\$15.9	22.2%	\$17.9	12.7%	\$19.2	7.1%	\$19.8	3.6%	\$19.8	-0.5%	\$20.0	1.2%	\$20.4	2.0%
Hospital Provider Tax	\$125.3	4.3%	\$131.7	5.1%	\$137.3	4.2%	\$143.5	4.5%	\$146.3	2.0%	\$146.0	-0.2%	\$149.6	2.5%
Nursing Home Provide Tax	\$15.6	-2.5%	\$15.7	0.5%	\$15.0	-4.3%	\$14.8	-1.0%	\$14.8	-0.3%	\$14.7	-0.8%	\$14.7	0.0%
Home Health Provider Tax	\$4.4	6.8%	\$4.5	2.6%	\$5.5	21.8%	\$4.7	-14.0%	\$4.8	2.2%	\$5.3	10.3%	\$5.5	2.9%
All other HC revenues	\$0.8	-46.9%	\$1.5	70.8%	\$5.3	263.8%	\$1.8	-65.5%	\$2.6	41.7%	\$1.6	-38.5%	\$1.6	1.1%
TOTAL HEALTHCARE	\$256.2	5.4%	\$269.2	5.1%	\$276.6	2.8%	\$275.6	-0.4%	\$276.3	0.2%	\$274.4	-0.7%	\$277.8	1.2%

## TABLE 1C - STATE OF VERMONT LEGISLATIVE JOINT FISCAL OFFICE AVAILABLE HEALTHCARE REVENUE FORECAST UPDATE Consensus JFO and Administration Forecast - July 2019

CURRENT LAW BASIS including all Education Fund allocations and other out-transfers	FY 2015 (Actual)	% Change	FY 2016 (Actual)	% Change	FY 2017 (Actual)	% Change	FY 2018 (Actual)	% Change	FY 2019 (Preliminary)	% Change	FY2020 (Forecast)	% Change	FY2021 (Forecast)	% Change
REVENUE SOURCE														
Cigarette, Tobacco, E-Cig	\$77.6	7.9%	\$80.7	4.0%	\$76.7	-5.0%	\$71.1	-7.3%	\$68.4	-3.7%	\$66.9	-2.2%	\$65.6	-2.0%
Claims Assessment	\$14.0	6.9%	\$13.8	-1.5%	\$14.1	2.1%	\$15.9	13.2%	\$15.6	-1.7%	\$16.0	2.2%	\$16.3	2.2%
Employer Assessment	\$15.9	22.2%	\$17.9	12.7%	\$19.2	7.1%	\$19.8	3.6%	\$19.8	-0.5%	\$20.0	1.2%	\$20.4	2.0%
Hospital Provider Tax	\$125.3	4.3%	\$131.7	5.1%	\$137.3	4.2%	\$143.5	4.5%	\$146.3	2.0%	\$146.0	-0.2%	\$149.6	2.5%
Nursing Home Provide Tax	\$15.6	-2.5%	\$15.7	0.5%	\$15.0	-4.3%	\$14.8	-1.0%	\$14.8	-0.3%	\$14.7	-0.8%	\$14.7	0.0%
Home Health Provider Tax	\$4.4	6.8%	\$4.5	2.6%	\$5.5	21.8%	\$4.7	-14.0%	\$4.8	2.2%	\$5.3	10.3%	\$5.5	2.9%
All other HC revenues	\$0.8	-46.9%	\$1.5	70.8%	\$5.3	263.8%	\$1.8	-65.5%	\$2.6	41.7%	\$1.6	-38.5%	\$1.6	1.1%
TOTAL HEALTHCARE	\$253.6	5.8%	\$265.7	4.8%	\$272.9	2.7%	\$271.7	-0.5%	\$272.3	0.2%	\$270.4	-0.7%	\$273.7	1.2%

 Heathcare Related Taxes - Act 6 of 2019 (BAA) moved selected revenue sources from the State Health Care Resources Fund to the General Fund, effective in FY20. With the exception of the cigarette, tobacco products and vaping tax, which has historically been part of the General Fund forecast, the forecasts for the other Healthcare related taxes are provided by the a healthcare consensus forecasting group, which includes JFO, F&M and AHS staff.

## TABLE 2A - STATE OF VERMONT LEGISLATIVE JOINT FISCAL OFFICE SOURCE TRANSPORTATION FUND REVENUE FORECAST UPDATE Consensus JFO and Administration Forecast - July 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 (Actual)	% Change	FY 2016 (Actual)	% Change	FY 2017 (Actual)	% Change	FY 2018 (Actual)	% Change	FY 2019 (Preliminary)	% Change	FY2020 (Forecast)	% Change	FY2021 (Forecast)	% Change
REVENUE SOURCE														
Gasoline	\$77.6	1.5%	\$78.0	0.5%	\$78.2	0.3%	\$78.2	0.0%	\$77.8	-0.5%	\$78.1	0.4%	\$77.9	-0.3%
Diesel****	\$19.1	11.5%	\$18.3	-4.4%	\$18.2	-0.5%	\$18.9	3.6%	\$18.6	-1.6%	\$18.8	1.3%	\$19.0	1.1%
Purchase and Use*	\$97.3	5.9%	\$100.1	2.9%	\$103.2	3.1%	\$109.4	6.0%	\$111.8	2.2%	\$115.2	3.0%	\$118.3	2.7%
Motor Vehicle Fees	\$80.1	1.4%	\$82.0	2.3%	\$86.2	5.2%	\$86.0	-0.3%	\$85.4	-0.7%	\$86.1	0.8%	\$87.1	1.2%
Other Revenue**	\$19.7	0.8%	\$19.6	-0.5%	\$19.9	1.8%	\$23.0	15.3%	\$24.3	6.0%	\$24.8	1.9%	\$25.1	1.2%
TOTAL TRANS. FUND	\$293.8	3.5%	\$298.0	1.4%	\$305.8	2.6%	\$315.4	3.1%	\$317.9	0.8%	\$323.0	1.6%	\$327.4	1.4%

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

**CURRENT LAW BASIS** FY 2015 FY 2016 % FY 2017 % FY 2018 % FY 2019 % FY2020 % FY2021 % % including all Education Fund Change Change Change Change (Preliminary) Change (Forecast) Change Change allocations and other out-transfers (Actual) (Actual) (Actual) (Actual) (Forecast) REVENUE SOURCE Gasoline \$77.6 1.5% \$78.0 0.5% \$78.2 0.3% \$78.2 0.0% \$77.8 -0.5% \$78.1 0.4% \$77.9 -0.3% Diesel \$19.1 11.5% \$18.3 -4.4% \$18.2 -0.5% \$18.9 3.6% \$18.6 -1.6% \$18.8 1.3% \$19.0 1.1% Purchase and Use<sup>1</sup> \$64.8 5.9% \$66.8 2.9% \$68.8 3.1% \$73.0 6.0% \$74.5 2.2% \$76.8 3.0% \$78.9 2.7% Motor Vehicle Fees \$80.1 \$82.0 2.3% \$86.2 5.2% \$86.0 -0.3% \$85.4 -0.7% \$86.1 0.8% \$87.1 1.2% 1.4% Other Revenue<sup>2</sup> \$19.7 0.8% \$19.6 -0.5% \$19.9 1.8% \$23.0 15.3% \$24.3 6.0% \$24.8 1.9% \$25.1 1.2% TOTAL TRANS. FUND \$261.4 3.2% \$264.6 1.2% \$271.4 2.6% \$279.0 2.8% \$280.7 0.6% \$284.6 1.4% \$288.0 1.2% OTHER (TIB<sup>3</sup>) **TIB** Gasoline \$18.2 -5.2% \$13.0 -28.4% \$12.6 -3.3% \$12.9 2.2% \$14.6 13.1% \$14.6 -0.1% \$15.2 4.5% TIB Diesel and Other<sup>4</sup> \$2.1 11.4% \$1.9 -6.1% \$1.7 -11.3% \$2.0 16.1% \$2.1 3.7% \$2.0 -1.3% \$2.1 1.5% TOTAL OTHER (TIB) \$20.2 -3.8% \$15.0 -26.1% \$14.5 -2.9% \$14.9 2.4% \$16.6 11.9% \$16.6 -0.2% \$17.3 4.2%

1) As of FY04, includes Motor Vehicle Rental tax revenue.

2) 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.

3) Transportation Infrastructure Bond revenues

4) Includes TIB Fund interest income (which has never exceeded \$85,000 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<sup>1</sup> REVENUE FORECAST UPDATE

#### (Partial Education Fund Total - Includes Source General and Transportation Fund Allocations Only) Consensus JFO and Administration Forecast - July 2019

#### CURRENT LAW BASIS

Source General and 1	Transportation
----------------------	----------------

Fund taxes allocated to or associated with the Education Fund only	FY 2015 (Actual)	% Change	FY 2016 (Actual)	% Change	FY 2017 (Actual)	% Change	FY 2018 (Actual)	% Change	FY 2019 (Preliminary)	% Change	FY2020 (Forecast)	% Change	FY2021 (Forecast)	% Change
GENERAL FUND														
Meals and Rooms	\$0.0	NM	\$0.0	NM	\$0.0	NM	\$0.0	NM	\$45.5	NM	\$48.2	5.8%	\$50.0	3.9%
Sales & Use <sup>2</sup>	127.6	3.1%	\$129.8	1.7%	\$131.8	1.6%	\$139.2	5.6%	\$412.5	196.3%	\$436.2	5.7%	\$448.2	2.8%
Interest	0.1	3.6%	\$0.2	135.7%	\$0.4	122.7%	\$0.5	30.3%	\$0.7	38.1%	\$0.7	3.5%	\$0.8	14.3%
Lottery	22.8	0.8%	\$26.4	16.1%	\$25.5	-3.3%	\$27.1	6.4%	\$29.5	8.6%	\$29.4	-0.2%	\$30.2	2.7%
TRANSPORTATION FUND														
Purchase and Use <sup>3</sup>	32.4	5.9%	\$33.4	2.9%	\$34.4	3.1%	\$36.5	6.0%	\$37.3	2.2%	\$38.4	3.0%	\$39.433	2.7%
TOTAL EDUCATION FUND	182.9	3.3%	\$189.7	3.7%	\$192.2	1.3%	\$203.3	5.8%	\$525.4	158.4%	\$552.8	5.2%	\$568.7	2.9%

1) 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.

2) 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.

3) Includes Motor Vehicle Rental revenues, restated

# Appendix A

Five Year Revenue Forecast Tables

July 2019

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

Consensus JFO and Administration Forecast - July 2019

#### SOURCE G-FUND

analytic and comparative purposes only (Actual) Change (Actual) Change (Actual) Change (Actual) Change (Actual) Change (Forecast) Change (Fo	% hange
REVENUE SOURCE   Personal Income \$705.9 5.2% \$747.0 5.8% \$756.5 1.3% \$832.0 10.0% \$875.4 5.2% \$876.9 0.2% \$893.4 1.9% \$913.7 2.3% \$936.3 2.5% \$961.8   Sales & Use! \$364.6 3.1% \$370.7 1.7% \$376.7 1.6% \$397.8 5.6% \$412.5 3.7% \$448.2 2.8% \$460.3 2.7% \$472.0 2.5% \$483.6   Corporate \$121.9 28.5% \$117.0 -4.0% \$95.8 -18.1% \$96.4 0.6% \$134.2 39.3% \$108.4 -19.2% \$95.1 -12.3% \$89.9 -5.5% \$95.3 6.0% \$101.0   Meals and Rooms \$150.8 5.7% \$154.2 2.2% \$165.3 7.3% \$173.2 4.8% \$182.1 5.1% \$200.1 3.9% \$207.8 3.8% \$215.6 3.8% \$223.6	hande
Personal Income \$705.9 5.2% \$747.0 5.8% \$756.5 1.3% \$832.0 10.0% \$875.4 5.2% \$876.9 0.2% \$893.4 1.9% \$913.7 2.3% \$936.3 2.5% \$961.8   Sales & Use' \$364.6 3.1% \$370.7 1.7% \$376.7 1.6% \$397.8 5.6% \$412.5 3.7% \$4436.2 5.7% \$448.2 2.8% \$460.3 2.7% \$472.0 2.5% \$483.6   Corporate \$121.9 28.5% \$117.0 -4.0% \$95.8 -18.1% \$96.4 0.6% \$134.2 39.3% \$108.4 -19.2% \$95.1 -12.3% \$89.9 -5.5% \$95.3 6.0% \$101.0   Meals and Rooms \$150.8 5.7% \$154.2 2.2% \$165.3 7.3% \$173.2 4.8% \$182.1 5.1% \$192.6 5.8% \$200.1 3.9% \$207.8 3.8% \$215.6 3.8% \$223.6	lange
Personal Income \$705.9 5.2% \$747.0 5.8% \$756.5 1.3% \$832.0 10.0% \$875.4 5.2% \$876.9 0.2% \$893.4 1.9% \$913.7 2.3% \$936.3 2.5% \$961.8   Sales & Use <sup>1</sup> \$364.6 3.1% \$370.7 1.7% \$376.7 1.6% \$397.8 5.6% \$412.5 3.7% \$443.2 5.7% \$448.2 2.8% \$460.3 2.7% \$472.0 2.5% \$483.6   Corporate \$121.9 28.5% \$117.0 -4.0% \$95.8 -18.1% \$96.4 0.6% \$134.2 39.3% \$108.4 -19.2% \$95.1 -12.3% \$89.9 -5.5% \$95.3 6.0% \$101.0   Meals and Rooms \$150.8 5.7% \$154.2 2.2% \$165.3 7.3% \$173.2 4.8% \$182.1 5.1% \$192.6 5.8% \$200.1 3.9% \$207.8 3.8% \$215.6 3.8% \$223.6	
Sales & Use <sup>1</sup> \$364.6 3.1% \$370.7 1.7% \$376.7 1.6% \$397.8 5.6% \$412.5 3.7% \$448.2 2.8% \$460.3 2.7% \$472.0 2.5% \$483.6   Corporate \$121.9 28.5% \$117.0 -4.0% \$95.8 -18.1% \$96.4 0.6% \$134.2 39.3% \$108.4 -19.2% \$95.1 -12.3% \$89.9 -5.5% \$95.3 6.0% \$101.0   Meals and Rooms \$150.8 5.7% \$154.2 2.2% \$165.3 7.3% \$173.2 4.8% \$182.1 5.1% \$192.6 5.8% \$200.1 3.9% \$207.8 3.8% \$215.6 3.8% \$223.6	
Corporate   \$121.9   28.5%   \$117.0   -4.0%   \$95.8   -18.1%   \$96.4   0.6%   \$134.2   39.3%   \$108.4   -19.2%   \$95.1   -12.3%   \$89.9   -5.5%   \$95.3   6.0%   \$101.0     Meals and Rooms   \$150.8   5.7%   \$154.2   2.2%   \$165.3   7.3%   \$173.2   4.8%   \$182.1   5.1%   \$192.6   5.8%   \$200.1   3.9%   \$207.8   3.8%   \$215.6   3.8%   \$223.6	2.7%
Meals and Rooms \$150.8 5.7% \$154.2 2.2% \$165.3 7.3% \$173.2 4.8% \$182.1 5.1% \$192.6 5.8% \$200.1 3.9% \$207.8 3.8% \$215.6 3.8% \$223.6	2.4%
	5.9%
	3.7%
Liquor \$18.2 2.9% \$18.3 0.8% \$19.1 4.4% \$19.8 3.6% \$21.4 8.1% \$21.6 0.8% \$22.1 2.3% \$22.6 2.3% \$23.1 2.2% \$23.6	2.2%
Insurance \$55.3 -3.1% \$56.2 1.7% \$57.0 1.3% \$57.5 1.0% \$56.9 -1.2% \$57.2 0.6% \$57.5 0.5% \$57.8 0.5% \$58.2 0.7% \$58.6	0.7%
Telephone \$7.7 -14.9% \$3.2 -59.2% \$5.7 80.6% \$4.7 -16.8% \$4.3 -8.8% \$4.0 -7.6% \$3.7 -7.5% \$3.4 -8.1% \$3.1 -8.8% \$2.8	-9.7%
Beverage \$6.7 4.2% \$6.7 0.6% \$6.9 2.9% \$7.1 2.5% \$7.6 6.9% \$7.6 0.6% \$7.8 2.6% \$8.0 2.6% \$8.2 2.5% \$8.4	2.4%
Electric <sup>2</sup> \$9.4 -28.2% \$0.0 NM \$0.0	NM
Estate \$9.9 -72.2% \$12.5 26.5% \$16.7 33.3% \$22.9 37.6% \$12.6 -44.9% \$20.9 65.5% \$17.3 -17.2% \$15.1 -12.7% \$15.6 3.3% \$16.1	3.2%
Property \$33.6 8.6% \$35.7 6.2% \$38.7 8.4% \$40.9 5.6% \$41.1 0.6% \$45.58 10.9% \$49.16 7.9% \$51.90 5.6% \$53.93 3.9% \$55.85	3.6%
	0.6%
Other Tax \$2.0 4.5% \$1.8 -9.0% \$2.2 18.0% \$1.8 -15.2% \$2.4 32.9% \$1.72 -29.7% \$1.00 -41.9% \$1.03 3.0% \$1.06 2.9% \$1.10	3.8%
Total Tax Revenue \$1496.8 3.6% \$1534.0 2.5% \$1553.7 1.3% \$1667.2 7.3% \$1763.0 5.7% \$1785.2 1.3% \$1807.9 1.3% \$1844.2 2.0% \$1895.1 2.8% \$1949.2	2.9%
Business Licenses \$1.1 0.2% \$1.1 -1.6% \$1.2 16.8% \$1.2 -2.9% \$1.2 -1.0% \$1.19 -0.6% \$1.21 1.2% \$1.23 1.7% \$1.25 1.6% \$1.27	1.6%
Fees \$22.1 7.0% \$23.0 4.2% \$48.5 110.8% \$47.1 -2.9% \$47.0 -0.2% \$46.9 -0.2% \$46.8 -0.2% \$46.8 0.0% \$46.9 0.2% \$47.0	0.2%
Services \$1.5 12.5% \$2.8 86.6% \$3.0 7.9% \$2.9 -4.2% \$3.4 16.4% \$3.4 1.3% \$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 0.6% \$3.6 2.0% \$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% \$5.0 79.1% \$5.2 4.2% \$5.5 5.8% \$5.8 5.5% \$6.0 3.4% \$6.2	3.3%
Lottery \$22.8 0.8% \$26.4 16.1% \$25.5 -3.3% \$27.1 6.4% \$29.5 8.6% \$29.4 -0.2% \$30.2 2.7% \$31.0 2.6% \$31.8 2.6% \$32.6	2.5%
All Other <sup>3</sup>	5.9%
Total Other Revenue \$52.2 3.0% \$58.9 12.9% \$87.1 47.9% \$87.0 -0.1% \$94.11 8.2% \$91.63 -2.6% \$92.39 0.8% \$93.77 1.5% \$95.16 1.5% \$96.56	1.5%
Healthcare Revenue <sup>4</sup> \$256.2 5.4% \$269.2 5.1% \$276.6 2.8% \$275.6 -0.4% \$276.3 0.2% \$274.4 -0.7% \$277.8 1.2% \$280.9 1.1% \$283.9 1.1% \$287.1	1.1%
TOTAL GENERAL FUND \$1805.2 3.8% \$1862.1 3.2% \$1917.4 3.0% \$2029.8 5.9% \$2133.4 5.1% \$2151.3 0.8% \$2178.1 1.2% \$2218.9 1.9% \$2274.2 2.5% \$2332.9	2.6%

1) Includes Telecommunications Tax; includes \$3.76M transfer in FY08 to the T-Fund for prior years Jet Fuel tax processing error.

2) 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 E-Fund.

3) 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.

4) Heathcare Related Taxes - Act 6 of 2019 (BAA) moved selected revenue sources from the State Health Care Resources Fund to the General Fund, effective in FY20. With the exception of the cigarette, tobacco products and vaping tax, which has historically been part of the General Fund forecast, the forecasts for the other Healthcare related taxes are provided by the a healthcare consensus forecasting group, which includes JFO, F&M and AHS staff. See Tables 1B and 1C for details.

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

**Consensus JFO and Administration Forecast - July 2019** 

CURRENT LAW BASIS																				
including all Education Fund	FY 2015	%	FY 2016	%	FY 2017	%	FY 2018	%	FY 2019	%	FY2020	%	FY2021	%	FY2022	%	FY2023	%	FY2024	%
allocations and other out-transfers	(Actual)	Change	(Actual)	Change	(Actual)	Change	(Actual)	Change	(Preliminary)	Change	(Forecast)	Change								
REVENUE SOURCE																				
Personal Income	\$705.9	5.2%	\$747.0	5.8%	\$756.5	1.3%	\$832.0	10.0%	\$875.4	5.2%	\$876.9	0.2%	\$893.4	1.9%	\$913.7	2.3%	\$936.3	2.5%	\$961.8	2.7%
Sales and Use <sup>1</sup>	\$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%	\$134.2	39.3%	\$108.4	-19.2%	\$95.1	-12.3%	\$89.9	-5.5%	\$95.3	6.0%	\$101.0	5.9%
Meals and Rooms	\$150.8	5.7%	\$154.2	2.2%	\$165.3	7.3%	\$173.2	4.8%	\$136.5	-21.2%	\$137.0	0.3%	\$138.1	0.8%	\$143.4	3.8%	\$148.8	3.8%	\$154.3	3.7%
Liquor <sup>6</sup>	\$18.2	2.9%	\$18.3	0.8%	\$19.1	4.4%	\$19.8	3.6%	\$21.4	8.1%	\$4.14	-80.7%	\$4.2	1.4%	\$4.3	2.4%	\$4.4	2.3%	\$4.5	2.3%
Insurance	\$55.3	-3.1%	\$56.2	1.7%	\$57.0	1.3%	\$57.5	1.0%	\$56.9	-1.2%	\$57.2	0.6%	\$57.5	0.5%	\$57.8	0.5%	\$58.2	0.7%	\$58.6	0.7%
Telephone	\$7.7	-14.9%	\$3.2	-59.2%	\$5.7	80.6%	\$4.7	-16.8%	\$4.3	-8.8%	\$4.0	-7.6%	\$3.7	-7.5%	\$3.4	-8.1%	\$3.1	-8.8%	\$2.8	-9.7%
Beverage	\$6.7	4.2%	\$6.7	0.6%	\$6.9	2.9%	\$7.1	2.5%	\$7.6	6.9%	\$7.6	0.6%	\$7.8	2.6%	\$8.0	2.6%	\$8.2	2.5%	\$8.4	2.4%
Electric <sup>2</sup>	\$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 <sup>3</sup>	\$9.9	-72.2%	\$12.5	26.5%	\$16.7	33.3%	\$22.9	37.6%	\$12.6	-44.9%	\$20.9	65.5%	\$17.3	-17.2%	\$15.1	-12.7%	\$15.6	3.3%	\$16.1	3.2%
Property	\$10.9	8.7%	\$11.5	6.0%	\$12.6	9.0%	\$12.4	-1.5%	\$12.5	0.9%	\$13.9	11.6%	\$15.1	8.3%	\$16.0	5.9%	\$16.6	4.1%	\$17.3	3.7%
Bank	\$10.7	-2.0%	\$10.7	-0.6%	\$13.2	24.0%	\$13.1	-1.3%	\$12.5	-4.6%	\$12.5	0.4%	\$12.6	0.4%	\$12.6	0.5%	\$12.7	0.6%	\$12.8	0.6%
Other Tax	\$2.0	4.5%	\$1.8	-9.0%	\$2.2	18.0%	\$1.8	-15.2%	\$2.4	32.9%	\$1.7	-29.7%	\$1.0	-41.9%	\$1.0	3.0%	\$1.1	2.9%	\$1.1	3.8%
Total Tax Revenue	\$1346.4	3.5%	\$1380.1	2.5%	\$1395.7	1.1%	\$1499.5	7.4%	\$1276.4	-14.9%	\$1244.3	-2.5%	\$1245.7	0.1%	\$1265.2	1.6%	\$1300.3	2.8%	\$1338.6	2.9%
Business Licenses	\$1.1	0.2%	\$1.1	-1.6%	\$1.2	16.8%	\$1.2	-2.9%	\$1.2	-1.0%	\$1.2	-0.6%	\$1.2	1.7%	\$1.2	1.7%	\$1.3	1.6%	\$1.3	1.6%
Fees	\$22.1	7.0%	\$23.0	4.2%	\$48.5	110.8%	\$47.1	-2.9%	\$47.0	-0.2%	\$46.9	-0.2%	\$46.8	-0.2%	\$46.8	0.0%	\$46.9	0.2%	\$47.0	0.2%
Services	\$1.5	12.5%	\$2.8	86.6%	\$3.0	7.9%	\$2.9	-4.2%	\$3.4	16.4%	\$3.4	1.3%	\$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	0.6%	\$3.6	2.0%	\$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%	\$4.3	87.8%	\$4.5	4.3%	\$4.7	4.4%	\$4.9	4.3%	\$5.0	2.0%	\$5.1	2.0%
All Other <sup>₄</sup>	\$1.0	-20.4%	\$1.3	25.9%	\$2.9	128.5%	\$2.4	-18.8%	\$4.6	92.7%	\$1.9	-58.3%	\$1.5	-21.1%	\$1.6	6.7%	\$1.7	6.3%	\$1.8	5.9%
Total Other Revenue	\$29.4	4.7%	\$32.3	10.1%	\$61.2	89.3%	\$59.4	-3.0%	\$64.0	7.8%	\$61.5	-3.8%	\$61.4	-0.2%	\$61.9	0.8%	\$62.4	0.8%	\$62.9	0.8%
Healthcare Revenue⁵	\$0.0		\$0.0		\$0.0		\$0.0		\$272.3	NM	\$270.4	-0.7%	\$273.7	1.2%	\$276.7	1.1%	\$279.6	1.1%	\$282.8	1.1%
TOTAL GENERAL FUND	\$1375.8	3.6%	\$1412.4	2.7%	\$1457.0	3.2%	\$1558.9	7.0%	\$1612.7	3.5%	\$1576.2	-2.3%	\$1580.8	0.3%	\$1603.8	1.5%	\$1642.3	2.4%	\$1684.2	2.6%

1) 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.

2) 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.

3) Excludes transfer to the Higher Education Trust Fund of \$2.4M in FY05, \$5.2M in FY06 and \$11.0M in FY11.

4) 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.

5) Heathcare Related Taxes - Act 6 of 2019 (BAA) moved selected revenue sources from the State Health Care Resources Fund to the General Fund, effective in FY20. With the exception of the cigarette, tobacco products and vaping tax, which has historically been part of the General Fund forecast, the forecasts for the other Healthcare related taxes are provided by the a healthcare consensus forecasting group, which includes JFO. F&M and AHS staff. See Tables 1B and 1C for details.

6) Series is discontinuous beginning in FY20 due to fund allocation changes associated with Act 73 of the 2019 Session.

#### TABLE 1B - STATE OF VERMONT LEGISLATIVE JOINT FISCAL OFFICE SOURCE HEALTHCARE REVENUE FORECAST UPDATE Consensus JFO and Administration Forecast - July 2019

#### SOURCE HEALTHCARE<sup>1</sup>

revenues are prior to all allocations																				
and other out-transfers; used for	FY 2015	%	FY 2016	%	FY 2017	%	FY 2018	%	FY 2019	%	FY2020	%	FY2021	%	FY2022	%	FY2023	%	FY2024	%
analytic and comparative purposes only	(Actual)	Change	(Actual)	Change	(Actual)	Change	(Actual)	Change	(Preliminary)	Change	(Forecast)	Change								
REVENUE SOURCE																				
Cigarette, Tobacco, E-Cig	\$76.8	6.7%	\$80.7	5.2%	\$76.7	-5.0%	\$71.1	-7.3%	\$68.4	-3.7%	\$66.9	-2.2%	\$65.6	-2.0%	\$63.9	-2.6%	\$62.2	-2.7%	\$60.4	-2.8%
Claims Assessment	\$17.5	6.8%	\$17.2	-1.5%	\$17.7	2.9%	\$19.8	12.1%	\$19.6	-1.3%	\$20.0	2.2%	\$20.4	2.2%	\$20.9	2.2%	\$21.3	2.2%	\$21.8	2.2%
Employer Assessment	\$15.9	22.2%	\$17.9	12.7%	\$19.2	7.1%	\$19.8	3.6%	\$19.8	-0.5%	\$20.0	1.2%	\$20.4	2.0%	\$20.8	2.0%	\$21.2	2.0%	\$21.6	2.0%
Hospital Provider Tax	\$125.3	4.3%	\$131.7	5.1%	\$137.3	4.2%	\$143.5	4.5%	\$146.3	2.0%	\$146.0	-0.2%	\$149.6	2.5%	\$153.4	2.5%	\$157.2	2.5%	\$161.1	2.5%
Nursing Home Provide Tax	\$15.6	-2.5%	\$15.7	0.5%	\$15.0	-4.3%	\$14.8	-1.0%	\$14.8	-0.3%	\$14.7	-0.8%	\$14.7	0.0%	\$14.7	0.0%	\$14.7	0.0%	\$14.7	0.0%
Home Health Provider Tax	\$4.4	6.8%	\$4.5	2.6%	\$5.5	21.8%	\$4.7	-14.0%	\$4.8	2.2%	\$5.3	10.3%	\$5.5	2.9%	\$5.7	3.7%	\$5.7	0.9%	\$5.8	1.8%
All other HC revenues	\$0.8	-46.9%	\$1.5	70.8%	\$5.3	263.8%	\$1.8	-65.5%	\$2.6	41.7%	\$1.6	-38.5%	\$1.6	1.1%	\$1.6	0.9%	\$1.6	0.0%	\$1.6	0.9%
TOTAL HEALTHCARE	\$256.2	5.4%	\$269.2	5.1%	\$276.6	2.8%	\$275.6	-0.4%	\$276.3	0.2%	\$274.4	-0.7%	\$277.8	1.2%	\$280.9	1.1%	\$283.9	1.1%	\$287.1	1.1%

#### TABLE 1C - STATE OF VERMONT LEGISLATIVE JOINT FISCAL OFFICE AVAILABLE HEALTHCARE REVENUE FORECAST UPDATE Consensus JFO and Administration Forecast - July 2019

CURRENT LAW BASIS including all Education Fund allocations and other out-transfers	FY 2015 (Actual)	% Change	FY 2016 (Actual)	% Change	FY 2017 (Actual)	% Change	FY 2018 (Actual)	% Change	FY 2019 (Preliminary)	% Change	FY2020 (Forecast)	% Change	FY2021 (Forecast)	% Change	FY2022 (Forecast)	% Change	FY2023 (Forecast)	% Change	FY2024 (Forecast)	% Change
REVENUE SOURCE																				
Cigarette, Tobacco, E-Cig	\$77.6	7.9%	\$80.7	4.0%	\$76.7	-5.0%	\$71.1	-7.3%	\$68.4	-3.7%	\$66.9	-2.2%	\$65.6	-2.0%	\$63.9	-2.6%	\$62.2	-2.7%	\$60.4	-2.8%
Claims Assessment	\$14.0	6.9%	\$13.8	-1.5%	\$14.1	2.1%	\$15.9	13.2%	\$15.6	-1.7%	\$16.0	2.2%	\$16.3	2.2%	\$16.7	2.2%	\$17.1	2.2%	\$17.4	2.2%
Employer Assessment	\$15.9	22.2%	\$17.9	12.7%	\$19.2	7.1%	\$19.8	3.6%	\$19.8	-0.5%	\$20.0	1.2%	\$20.4	2.0%	\$20.8	2.0%	\$21.2	2.0%	\$21.6	2.0%
Hospital Provider Tax	\$125.3	4.3%	\$131.7	5.1%	\$137.3	4.2%	\$143.5	4.5%	\$146.3	2.0%	\$146.0	-0.2%	\$149.6	2.5%	\$153.4	2.5%	\$157.2	2.5%	\$161.1	2.5%
Nursing Home Provide Tax	\$15.6	-2.5%	\$15.7	0.5%	\$15.0	-4.3%	\$14.8	-1.0%	\$14.8	-0.3%	\$14.7	-0.8%	\$14.7	0.0%	\$14.7	0.0%	\$14.7	0.0%	\$14.7	0.0%
Home Health Provider Tax	\$4.4	6.8%	\$4.5	2.6%	\$5.5	21.8%	\$4.7	-14.0%	\$4.8	2.2%	\$5.3	10.3%	\$5.5	2.9%	\$5.7	3.7%	\$5.7	0.9%	\$5.8	1.8%
All other HC revenues	\$0.8	-46.9%	\$1.5	70.8%	\$5.3	263.8%	\$1.8	-65.5%	\$2.6	41.7%	\$1.6	-38.5%	\$1.6	1.1%	\$1.6	0.9%	\$1.6	0.0%	\$1.6	0.9%
TOTAL HEALTHCARE	\$253.6	5.8%	\$265.7	4.8%	\$272.9	2.7%	\$271.7	-0.5%	\$272.3	0.2%	\$270.4	-0.7%	\$273.7	1.2%	\$276.7	1.1%	\$279.6	1.1%	\$282.8	1.1%

1) Heathcare Related Taxes - Act 6 of 2019 (BAA) moved selected revenue sources from the State Health Care Resources Fund to the General Fund, effective in FY20. With the exception of the cigarette, tobacco products and vaping tax, which has historically been part of the General Fund forecast, the forecasts for the other Healthcare related taxes are provided by the a healthcare consensus forecasting group, which includes JFO, F&M and AHS staff.

#### **TABLE 2A - STATE OF VERMONT** LEGISLATIVE JOINT FISCAL OFFICE SOURCE TRANSPORTATION FUND REVENUE FORECAST UPDATE Consensus JFO and Administration Forecast - July 2019

#### SOURCE T-FUND

revenues are prior to all E-Fund allocations																				
and other out-transfers; used for	FY 2015	%	FY 2016	%	FY 2017	%	FY 2018	%	FY 2019	%	FY2020	%	FY2021	%	FY2022	%	FY2023	%	FY2024	%
analytic and comparative purposes only	(Actual)	Change	(Actual)	Change	(Actual)	Change	(Actual)	Change	(Preliminary)	Change	(Forecast)	Change								
REVENUE SOURCE																				
Gasoline	\$77.6	1.5%	\$78.0	0.5%	\$78.2	0.3%	\$78.2	0.0%	\$77.8	-0.5%	\$78.1	0.4%	\$77.9	-0.3%	\$77.8	-0.1%	\$77.5	-0.4%	\$77.3	-0.3%
Diesel****	\$19.1	11.5%	\$18.3	-4.4%	\$18.2	-0.5%	\$18.9	3.6%	\$18.6	-1.6%	\$18.8	1.3%	\$19.0	1.1%	\$19.2	1.1%	\$19.4	1.0%	\$19.6	1.0%
Purchase and Use*	\$97.3	5.9%	\$100.1	2.9%	\$103.2	3.1%	\$109.4	6.0%	\$111.8	2.2%	\$115.2	3.0%	\$118.3	2.7%	\$121.5	2.7%	\$124.7	2.6%	\$127.8	2.5%
Motor Vehicle Fees	\$80.1	1.4%	\$82.0	2.3%	\$86.2	5.2%	\$86.0	-0.3%	\$85.4	-0.7%	\$86.1	0.8%	\$87.1	1.2%	\$88.3	1.4%	\$89.4	1.2%	\$90.3	1.0%
Other Revenue**	\$19.7	0.8%	\$19.6	-0.5%	\$19.9	1.8%	\$23.0	15.3%	\$24.3	6.0%	\$24.8	1.9%	\$25.1	1.2%	\$25.4	1.2%	\$25.8	1.6%	\$26.2	1.6%
TOTAL TRANS. FUND	\$293.8	3.5%	\$298.0	1.4%	\$305.8	2.6%	\$315.4	3.1%	\$317.9	0.8%	\$323.0	1.6%	\$327.4	1.4%	\$332.2	1.5%	\$336.8	1.4%	\$341.2	1.3%

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

Consensus JFO and Administration Forecast - July 2019

CURRENT LAW BASIS including all Education Fund allocations and other out-transfers	FY 2015 (Actual)	% Change	FY 2016 (Actual)	% Change	FY 2017 (Actual)	% Change	FY 2018 (Actual)	% Change	FY 2019 (Preliminary)	% Change	FY2020 (Forecast)	% Change	FY2021 (Forecast)	% Change	FY2022 (Forecast)	% Change	FY2023 (Forecast)	% Change	FY2024 (Forecast)	% Change
REVENUE SOURCE																				
Gasoline	\$77.6	1.5%	\$78.0	0.5%	\$78.2	0.3%	\$78.2	0.0%	\$77.8	-0.5%	\$78.1	0.4%	\$77.9	-0.3%	\$77.8	-0.1%	\$77.5	-0.4%	\$77.3	-0.3%
Diesel	\$19.1	11.5%	\$18.3	-4.4%	\$18.2	-0.5%	\$18.9	3.6%	\$18.6	-1.6%	\$18.8	1.3%	\$19.0	1.1%	\$19.2	1.1%	\$19.4	1.0%	\$19.6	1.0%
Purchase and Use <sup>1</sup>	\$64.8	5.9%	\$66.8	2.9%	\$68.8	3.1%	\$73.0	6.0%	\$74.5	2.2%	\$76.8	3.0%	\$78.9	2.7%	\$81.0	2.7%	\$83.1	2.6%	\$85.2	2.5%
Motor Vehicle Fees	\$80.1	1.4%	\$82.0	2.3%	\$86.2	5.2%	\$86.0	-0.3%	\$85.4	-0.7%	\$86.1	0.8%	\$87.1	1.2%	\$88.3	1.4%	\$89.4	1.2%	\$90.3	1.0%
Other Revenue <sup>2</sup>	\$19.7	0.8%	\$19.6	-0.5%	\$19.9	1.8%	\$23.0	15.3%	\$24.3	6.0%	\$24.8	1.9%	\$25.1	1.2%	\$25.4	1.2%	\$25.8	1.6%	\$26.2	1.6%
TOTAL TRANS. FUND	\$261.4	3.2%	\$264.6	1.2%	\$271.4	2.6%	\$279.0	2.8%	\$280.7	0.6%	\$284.6	1.4%	\$288.0	1.2%	\$291.7	1.3%	\$295.2	1.2%	\$298.6	1.1%
OTHER (TIB <sup>3</sup> )																				
TIB Gasoline	\$18.2	-5.2%	\$13.0	-28.4%	\$12.6	-3.3%	\$12.9	2.2%	\$14.6	13.1%	\$14.6	-0.1%	\$15.2	4.5%	\$15.9	4.3%	\$16.6	4.3%	\$17.3	4.2%
TIB Diesel and Other <sup>4</sup>	\$2.1	11.4%	\$1.9	-6.1%	\$1.7	-11.3%	\$2.0	16.1%	\$2.1	3.7%	\$2.0	-1.3%	\$2.1	1.5%	\$2.1	1.0%	\$2.1	1.0%	\$2.1	1.0%
TOTAL OTHER (TIB)	\$20.2	-3.8%	\$15.0	-26.1%	\$14.5	-2.9%	\$14.9	2.4%	\$16.6	11.9%	\$16.6	-0.2%	\$17.3	4.2%	\$18.0	3.9%	\$18.7	4.0%	\$19.4	3.9%

1) As of FY04, includes Motor Vehicle Rental tax revenue.

2) 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.

3) Transportation Infrastructure Bond revenues

4) Includes TIB Fund interest income (which has never exceeded \$85,000 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) Consensus JFO and Administration Forecast - July 2019

#### CURRENT LAW BASIS

Source General and Transportation																				
Fund taxes allocated to or associated	FY 2015	%	FY 2016	%	FY 2017	%	FY 2018	%	FY 2019	%	FY2020	%	FY2021	%	FY2022	%	FY2023	%	FY2024	%
with the Education Fund only	(Actual)	Change	(Actual)	Change	(Actual)	Change	(Actual)	Change	(Preliminary)	Change	(Forecast)	Change								
GENERAL FUND																				
Meals and Rooms	\$0.0	NM	\$0.0	NM	\$0.0	NM	\$0.0	NM	\$45.5	NM	\$48.2	5.8%	\$50.0	3.9%	\$52.0	3.8%	\$53.9	3.8%	\$55.9	3.7%
Sales & Use <sup>2</sup>	127.6	3.1%	\$129.8	1.7%	\$131.8	1.6%	\$139.2	5.6%	\$412.5	196.3%	\$436.2	5.7%	\$448.2	2.8%	\$460.3	2.7%	\$472.0	2.5%	\$483.6	2.4%
Interest	0.1	3.6%	\$0.2	135.7%	\$0.4	122.7%	\$0.5	30.3%	\$0.7	38.1%	\$0.7	3.5%	\$0.8	14.3%	\$0.9	12.5%	\$1.0	11.1%	\$1.1	10.0%
Lottery	22.8	0.8%	\$26.4	16.1%	\$25.5	-3.3%	\$27.1	6.4%	\$29.5	8.6%	\$29.4	-0.2%	\$30.2	2.7%	\$31.0	2.6%	\$31.8	2.6%	\$32.6	2.5%
TRANSPORTATION FUND																				
Purchase and Use <sup>3</sup>	32.4	5.9%	\$33.4	2.9%	\$34.4	3.1%	\$36.5	6.0%	\$37.3	2.2%	\$38.4	3.0%	\$39.433	2.7%	\$40.5	2.7%	\$41.567	2.6%	\$42.6	2.5%
TOTAL EDUCATION FUND	182.9	3.3%	\$189.7	3.7%	\$192.2	1.3%	\$203.3	5.8%	\$525.4	158.4%	\$552.8	5.2%	\$568.7	2.9%	\$584.7	2.8%	\$600.3	2.7%	\$615.8	2.6%

1) 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.

2) 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.

3) Includes Motor Vehicle Rental revenues, restated

## Economic Policy Makes a Difference: U.S. Business Cycles Since 1854

(Recessionary Periods in Grey - As Defined by the National Bureau of Economic Research)

		Great Depression	
12/1/1854 4/1/1857 8/1/1859 12/1/1864 4/1/1866 12/1/1868 4/1/1875 4/1/1875 4/1/1875 8/1/1875 4/1/1885 8/1/1885 8/1/1885 8/1/1885 8/1/1885	4/1/1892 8/1/1894 12/1/1896 4/1/1899 8/1/1903 4/1/1903 8/1/1903 8/1/1913 12/1/1913 8/1/1913 12/1/1913 4/1/1922 8/1/1922 4/1/1922 8/1/1922 8/1/1922	8/1/1929 12/1/1934 8/1/1934 8/1/1938 4/1/1938 4/1/1945 12/1/1945 8/1/1955 12/1/1955 4/1/1955 8/1/1955 8/1/1957 12/1/1956 8/1/1957 12/1/1966 8/1/1957 8/1/1957 12/1/1966	12/1/1973 4/1/1976 8/1/1980 4/1/1985 4/1/1985 8/1/1992 8/1/1992 8/1/1992 8/1/1999 8/1/1999 8/1/1999 12/1/2004 8/1/2008 12/1/2008 12/1/2008 12/1/2013 4/1/2015 4/1/2015 4/1/2015