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STATE OF VERMONT
GENERAL ASSEMBLY
LEGISLATIVE JOINT FISCAL COMMITTEE

Agenda

Monday, July 29, 2019

Room 10, State House

9:30 a.m. A. Call to order and approve minutes of November 8, 2018; and February 13, 2019. **[Approved]**

9:35 a.m. B. Administrations Fiscal Updates

1. Fund Transfers, Reversions, Reserves (unencumbered balances report) [Sec. D.101 of Act 11 (H.16) of SS2018 amended by Sec. 56 of Act 6 (H.532) of 2019 further amended by Sec. C.102 of Act 72 (H.542) of 2019]
2. FY 2019 Preliminary Close-Out [report] [Sec. C.102.1 of Act 72 of 2019]
   a. Merging of General Fund & Health Care Resources Fund [report] [Sec. E.300.1 of Act 72 of 2019]
   b. 5-Year Spending Analysis
   c. FY2019 Transportation Fund Close-out [report] [Sec. 80 of Act 6 of 2019]

   Adam Greshin, Commissioner, and
   Matt Riven, Deputy Commissioner, Dept. of Finance & Management

10:05 a.m.

3. Human Services FY 2019 Preliminary Close-out
   a. Year-end Medicaid [report] [32 V.S.A. Sec. 305a.]; Status of Choice for Care to DDAIL from DVHA
   Sarah Clark, Chief Financial Officer, Agency of Human Services
   Nolan Langweil, Senior Fiscal Analyst, Joint Fiscal Office
   b. Agency in Total [presentation]
   Martha Marksym, Acting Secretary, and
   Sarah Clark, Chief Financial Officer, Agency of Human Services

10:30 a.m. C. Proposed plan for an electronic medical/health records system for the State's Designated Agency's [Sec. C.100(a)(10) of Act 72 (H.542) 2019]
[Approved with the the request that the DA's continue to work with the AHS and JFO to allow continued project review regarding the change in estimates/true costs and the single point of accountability]
[Plan] [Smith Memo] [AHS Memo]
Sarah Squirrell, Commissioner, Department of Mental Health
Jenney Samuelson, Deputy Commissioner, Dept. of Vermont Health Access
Simone Rueschemeyer, Executive Director, and

[next page]

Ken Gingras, Health Information Technology Director, Vermont Care Network/Vermont Care Partners
Dan Smith, Contractor, Joint Fiscal Office

11:15 a.m. D. Fitch Rating for Vermont [report] – *Beth Pearce, Vermont State Treasurer*

11:30 a.m. E. July 2019 Economic Review and Revenue Forecast Update
Tom Kavet, Legislature's Economist

12:00 p.m. F. Cost-Effectiveness of Lake Champlain Cleanup Efforts [PR] [report] [graph]
Doug Hoffer, Vermont State Auditor

12:10 p.m. *Emily Boedecker, Commissioner, Department of Environmental Conservation*

12:20 p.m. G. Correctional Facility Assessment [Sec. 2 of Act 42 (H.543) of 2019] **[tabled until September Meeting]** [BGS and the Joint Justice Oversight Recommendation] [Wasserman Memo]

12:40 p.m. H. Fiscal Officer's Report – *Stephen Klein, Chief Fiscal Officer, Joint Fiscal Office*
1. Education Fund Update – *Chloe Wexler, Fiscal Data Analyst, Joint Fiscal Office*

12:55 p.m. Next meeting and adjourn September 16 and November 1

Note: The Emergency Board met at 2:00 p.m. in the Pavilion Office Building, 5th floor conference room.

Notable Dates:

December 4 – All Legislative Briefing at 10:00 a.m. in the Well of the House

December 16 – 19 – House Appropriations Committee FY 2020 Budget Adjustment meetings.

Statutory References to Agenda Items

B.1. – Sec. D.101 of Act 11 (H.16) of SS2018 amended by Sec. 56 of Act 6 (H.532) of 2019 further amended by Sec. C.102 of Act 72 (H.542) of 2019 *(Unencumbered Balances)*

Sec. D.101 FUND TRANSFERS, REVERSIONS, AND RESERVES

* * *

(2) The following estimated amounts, which may be all or a portion of unencumbered fund balances, shall be transferred from the following funds to the General Fund in fiscal year 2020. The

Commissioner of Finance and Management shall report to the Joint Fiscal Committee at its July meeting the final amounts transferred from each fund and certify that such transfers will not impair the agency, office, or department reliant upon each fund from meeting its statutory requirements.

* * *

B.2. – Sec. C.102.1 of Act 72 of 2019

Sec. C.102.1 CONTINGENT TRANSFERS (a) In fiscal year 2019, of the unreserved and undesignated end of fiscal year General Fund surplus remaining after satisfying the requirements of 32V.S.A. §308, notwithstanding 32 V.S.A. §308c:

(1) First: fifty percent shall be transferred from the General Fund to the Vermont State Employees' Postemployment Benefits Trust Fund established by 3 V.S.A. § 479a;(2) Second: an amount of $9,400,000 shall be transferred to the AHS Federal Receipts Holding Account; and (3) Third: any remaining unreserved and undesignated end of fiscal year General Fund surplus shall be reserved in the General Fund Balance Reserve.

B.2.a. – Sec. E.300.1 of Act 72 (H.542) of 2019

Sec. E.300.1 TRANSITION OF STATE HEALTH CARE RESOURCES FUND REVENUES TO THE GENERAL FUND

(a) The Department of Finance and Management shall report the total statewide revenues received from each of the following revenue sources both historically and prospectively and compare those amounts to the total amount of State fund sources appropriated in Sec. B.301 of this act, as amended by 2019 Acts and Resolves No. 6:

(1) all revenue from cigarette and tobacco products taxes levied pursuant to 32 V.S.A. chapter 205;

(2) all revenue from health care provider assessments pursuant to 33 V.S.A. chapter 19, subchapter 2;

(3) all revenue from the Employers' Health Care Fund contribution pursuant to 32 V.S.A. chapter 245; and

(4) all revenue from health care claims assessments pursuant to 32 V.S.A. § 10402.

(b) The State agency or department to which the revenue is remitted shall maintain the same level of accounting detail for each of the revenue sources listed in subdivisions (a)(1)–(4) of this section as was maintained prior to July 1, 2020.

B.2.c. –Sec. 80 of Act 6 (H.532) of 2019 *(Transportation)*

Sec. 80 SUPPLEMENTAL MAINTENANCE SPENDING

(a) Notwithstanding 32 V.S.A. § 706 and the limits on program, project, or activity spending authority approved in the fiscal year 2019 Transportation Program, the Secretary of Transportation, with the approval of the Secretary of Administration and subject to the provisions of subsection (b) of this section, may transfer up to $2,500,000 in Transportation Fund appropriations, other than appropriations for the Town Highway State Aid, Structures, and Class 2 roadway programs, to the Transportation – Maintenance State System (8100002000) appropriation, for the specific purpose of addressing the overall cost of highway maintenance during fiscal year 2019.

* * *

(c) In July 2019, the Secretary of Administration shall report all appropriations reductions made under the authority of this section to the Joint Fiscal Office, the Joint Fiscal Committee, and the Joint Transportation Oversight Committee.

B.3.a. – 32 V.S.A. Sec. 305a. *(Year-end Medicaid)*

§ 305a. Official State revenue estimate

(a) On or about January 15 and again by July 31 of each year, and at such other times as the Emergency Board or the Governor deems proper, the Joint Fiscal Office and the Secretary of Administration shall provide to the Emergency Board their respective estimates of State revenues in the General, Transportation, Transportation Infrastructure Bond, Education, and State Health Care Resources Funds. The January revenue estimate shall be for the current and next two succeeding fiscal years, and the July revenue estimate shall be for the current and immediately succeeding fiscal years. Federal fund estimates shall be provided at the same times for the current fiscal year. Global Commitment Fund estimates shall be provided in January for the current and immediately succeeding fiscal year and in July for the current fiscal year.

* * *

(c)(1)(A) The January estimates shall include estimated caseloads and estimated per-member per-month expenditures for the current and next succeeding fiscal years for each Medicaid enrollment group as defined by the Agency and the Joint Fiscal Office for State Health Care Assistance Programs or premium assistance programs supported by the State Health Care Resources and Global Commitment Funds, and for the programs under any Medicaid Section 1115 waiver.

* * *

(2) In July, the Administration and the Joint Fiscal Office shall make a report to the Emergency Board on the most recently ended fiscal year for all Medicaid and Medicaid-related programs, including caseload and expenditure information for each Medicaid eligibility group. Based on this report, the Emergency Board may adopt revised estimates for the current fiscal year and estimates for the next succeeding fiscal year. The provisions of 2 V.S.A. § 20(d) (expiration of required reports) shall not apply to the report to be made under this subsection.

C. – Sec. C.100(a)(10) of Act 72 (H.542) of 2019 *(Electronic Health Records Plan)*

Sec. C.100 FISCAL YEAR 2019 ONE-TIME APPROPRIATIONS

(a) In fiscal year 2019, funds are appropriated from the General Fund as follows:

* * *

(10) To the Agency of Human Services: $1,500,000 to fund grants for the development of an electronic medical/health records system for the State's Designated Agency system.

(A) Vermont Care Partners and the Agency of Human Services shall present a plan for review and approval by the **Joint Fiscal Committee at its July 2019 meeting**. The plan shall summarize the development and implementation of the system and demonstrate that this project will support the goals set forth in the statewide Health Information Technology (HIT) Plan (defined in 18 V.S.A. § 9351) and meet, at a minimum, the connectivity requirements set forth in the statewide HIT plan and the requirements of the Centers for Medicaid Services (CMS). The plan shall support current payment reform initiatives and include the projected project timeline and total budget including the allocation of this appropriation. No funds shall be released prior to review and approval by the Joint Fiscal Committee.

G. – Sec. 2 of Act 42 (H.543) of 2019 *(Correctional Assessment)*

Sec. 2. STATE BUILDINGS

* * *

(d) For the amount appropriated in subdivision (b)(4) of this section, the Commissioner of Buildings and General Services is authorized to use up to $200,000.00 to assess relative costs and resource requirements for potential construction of a correctional facility that ranges in scale in order to accommodate the results of the Council of State Governments' study described in Sec. 28 of this act; provided, however, that the funds shall only become available after approval by the Joint Fiscal Committee and the Joint Legislative Justice Oversight Committee. On or before March 15, 2020, the Commissioner shall submit a copy of the assessment to the House Committee on Corrections and Institutions and the Senate Committee on Institutions.

Appropriation – FY 2020	$20,323,423.00
Appropriation – FY 2021	$21,325,813.00
Total Appropriation – Section 2	$41,649,236.00

H. – Sec. 88 of Act 6 (H.532) of 2019 *(UVM Study)*

Sec. 88. FISCAL YEAR 2019 ONE-TIME APPROPRIATIONS AND TRANSFERS FROM THE GENERAL FUND

(a) The following appropriations are made from the General Fund in fiscal year 2019:

* * *

(6) To the Joint Fiscal Office: $275,000 to be allocated as follows for studies that will be comprehensively defined in the fiscal year 2020 budget process:

(A) $250,000 to be reserved to fund contracted services for research and findings to identify and examine the factors contributing to Vermont's high rate of children entering the custody of the State. Such research shall study the preventive and upstream services and interventions provided to families and the extent to which these supports to families have demonstrated effectiveness in allowing children to remain with their families. Policy recommendations resulting from this research are intended to inform funding decisions regarding these services to ensure the safety of Vermont's vulnerable children and to enhance the long-term stability and well-being of these families.

(B) $25,000 to be reserved to fund contracted services for research and findings related to the detention population of the Department of Corrections (DOC) and policy recommendations to reduce this population and/or reduce the need for DOC in-state bed capacity for this population. The report shall be submitted to the General Assembly on or before December 15, 2019.

Reports

§ 20. Particular proceedings and activities; personnel

Citation: 30 V.S.A. § 20. PARTICULAR PROCEEDINGS AND ACTIVITIES; PERSONNEL [Report Link]

(a)(1) The Board or the Department of Public Service may authorize or retain legal counsel, official stenographers, expert witnesses, advisors, temporary employees, and other research, scientific, or engineering services:

* * *

(2) The agency of natural resources may authorize or retain legal counsel, official stenographers, expert witnesses, advisors, temporary employees, and other research, scientific or engineering services to:

* * *

(C) assist the Board or the Department of Public Service in any proceedings described in subdivisions (b)(9) (Federal Energy Regulatory Commission) and (11) (Nuclear Regulatory Commission) of this section. Allocation of agency of natural resources costs under this subdivision (C) shall be in the same manner as provided under subdivisions (b)(9) and (11) of this section. **The agency of natural resources shall report annually to the joint fiscal committee all costs incurred and expenditures charged under the authority of this subsection with respect to proceedings under subdivision (b)(9) of this section and the purpose for which such costs were incurred and expenditures made.**

* * *

(b) Proceedings, including appeals therefrom, for which additional personnel may be retained are:

* * *

(9) Proceedings at the Federal Energy Regulatory Commission which involve Vermont utilities or which may affect the interests of the State of Vermont. Costs under this subdivision shall be charged to the involved electric or natural gas companies pursuant to subsection 21(a) of this title. In cases where the proceeding is generic in nature the costs shall be allocated to electric or natural gas companies in proportion to the benefits sought for the customers of such companies from such advocacy. **The Public Service Board and the Department of Public Service shall report quarterly to the Joint Fiscal Committee all costs incurred and expenditures charged under the authority of this subsection, and the purpose for which such costs were incurred, and expenditures made.**

* * *

Acceptance of grants and procedures [Small Grants]

Citation: 32 V.S.A. Sec. 5 as amended by Sec. E.127.2 of Act 72 (H.542) of 2019 [Report Link]

* * *

(ii) The Joint Fiscal Office shall report all items received under this subdivision to the Joint Fiscal Committee quarterly. The provisions of 2 V.S.A. § 20(d) (expiration of required reports) shall not apply to the report to be made under this subdivision.

* * *

§ 511. Excess receipts

Citation: 32 V.S.A. § 511. Excess Receipts [Report Link]

If any receipts including federal receipts exceed the appropriated amounts, the receipts may be allocated and expended on the approval of the Commissioner of Finance and Management. If, however, the expenditure of those receipts will establish or increase the scope of the program, which establishment or increase will at any time commit the State to the expenditure of State funds, they may only be expended upon the approval of the General Assembly. Excess federal receipts, whenever possible, shall be utilized to reduce the expenditure of State funds. **The Commissioner of Finance and Management shall report to the Joint Fiscal Committee quarterly with a cumulative list and explanation of the allocation and expenditure of such excess receipts.** The provisions of 2 V.S.A. § 20(d) (expiration of required reports) shall not apply to the report to be made under this section.

CORRECTIONS APPROPRIATIONS; TRANSFER; REPORT

Citation: Sec. E.335 of Act 11 of SS2018 [Report Link]

(a) In fiscal year 2019, the Secretary of Administration may, upon recommendation of the Secretary of Human Services, transfer unexpended funds between the respective appropriations for correctional services and for correctional services out-of-state beds. At least three days prior to any such transfer being made, the Secretary of Administration shall report the intended transfer to the Joint Fiscal Office and shall report any completed transfers to the Joint Fiscal Committee at its next scheduled meeting.

Interim Reports

[distributed after November 2018 meeting]

Vermont Enhanced 9-1-1 Board (Addendum May 2019). Redundancy and Resiliency in Vermont's 9-1-1 System (Report Sept. 2018) – Addendum to 2018 report.

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SEN. ANN CUMMINGS, CHAIR
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REP. PETER J. FAGAN, CLERK
REP. JANET ANCEL
SEN. TIM ASHE

REP. MARY S. HOOPER
SEN. JANE KITCHEL
REP. WILLIAM J. LIPPERT, JR.
SEN. DICK SEARS, JR.
SEN. RICHARD WESTMAN

GENERAL ASSEMBLY
STATE OF VERMONT
LEGISLATIVE JOINT FISCAL COMMITTEE

Monday, July 29, 2019

Minutes

Room 5, State House

Members present: Representatives Ancel, Fagan, Hooper, Lippert, and Toll and Senators Ashe, Cummings, and Kitchel.

Other Attendees: Representative David Yacovone, Administration, Joint Fiscal Office staff, various lobbyists, and advocacy groups.

Senator Cummings, Chair, called the meeting to order 9:36 a.m. Representative Fagan moved to approve the minutes of November 8, 2018, and February 13, 2019, and Representative Hooper seconded the motion. The Committee approved the motion.

B. Administrations Fiscal Updates – 1. Fund Transfers, Reversions, Reserves and FY 2019 Preliminary Close-Out

Commissioner Greshin, Commissioner, and Matt Riven, Deputy Commissioner, Department of Finance and Management, referred to a memorandum that summarized the fund transfers, reversions and reserves (unencumbered balances) for FY 2019, and a document summarizing the preliminary distributions of reserve balances for FY 2019 closeout. The total preliminary surplus balance for FY 2019 was estimated at $51.27 million. Act 72 of 2019 instructed that 50% of surplus amounts (approximately $26 million) be transferred to pay down the Medical Benefits for retired State Employees known as Other Post-Employment Benefits (OPEB). Another $9.4 million will transfer to the Agency of Human Services Federal Receipt Account known as the "Bluebook" for FY 2020 and the remainder $16.24 million would transfer to the Rainy-Day Fund to bring reserves to a total of $31.55 million. Commissioner Greshin agreed with Senator Ashe that the additional infusion of funds toward the retirement obligation that the Legislature intended was positive in moving from a pay-as-you-go status with the State's retirement obligations to a pre-funding status.

Representative Toll queried whether the $9.4 million transfer to the AHS Federal Holding Account was reflected in the General Fund (GF) reserves balances for the end of FY 2019, and the total amount in the fund. Commissioner Greshin stated the $9.4 million was not reflected within the reserve totals. Sarah Clark, Chief Financial Officer, Agency of Human Services, responded that there was an approximately $25 million in the Non-Budgeted Revenue (NBR) at the FY 2018 closeout. The FY 2019 estimated transfer amount of $9.4 million would be transferred to the NBR and then in FY 2020 would transfer as a direct application to Clean Water as directed by Act 72 of 2019.

Commissioner Greshin stated that the preliminary total for all reserves was $224.24 million or 14.2% of the total GF portion of the State budget in FY 2019. The Commissioner responded to Representative Toll that the Administration did not have a specific target percentage they wished to achieve. Senator Cummings queried whether Vermont had enough reserves for an economic downturn that would cover the State's current spending plus the additional caseload that typically appears during these difficult fiscal times. Mr. Riven responded that it depended on what threshold amount. Vermont had a high reliance on federal funding for Medicaid which put it at an increased risk with fluctuations in those types of funds. The Commissioner added that Vermont also had a more unpredictable revenue stream than most states. Representative Lippert inquired what the estimated surplus was when the current budget passed. Commissioner Greshin responded that the last estimate before the current Consensus Revenue Forecast announcement was within the $40-50 million range.

<u>2. FY 2019 Preliminary Close-Out – a. Merging of General Fund & Health Care Resources Fund</u>

Mr. Riven distributed a document and explained that Act 64 of 2019 instructed the merging of the Health Care Resources Funds (HCRF) with the General Fund (GF). Since the HCRF dollars were deposited into a special fund, rating agencies did not recognize the fund balance as a source of income for the GF, which made the States' GF seem artificially low and decreased the States' financial sustainability picture. With the merged funds, the revenue from the HCRF would be incorporated into the States' revenue forecasts in the future, but AHS would continue to do the actual forecasting of funds as in the past. The additional revenue would raise the GF balance by $275 million a year. The Chair clarified that the revenue from the new e-cigarette tax policy implemented on July 1 of the current year was not included in the chart distributed earlier, and Mr. Riven agreed.

<u>b. 5-Year Spending Analysis</u>

Commissioner Greshin explained that the Administration has attempted a longer-term budgeting and revenue expenditures exercise over the summer (5-Year Spending Analysis) that incorporates two broad goals. The first goal was to adopt a new vision of reviewing the State's budget and revenue over the course of a 5-year period rather than the one fiscal year at-a-time strategy. This would allow for a budget and revenue plan to be in place for two Gubernatorial and Legislative terms and enable longer-term projections for budget and revenue differences as shown in the Joint Fiscal Offices' alligator mouth diagram. The State Departments included in the Spending Analysis were offices that reported to Cabinet Agencies and Departments, and exclusions included the Education Fund, Judiciary and Legislature's budgets, and the state-wide elected offices such as, the Auditor. Even with the exclusions, the analysis included over 90% of State budgeted items.

The Commissioner stated that the assumptions from the Spending Analysis included growth in GF and the Internal Service Fund (ISF) department receipts by 2%. Federal and special funds, along with areas such as salaries and fringe benefits were analyzed using broad assumptions through historical and known data fluctuations. Due to the complexity of these budget areas, they were analyzed by each department and included in current changes such as, the phase out of the Children's Health Insurance Program (CHIP) grant.

Commissioner Greshin stated that the Administration hoped to have cabinet and commissioner recommendations by the end of the summer. The intent of the exercise was to compile small but significant changes to the State budget that could add up to a larger impact in totality on how, who and why services are delivered to State government. Senator Ashe stated that he welcomed better ways to deliver services, but voiced concern of agencies workload being bogged down, and cautioned the Commissioner to keep an eye toward positive changes in programs that were realistic and supported by its staff. Representative Lippert asked what the timeframe and budget reduction percentage that departments were asked to achieve. The Commissioner responded that departments were asked to review their programs budgets and close, at a minimum, 20% of their individual budget gap over the next 5 years.

Senator Kitchel stated that budget exercises are positive because they challenge what exists and asks for the State government's role and top priorities. The Senator asked if the exercise included the two decision points of whether we do a program better or do we reassess if the program was a priority. Commissioner Greshin added that those questions were central to the decisions of the departments in this exercise, including the decision of what programs were the most important to State government. He added that the vast majority of the $6 billion spent in State and federal funds were on program costs ($4 billion).

Representative Toll informed the Committee that there was similar language for a 5-10-year spending analysis for the Agency of Human Services included in Act 72 of 2019. Senator Kitchel added that the AHS budget language required a larger analysis that included trends. Representative Hooper suggested the Administration include service delivery workers in its 5-year internal budget exercise at some point in its process.

<u>c. – FY 2019 Transportation Fund Close-out</u>

Commissioner Greshin summarized the report and the Committee had not questions.

<u>3. – Human Services FY 2019 Preliminary Close-out – a. Year End Medicaid</u>

Sarah Clark, Chief Financial Officer, Agency of Human Services, and Nolan Langweil, Senior Fiscal Analyst, Joint Fiscal Office, provided a handout and summarized that the report reflected the latest actuals and that there were no actions required by the Legislature until January 2020. Mr. Langweil highlighted that Medicaid expenditures totaled $1.82 billion, about 1% below what was budgeted for FY 2019. Overall spending grew by 4% over FY 2018. The data also showed that Medicaid caseload had stabilized in FY 2019. Total Medicaid enrollment showed modest declines with the largest decreases in childless new adult at 6.7% and state cost share reductions (CSRs) at 20%

Mr. Langweil suggested that the Administration will likely seek authority to begin the initial work for the next version of the Global Commitment Waiver in the next legislative session. He also said there is an anticipated negative fiscal impact on the State's budget for the Children's Health Insurance Program (CHIP) of $6 million in FY 2021 and $12.3 million in

FY 2022 (fully annualized). The Federal Medicaid Assistance Model (FMAP) for New Adults is estimated to have a $4 million negative impact. In answering Senator Kitchel's question, Mr. Langweil clarified that the $4 million would be included in the FY 2021 budget impacts. Senator Kitchel expressed concern that Agencies were working to reduce costs over 5 years through the Administration's internal budget exercise and adjust to a federal loss of $10 million simultaneously.

Senator Ashe asked for the reasons for reduction in the employer assessment amounts. Mr. Langweil speculated that employers appear to be paying the assessment on fewer full-time equivalents (FTEs), possibly because more employers were sponsoring health insurance coverage for its workers. He added that it was difficult to fully measure but the data showed a reduction in the number of FTE's for which employers were assessed. Representative Lippert requested that the FTE data be provided to the Committee, and Mr. Langweil agreed to send a spreadsheet of the historical information.

b. Agency in Total

Martha Maksym the acting Secretary of Agency of Human Services (AHS), and Sarah Clark, presented the AHS' FY 2019 closeout. Ms. Clark explained the Agency closed near their budget but relied on $2.4 million from the federal receipt account to balance overall AHS State fund position. This was mostly driven in two programs, a deficit in the Family Services Division within the Department for Children and Families (DCF) due to increased caseload for children in custody substitute care and staffing levels; and ver spending in the General Assistance program due to increased demand in emergency housing. The deficits were partially offset by underspending in the Child Development Division. These two areas will likely require additional discussion in the budget adjustment and FY 2021 budget.

Ms. Clark explained that the Choices of Care transfer status from the Department of Vermont Health Access to the Department of Disabilities, Aging, and Independent Living was accomplished on July 1, 2019, which would be reflected in FY20 BAA and FY21 Budget proposals. Representative Hooper suggested that there should be a broader view of issues within AHS that also affect the court system, State's Attorney's and other local interventions. Senator Kitchel informed the Committee that the first report of the State's child welfare system was due in January 2020.

C. Proposed plan for an electronic medical/health records system for the State's Designated Agency's

Sarah Squirrell, Commissioner, Department of Mental Health; Jenney Samuelson, Deputy Commissioner, Dept. of Vermont Health Access; Simone Rueschemeyer, Executive Director, and Ken Gingras, Health Information Technology Director, Vermont Care Network/Vermont Care Partners; summarized the proposed plan.

Senator Kitchel expressed concern for the terminology "meaningful use" after issue with the Vermont Information Technology Leaders (VITL) issues around cost effectiveness and quality of data with the Health Information Exchange. The Senator inquired that since the project for the DA's medical/health records system was funded mostly by State funds, and viewed as a State IT project, how should the concerns raised by Dan Smith be addressed. Commissioner

Squirrell responded that AHS had similar anxieties for good outcomes of public funding for the project, and was striving for a cost effective, and efficient product with a shared partnership, accountability and responsibility.

Senator Kitchel asked for clarification on how electronic medical records would be available to the two types of agencies of DAs and DSs and if medical records would be bifurcated for agencies with both health and mental health services. Ms. Rueschemeyer responded that there was funding for nine of the comprehensive agencies that would have one system. The five single-service agencies for developmental services only, implemented a different system previously under a different vendor. Representative Toll asked if the two systems could interact or communicate with one another. Ms. Rueschemeyer responded that the two systems should be able to talk to each other and allow for the aggregating of data.

Dan Smith, Contractor, Joint Fiscal Office, referred to his memo submitted to the Committee on concerns of the system plan and explained that currently there was no other Independent Review of the plan or third-party oversight other than the Committee, which has been an ongoing issue with State IT projects. There was additional concern that no one person was responsible for the oversight of the project along with the constant change in the financial costs. Smith advised that the Committee should receive more clarity with the costs of the project and a single project manager.

Representative Toll moved to approve the plan as presented for the development of an electronic medical/health records system for the State's Designated Agency (DA) System as required in Sec. C.100(a)(10) of Act 72 (H.542) of 2019, and request that the DA's continue to work with AHS and JFO to allow continued project review regarding the change in estimates/true costs and the single point of accountability. Senator Kitchel seconded the motion and the Committee approved it.

D. Fitch Rating for Vermont

Beth Pearce, State Treasurer, reviewed the downgrade in Fitch Ratings to Vermont, and explained that it was directly related to the issue of debt and Vermont's demographics. Senator Ashe commented that a one-size-fits-all approach to state credit ratings puts Vermont at a disadvantage. He used the fact that, unlike many states the credit agencies applaud, Vermont is investing to clean up our waters and has done much to meet the needs of the poor, children, and the elderly. He also said that the rating agencies are creating a paradox - they say we need more housing to boost the economy and were downgraded partially for lack of more housing activity, but they won't permit bonding which would be the best tool to create substantial new housing units and increase economic activity. Senator Ashe asked the Treasurer if she and the state's team could work with the rating agencies to better understand Vermont's unique situation. The Treasurer said the Legislature sets the policy. Senator Ashe asked the Treasurer for her recommendation as to what the Legislature should do then, if anything. Treasurer Pearce said there was exploration in other states for a pay-as-you-go system for capital projects. Several committee members commented on how that is not feasible for anything but extremely incremental investments at this time in Vermont.

E. July 2019 Revenue Forecast

Tom Kavet, the Legislature's Economist, summarized that the economy continued to be positive in terms of Vermont's revenue with an overage in personal income in April. There were three volatile revenue sources, Corporate, Estate Tax, and personal income and they bear watching. Even though personal income came in high, the Estate Tax came in well below estimates at about 34%. These areas are more volatile because there is a narrower base of payers—higher income—that were paying a higher percentage.

Senator Kitchel asked what non-volatile revenue sources Vermont collected. Kavet responded that meals and rooms tax was a very steady revenue source, but Vermont's tax base was very progressive. Senator Kitchel inquired if other states have found more steady revenue sources. Kavet commented that not all states had income taxes, but property tax was another more stable source of revenue.

Kavet explained that Vermont had the lowest employment rate in May and June with the highest unemployment rate at 4% in Orleans County which typically had the highest rate. Senator Cummings asked if Vermont was experiencing wage growth. Kavet responded that Vermont was not only experiencing wage growth but real wage growth.

F. – Cost-Effectiveness of Lake Champlain Cleanup Effort

Doug Hoffer, State Auditor, distributed a chart as a companion to the report and summarized its concerns. In responding to Senator Ashe, the Auditor suggested that the Legislature request that the Agency include reporting of the Clean water funding in its annual report.

The Auditor raised an additional area of concern regarding a performance audit of the St. Albans Tax Incremental Finance (TIF) district and potential changes to the TIF rule; and recommended a memo be sent by the Committee to the Vermont Economic Progress Council (VEPC). Senator Ashe suggested the Chair send a memo on behalf of the Committee to VEPC requesting that VEPC delay further action on rule changes and guidance to municipalities on TIF until the Legislature had time to consider them fully, which was agreed upon by the Committee.

Emily Boedecker, Commissioner, Department of Environmental Conservation, responded to the Auditor's report on Clean Water.

G. Correctional Facility Assessment

Representative Hooper gave a summary of the correctional facility assessment study and the Joint Justice Oversight Committee (JJOC) discussions. A Committee discussion ensured on the shortage of correctional beds, structural issues of facilities, and siting costs for designing a new facility.

The Chair suggested the Committee table the discussion and action on the Correctional Facility Assessment issue until its next meeting. Representative Fagan moved to release the funds for the assessment of a correctional facility, and then withdrew his motion after further discussion. Senator Kitchel moved to defer action on the issue until the Committees next meeting in September in order to get further clarity. Representative Ancel seconded the motion. The committee approved it.

H. Fiscal Officers Report

Stephen Klein, Chief Fiscal Officer, reviewed his report to the Committee for July 2019.

The Committee adjourned at 1:25 p.m.

Respectfully Submitted,

Theresa Utton-Jerman
Legislative Joint Fiscal Office

B.1.

VERMONT

State of Vermont
Agency of Administration
Department of Finance & Management
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Montpelier, VT 05609-0201
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Adam Greshin, Commissioner

July 25, 2019

Senator Ann Cummings, Chair
Joint Fiscal Committee
1 Baldwin Street
Montpelier, VT 05602

Dear Senator Cummings:

Below are the final figures for Fiscal Year 2019 receipts available to the General Fund from the funds respectively listed below, pursuant to 2018 Acts and Resolves (Special Session) No. 11, Sec. D.101, as amended by 2019 Acts and Resolves No. 6, Sec. 56, as further amended by 2019 Acts and Resolves No. 72, Sec. C.102. I certify that the transfers listed below will not impair the agency, office or department reliant upon the respective fund from meeting its statutory requirement.

Fund Name		Amount
AG-Fees & Reimmbursements-Court Order	$	4,493,648.44
Secretary of State Services Fund	$	2,607,923.00
Unclaimed Property Fund	$	5,807,789.16
Total	**$**	**12,909,360.60**

Sincerely,

Adam Greshin
Commissioner of Finance and Management

FY 2019 General Fund - Final - Distributions pursuant to Act 72, Sec. C.102.1 -- and reserve balances

Department of Finance and Management - for Joint Fiscal Committee meeting 7/29/19

amounts in $ millions

Prior to Sec. C.102.1 EOY Unllaocated distribution		
Total In-flows less Out-flows:	**51.27**	
Remaining Unallocated Surplus Subject to Section C.102.1		
Transfer to VSERS OPEB	25.64	50% to VSERS OPEB;
Transfer to the AHS Federal Holding Account	9.40	Of remaining 50%, first $9.4M to AHS reserve,
Additional Rainy Day Fund contribution	16.24	Balance to the Rainy Day Fund.
Unallocated Operating Surplus (Deficit)	**0.00**	

General Fund Reserves - balances at end of FY 2019		
Budget Stabilization Reserve	78.18	5% reserve requirement met.
Human Services Caseload Reserve	100.09	Reflects transfer of $78M Global Commitment unspent balance.
27/53 reserve	14.42	Includes FY19 pre-payment of FY20 obligation for 27th PP.
Balance Reserve (Rainy Day Fund)	31.55	Reflects transfer above and DFR-related transfer.
Total GF Reserve Balances	**224.24**	
GF Reserves as percent of FY19 appropriations	**14.2%**	Includes base appropriations plus Pay Act and BAA

B.2.a.

Healthcare Revenues in the GF

Source	SHCRF actual FY17	SHCRF actual FY18	GF actual FY19	GF forecast FY20	GF forecast FY21
Cig/Tob/Ecig	76.69	71.07	68.43	66.91	65.58
Claims Assessment	17.69	19.83	19.56	19.99	20.43
Employer Assessment	19.16	19.84	19.75	19.98	20.38
Hospital Provider Tax	137.30	143.50	146.34	145.99	149.64
Nursing Home Provide Tax	15.00	14.85	14.80	14.67	14.67
Home Health Provider Tax	5.47	4.70	4.80	5.30	5.45
All other HC revenues	5.28	1.82	2.58	1.59	1.61
HC Revenue Subtotal [1]	276.58	275.61	276.27	274.44	277.76
Available					
Cig/Tob/Ecig	76.69	71.07	68.43	66.91	65.58
Claims Assessment	14.06	15.91	15.64	15.99	16.34
Employer Assessment	19.16	19.84	19.75	19.98	20.38
Hospital Provider Tax	137.30	143.50	146.34	145.99	149.64
Nursing Home Provide Tax	15.00	14.85	14.80	14.67	14.67
Home Health Provider Tax	5.47	4.70	4.80	5.30	5.45
All other HC revenues	5.28	1.82	2.58	1.59	1.61
HC Revenue Subtotal [1]	272.95	271.70	272.35	270.43	273.67

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

B.2.C.

VERMONT

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Agency of Transportation

TO: Members, Joint Fiscal and Joint Transportation Oversight Committees

FROM: Joe Flynn, Secretary of Transportation E-SIGNED by Joe Flynn on 2019-07-10 16:43:53 GMT

Susanne R. Young, Secretary of Administration 7/11/19

DATE: July 10, 2019

SUBJECT: Report of transfer of appropriations pursuant to Section 80(c) of Act No. 6 of 2019

The following authority is established by Sec. 80 of Act No. 6 of 2019 which states:

Sec. 80. SUPPLEMENTAL MAINTENANCE SPENDING

(a) Notwithstanding 32 V.S.A. § 706 and the limits on program, project, or activity spending authority approved in the fiscal year 2019 Transportation Program, the Secretary of Transportation, with the approval of the Secretary of Administration and subject to the provisions of subsection (b) of this section, may transfer up to $2,500,000 in Transportation Fund appropriations, other than appropriations for the Town Highway State Aid, Structures, and Class 2 roadway programs, to the Transportation – Maintenance State System (8100002000) appropriation, for the specific purpose of addressing the overall cost of highway maintenance during fiscal year 2019.

(b)(1) If a contemplated transfer of an appropriation would not significantly delay the planned work schedule of a project, the Secretary may execute the transfer and shall give prompt notice thereof to the Joint Fiscal Office and to the House and Senate Committees on Transportation when the General Assembly is in session and, when the General Assembly is not in session, to the Joint Fiscal Office and the Joint Transportation Oversight Committee.

(2) If a contemplated transfer of an appropriation would, by itself, significantly delay the planned work schedule of a project, the Secretary:

(A) when the General Assembly is in session, may execute the transfer, but shall give the House and Senate Committees on Transportation advance notice of at least 10 business days prior to executing the transfer; or

(B) when the General Assembly is not in session, may execute the transfer, but shall give prompt notice of the transfer to the Joint Fiscal Office and the Joint Transportation Oversight Committee.

(c) In July 2019, the Secretary of Administration shall report all appropriations reductions made under the authority of this section to the Joint Fiscal Office, the Joint Fiscal Committee, and the Joint Transportation Oversight Committee.

The following reductions of FY2019 Transportation Fund appropriations occurred and were transferred to the Maintenance (8100002000) appropriation under the authority of Sec. 80 of Act No. 6 of 2019.

1. $600,000.00 from Finance and Administration (8100000100).
2. $200,000.00 from Department of Motor Vehicles (8100002100).
3. $1,700,000.00 from Rail (8100002300).

The transfers did not delay the planned work schedule of projects.

Please feel free to contact me or the Agency's Chief Financial Officer Lenny LeBlanc (828-2704) if you have questions.

Thank you.

cc: Neil Schickner, Joint Fiscal Office

VTrans

July 29, 2019
Emergency Board Meeting
Report on Medicaid for Fiscal Year 2019

32 V.S.A. § 305a(c) requires a year-end report on Medicaid and Medicaid-related expenditures and caseload. Each January the Emergency Board is required to adopt specific caseload and expenditure estimates for Medicaid and Medicaid-related programs. Action is not required at the July meeting of the Emergency Board unless the Board determines a new forecast is needed as a result of the year-end report. The data in this report reflects the most current actual FY19 information to date. The comparison of actual to the budgeted amount for FY19 reflects the changes made through budget adjustment and big bill processes. There may be adjustments to actual year-end amounts as the financial close-out for the fiscal year is completed and finalized. If necessary, changes will be included in a subsequent report.

Executive Summary
The bullet points below provide the primary results of FY19 in the Vermont Medicaid, Global Commitment Waiver (GC), Children's Health Insurance Program (CHIP) and related programs; followed by a brief summary of issues to be aware of looking forward. Detailed multiyear charts for overall program expenditure, enrollment and fund balances follow this summary.

- The State's Medicaid/Global Commitment/SCHIP and related programs ended FY19 in a relatively neutral position compared to budgeted expectations. In terms of gross total spending, the programs in the aggregate came in below expectation, but after accounting for Choice for Care savings there is a less than 0.1% GF program balance of $600k.
  - DVHA expenditures ended up higher than expected mostly due to 1) pharmacy rebates coming below expectations and 2) the unbudgeted "ACO tail". DVHA has done detailed analysis on the more than 32,000 additional attributed ACO Medicaid lives for CY2019. This analysis looks at the net impact of the PMPM payments to the ACO and the payoff or 'tail' of claims for the same population. This is further netted with the impact of attributed lives that leave the ACO over the same period. This analysis indicated a one-time (unbudgeted) fiscal impact of $13.8 million gross that was accommodated by AHS in the second half of FY19.
  - The overage in DVHA was covered by expenditures in other departments, primarily the DDAIL/DDS budget. In DMH, the Success Beyond Six program came in under expectation but this has no direct impact on other state funding since the match in this program is provided by the schools, so this underspending is either a direct savings or avoided cost to school budgets and the Education Fund.
- **Caseload:** Caseload appears to have stabilized in FY19. Total Medicaid enrollments showed modest declines, decreasing by 4% compared to the previous year, with decerases in almost every eligibility group. The largest decreases were in General Adults (2,558 people or 20%) and Childless New Adults (2,668 or 6.7%). Beneficiaries receiving State Cost Sharing Reductions (CSRs) for exchange plans also decreased by 20% (1,222 people). Multi-year detailed caseload data is provided later in this report.

- **Health Care Revenues:** Cigarette, claims, and provider taxes, as well as the employer assessment, will be recognized as General Fund revenues rather than State Health Care Resources Fund (SHCRF) revenues pursuant FY19 BAA (Act 6 of 2019) on an ongoing basis beginning with FY19. These health care related taxes came in $5.2 million below estimates.
  - The Employer Assessment raised $19.75 million in FY19. This is approximately $93,000 less than FY18 and the first time since its inception revenues decreased from the previous year. Revenues decreased because the total number of reported FTEs for which the assessment is paid saw a decrease. As such, we anticipate very modest growth or even a leveling off in the next couple of years.
  - Provider tax revenues came in $1.6 million below expectation set in January for FY19. With the shift in the recognition of these revenues from the SHCRF to the General Fund, the accounting basis shifted accordingly from cash to accrual. This change in accounting treatment resulted in cash revenue that was budgeted, but not recognized in FY19. In addition, Springfield Hospital did not make more than half its FY19 payments, assuming current provider tax obligations do not materialize there could be a future bad debt write down adjustment. Our future provider tax forecasts take this into consideration.
  - Cigarette and tobacco taxes and the health care claims tax also fell short of expectations by approximately $2.5 million and $850,000 respectively.
- The current **GC Waiver agreement**, which began in Jan. 2017, phases out federal match for several waiver investments and establishes annual calendar year caps on the total amount of waiver investments. We are half way through the phase out of several investments such as Room & Board and Vermont Physician Training. These will be fully phased down over the next two budget cycles with an approximately budget impact of $6 million gross each year from 2019 through 2021. For the 2018 waiver year, which ended Dec. 31, 2018, the total cap was $148.5 million. The CY2019 cap is $138.5 million. The agency will likely seek authority to begin the initial work for the next version of this waiver during the legislative session.

Looking Ahead – Concerns, Considerations and Areas of Focus

- **"Chip Dip":** Under the ACA, the CHIP match was further enhanced in FFY16 through FFY19 by 23 percentage points. When CHIP was renewed by Congress in 2018, it phased out the ACA enhancements by 11.5 percentage points for FFY20 and will completely revert to the regular pre-ACA enhanced FMAP in FFY21 and beyond. This is estimated to have a negative fiscal impact in SFY21 of approximately $6 million, growing to a fully annualized $12.3 million reduction to be entirely absorbed by SFY22.
- **New Adult**: States also received enhanced FMAP for newly eligible childless adults under the ACA. States like Vermont that had already expanded coverage, received enhanced FMAP for this population of at least 75% in CY 2014, incrementally increasing to 93% by

CY 2019, before leveling out at 90% for CY 2020 and beyond. This leveling out is anticipated to have a negative fiscal impact of a roughly $4 million impact.

- **Global Commitment Waiver:** The current Global Commitment Waiver agreement expires at the end of CY2021. As such, representatives from AHS will begin initial work renegotiating the terms and conditions for a new waiver and/or an extension of the current waiver. Authorizing language will likely be needed in the upcoming session.
- AHS is in the final stages for submitting the **SMI/IMD state plan amendment.**[1] Within the next few weeks, AHS will make an application to amend the Global Commitment to Health Section 1115 waiver as it relates to receiving expenditure authority for the treatment of serious mental illness (SMI) provided to Medicaid beneficiaries (non-forensic) at Institutions for Mental Disease (IMDs). These treatment services are currently claimed under the Investment authority of the 1115 waiver which is subject to phasedown beginning in CY2021. Medicaid match which would have a very positive fiscal impact for the state during the next waiver period by mitigating a portion of this future investment phase out.

[1] SMI = Serious mental illness. IMD = Institutions for mental diseases.

Average Medicaid Caseload

(Based on Monthly Enrollment Through June 2019)	actual FY15	actual FY16	actual FY17	actual FY18	Eboard Jan.'19 FY19	est. actual FY19	Budgeted Eboard Jan.'19 FY20
FY15- FY17 impacted by eligibility redetermination suspension and resumption							
Full/Primary Coverage (note1)							
Adult							
Aged, Blind, or Disabled (ABD) Adults	15,967	14,883	8,759	6,779	6,250	6,485	*6,031*
General Adults	17,339	20,050	14,876	12,705	12,958	10,148	*12,867*
New Adult Childless- began 1/1/2014	42,814	49,895	42,412	40,100	39,248	37,432	*39,273*
New Adult w/Kids - began 1/1/2014	10,379	12,810	17,787	18,618	18,813	19,101	*18,813*
Childless % of total New Adult	80%	80%	70%	68%	68%	66%	68%
Adult subtotal	86,499	97,638	83,834	78,202	77,269	73,166	*76,984*
Children			-14.1%	-6.7%	-1.2%	-6.4%	
Blind or Disabled (BD) Kids	3,654	3,243	2,579	2,244	2,166	2,093	*2,112*
General Kids	60,894	63,354	60,024	60,009	59,811	58,779	*59,708*
CHIP (Uninsured) Kids	4,416	4,509	5,136	4,673	4,697	4,479	*4,697*
Child subtotal	68,964	71,106	67,739	66,926	66,674	65,351	*66,517*
			-4.7%	-1.2%	-0.4%	-2.4%	
Subtotal -Full/Primary	**155,462**	**168,744**	**151,573**	**145,128**	**143,943**	**138,517**	***143,501***
			-10.2%	-4.3%	-0.8%	-4.6%	
Partial/Supplemental Coverage							
Choices for Care	4,101	4,263	4,302	4,259	4,350	4,275	*4,390*
ABD Dual Eligibles	18,309	18,734	17,651	17,761	17,645	17,651	*17,772*
Rx -Pharmacy Only Programs	11,974	11,583	11,389	10,690	11,182	10,382	*10,913*
VPA-Vermont Premium Assistance (note2)	16,906	14,893	17,961	18,275	19,023	17,163	*20,524*
CSR-Cost Sharing Reduction - subset of VPA	*5,322*	*4,976*	*5,816*	*6,141*	*6,483*	*4,919*	*7,099*
Underinsured Kids (ESI upto 312% FPL)	907	834	873	624	831	563	*800*
Subtotal -Partial/Supplemental Coverage	**52,197**	**50,307**	**52,177**	**51,609**	**53,031**	**50,034**	***54,399***
			3.7%	-1.1%	2.8%	-3.1%	
Total Medicaid Enrollment	**207,659**	**219,051**	**203,750**	**196,737**	**196,974**	**188,551**	***197,900***
			-7.0%	-3.4%	0.1%	-4.2%	

Notes 1 1) Some Full Coverage enrollees may have other forms of insurance.

2 2) VPA-Vermont Premium Assistance counts are subscribers not individuals.

doc# 343038

Summary of Total Expenditures Medicaid and Medicaid Related	FY15 Actual	FY16 Actual	FY17 Actual	FY18 Actual	FY19BAA Budgeted	FY19 Actual (est)	FY20 Budgeted
Administration (not in Waiver)							
Non Capitated Administration 50/50	2,468,599	-	42,336,781	80,088,129	69,471,206	72,558,595	55,447,800
Non Capitated Administration 75/25 MMIS M&O			6,576,855	14,272,895	24,127,933	17,333,783	22,338,091
Non Capitated Administration 75/25 SPMP			4,609,334	6,161,582	6,258,533	6,309,453	6,298,181
Sub-total Non Capitated Administration	2,468,599	-	53,522,970	100,522,606	99,857,672	96,201,831	84,084,072
Non Capitated Administration 75/25 E&E M&O		13,063,756	23,949,052	30,224,766	37,839,944	28,215,235	50,680,048
Total Non Capitated Administration	**2,468,599**	**13,063,756**	**77,472,022**	**130,747,372**	**137,697,616**	**124,417,065**	**134,764,120**
Global Commitment Waiver							
GC - Administration	89,009,358	101,878,207	53,983,552	n/a	n/a	n/a	n/a
GC - Program	1,115,568,211	1,192,959,128	1,172,779,869	1,176,581,623	1,251,710,196	1,245,532,724	1,276,855,167
GC - VT Premium Assistance	5,471,173	5,256,145	6,162,611	6,332,790	6,614,098	5,941,367	6,914,219
GC - Choices for Care (CY 2015 now in GC)	102,782,659	183,841,818	190,393,133	193,956,348	209,074,560	206,204,809	213,712,634
GC - Investments	121,609,350	119,743,698	135,234,008	139,114,731	136,330,595	135,033,700	126,253,313
GC - Certified (non -cash program & cnom)	29,279,458	32,698,831	28,059,203	27,307,277	26,394,678	27,770,489	26,348,983
GC Waiver total	1,463,720,209	1,636,377,827	1,586,612,376	1,543,292,769	1,630,124,127	1,620,483,089	1,650,084,316
						5.0%	1.8%
Other Medicaid and Related Programs							
~~Choices For Care~~ / Money Follows the Person	108,013,364	3,263,786	2,244,110	2,607,149	-	766,828	-
Exchange Cost Sharing Subsidy (State Only)	1,138,775	1,186,720	1,355,318	1,533,802	1,520,434	1,482,370	1,314,872
Exchange Vermont Premium Assistance (State Only)	140,293	10,097	(62,232)	74,896	-	-	-
Pharmacy - State Only	1,256,966	(2,752,230)	(258,671)	1,054,658	6,385,930	4,784,349	2,693,721
DSH	37,448,781	37,448,781	37,448,780	27,448,780	22,704,471	22,704,471	22,704,471
Clawback (state only funded)	25,888,658	29,011,845	31,738,186	33,676,089	34,565,706	34,453,902	34,912,199
SCHIP	10,373,932	9,787,010	13,081,552	11,055,931	9,199,267	12,093,133	9,276,618
Total All Expenditures	**1,650,449,577**	**1,727,397,592**	**1,749,631,439**	**1,751,491,446**	**1,842,197,551**	**1,821,185,207**	**1,855,750,317**
	5.1%	4.7%	1.3%	0.1%		4.0%	1.9%
Blue Cross Blue Shield VT Recon Settlement		1,600,000	3,500,000	4,500,000			
Notes				-			
CY17 - Admin out of GC in new waiver agreement							
CY17 - Payments to ACO for attributed lives include in GC program expenditures							
CY15 - CFC into GC waiver							Doc # 343033

Choices for Care Year End Summary - SFY19

CFC is managed as one budget, categories are estimated **but** funding is fluid **within them.**

DeptID - 34100160000

	SFY19 Plan$s Available (Final Approp)	Less SFY19 Expend and Obligated	= Bal. of SFY19 (Final Approp) All Funds	State Share Bal FY19 Year End (SFY19 State Share is 46.21% of GC)	MFP SFY20 Obligations State and Fed Share	Bal. of State Share converted to GC (SFY20 46.13%) Available For CFC Savings Reinvest	
H&CB Money Follows the Person GF	$650,292	$177,465	$472,827	$472,827	$222,827	$541,947	$472,826.88 less $250K GF (Grossed up to $541,946.67 GC) = $222,826.88 General Fund balance being carried forward to SFY20 - staying as GF for H&CB MFP obligations.
H&CB Money Follows the Person FF	$1,100,000	$589,363	$510,637	$0	$510,637	$0	FF not used are available for next yr MFP obligations
H&CB Global Commitment Fund	$76,230,406	$76,856,122	($625,716)	($289,143)	$0	($626,801)	
Nursing Home GCF	$131,762,137	$129,348,687	$2,413,450	$1,115,255	$0	$2,417,635	
Choices for Care Subtotal all funds	$209,742,835	$206,971,637	$2,771,198	$1,298,939	$733,464	$2,332,781	**GC SFY 19 Carryforward into SFY20 available before obligations.**

NOTES

* It is good to **note that in the SFY19 Plan is** $2,058,502 in **Carryforward from SFY18.**

$2,332,781	Balance of carryforward not obligated - this is 1.13% of budget.
$2,069,716	1% reserve requirement, calculated by taking 1% of SFY19 expenses
$263,065	amount available for "reinvestment"
	1) This will be used for Moderate Needs Case Mgt 12 to 24 **hours.**

Global Commitment - Cash Balance Sheet - FY15 to FY19

	FY15 Actual	FY16 Actual	FY17 Actual	FY18 Budgeted	FY18 Actual	FY19 Actual	
Revenues - Cash Capitated Payments	**1,442,945,241**	**1,633,975,029**	**1,554,409,832**	**1,540,133,246**	**1,512,050,358**	**1,589,240,101**	***
Expenses - Cash Capitated							
Administration	89,009,358	101,878,207	53,983,552	-			
Program	1,223,822,043	1,382,057,091	1,369,335,613	1,401,839,656	1,376,870,761	1,457,678,900	
Investment	112,000,874	110,777,644	131,087,882	138,293,590	135,179,597	131,473,726	
Total Cash Expenses	**1,424,832,275**	**1,594,712,942**	**1,554,407,047**	**1,540,133,246**	**1,512,050,358**	**1,589,152,626**	
Transfer to 27/53 Reserve- 53rd week portion	n/a	n/a	**(5,287,591)**	**(1,700,000)**	**(1,700,000)**	**(1,760,000)**	
Transfer to Human Service CR - IBNR						**(64,022,729)**	
Transfer to Human Service CR - Medicaid						**(14,064,254)**	
Change in Fund Balance	**18,112,966**	**39,262,087**	**(5,284,806)**	**(1,700,000)**	**(1,700,000)**	**(79,759,508)**	
Prior Year Fund Balance	**29,456,821**	**47,569,787**	**86,831,874**	**81,547,068**	**81,547,068**	**79,847,068**	
Total Fund Balance	**47,569,787**	**86,831,874**	**81,547,068**	**79,847,068**	**79,847,068**	**87,560**	
Actual balance		**86,844,215**	**81,561,150**		**79,861,148**	**101,899**	
variance		**12,341**	**14,082**		**14,080**	**14,339**	
deposits into GC fund in error (cumulative)		**12,339**	**14,081**		**14,081**	**14,339**	
true variance		**2**	**1**		**(1)**	**1**	
Non-capitated administrative expenses [(1)]	2,468,599	-					
Non-cash expenses [(2)]	29,311,669	32,698,831	28,059,203	26,453,027	27,307,277	27,770,489	
Non-cash revenues [(3)]	29,311,669	32,698,831	28,059,203	26,453,027	27,307,277	27,770,489	

Notes:

(1) Non-capitated expenses are cash expenses but are paid outside of capitation pmt and do not affect fund

(2) Non-cash expenses include certified programs in which non-federal expenses are not State cash expenses.

(3) Non-cash revenues include certified programs in which non-federal revenues are not State cash revenues.

**** GC fund was overpaid (revenue) in error due to timing of DCF closeout entries - $84,475*

VT LEG #259687

State Health Care Resources Fund (most revenues redirected to GF in FY19)

State Health Care Resources Fund	FY15 Actuals	FY16 Actual	FY17 Actuals	FY18 Actual	*Working Budget Jan. 2019 FY19*	*informational only* FY19 Actual	*Working Budget Jan. 2019 FY20*	As Of July 2019 FY20
Total Beginning balance	**(748)**	**7,337,508**	**4,729,431**	**(12,694)**	***1,647,034***	***1,647,034***	-	
Health Care Tax Revenue						*redirect to GF*		***These***
Cigarette Tax Revenue	68,302,786	70,007,845	67,556,831	61,785,442	*61,950,000*	*59,496,386*	*59,060,000*	***revenues***
Tobacco Products Tax - 100%	8,104,758	9,012,347	9,134,862	9,286,787	*9,150,000*	*8,937,874*	*9,320,000*	***were***
Cigarette Floor Stock Tax	347,610	897,670	-	-	-	-	-	***redirected***
Claims Assessment	13,978,648	13,767,674	14,055,360	15,912,905	*16,500,000*	*15,643,633*	*16,500,000*	***to the***
Employer Assessment	15,879,665	17,896,335	19,159,000	19,843,461	*19,900,000*	*19,750,365*	*20,500,000*	***General***
Nursing Home Sale Assessment	-	593,400	3,683,218		*800,000*	*800,000*		***Fund***
Prov Tax - Ambulance			736,924	936,174	*935,000*	*931,660*	*935,000*	***in FY19 BAA***
Prov Tax - Hospital	125,293,302	131,712,103	137,296,343	143,498,478	*147,940,724*	*146,336,595*	*149,571,631*	***(Act 6 2019)***
Prov Tax - Nursing Home	15,595,924	15,681,383	15,000,491	14,847,278	*14,737,022*	*14,798,877*	*14,674,958*	***below are the***
Prov Tax - Home Health	4,373,603	4,488,435	5,467,427	4,699,521	*4,799,638*	*4,800,638*	*4,799,638*	***remaining***
Prov Tax - ICF-MR	73,759	73,308	73,308	73,828	*79,445*	*86,066*	*79,445*	***SHCRF***
Pharmacy $0.10/script	775,297	783,689	782,910	812,375	*800,000*	*765,113*	*800,000*	***revenues***
Subtotal tax revenue	**252,725,352**	**264,914,189**	**272,946,674**	**271,696,249**	***277,591,829***	***272,347,207***	***276,240,672***	
Other Fund Revenue						*remain SHCRF*		
Graduate Med Education	13,054,500	13,491,750	13,462,714	13,884,750	*13,863,000*	*13,864,500*	*13,839,000*	
Premiums - Dr. D (medicaid)	192,949	130,524	183,318	204,640	*160,000*	*220,727*	*160,000*	
Premiums - SCHIP	928,108	163,865	102,313	132,739	*100,000*	*140,194*	*100,000*	
Premiums - Rx programs	3,112,356	2,918,910	2,799,719	2,617,496	*2,500,000*	*2,553,266*	*2,350,000*	
Recoveries	435,377	2,831,833	55,117	985,651	*276,468*	*567,690*	*442,501*	
Other *(Misc, Interest)*	(39,319)	(962,512)	(77,088)	288,327	*0*	*812,183*	*24,000*	
Subtotal other revenue	**17,683,711**	**18,574,332**	**16,526,047**	**18,113,570**	***16,899,468***	***18,158,560***	***16,915,501***	-
Total Fund Revenue	**270,409,063**	**283,488,521**	**289,472,721**	**289,809,819**	***16,899,468***	***18,158,560***	***16,915,501***	-
Total Available	**270,408,315**	**290,826,029**	**294,202,152**	**289,797,125**	***18,546,502***	***19,805,594***	***16,915,501***	-
Expenditures								
Total GC Expend	**263,070,807**	**286,096,598**	**294,214,846**	**288,150,091**	**18,546,502**	**18,546,502**	**16,915,501**	**16,915,501**
End. Balance	**7,337,508**	**4,729,431**	**(12,694)**	**1,647,034**	-	***1,259,092***	-	**(16,915,501)**
								doc # 343010

B.3.b.

Agency of Human Services

Joint Fiscal Committee

July 29, 2019

FY 2019 AHS Closeout – Spending Ended Relatively On Target

($'s in millions)

Department	Total Expended	General Fund Balance	General Fund Obligations (per Act 11, Act 72 (C.1000)	General Fund Obligations FY19 Liabilities	General Fund Carryforward FY20 Pay Act	General Fund Carryforward FY20 BAA Needs	Federal Surplus/ <Deficit>	Net Federal & GF Surplus/ <Deficit>
AHS Secretary's Office	$1,632.3	$8.5	-$7.0	-$.9	-$.1	-$.6	$.2	$.2
DVHA	$1,164.4	$.7	-$.5	$.0	$.0	-$.2	-$.8	-$.8
VDH	$148.5	$2.9	-$2.9	$.0	$.0	$.0	$.0	$.0
DMH	$256.3	$.4	-$.4	$.0	$.0	$.0	$.4	$.4
DCF	$451.9	$8.8	-$7.0	-$1.8	$.0	$.0	-$2.4	-$2.4
DAIL	$281.2	$1.3	-$.8	-$.1	-$.5	$.0	$.2	$.2
DOC	$163.4	$1.1	$.0	-$1.1	$.0	$.0	$.0	$.0
TOTAL AHS	**$4,098.1**	**$23.8**	**-$18.5**	**-$3.9**	**-$.5**	**-$.9**	**-$2.4**	**-$2.4**

Underspent GF budget by 0.82% of appropriation excluding one-time approps (over FY19 As Passed BAA) *Federal funds based on estimated amounts

FY 2019 AHS Closeout Issues

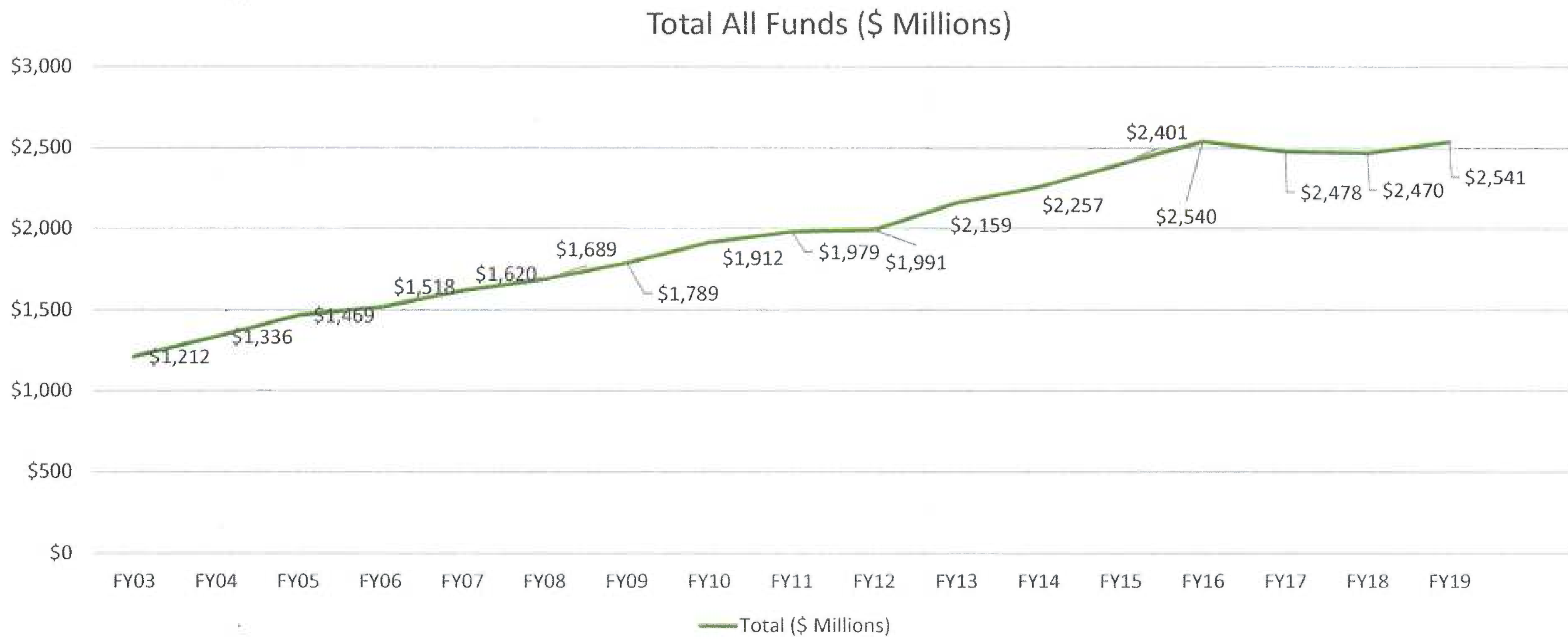
Department for Children and Families

- The Family Services Division within DCF finished FY 2019 with a $2.3M deficit
  - This was due largely to substitute care and staffing related to an increased caseload of children in custody
- The General Assistance program finished FY 2019 with a $2.7M deficit
  - Due to an increased demand in emergency housing

- AHS was able to partially cover these overages by underspending in the Child Development Division (CDD) of $2.1M (net of required carryforward of $2.2M)
- Balance came from AHS Non-Budgeted Revenue (NBR) account

VERMONT
AGENCY OF HUMAN SERVICES

AHS Actual Expenditures – (All Funds – Non-Duplicated by GC)



Source: VISION Appropriation Status thru 998 period. Data from FY03 and FY04 is pre-AHS reorg.

Status of Choices for Care from DVHA to DAIL

- Appropriation was transferred from DVHA to DAIL on 7/1/19.
- This transfer will be reflected in the FY20 BAA and FY21 budget.

VERMONT
AGENCY OF HUMAN SERVICES

C.

MEMORANDUM

TO:	STEPHEN KLEIN AND CATHERINE BENHAM, LEGISLATIVE JOINT FISCAL OFFICE
FROM:	DANIEL SMITH, IT CONSULTANT FOR THE JOINT FISCAL OFFICE
SUBJECT:	ACT 072 SECTION C.100 – LIMITED ASSESSMENT OF THE DESIGNATED AGENCY ELECTRONIC HEALTH RECORD FUNDING REQUEST
DATE:	JULY 26, 2019

1. Background

The FY 2020 Budget (Act 072), section C. 100(a)(10), allocated $1.5M "to fund grants for the development of an electronic medical/health records system for the State's Designated Agency system." Section C.100(a)(10)(A) of the Act requires that report be submitted to the Joint Fiscal Committee prior to the release of the funds:

"Vermont Care Partners and the Agency of Human Services shall present a plan for review and approval by the Joint Fiscal Committee at its July 2019 meeting. The plan shall summarize the development and implementation of the system and demonstrate that this project will support the goals set forth in the statewide Health Information Technology (HIT) Plan (defined in 18 V.S.A. § 9351) and meet, at a minimum, the connectivity requirements set forth in the statewide HIT plan and the requirements of the Centers for Medicaid Services (CMS). The plan shall support current payment reform initiatives and include the projected project timeline and total budget including the allocation of this appropriation. No funds shall be released prior to review and approval by the Joint Fiscal Committee."

While the original House budget bill contained language requiring the Joint Fiscal Office to "provide a preliminary review and assessment of the proposed project to the Joint Fiscal Committee at its July 17 2019 meeting and a final report at its September 2019 meeting." This language was removed in the Senate and final version of the bill. However, as the proposal is before the Joint Fiscal Committee I was asked to provide some background on the proposal.

Vermont Care Partners provided several documents to the Joint Fiscal Office in support of the required review plan (Act 072):

- A summary of the project background, including justification, anticipated benefits, and estimated costs (4/5/2019);
- A copy of the Request for Procurement that was used to select vendors for the system (4/5/2019);
- A draft version of the report required by Act 072 section C.100(a)(10)(A) (7/22/2019);
- The final version of the report required by Act 072 section C.100(a)(10)(A) (7/25/2019).

Meetings and phone conferences were held between the Joint Fiscal Office (JFO), the Agency of Human Services (AHS), and Vermont Care Partners (VCP) on 7/22/2019 and 7/23/2019 to discuss the Electronic Health Record (EHR) project and the report required by Act 072.

2. Comments and Concerns

This project was designed as a collaboration between D.A.'s and as such is a collective of smaller projects moving toward common systems. As the designated agencies have requested state support for $1.5 million, and the cost of the completed project may be $6 to $7 million, the Joint Fiscal Office suggests that the level of state review should be reexamined.

Based on a preliminary review of the available documents and meetings conducted there is a reasonable amount of information available regarding the EHR project. While it must be recognized that this is not a State project, it does involve AHS and it will require State funds for both development and ongoing operations/maintenance. The specific comments and concerns that can be identified at this point are:

a) This project has not been subject to an Independent Review or other third-party oversight. Given the projected implementation costs ($6.7M), funding request before the JFC ($1.5M), and projected increase in operational costs ($3.5M), a State project would require such an Independent Review. VCP has made the argument that since the per-DA costs would be less than the State threshold of $1M, an Independent Review is not needed. However, in current practice the State uses the aggregate cost, not the per-participant cost. While it must be acknowledged that while this project is not subject to State standards and requirements, our best practices would still indicate the need for independent review and oversight in order to identify and minimize project risks.

b) Documentation and Reports submitted by VCP and AHS are not sufficient to address all of the key areas that the JFO generally uses to evaluate IT projects. If we were to use our traditional evaluation approach the preliminary evaluation would be as indicated below. While the final report submitted by VCP represented a significant improvement over the draft version, there are still some areas of concern.

- Project Justification: (Why are we doing this? Is the project necessary and beneficial?)

  Strong: The final report is acceptable with regards to justification. It describes several potential benefits of the new EHR system, and also highlights the disadvantages of continuing with the present system.

- Clarity of Purpose: (Is there a clear definition of success? Is the scope statement complete?)

  Strong: The final report includes specific milestones and detailed objectives. This includes implementation schedule and EHR type for each participating DA.

- Organizational Support: (Is the organization ready to undertake this project? Has the potential need for business process change been acknowledged, and is there a Change Management Plan?

  Neutral: The report indicates that the organizations involved (VSP, AHS, and the DAs) support the project, however the report does not indicate how the organizations involved will ensure that migration to the new EHR systems is successful. This project appears to be a collaborative effort, without a single lead organization.

- Project Leadership: (Has a qualified person been designated to lead the project, and has that person been empowered to do so?)

  Neutral: The report does not clearly indicate what agency, and what person in that agency, is ultimately responsible for the success of the project. The meetings held to discuss the report did not clear this up, and this can be considered a risk due to the complexity of the project and the number of organizations involved.

- Project Management: (Is the project management staff appropriate, and will project management conform to State of Vermont standards?)

  Neutral: This is neutral since it is essentially unknown. Although VCP hired a project manager via a Health and Human Services Health Resources and Services Administration (HRSA) grant, no project management documentation or other information has yet been provided.

- Financial Considerations: (How much will it cost to complete the project, how much will it cost to maintain and operate the system, and how it will all be paid for?)

  Neutral. While the final report is much stronger than the draft version regarding financial information, there are still some concerns. First, it is not entirely clear what the true implementation costs and annual operations/maintenance costs will be; the draft report described $6.7 in implementation costs and a $3.5M increase in annual operations/maintenance costs, while the final report described $4.6M in implementation costs and a total annual operations/maintenance cost of $2.5M. Second, there is no indication as to how these annual costs will be paid, and whether there will be recurring requests to the State legislature for funds.

- Technical Approach: (Is the proposed solution achievable, realistic, and appropriate?)

  Strong. Although it would be desirable to have more information, the basic premise of implementing the new EHRs through commercially available systems is sound. That said, additional information regarding how the different EHR systems will be integrated and how they will connect to the Vermont Health Information Exchange would be desirable.

C.

State of Vermont
Agency of Human Services
Office of the Secretary
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Waterbury, VT 05671
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Martha Maksym, *Acting Secretary*

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TESTIMONY

TO: Joint Fiscal Committee

FROM: Sarah Squirrel, Commissioner, Department of Mental Health
Jenney Samuelson, Deputy Commissioner, Department of Vermont Health Access

DATE: July 29, 2019

RE: Sec. C.100(10)(A) of Act 72 of 2019: One Time Appropriation for Development of an Electronic Medical/Health Records System for the State's Designated Agency System

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The Agency of Human Services (AHS) supports the need for the development and implementation of an electronic medical/health record (EHR) system for the State's Designated Agencies. EHR implementation can result in improved quality of care and allows organizations to participate in the exchange of information. It is anticipated that an effective exchange of health information between organizations will support an efficient health care system that effectively manages costs while promoting improved health and well-being for recipients.

VCP started the process to upgrade and implement their EHRs in late 2016. While the one-time FY 2020 appropriation is directed to AHS to fund grants to the Designated Agencies, it is not an AHS technology project. For State health information technology projects, we put each project through a robust analysis. This type of analysis and oversight would typically be achieved through business case development and independent review, however, those are not included nor required in the legislation authorizing this project/appropriation.

Sec. C.100(10)(A) of Act 72 of 2019 asked the Agency of Human Services and Vermont Care Partners to present a plan that supports the goals set forth in the Health Information Exchange Plan and support current payment reform initiatives.

The Health Information Exchange Plan (defined in 18 V.S.A. § 9351) outlines the strategic vision for the statewide exchange of health information, as set forth in the goals below:

1. **Create One Health Record for Every Person -** Support optimal care delivery and coordination by ensuring access to complete and accurate health records.

2. **Improve Health Care Operations -** Enrich health care operations through data collection and analysis to support quality improvement and reporting.

3. **Use Data to Enable Investment and Policy Decisions -** Bolster the health system's ability to learn and improve by using accurate, comprehensive data to guide investment of time, labor and capital, and inform policymaking and program development.

Achieving these goals is important to ensuring the success of the current payment reform initiatives in Vermont. The Agency of Human Services believes that future investments in these systems should be subject to more rigorous review and contingent on meeting these seven steps:

1. Capability to manage consent compliant with 42 CFR Part 2.
2. Ability to demonstrate connectivity to the Health Information Exchange, including working with VITL to test feeds from the selected vendor system to the HIE.
3. Interoperability between the EHR systems proposed by the independent Designated Agencies.
4. Interoperability between the Designated Agencies EHR systems and the other health care providers and related population health tools (EPIC, ACO analytic tools, etc.)
5. Ability to report to payers.
6. Robust governance and implementation plan for each system.
7. Clear budget and ongoing costs sustainability plan.

The Agency of Human Services believes that the adherence to these steps will not only improve the success of the systems but will help continue Vermont's ongoing health care reform efforts. Additional analysis and oversight would be needed to determine the degree to which future investments in the DA EHRs will successfully support the goals laid out in the State's HIE Plan and current health reform initiatives.

C.

Report to the Joint Fiscal Committee:

A Plan to Implement Electronic Health Records for Nine of the State's Designated Agency System

Required Under: Act 72 of 2019 Sec C.100

Submitted Jointly by: Vermont Care Partners & Vermont Agency of Human Services

Prepared by: Vermont Care Partners

In 2019, the legislature appropriate funding for the implementation of an electronic health record system for the State's Designated Agency System. In order for the funds to be used, the Joint Fiscal Committee must approve a plan prepared by Vermont Care Partners and the Agency of Human Services.

Sec. C.100 FISCAL YEAR 2019 ONE-TIME APPROPRIATIONS

(10) To the Agency of Human Services: $1,500,000 to fund grants for the development of an electronic medical/health records system for the State's Designated Agency system.

(A) Vermont Care Partners and the Agency of Human Services shall present a plan for review and approval by the Joint Fiscal Committee at its July 2019 meeting. The plan shall summarize the development and implementation of the system and demonstrate that this project will support the goals set forth in the statewide Health Information Technology (HIT) Plan (defined in 18 V.S.A. § 9351) and meet, at a minimum, the connectivity requirements set forth in the statewide HIT plan and the requirements of the Centers for Medicaid Services (CMS). The plan shall support current payment reform initiatives and include the projected project timeline and total budget including the allocation of this appropriation. No funds shall be released prior to review and approval by the Joint Fiscal Committee.

The following document contains the plan for the Joint Fiscal Committee's consideration.

Table of Contents

1.0 Financial and Go-Live Summary

FINANCIAL AND GO-LIVE SUMMARY FOR NINE DESIGNATED AGENCIES IMPLEMENTING EHRS FROM TWO VENDORS					
AGENCY	Current Annual*	Estimated implementation Cost**	***New Annual Cost	Approximate Delta in Annual Cost	Projected Go-Live
CSAC	$ 88,575.00	$ 295,000.00	$ 170,200.00	$ 81,625.00	11/12019
HC	$ 57,355.00	$ 290,675.00	$ 372,517.00	$ 315,162.00	9/3/2019
HCRS	$ 101,351.00	$ 364,675.00	$ 200,000.00	$ 98,649.00	9/3/2019
RMHS	$ 53,723.00	$ 204,425.00	$ 185,750.00	$ 132,027.00	9/3/2019
LCMHS	$ 237,075.35	$ 775,295.00	$ 241,261.98	$ 4,186.63	Summer 2020
UCS	$ 72,637.00	$ 801,826.00	$ 141,417.00	$ 68,780.00	Spring 2020
WCMHS	$ 196,355.00	$ 743,284.00	$ 242,268.00	$ 45,913.00	Summer 2020
NCSS	$ 165,288.60	$ 831,826.00	$ 372,514.69	$ 207,226.09	Spring 2020
NKHS****	$ 85,000.00	$ 285,000.00	$ 334,000.00	$ 249,000.00	N/A
Total	$1,057,360	$4,592,006	$ 2,259,928.67	$ 1,120,943.72	

* **Current annual does not include** the initial build including hardware and software. Nor does it include the ongoing expense of maintenance, upgrades in hardware and software, upgrades to product etc. A few agencies will be maintaining their existing product for a period of time for data retention and historically archiving purposes.

****Estimated implementation** incudes vendor costs and external project management. It does not include loss of productivity, staff time, internal project management etc.

*****Does not include** CPI every year for Credible. No increase for 5 years for Netsmart.

VCP proposed formula for distribution of funds: Given that each agency had to make the decision to upgrade their EHR and it was an equally difficult financial decision for all, we recommend that the funds are allocated equally amongst the 9 agencies.

****Estimated

2.0 Project Justification

VCP is a statewide network of 16 of the State's designated, community-based agencies providing a comprehensive array of services and supports to people living with mental health conditions, substance use disorders, and intellectual and developmental disabilities. The network has approximately 32,000 clients and serves nearly 50,000 Vermonters.

In late 2016, nine of the comprehensive designated agencies came together to discuss the need to move to a new electronic health record (EHR). The rationale for the move included the following:

1) 7 agencies were on a legacy platform on a trajectory for potential sun-setting
2) 1 agency had an EHR from a vendor was going out of business

3) 1 agency with a platform that was not working well for them and that was about to be revamped
4) Legacy EHRs were not keeping pace with new requirements.
5) There were large staffing requirements to provide 'scaffolding' to support the EHRs
6) Reporting was costly and inefficient (clinical; billing; financial; administrative)

VCP and the nine agencies saw this as an opportune time to coordinate their efforts to update their aging systems to more modern systems enabling them to participate in an integrated delivery system with value-based payment methodologies. The decision was made to do so in a coordinated manner that would leverage experience and expertise, and improve overall efficiency.

Rather than have each agency write and post a RFP on their own, VCP hired a project manager to assist with the development of a comprehensive Request for Proposal (RFP) and selection process for the nine agencies. This took place in January 2017, and was supported by a grant from the Health and Human Services Health Resources and Services Administration (HRSA). VCP and its network agencies wrote and posted a RFP that was centered on the future of an integrated health delivery system and value-based payment methodologies. It was also centered on the ability for vendors to develop a unified solution. VCP received 16 responses. After a formalized vetting process, each of five selected vendors was brought in for a two-day vetting process that included content experts from all participating agencies and VCP staff. VCP hired outside consultants to be a part of the vetting process to provide additional subject matter expertise and oversight. Annmarie Curley of Newgrange IT Consulting and Jed Batchelder an independent health care IT consultant worked with VCP and the agencies to fully vet the vendors and worked with VITL to ensure that the vendors met the VHIE connectivity requirements

Over time and with significant additional vetting and further site visits, the pool was narrowed down to two vendors – one of which was able to implement a unified solution. The two vendors met the selection criteria (inclusive of price, meaningful use certification, clinical ease of use, mobile solutions, etc.) and the goals of going beyond a traditional EHR to enable participation in an integrated value-based health delivery system. While we originally had the lofty goal of a unified EHR for all nine agencies, in the end, agencies had to choose the vendor that was right for them. They had to consider everything from their agency specific fiduciary responsibility to the interoperability needs in their community to acceptance and ease of use by their staff. Agencies selected the vendors that best met the needs of their agency resulting in two products (Credible and Netsmart's My Avatar) across the nine agencies. VCP considers this process to have been a great success.

The two EHRs are not being custom built for the agencies. They are high quality off the shelf solutions that are being configured for the specific agencies. Credible is a behavioral health EHR that enables everything from scheduling and billing to mobile reporting and integrated care for all the populations served at the agencies. Netsmart is a company offering an EHR solution specifically designed for human services communities including behavioral health, substance use and developmental disabilities. They are focused on integrated value-based care which also includes scheduling, billing, and a mobile solution. More information can be found at: https://www.credibleinc.com/ and https://www.ntst.com/.

It is extremely important to VCP and to the nine agencies that the new EHRs align with the State of Vermont's Health Information Exchange goals. VCP's Simone Rueschemeyer co-chaired the State's SIM Health Data Infrastructure Workgroup, is currently a representative of the State's Health Information Exchange (HIE) Steering Committee and was part of the development of the last two Vermont's Health Information Exchange Strategic Plans. The State's Strategic Plan can be found at:
https://healthdata.vermont.gov/sites/healthdata/files/HIE%20Strategic%20Plan.pdf.

The HIE's Plan's primary goals are as follows:

1. **Create One Health Record for Every Person - Support optimal care delivery and coordination by ensuring access to complete and accurate health records.**

If the State eventually wants everyone to have a complete health record, we need all care settings to have the ability to capture health data in a standard way, through an EHR. This effort provides a link to an essential care setting that has been fundamentally left out of traditional health records and health information exchange. The technology within the new EHRs will allow the agencies to keep pace with the physical health data systems. In addition, the new EHRs are necessary to position the agencies to connect to the HIE when a privacy solution that complies with federal law is implemented. (See Technical Approach for more information about health information exchange).

2. **Improve Health Care Operations - Enrich health care operations through data collection and analysis to support quality improvement and reporting.**

The new EHRs will help improve data quality while reducing administrative burden via better user interface which can reduce errors, and redundant data entry. They will streamline treatment activity through better scheduling and service data capture and move data capture to point of service delivery via remote system access. The new, standardized EHRs will also link to the VCP data repository which in the future we hope will support improved panel/population health management i.e., using data to assess care outcomes and test health management solutions.

3. **Use Data to Enable Investment and Policy Decisions - Bolster the health system's ability to learn and improve by using accurate, comprehensive data to guide investment of time, labor and capital, and inform policy making and program development.**

Modern EHRs will allow more and higher quality data to be collected through improved user interface (UI). In addition, they will continue to transmit data to the VCN Data Repository which will allow for statewide and more advanced analytics supporting the state and legislature in using real data sets to understand the impacts of funded health services. Using data to inform clinical decision will allow for better coordinated, efficient, and effective service delivery structures.

A Core Piece of Business

Having an EHR is foundational to the business of each designated agency and as such, the vendor chosen was the decision of each of the agencies. This initiative is not only an EHR implementation for each agency but also a business and care delivery transformation resting on the foundation of IT platforms. It is our belief that the new EHRs will provide a transformative platform that will:

- Enable operational efficiencies
    - A modern EHR which has an easier to use and understand interface will reduce data entry errors which will mean less internal auditing and re-work. This modernization will also reduce the administrative burden by making workflows, data entry and recovery easier, and shorten training time for staff.

- Support the shift to value-based payment
    - The chosen EHR platforms will allow designated agencies to capture information digitally, and track additional aspects of client care beyond the current fee for service data points. Having the ability to capture clinical outcomes and highlight client progress, will be not only invaluable but necessary as we move to value-based payment.

- Develop capabilities to further participate in population health initiatives
    - A state of the art system will enable agencies to define, track, and report out on additional data elements in concert with other members of the health care community to expand work in the area of population health.

- Enhance capabilities to work as part of a greater integrated care delivery system in VT
    - A contemporary EHR for these agencies will come closer to providing similar tools that the medical community already has in place. Better analytic capabilities will allow enhanced alignment of operational goals among care partners. Greater alignment of clinical goals within the health care system will increase care coordination realize efficiencies, and improve outcomes.

- Enable enhanced quality improvement and care delivery
    - Better capture of more digital information will allow more sophisticated analysis and planning around quality of care for specific cohorts as well as individuals. Data driven planning will allow for more targeted allocation of resources to improve client experience and outcomes.

- Lead the agencies in the correct direction to meet the HIT goals

- The antiquated EHRs currently in use by the agencies are a barrier to achieving the HIT goals. Newer systems can more easily be configured and updated to track information and activities that are aligned with HIT goals.

3.0 Clarity of Purpose

The purpose of this initiative is to replace aging and/or disappearing legacy EHRs with state of the art EHRs that can able the nine agencies to participate in an integrated delivery system with value-based payment methodologies.

Current agency legacy EHRs are no longer supporting our vision, nor are they sophisticated enough to move us to be fully data driven or participate in an integrated delivery system. In addition, some of the legacy EHRs are sun-setting and will no longer be supported by the vendor. Moving toward outcome-driven payments, analyzing data and outcomes to improve care at the point of service, and focusing on improving the health of our population, all require data. Collecting that data as close to the source as possible increases data integrity and usability. Upgrading to more sophisticated systems will move the agencies further down this path.

This is an EHR implementation for each agency. It is not a health information exchange though the vendors chosen have the capabilities to enable the sharing of information and the exchange of data. (See Technical Approach). None of the agencies met the Certificate of Need (CON) threshold. That stated, VCP came to agreement with the Department of Mental Health that they would keep DMH appraised of the process and of any potential barriers to realizing full implementation.

4.0 Implementation

Each agency is already in the process of undertaking this project. Some have go-live dates as soon as September 3, 2019. They each have robust implementation plans that have been designed in collaboration with their vendors. Each agency has engaged their organization at multiple levels in all parts of the process and each agency has had implementation teams formalized since the beginning of the vetting process.

Implementation Plans

It is important to point out that this is not one implementation for nine agencies. Each of the nine agencies are implementing their EHRs within their agencies at different times but with similar implementation plans by vendor. Below is a chart of the agencies, the vendor, and estimated go-live date. The Netsmart agencies will be implementing consecutively with 2-3 weeks in between each one.

AGENCY	VENDOR	ESTIMATED GO-LIVE DATE
Counseling Service of Addison County	Credible	11/1/2019

Health Care and Rehabilitation Services	Credible	9/3/2019
Howard Center	Credible	9/3/2019
Lamoille County Mental Health Services	Netsmart's MyAvatar	Summer 2020
Northeast Kingdom Mental Health Services	Undecided – Will decide by 12/31/2019	N/A
Northwestern Counseling & Support Services	Netsmart's MyAvatar	Spring 2020
Rutland Mental Health Services	Credible	9/3/2019
United Counseling Service	Netsmart's MyAvatar	Spring 2020
Washington County Mental Health Services	Netsmart's MyAvatar	Summer 2020

Attachment A: Implementation Plan Summaries, includes varying summaries of the implementation plans. The Credible agencies each have robust implementation plans designed in concert with their vendor (Credible considers the full implementation plans to be proprietary). The four agencies moving forward with Netsmart's MyAvatar have a joint implementation plan.

5.0 Project Leadership and Management

Included with the Implementation Plan Summaries are summaries of the Project Implementation Teams. Each agency has empowered their leader and team to successfully implement the EHRs. The four agencies that are moving onto Netsmart's MyAvatar are implementing a unified system and have hired a consulting firm to provide them with the specific services mentioned above. The remaining agencies will be relying on their vendor, Credible, and their own internal resources to move to their new platforms. They are meeting weekly to develop aligned processes.

VCP's Role in Implementation Post Vendor Selection and Standardization

Deployment of new systems requires numerous workflow changes, review and adaptation of policies and procedures, harmonization of code sets training and more. VCP is a collaboration of 16 of the State's 18 designated and specialized service agencies. VCP's role in the implementation of the EHRs is primarily supportive and consultative. VCP is also taking a leadership role to assure that the EHRs are standardized and aligned to the extent possible.

VCP's HIT Director will be working with the vendors to develop the necessary feeds to the data repository and to ensure uninterrupted functioning of the repository.

Integration of Legacy Systems into New EHRs

In an effort to maintain the highest quality data and decrease the chances of corrupting the new systems' data, only relevant client data will be migrated from the current systems to the new systems at the time of conversion. Agencies will employ various methods of retaining access to historical data, including maintaining existing systems for historical purposes and/or putting data onto new servers which will need to be purchased as the old ones are at use end.

6.0 Financial Considerations

The new EHRs use a subscription-based model and as such there is no on premise or on-site hardware dedicated to the EHRs. Staff will access the EHRs using remote connectivity through typical end point devices. E.G. PCs, laptops etc.

VCP and the agencies underwent a robust negotiation process with the vendors which resulted in each agency having a specific contract with their vendor that they felt was financially sound. Each of the nine agencies determined internally how they would fund the EHRs while VCP worked with the State to determine if there was a possibility to support implementation through the use of one-time funds. VCP presented to CMS as well as to the various departments within AHS.

Again, none of the agencies met the CON threshold that would trigger the agencies to provide the State with detailed information on the financial considerations.

It is important to note, that this is the first step to fully participate in a state-wide integrated delivery system. The overarching steps include:

1) EHR go-live and post-go live/ agency
2) Connectivity to the VCN data repository
3) Interoperability with other providers which will also depend on the other providers' IT systems capabilities to be interoperable.
4) Connectivity to the VHIE (assuming solution to 42CFR Part2)

Initial EHR Build and Funding

An upfront capital infusion was necessary for the agencies moving to new EHRs and they are extremely appreciative. The appropriation funding will be used as one-time funds to support implementation costs for work already completed and/or future work, depending on the agency and their vendor contract. It will not be used to support ongoing costs.

As has been the case for previous EHRs, the ongoing cost is part of doing business. The initial funding has been budgeted in various ways by each agency. An EHR is not an optional part of a DA any more than an office building is and will be covered as part of doing business. The agencies expect the new EHRs to manage costs going forward through enhanced automation, as well as increasing staff productivity.

VCP represents the needs of the designated and specialized service agencies on the HIE Steering Committee – the group that is responsible for driving more efficient and effective statewide data exchange strategy. It is VCP's goal therefore that the needs of these agencies will be represented in the public investment strategy recognizing that proposals to drawdown federal funds have not been successful to date.

Funding of Ongoing Maintenance and Upgrades
Our options are hosted solutions that are subscription base. This means that the initial cost is much lower than these kinds of purchases have been historically. While the ongoing costs are higher than what we have now, they reduce the need for onsite equipment, reduce systems risk and increase systems resiliency. Additionally, it represents modern system sustainability by converting traditional large upfront and less predictable capital expenditures to a steady stream of operationalized costs reflecting a long range total cost of ownership and vendor partnership. The subscription model also includes some ongoing maintenance.

The network agencies exist in large part to provide the services that the State is mandated to provide. They are primarily Medicaid funded (85%) and are capped. As such, there is little to no opportunity to cost shift to other revenue sources. As they must for other utilities, agencies have no choice but to budget for the ongoing costs. As new requirements are designed by the State of Vermont, whether for reporting or for health information exchange, agencies will need to make those changes within their EHRs at an additional cost. This is true for all agencies – not only the ones that are moving to new EHRs in the coming year. For example, should the State and VITL come up with a consent management platform and process that is compliant with federal law and request that the designated and specialized service agencies connect to the VHIE, interfaces will need to be developed which would be a cost not currently factored into the initial build.

7.0 Technical Approach, Reporting, Interoperability

Both of the selected software companies have many installations nationwide and are leaders in the field of Mental Health Electronic Health Records systems. They both have proven track records of success. One of them, Netsmart also has experience in Vermont and is currently in use at one SSA and one DA. Both are meaningful use certified.

State Reporting
The nine agencies are partnering with vendors who provide a constellation of solutions centered around the EHRs. These new systems, using current technology and designs, can be more easily configured to meet the current reporting specifications, and be agile enough to accommodate improvements in the reporting. The short-term goal is to transition to a data-centered EHR and move away from document-centered systems. This will also increase our

ability to data mine on the care we deliver today and increase the transparency and accountability for care provision.

The new systems are required to be compatible with older systems such as the State of Vermont's Monthly Service Reports (MSR) in order to remain compliant. As a result, they will continue to meet State of Vermont reporting requirements. Newer systems will be more readily able to adapt to changes being made by the State of Vermont and other stakeholders. That stated, changes in future reporting requirements will require financial resources to make changes which should be considered as we all try to balance the use of limited resources in the provision of services and supports to the people we serve.

Connectivity to the Vermont Health Information Exchange (VHIE)
The role of the Health Information Exchange in Vermont is to aggregate health information and make it exchangeable across health care providers. The largest constraint for connection of the designated agencies to the VHIE today is the federal regulation 42CFR Part 2 which protects the privacy of substance use disorder patient records by prohibiting unauthorized disclosures of the records except in limited circumstances. VCP and its agencies fully support the concept of sharing information that falls under the jurisdiction of 42CFR Part 2, with other members of the treatment community as long as that information is collected, stored, managed and shared in a way that allows the individual being served control over their information consistent with the intent and requirements of the law.

As stated in the Vermont HIE Plan, "currently, the VHIE cannot manage SUD data apart from other medical data and many EHR systems cannot separate sensitive data types when sharing with the VHIE; therefore, records containing SUD treatment information cannot be shared. This challenge will remain so long as sharing requirements are limited by laws or regulations and as long as consent processes remain onerous to clinical staff." While this solution is not available today, VCP understands that VITL is working to meet this need in the relatively near future. As such, VCP agencies are building opt-in solutions to be ready and able to plug into a state-wide data sharing solution for clinically sensitive data types when it is available. VCP's plan is to have as much clean high quality data in digital form as possible, so that when there is a solution to manage 42CFR Part 2 within the VHIE, agencies will be ready to implement connectivity and data sharing in an expedited manner. Legacy EHRs were either cost prohibitive in their ability to produce CCDs, ADTs, etc., or did not have the capabilities to produce them at all. The two new vendors are meaningful use certified and as such can transfer data electronically. They both have HL7 capability and can transfer ADTs, CCDs, etc. VCP worked with VITL during the onset of the EHR vetting process, has participated on workgroups with VITL to focus on consent management, and will continue to work with VITL and the agencies to develop the interfaces when a solution is built. This will be an additional cost to the agencies.

Interoperability
There are multiple facets to interoperability, and this initiative is a big step forward for our system of care in all of them. The EHRs selected through the vetting process will improve the network's ability to transfer clients between agencies when necessary and appropriate. Fewer

systems also mean it will be easier for staff to move between agencies with minimal retraining. In addition, more consistent language and documentation will streamline compliance and auditing. Similarly, the chosen EHRs will allow more consistent workflows across agencies as well as configurations such as: coding, cost centers, program codes, service codes etc. all of which will drive toward better coordination, both administrative and clinical. Best practices can be more easily replicated within a standardized and aligned EHR network. Agencies have and will continue to have the ability to transfer data when a client transfers to another agency. This was never meant to be a health information exchange between the designated agencies in large part due to the fact that agencies don't typically share clients. They are deploying new EHRs that are replacing legacy EHRs.

The two vendors are meaningful use certified and as such have the capability to transfer information electronically. It is important to note that interoperability is not only impacted by the capabilities of the vendors the agencies have chosen but also the capabilities of the receiving/sending EHRs of other providers.

Integration of Clinically Sensitive Data into General Health Records
Integrating agency records requires a robust consent model. Without a model within the general health record, or VHIE, it is impossible to develop a plan to integrate with general health records. That stated, we remain committed to the improvement of health information technology and exchange in Vermont as demonstrated by our years of involvement and committed on the HIE Steering Committee and the State Innovation Model Health Data Infrastructure Workgroup.

Interoperability with community-based partners is essential. The scope and range of activities and services required for the delivery of care in a community setting are beyond the data collection scope of out-of-the-box EHR's today. While our short-term goal is to transition to a data-centered EHRs and move away from document-centered systems, the long term goal envisions systems that can more fully integrate with other health systems and care models to right-size care, stabilize costs, and optimize outcomes. Moving into a data management model and away from document-centered records, will increase accountability.

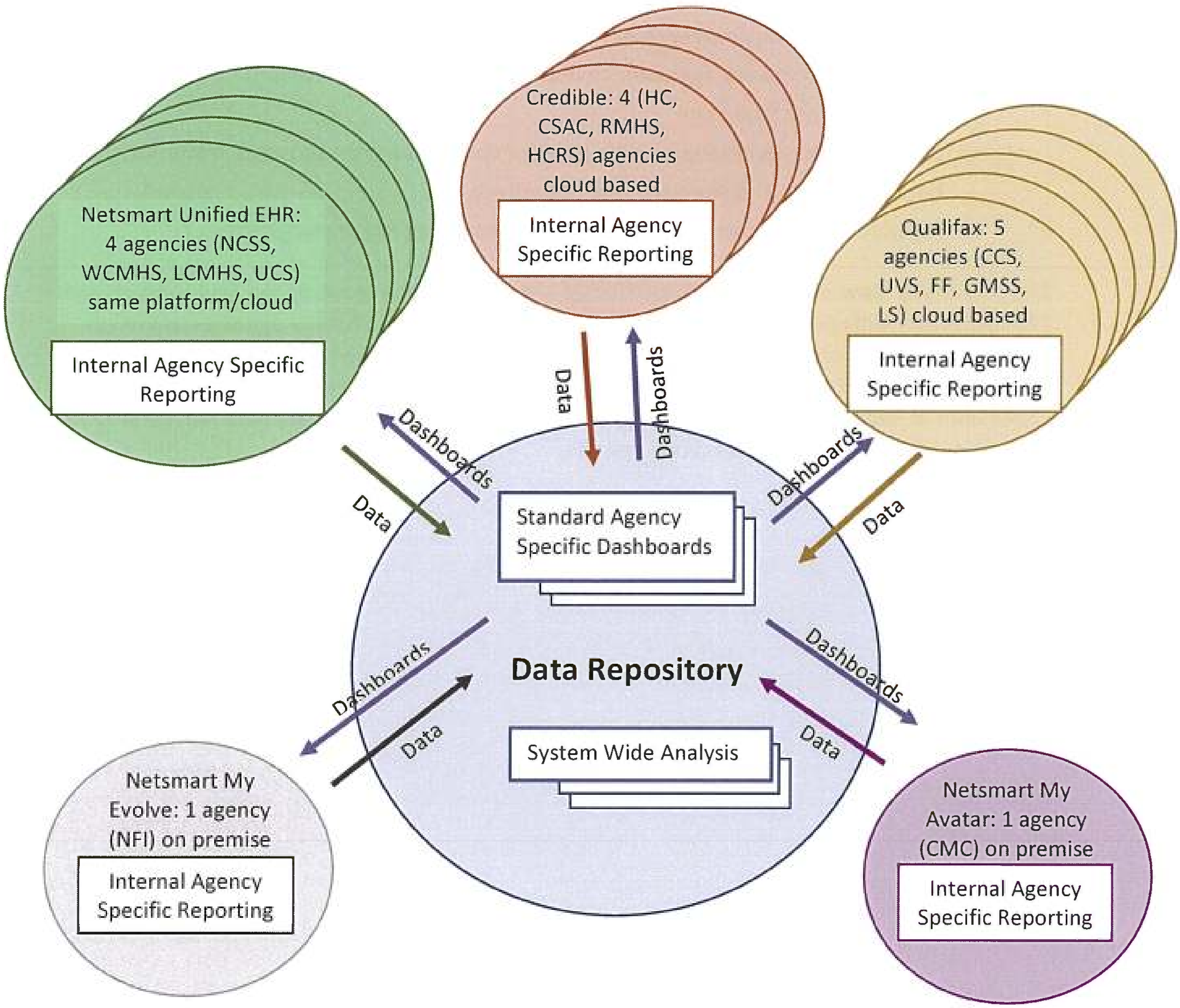
Ability to Capture Data on Services Provided that Do Not Result in a Claim
The capture of services that do not result in a claim (non-billable services such as care inquiry calls, training, disaster and post-vention services etc.) will be driven by the agency workflows, and data collection requirements other than claims generation. The new systems will be configured to allow this kind of data to be captured. The decision process for which non-billable activities will be collected and when and how, would typically be part of work flow development. This could be driven by a number of factors including data reporting and analytics requirements.

8.0 Alignment with the Full VCP Network

What the VCP agencies are doing is unique. All 16 agencies will work within a streamlined network of four platforms with three vendors (Netsmart, Credible, and Qualifax). Though they are on different platforms, they have come together to focus on standardization and data quality. Last summer and fall, 10 groups came together with representation from the agencies to standardize 50 documents. These draft standardized documents were then vetted through each agency and approved by the EHR Steering Committee comprised of representation from 10 of the designated agencies. This type of consolidation and standardization is unique for the industry. It will not only increase efficiency for data collection, reporting and analysis, but will also help to streamline our work with the State of Vermont and other stakeholders.

All EHRs within the network roll data up to the VCP statewide clinical repository. The new EHRs will enable the repository to expand as they will improve the breadth and accuracy of data through the interface. This will then enable VCP to further align data points to improve the dashboards being created and used. The implementation of the EHRs will also allow for agencies to become better aligned improving our network's ability to set and achieve goals for value demonstration and quality improvement among other areas.

16 agencies, three vendors, one repository.
*Data are submitted separately to the repository from 16 agencies.
** 9 agencies moving to a new platform (NKHS undecided)



The Role of the Data Repository and Accompanying Analytics Services
The VCN Data repository is built to collect information from all of the network agencies and provide data analysis, in the form of interactive dashboards.

Our primary goals are:

- Develop a standardized system for collecting data and performing reporting and analytics for network agencies, to improve care quality, document value, and support the health care triple aim.
- Gain efficiency by having a single point of contact for data requests related to our network's data that resides in the repository.
- Support coordination and collaboration among our network agencies.

The role of the data repository will not change significantly as a result of the EHR replacements. The repository will continue to provide dashboards and analytics for the agencies as well as aggregated system wide data, for specific reporting purposes. Due to the persistent nature of the repository interface specification, the information flowing from the agencies, will be contiguous in spite of the change in systems. Additionally, the repository data will be available for long term trends that span agency systems.

9.0 Attachment A: Implementation Plan Summaries

Health Care & Rehabilitation Services (HCRS)
Electronic Health Record Implementation Summary

The HCRS Implementation has been divided into four separate phases. Through the Partnership with Credible, a Milestone sign-off will be completed at the end of each phase to ensure the Implementation is on schedule.

Phase 1: Credible Tour / Data Gathering. This Milestone began January 1, 2019 and was completed by February 22, 2019.

Purpose: During the Credible Tour / Data Gathering phase, Credible staff came to HCRS and gave our Project team and Super Users a tour of the Credible software utilizing Credible best practice workflows and to gather all the needed data to configure our Credible solution. During the Credible Tour / Data Gathering phase, HCRS was expected to:

1. Define the HCRS's Project Team.
2. Hold internal meetings to define/re-define expectations regarding staff buy-in, change management, project management, and business practice changes consistent with implementing an EHR.
3. Provide all requested data to Credible. This includes information related to: revenue recognition practices, chart of accounts, client demographic information, defining programs, teams, payers, prescriber information, to name a few.
4. Participate in a two (2) day on-site Credible Tour with Credible's Implementation and Learning and Development Team, as well as complete additional trainings in Credible's Learning Management System.
5. Participate in a one and a half (1.5) to two (2) day on-site with Credible's Implementation Team to further understand the basic Credible concepts, make decisions regarding the configuration of the Agency's Credible domain, identify and make decisions regarding State Reporting configuration (if applicable), and provide/clarify all remaining data needed for configuration.

Phase 2: Configuration. February 22, 2019 to July 12, 2019

Purpose: During the Configuration phase, Credible's Implementation Manager, Configuration Analyst, and Billing Specialist will be actively reviewing the data provided by HCRS's Project Team and completing the configuration of our Credible domain. During the Configuration phase, HCRS's Project Team completed the following:

1. Attend remote calls through Go-To-Meeting with the Implementation Manager to review progress and learn more about Credible features and functionality.
2. HCRS will be introduced to and make decisions about utilizing Credible features and functionality. When necessary, HCRS will provide needed information to allow Credible to complete configuration. As Credible best practice of state-specific forms are reviewed, HCRS will also provide input on minor changes needed for these forms.

3. Attend remote calls, as requested, by the Credible Billing Specialist or Configuration Analyst for the purpose of clarifying questions related to the data provided in Data Gathering.
4. Receive weekly updates on the status of configuration.
5. Attend a 1-2 hour call at the end of the Configuration phase to review the configuration and Milestone.

Phase 3: Testing and Training. July 15, 2019 to September 3, 2019

Purpose: During the Testing and Training phase, Credible and HCRS project team will work together to validate the accuracy of configuration, and make any final edits to configuration needed prior to GoLive. Testing also includes payer testing of 90% of the Partner's revenue sources or top 10 payers. During the Testing and Training phase, HCRS's Project Team can expect to:

1. Attend regularly scheduled calls through Go-To-Meeting with the Credible Implementation Manager to review accuracy of clinical and administrative areas of the configuration.
2. Attend regularly scheduled calls through Go-To-Meeting with Credible Billing Specialist to review accuracy of billing configuration.
3. Receive training on how to enter services into the domain.
4. HCRS will practice entering test services into the domain for purposes of workflow, form and payer testing.
5. Credible Billing Specialists will work with members of the HCRS Project Team to learn how to resolve Red Xs, run pre-billing checks, and generate a batch.
6. Payer testing will be completed: HCRS with the support of the Credible Billing Specialist will complete File Acceptance and live payer testing.
7. HCRS staff will work with the Credible State Reporting Team to submit test submission of State Reports.
8. HCRS staff will complete end-user training.
9. Final data imports are completed to enter all client demographic and needed clinical data.
10. HCRS Project Team is introduced to Credible Partner Services, who will provide ongoing support throughout the contract with Credible.

Phase 4: GoLive September 3, 2019 to October 19, 2019

Purpose: HCRS is set to GoLive with Credible on 9/3/2019. During the Post GoLive Support phase, Credible's Implementation Manager, Configuration Analyst, and Billing Specialist will continue to work with HCRS's Project Team to ensure a successful transition to the utilization of Credible. During the Post GoLive Support phase, HCRS's Project Team can expect to:

1. Complete a weekly Post GoLive checklist form in the Partnership domain. The Post GoLive checklist will assist HCRS to identify workflow or configuration issues before they become large problems or staff bad habits. The Credible Implementation Manager, Configuration Analyst, or Billing Specialist will be available to assist HCRS with a resolution of identified concerns.

2. Complete a daily 15-minute Touch Point with a member of the Credible Implementation team for at least the first two (2) weeks following GoLive. The daily Touch Point is a brief call to check on progress, troubleshoot any issues/concerns, or answer questions.
3. Complete a Pre-Billing/Batching Training Call with the Credible Billing Specialist. This call will walk HCRS's billing staff through Credible's best practice workflow for pre-billing checks and batching files using HCRS's actual production data. The goal of this call is to ensure the successful batch submission of production files to HCRS's payers.
4. Complete a Posting Training Call with the Credible Billing Specialist. This call will walk HCRS's billing staff through Credible's best practice workflow for manually and electronically posting claims, as well as how to address splitting revenue on a remit between Credible and HCRS's legacy software.
5. Complete 1-3 Month End Closing Calls with the Credible Billing Specialist. These calls will walk HCRS staff through Credible' s best practice workflow for closing the month, resolving any transactional mapping issues, and generating the first AR export batch.
6. During this phase, HCRS is expected to enter Task Tickets for any concerns/questions and a Credible Services Coordinator and/or Billing Specialist will address concerns via the Task Ticketing System.

Project Team Configuration:

IT Director – Project Manager
Chief Operations Officer
Administrative Service Manager
Billing Manager
CYF Division Director
CYF School Area Manger
Adult Division Director
DS Assistant Director
Residential Services Area Manager
Nurse Manager

Governance Structure:

The EHR Development Team reports directly to the Senior Leadership Team. The Development Team is responsible to ensure efficiencies in design for the larger HCRS staff. The Senior Leadership reviews and approves all decisions recommended by the project team.

Counseling Service of Addison County (CSAC)
Electronic Health Record Implementation Summary

The CSAC Implementation has been divided into four separate phases. Through the Partnership with Credible, a Milestone sign-off will be completed at the end of each phase to ensure the Implementation is on schedule.

Phase 1: Credible Tour / Data Gathering. This Milestone began February 29, 2019 and was completed by March 29, 2019.

Purpose: During the Credible Tour / Data Gathering phase, Credible staff came to the Counseling Service of Addison County (CSAC) and gave our Project team and Super Users a tour of the Credible software utilizing Credible best practice workflows and to gather all the needed data to configure your Credible solution. During the Credible Tour / Data Gathering phase, CSAC was expected to:

1. Define the CSAC's Project Team.
2. Hold internal meetings to define/re-define expectations regarding Staff Buy- In, Change Management, Project Management, and Business Practice changes consistent with implementing an EHR.
3. Provide all requested data to Credible. This includes information related to: Revenue Recognition practices, Chart of Accounts, Client Demographic information, defining Programs, Teams, Payers, Prescriber Information, to name a few.
4. Participate in a two (2) day on-site Credible Tour with Credible's Implementation and Learning and Development team, as well as complete additional trainings in Credible's Learning Management System.
5. Participate in a one and a half (1.5) to two (2) day on-site with Credible's Implementation team to further understand the basic Credible concepts, make decisions regarding the configuration of the Agency's Credible domain, identify and make decisions regarding State Reporting configuration (if applicable), and provide/clarify all remaining data needed for configuration.

Goal: At the end of the Credible Tour / Data Gathering phase, CSAC was asked to sign the Data Gathering Milestone. This Milestone sign-off indicates that both CSAC and Credible have all the data needed to complete the configuration of the domain. CSAC did sign off on this Milestone being completed.

Phase 2: Configuration. This Milestone began in early March of 2019 and we are continuing to work on the configuration details. The goal for completing the Configuration Phase is by September 13, 2019.

Purpose: During the Configuration phase, Credible's Implementation Manager, Configuration Analyst, and Billing Specialist will be actively reviewing the data provided by CSAC's project team and completing the configuration of your Credible Domain. During the Configuration phase, CSAC's project team can expect to:

1. Attend remote calls through Go-To-Meeting with the Implementation Manager to review progress and learn more about Credible features and functionality.
2. You will be introduced to and make decisions about utilizing Credible features and functionality. When necessary, CSAC will provide needed information to allow Credible to complete configuration. As Credible Best Practice or State-Specific forms are reviewed CSAC will also provide input on minor changes needed to these forms.
3. Attend remote calls, as requested, by the Credible Billing Specialist or Configuration Analyst for the purpose of clarifying questions related to the data provided in Data Gathering.
4. Receive weekly updates on the status of configuration.

5. Attend a 1-2 hour call at the end of the Configuration phase to review the configuration and Milestone.

Goal: At the completion of the Configuration phase, CSAC's Domain will be completed based on the data provided in the Credible Tour / Data Gathering phase. CSAC will be asked to sign the Configuration Milestone indicating that configuration is completed. **CSAC expects to attain the September 13, 2019 Configuration completion date goal.**

Phase 3: Testing and Training. We expect this Milestone to begin by early August 2019. The goal to complete the Testing and Training Phase is by October 31, 2019.

Purpose: During the Testing and Training phase, Credible and CSAC project team will work together to validate the accuracy of configuration, and make any final edits to configuration needed prior to GoLive. Testing also includes Payer Testing of 90% of the Partner's Revenue Sources or top 10 Payers. During the Testing and Training phase, CSAC's project teams can expect to:

1. Attend regularly scheduled calls through Go-To-Meeting with the Credible Implementation Manager to review accuracy of clinical and administrative areas of the configuration.
2. Attend regularly scheduled calls through Go-To-Meeting with Credible Billing Specialist to review accuracy of billing configuration.
3. Receive training on how to enter services into the domain.
4. CSAC will practice entering test services into the domain for purposes of Workflow, Form and Payer testing.
5. Credible Billing Specialists will work with members of the CSAC project team to learn how to resolve Red Xs, run Pre-Billing Checks, and Generate a Batch.
6. Payer Testing will be completed: CSAC with the support of the Credible Billing Specialist will complete File Acceptance and Live Payer Testing.
7. CSAC staff will work with the Credible State Reporting team to submit test submission of State Reports.
8. CSAC staff will complete End User training.
9. Final data imports are completed to enter all Client demographic and needed clinical data.
10. CSAC Project Team is introduced to Credible Partner Services, who will provided ongoing support throughout the contract with Credible.

Goal: At the completion of the Testing and Training phase, CSAC and Credible will have confirmed the accuracy of the configuration completed, successfully passed Live Payer Testing for 90% of Revenue or Top 10 Payers, and CSAC staff will have completed End User training. CSAC will be asked to sign the Payer Testing Milestone indicating the successfully completion of Payer Testing, and the GoLive Readiness Milestone indicating the configuration has been validated and the domain is ready for production use. **CSAC expects to attain the October 31, 2019 Testing and Training completion date goal.**

Phase 4: Post GoLive Support

Purpose: CSAC anticipates being Live on Credible as of November 1, 2019. Meaning that CSAC would be actively using the Credible software. During the Post GoLive Support phase, Credible's Implementation Manager, Configuration Analyst, and Billing Specialist will continue to work with CSAC's project team to ensure a successful transition to the utilization of Credible. During the Post GoLive Support phase, CSAC's project teams can expect to:

1. Complete a weekly Post GoLive checklist form in the Partnership domain. The Post GoLive checklist will assist CSAC identify workflow or configuration issues before they become large problems or staff bad habits. The Credible Implementation Manager, Configuration Analyst, or Billing Specialist will be available to assist CSAC with a resolution of identified concerns.

2. Complete a daily 15-minute Touch Point with a member of the Credible Implementation team for at least the first 2 weeks following GoLive. The daily Touch Point is a brief call to check on progress, troubleshoot any issues/concerns, or answer questions.
3. Complete a Pre-Billing/Batching Training Call with the Credible Billing Specialist. This call will walk CSAC's Billing staff through Credible's Best Practice workflow for Pre-Billing checks and batching files using CSAC's actual production data. The goal of this call is to ensure the successful batch submission of production files to CSAC's Payers.
4. Complete a Posting Training Call with the Credible Billing Specialist. This call will walk CSAC's Billing staff through Credible's Best Practice workflow for manually and electronically posting claims, as well as how to address splitting revenue on a remit between Credible and CSAC's legacy software.
5. Complete 1-3 Month End Closing Calls with the Credible Billing Specialist. These calls will walk CSAC staff through Credible's Best Practice workflow for closing the month, resolving any transactional mapping issues, and generating the first AR Export Batch.
6. During this Phase, CSAC is expected to enter Task Tickets for any concerns/questions and a Credible Services Coordinator and/or Billing Specialist will address concerns via the Task Ticketing System.

Goal: To provide a smooth transition from Implementation to ongoing Credible Partner Support and to ensure successful billing from GoLive. CSAC will be asked to sign the Post GoLive Milestone indicating that training and completion of 1st month end close and payment posting. **CSAC expects to attain the Post GoLive Milestone by early December 2019.**

SUMMARY OF CSAC IMPLEMENTATION TEAM

CSAC has a nine-person internal Project Implementation Team that includes three co-project managers (CFO, Billing/records Manager and IT manager), with the CFO as the lead Project Manager. The team includes 4 administrators and 5 program staff representing each clinical area of CSAC. The team is empowered to make decisions regarding the implementation of the EHR based upon feedback from CSAC's "Super Users" and Subject Matter Experts". There are 36 "Super Users" and "Subject Matter Experts" who represent all specific areas of CSAC's operations. Generally, these individuals are involved with the project implementation by attending meetings and trainings and providing direct feedback to the implementation team regarding workflows and decisions. The 10 Super Users and the Project Implementation Team will be the main resource in training CSAC staff to the CSAC specific workflows within the EHR in preparing to go Live and afterward. The 26 Subject Matter Experts are more of a reference for the Implementation Team on the workflows and other components during implementation and then will also be an additional level of support to assist staff as needed as CSAC prepares to go Live and after go Live.

Credible has an Implementation Manager guiding/facilitating CSAC through the various steps/phases of the CSAC implementation.

Unified Electronic Medical Record Project of Vermont

Designated Agency Consortia

Clara Martin Center (CMC)
Lamoille County Mental Health Services (LCMHS)
Northwest Counseling and Support Services (NCSS)
United Counseling Services (UCS)
Washington County Mental Health Services (WCMHS)

INITIATIVE UPDATE
FOR
VERMONT JOINT FISCAL COMMITTEE

Authored by:
Sean Thomson
Solution Delivery Manager

Table of Contents

• REVISION HISTORY

Version Table		
Version Number	Date	Notes
201907232354	7/24/2019	Initial Published Draft
201907241451	7/24/2019	Minor revisions

Executive Summary

Project Status

Vision

- UEMRVT has a Unified Vision, Governance, and Technological Enforcement to bring about the Digital Transformation of the UEMRVT Agencies, moving from Documents to Data.
- The UEMRVT Consortia wishes to foster stronger partnerships with our key stakeholders
- The UEMRVT Consortia plans to align with population health, risk bearance, and whole-person care for stronger community health outcomes across Vermont.

Tenets

- Business Transformation
  - UEMRVT not an IT Project, this is a Business Transformation Project
- Practice Standardization
  - The project will result in practice standardization improving data integrity and comparability
- Data not Documents (and the **"One Truth"** model)
  - It also results in an almost purely data-based workflow (**"paperless"** or **"paper on demand"**)
  - This includes a focus on a "one-truth" data model, aka "Single Source of Truth" (SSOT).

Strategic Differentiators

Solution	Approach
• Interoperability ○ Current Vendor Integrations between Behavioral Health Partners and Physical Health Networks using a National Secure Health Information Exchange Architecture • Population Health Integration Readiness • Master Patient Index	• Practice Standardization • Economies of Scale and Resource • Long Term Sustainability • Digital Enforcement of System and Standardization Integrity

Timeline

Phase 0 - Discovery and Initialization		March 2019 - November 2019
Phase 1 - Configuration and Pre-Launch Prep	Solution Validation 1: September 2019 Solution Validation 2: December 2019	May 2019 - February 2019
Phase 2 - Localization	User Acceptance Testing, End User Training, Conversion Validation, Legacy System Continuity Planning	January 2020 - June 2020
Phase 3 - Go-Live	**NCSS** - 3/9/2020 **UCS** - 4/20/2020 **LCMHS** - 5/18/2020 **WCMHS** - 6/22/2018	March 2020 - June 2020
Phase 4 - Post Launch and Support Transition		March 2020 through July 2020
Phase 5 - Continuous Improvement		July 2020 and ongoing

Business Drivers

The primary marketplace challenges attributed to the legacy technologies and subsequent operational difficulties, mostly managed through work-arounds and labor-intensive practices, were as follows:

Legacy interfaces created user difficulties and poor experiences for clinicians resulting in negative impacts on data integrity.

The lack of patient/client portals hindered improvements to client experiences and communication modernization.

The lack of interoperability from the community health systems to physical health providers, and vice versa, created barriers to integrated care models.

The lack of advanced analytical toolsets and data-driven workflows limited the opportunities for informed-design transformation of care models.

Disparate and decentralized systems locked the agencies into inefficient support models without economies of resource or scale.

In an effort to address those challenges and beyond, four (4) of the designated agencies completed the procurement phase of the UEMR initiative and emerged together as a unified consortia within the next phase of the project, affectionately known as UEMRVT (Unified Electronic Medical Records system of Vermont). This next phases plans to implement a fabric of digital solutions for the EMR, advanced analytics, data sharing, and improved clinician and client user experiences. Those four agencies, with support by a fifth agency possessing platform expertise (Clara Martin Center), are committed to the original mission with renewed enthusiasm and operational support for practice standardization and improved care and collaboration across the Vermont healthcare landscape.

The proposed digital solution fabric, will also address vision alignment challenges. By partnering the UEMRVT consortia (UEMRVT-C) with a vendor who provides a constellation of solutions orbiting around the EMR, the short term goal is to transition from the document-centered systems used today to a data-focused EMR. This short range goal will also increase UEMRVT-C's ability to data mine on the care delivered today and therefore increase the transparency and accountability for care provision. The long term goal is to have 100% of services documented within a data-driven, integrated system. The scope and range of activities and services required for the delivery of care in a community setting are beyond the data collection scope of out-of-the-box EMR's. However, once this solution is realized, models of care with comprehensive and inclusionary services can be developed to integrate with the physical health systems and care models in order to right-size care, stabilize costs, and optimize outcomes.

As healthcare evolves it requires, indeed, craves data. Data-driven systems meet this directive by collecting data as few times as possible and as close to the source as possible therefore increasing data integrity and useability. Patient Portals for continuous client feedback, secured data exchanges and integrations to reduce redundancy and create single data entry-points for providers, are all necessary to the success of outcomes-based care and the value-based payment systems to fuel it.

All that said, the center-point of the entire project, is a transformation toward care collaboration across all health providers in Vermont, especially for a client bases that represents a high-needs population. This is achieved by moving beyond data exchange and into data integration. The EMR alone is not the answer; it's the solution fabric that allows the data in the designated agency UEMRVT systems to move into the right place at the right time in other EMR's and data systems throughout the Vermont Healthcare landscape of providers and vice versa. This will also allow for redundant data entry to be minimized in order to increase the usefulness and effectiveness of care coordination tools.

Arriving through the procurement phase of the project and beginning discovery and implementation, the UEMRVT Consortia has tremendous evidence to support an assertion that it has chosen a vendor-partner, Netsmart Technologies, to deliver this solution fabric to achieve the unified Vision and Mission of the UEMRVT Consortia.

• Vision

Vision

To achieve a technology-based business transformation in order to pivot the participating agencies into a strategic role within the Vermont healthcare landscape.

Mission

To achieve this vision, the mission is to deliver a **unified** and **standardized** electronic medical record system across all four (or more) participating agencies that:

1. Improves the internal operations of the agencies,
2. Fosters a new era of data integration with UEMRVT-C's mainstream healthcare partners and data driven care,
3. While using the project as a platform for stronger partnerships with key stakeholders, such as the State of Vermont.

Goals and Objectives

The goals, in order to achieve the mission will be to:

1. Replace the legacy electronic medical record systems
2. Standardize practice management across the agencies, including workflows, business practices, coding, and data collection methods, wherever possible
3. Migrate as much viable data and record artifacts as possible without damaging the integrity of the highly governed data within the new system
4. Develop advanced reporting and analytics
5. Forge the cornerstones of population health, including care data and a Master Patient Index
6. Erect the beginnings of integrated care through healthcare information exchange with mental health and, potentially, substance use disorder data with other care partners, including but not limited to hospitals, FQHC's, primary care, and other community health partners.

Definition of Success

The UEMRVT shared instance of the Netsmart myAvatar Electronic Medical Record system, CareConnect, Order Entry, eMAR, Patient Portal, and CarePathways, PsychNote, Clinician POV, and KPI Tools implemented in all four (4) consortia agencies and operating in a standardized fashion such that all client-side functions and maintenance of the system can be conducted by a geographically separated but centrally managed configuration team and such that all functionality changes within the system affecting the core instance/version and/or data standardization and integrity are also centrally governed.

Complex Initiative Streams

The UEMRVT project is a complex initiative with two major project streams; (1) Practice Standardization; and (2) EMR Implementation. In order for the UEMRVT Agencies to coexist in a sustainable way within a shared instance of the myAvatar platform while preserving economies of scale and resources, the business practices of the four agencies will be adapted for optimized system performance and automation while preserving that which is strategically and culturally important to Vermont's Designated Agency System and its partners.

A known impact of the Practice Standardization stream is a lengthened overall project timeline. This risk is actively managed by the internal and vendor project teams and the project deliverables are being adapted to the Kanban Agile Project Methodology employed to make this successful.

• Strategic Differentiators

The UEMRVT Project contains several strategic differentiators focused to deliver the project with the established and complex Vision and Mission.

Solution Strengths		Netsmart's myAvatar
Mobile	Mobility Solutions and Apps	✓
Interoperability	National Secure Health Information Exchange Architecture	✓
	Active Integrations between Behavioral Health Partners and Physical Health and/or Hospital Networks	✓
	Federated Query capability into healthcare network systems	✓
Interoperability Options	Web Services	✓
	APIs	✓
	Direct Messages with CCD's	✓
	FIHR	✓
Integrated Health	Integrated Health Modules for providing physical health care in community and behavioral health settings	✓
Analytics	Advanced analytics engines to analyze internal and external comparative data	✓
Population Health	Integration with and Provision of Population Health Toolsets	✓
MPI	Master Patient Index. An MPI is critical for population health and integrated health tools for unique and unified identification of person-centric records. An integrated MPI for the UEMRVT system will allow the participating agencies to more easily analyze population cohorts alongside the State of Vermont and other Health Care Partners.	✓

Vendor Strengths		Netsmart
Vision	Company Vision for Short Term Solutions and Long Range Planning	✓
Partnership	Nationally positioned to monitor and influence the state of care records	✓
	Strategically and technologically positioned to provide solutions for future challenges	✓
	Staffing and Expertise to assist in the development of best practices with solution-based integration	✓
	Nationally positioned and partnered with other critical path electronic health care initiatives	✓
Proof of Value in Solutions	Active Integrations between Behavioral Health Partners and Physical Health and/or Hospital Networks	✓
	Successful health network-based implementations	✓

Additionally, the UEMRVT consortia identified a collective strength, beyond economies of scale, by working together in a unified approach. The benefits outweighed the

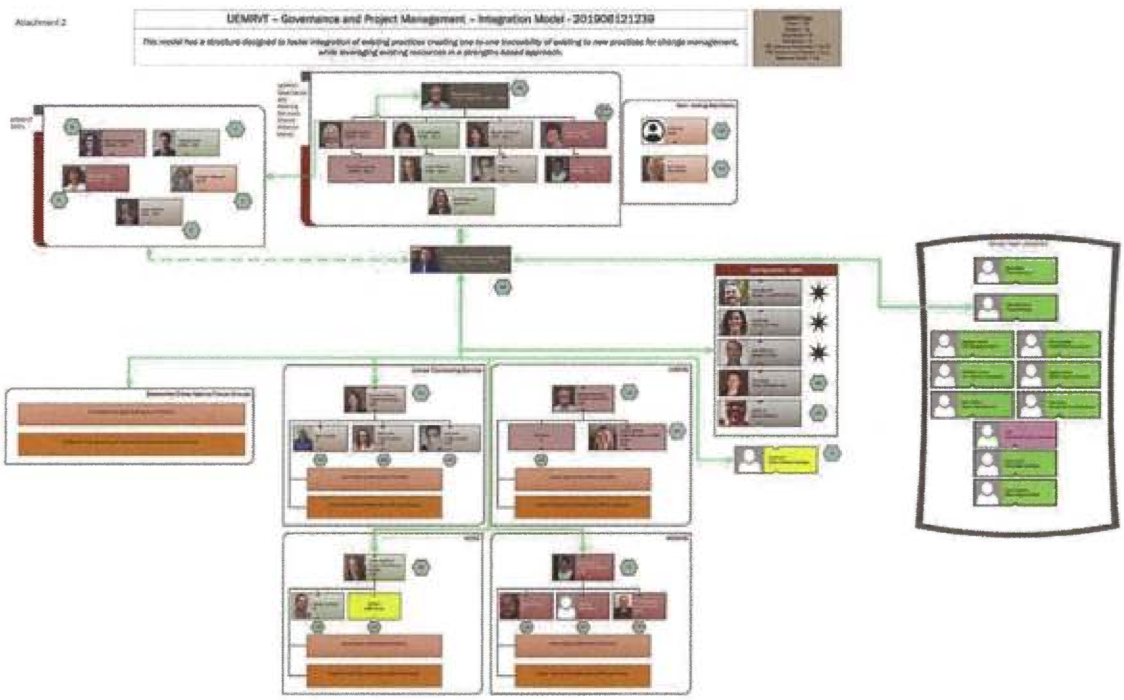
Unified vs Individual Implementation		Unified	Individual
Human Resources	Economies of resources to be found in shared EMR administration	✓	
System Resources	Potential to share source code, templates, reports, configuration files	✓	
Standardization	Practice Standardization platform	✓	
	Forcing function for standardization and unification	✓	
MPI	Master Patient Index to support Master Patient records for, sharing clients across DA's for client-centered specialist or best practice care	✓	
	MPI to support the foundation for population health	✓	
	MPI to support advanced care management	✓	
Purchasing Power	Purchasing power as a larger group	✓	
Strategic Stance	Together the group is a larger customer to improve strategic positioning within the customer base and improve solution priorities for Vermont within vendor roadmaps.	✓	
Autonomy	Complete autonomy from partner agencies resulting in an increase in individual agency operational agility		✓

UNIFIED SOLUTION, GOVERNANCE, AND DIGITAL ENFORCEMENT

Finally, in order to protect the investment in the unification and shared platform and to optimize both future results and sustainability, the UEMRVT solution will have digital enforcement through database architecture and a corresponding Governance Structure.

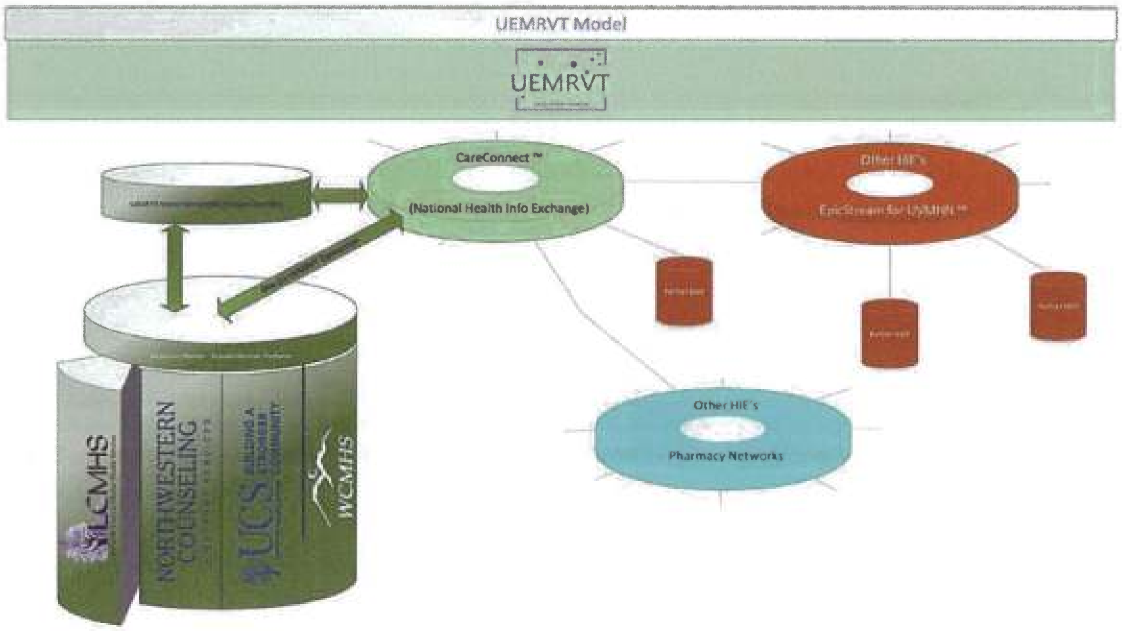
A strong, ratified, and documented Governance structure is key in complex projects. Established bylaws, roles, and responsibility, alongside a cohesive and collegial project team are the hallmarks of UEMRVT success.

Org Chart



Database Architecture

The database model allows for the necessary flexibility to support differing efforts across the UEMRVT agencies while enforcing and maintaining standardization where appropriate. This will maximize the interoperability of the resulting system.



• Summary Project Plan

Fostering Practice Standardization

One Truth Model

This concept has several connotations and is sometimes known as the SSOT (single source of truth) model. For our project it has two specific goals.

The first goal is "Digital First" and is intended to foster cohesion in a large and geographically spread team. By keeping all project materials fully electronic and by employing modern digital conference room technology, a team member attending meetings via web conference or completing assignments remotely can participate as fully and comprehensively in project efforts as if they were sitting down the hall. Digital First methods remove distance as a barrier to effective teams.

The second goal is "Single/Authority Sourcing." This method fosters the creation of complex project libraries and tools that consolidate all sources of material, regulations, templates, best practices, etc, and allow for not only their analysis and comparison, but conflict identification and solution engineering. This component will be critical in the practice standardization stream.

Additional Components of the Project Plan

- Toolset Management including Project and Team Sites
- Artifacts Management including Unified Libraries and Lexicons
- Governance Plan with Roles and Responsibilities
- Meeting Plan
- Project Change Order Plan
- Agency Change Management Plan
- Unified Project Schedule with Phase Management and Work Breakdown Structure
- Risk and Issues Response Plan
- Communication Plan
- Training and Sustainability Plan

Project Phases and Associated Timeline

This project schedule was co-developed with Netsmart and integrated both the Practice Standardization and the EMR Implementation project streams.

Phase 0 - Discovery and Initialization (March 2019 through November 2019)

This phase is extended as it includes the majority of the Practice Standardization effort and analysis. This includes analysis of and resynchronization with regulatory guides. It also includes modernization of clinical workflows, billing practices, financials, reporting, etc.

Phase 1 - Configuration and Pre-Launch Prep (May 2019 through February 2019)

Using a Kanban Agile project method, coupled with the One Truth model, configuration and requirements gathering begin to overlap early on with improvements made to configuration along the way.

- Solution Validation 1: September 2019
- Solution Validation 2: December 2019

Phase 2 - Localization (January 2020 through June 2020)

This phase will include localized requirements and configuration for specialized programming at each individual agency. Up until this phase the system will have been configured with a unified core build applicable and useable by all UEMRVT agencies. Also this phase will persist for some agencies as other are going live, meaning that Phase 2 and 3 will overlap across the UEMRVT agencies.

- Major Activities in this Phase
  - Final User Acceptance Testing and System Validation
  - End User Training (synchronized with per agency Go Live and supported by a centralized core team)
  - Conversion Validation
  - Legacy System Continuity Planning
    - Migration/Archiving
    - Parallel Operations Plan
    - Transition and Turn Down Plan

Phase 3 - Go-Live (March 2020 through June 2020)

Each Go Live will be successive, starting with NCSS, then UCS, then LCMHS, then WCMHS, separated by several weeks between Go Lives to ensure system performance and functionality.

- NCSS
  - 3/9/2020
- UCS
  - 4/20/2020
- LCMHS
  - 5/18/2020
- WCMHS
  - 6/22/2020

Phase 4 - Post Launch and Support Transition (March 2020 through July 2020)

Each Go Live will inform improvements with high and low priorities. It is within the design of the UEMRVT Project to improve the system between Go Lives with mission critical changes discovered during each Go Live in order to reduce the operational impact on agencies as the project progresses.

Additionally, at this time, a sustainable support methodology will be implemented upon Go Live for each agency. That plan will include self help resource sites, help desk resources, vendor escalation paths, Netsmart Community resources, and learned best practices from agencies already live on the system.

Phase 5 - Continuous Improvement (July 2020 and ongoing)

Inevitably during the project, discoveries for future improvements will be made and "parking lotted" in order to support a timely rollout of the EMR. Through the method outlined during Phase 4, the UEMRVT project intends to prioritize these and begin immediate system improvements as soon as the last agency is live. Additionally, by leveraging the sustainable support model, these improvements will be developed into a systems roadmap that will be synchronized with State and stakeholder requirements in an effort to future-proof the investment made by the UEMRVT agencies.

1.0 Howard Center EHR Implementation Status Summary

July 18, 2019

2.0 Phase 1 – Data Gathering and Project Planning

Started 11/5/2018 – Ended 12/18/2018
Status - Successfully Completed
Activities included: Project scoping, project schedule development, resources assignments and core project team development, environment set up, program review, labs forms, RX forms, employee and client profiles, treatment plans review, data migration planning, client systems review, bed board review, reporting requirements and options review, billing data examples and configuration high level review, data import formats, reports planning, Business Intelligence options, forms planning, reporting planning

3.0 Phase 2 – Configuration and Development

Started – 12/19/2019 – Ended 6/30/2019
Status – Successfully Completed
Activities included: Forms and template development and testing, report development, integration development, client/employee/episode profile configuration, Client portal review and planning, state reporting requirements, data import requirements and testing, staff training for admin and development, external provider set up, treatment plan configuration and development, medical profiles development, eMAR and orders configuration, RX and physician's orders development, security matrix planning and configuration, billing configuration and preparation, bed board training, schedule groups and templates review, development of notifications and triggers, billing workflows development, end user training materials development, project management, device planning, system decommissioning, information forums, signature pads planning, scanning preparation, support structure development, development of testing scenarios, development of additional training facilities and preparation, open clinics support to ensure current EHR close out of open items

4.0 Phase 3 – Test and Train

Started 6/29/19 – Targeted end 9/2/2019
Status – Current phase and on target as of 7/17/19
Activities include(d): Form testing and tuning, state reporting completion and testing, testing and tuning of all configurations based on test scenarios, training finalization, training for support staff and all clinical staff, final data migration, biller payer testing and tuning, final RX set up and testing, preparation and set up of production environment, reporting development and testing, integration development, mobile device distribution, deployment of signature devices, preparation for transition from previous EHR procedures, begin entry of treatment plans and other preparation after production environment readied

5.0 Phase 4 – Go Live and Post Go Live transition start up

Start Target 9/3/2019 Targeted end 11/30/2019 (Go live targeted for 9/3/2019)
Status – Not started
Activities include: Migrate users to new Credible domain, finalize transition from previous EHR including completing any open activity, dual billing procedures (could continue for 6 months in previous EHR), open clinics to support staff transition, super user support within programs and

locations, support for operational processes that have transitioned to new EHR, begin activation of Read Only access in previous EHR, monitor and tune Credible EHR processes/reports/support

Howard Center Implementation Team

6.0 Credible Core Project Team (CCPT)

Name	Title	Role	Organization
Laura Pearce	Director of Information Management and Compliance	Project owner, SME, trainer	Business Operations - IM
Robin Pesci	Health Informatics Manager	Lead HI, SME, trainer	Business Operations - IM
Bob Stetzel	Sr. Director of Information Technology	Lead IT	Business Operations - IT
Alyx Lyons	Project and Portfolio Manager	Project manager	Business Operations - IT
John Fredericks	Information Systems Manager	Lead IT/IS	Business Operations - IT
Ed Giroux	Director, Revenue Cycle	Lead Billing	Business Operations - Finance and Accounting
Liz Brunell	Billing Manager	Billing	Business Operations - Finance and Accounting
Ashleigh Allaire	Sr. Manager	Lead CS participant, trainer, SME, liaison with Client Services teams	Client Services - Long Term Services and Support
Jaime Elliot	Clinical Manager - Outpatient	Lead CS participant, trainer, SME, liaison with Client Services teams	Client Services - Outpatient Services
Betsy Ferry	FCP Program Coordinator	Lead CS participant, trainer, SME, liaison with Client Services teams	Client Services - Home and Community Programs

7.0 Health Informatics Team

Name	Title	Role	Organization
Ed Olszewski	Clinical Informatics Analyst	HI participant, trainer	Business Operations - IM
Judy Emerson	Clinical Informatics Analyst	HI participant, trainer	Business Operations - IM
Dan Ozimek	Technical Training Specialist	Trainer	Business Operations - IM
Bobby Leonard	Health Informatics Systems Auditor	Trainer	Business Operations - IM

8.0 Information Technology Team

Name	Title	Role	Organization
Jim Staples	Application Developer	Developer - reports, integrations, data migration	Business Operations - IT

Bill Post	Sr. Database Administrator and Programmer	Developer - reports, integrations, data migration	Business Operations - IT
Rick Bragg	Sr. Applications Analyst	Developer - reports, integrations, data migration, Application Admin	Business Operations - IT
Emma Owens	Emma Owens	Developer - reports, integrations, data migration, Application Admin	Business Operations - IT

9.0 Training Team

Casey Gates	Team Lead - Developmental Services	Trainer	Client Services - Long Term Services and Support
Lisa Bilowith	Director, Garvin School	Trainer	Client Services - School Programs
Dana Poverman	Director, Medication Assisted Treatment Programs	Trainer	Client Services - Medication Assisted Treatment Programs
Michelle Fane-Cushing	Clinical Director, Outpatient Services	Trainer	Client Services - Outpatient Services
Hanna Wagner	ARCh Program Coordinator	Trainer	Client Services - Access & Intake
Sara Stowell	ARCh Clinical Supervisor	Trainer	Client Services - Access & Intake
Adrianna Benson	Technology Support Analyst	Trainer	Business Operations - IT

Rutland Mental Health Services (RMHS)
Electronic Health Record Implementation Summary

The RMHS Implementation has been divided into four separate phases. Through the Partnership with Credible, a Milestone sign-off will be completed at the end of each phase to ensure the Implementation is on schedule.

Phase 1: Credible Tour / Data Gathering. This Milestone began November 25th, 2018 and was completed by January 18, 2019.

Purpose: During the Credible Tour / Data Gathering phase, Credible staff came to Rutland Mental Health Services, Inc. (RMHS) and gave our Project team and Super Users a tour of the Credible software utilizing Credible best practice workflows and to gather all the needed data to configure your Credible solution. During the Credible Tour / Data Gathering phase, RMHS was expected to:

1. Define the RMHS's Project Team.
2. Hold internal meetings to define/re-define expectations regarding Staff Buy- In, Change Management, Project Management, and Business Practice changes consistent with implementing an EHR.
3. Provide all requested data to Credible. This includes information related to: Revenue Recognition practices, Chart of Accounts, Client Demographic information, defining Programs, Teams, Payers, Prescriber Information, to name a few.
4. Participate in a two (2) day on-site Credible Tour with Credible's Implementation and Learning and Development team, as well as complete additional trainings in Credible's Learning Management System.
5. Participate in a one and a half (1.5) to two (2) day on-site with Credible's Implementation team to further understand the basic Credible concepts, make decisions regarding the configuration of the Agency's Credible domain, identify and make decisions regarding State Reporting configuration (if applicable), and provide/clarify all remaining data needed for configuration.

Goal: At the end of the Credible Tour / Data Gathering phase, RMHS was asked to sign the Data Gathering Milestone. This Milestone sign-off indicates that both RMHS and Credible have all the data needed to complete the configuration of the domain. RMHS did sign off on this Milestone being completed.

Phase 2: Configuration. This Milestone began in early January of 2019 and was completed on July 12th 2019.

Purpose: During the Configuration phase, Credible's Implementation Manager, Configuration Analyst, and Billing Specialist will be actively reviewing the data provided by RMHS's project team and completing the configuration of your Credible Domain. During the Configuration phase, RMHS's project team can expect to:

1. Attend remote calls through Go-To-Meeting with the Implementation Manager to review progress and learn more about Credible features and functionality.
2. You will be introduced to and make decisions about utilizing Credible features and functionality. When necessary, RMHS will provide needed information to allow Credible to complete configuration. As Credible Best Practice or State-Specific forms are reviewed RMHS will also provide input on minor changes needed to these forms.
3. Attend remote calls, as requested, by the Credible Billing Specialist or Configuration Analyst for the purpose of clarifying questions related to the data provided in Data Gathering.
4. Receive weekly updates on the status of configuration.

5. Attend a 1-2 hour call at the end of the Configuration phase to review the configuration and Milestone.

Goal: At the completion of the Configuration phase, RMHS's Domain will be completed based on the data provided in the Credible Tour / Data Gathering phase. RMHS signed the Configuration Milestone indicating that configuration is completed on July 12 2019 with addendums for state reporting, approvals and notification triggers to be completed later.

Phase 3: Testing and Training. We started this Milestone on July 15th. The goal to complete the Testing and Training Phase is by September 3rd, 2019.

Purpose: During the Testing and Training phase, Credible and RMHS project team will work together to validate the accuracy of configuration, and make any final edits to configuration needed prior to GoLive. Testing also includes Payer Testing of 90% of the Partner's Revenue Sources or top 10 Payers. During the Testing and Training phase, RMHS's project teams can expect to:

1. Attend regularly scheduled calls through Go-To-Meeting with the Credible Implementation Manager to review accuracy of clinical and administrative areas of the configuration.
2. Attend regularly scheduled calls through Go-To-Meeting with Credible Billing Specialist to review accuracy of billing configuration.
3. Receive training on how to enter services into the domain.
4. RMHS will practice entering test services into the domain for purposes of Workflow, Form and Payer testing.
5. Credible Billing Specialists will work with members of the RMHS project team to learn how to resolve Red Xs, run Pre-Billing Checks, and Generate a Batch.
6. Payer Testing will be completed: RMHS with the support of the Credible Billing Specialist will complete File Acceptance and Live Payer Testing.
7. RMHS staff will work with the Credible State Reporting team to submit test submission of State Reports.
8. RMHS staff will complete End User training.
9. Final data imports are completed to enter all Client demographic and needed clinical data.
10. RMHS Project Team is introduced to Credible Partner Services, who will provided ongoing support throughout the contract with Credible.

Goal: At the completion of the Testing and Training phase, RMHS and Credible will have confirmed the accuracy of the configuration completed, successfully passed Live Payer Testing for 90% of Revenue or Top 10 Payers, and RMHS staff will have completed End User training. RMHS will be asked to sign the Payer Testing Milestone indicating the successfully completion of Payer Testing, and the GoLive Readiness Milestone indicating the configuration has been validated and the domain is ready for production use. **RMHS expects to attain the September 3rd, 2019 Testing and Training completion date goal.**

Phase 4: Post GoLive Support

Purpose: RMHS anticipates being Live on Credible as of September 3, 2019. Meaning that RMHS would be actively using the Credible software. During the Post GoLive Support phase, Credible's Implementation Manager, Configuration Analyst, and Billing Specialist will continue to work with RMHS's project team to ensure a successful transition to the utilization of Credible. During the Post GoLive Support phase, RMHS's project teams can expect to:

1. Complete a weekly Post GoLive checklist form in the Partnership domain. The Post GoLive checklist will assist RMHS identify workflow or configuration issues before they become large problems or staff bad habits. The Credible Implementation Manager, Configuration Analyst, or Billing Specialist will be available to assist RMHS with a resolution of identified concerns.

2. Complete a daily 15-minute Touch Point with a member of the Credible Implementation team for at least the first 2 weeks following GoLive. The daily Touch Point is a brief call to check on progress, troubleshoot any issues/concerns, or answer questions.
3. Complete a Pre-Billing/Batching Training Call with the Credible Billing Specialist. This call will walk RMHS's Billing staff through Credible's Best Practice workflow for Pre-Billing checks and batching files using RMHS's actual production data. The goal of this call is to ensure the successful batch submission of production files to RMHS's Payers.
4. Complete a Posting Training Call with the Credible Billing Specialist. This call will walk RMHS's Billing staff through Credible's Best Practice workflow for manually and electronically posting claims, as well as how to address splitting revenue on a remit between Credible and RMHS's legacy software.
5. Complete 1-3 Month End Closing Calls with the Credible Billing Specialist. These calls will walk RMHS staff through Credible's Best Practice workflow for closing the month, resolving any transactional mapping issues, and generating the first AR Export Batch.
6. During this Phase, RMHS is expected to enter Task Tickets for any concerns/questions and a Credible Services Coordinator and/or Billing Specialist will address concerns via the Task Ticketing System.

Goal: To provide a smooth transition from Implementation to ongoing Credible Partner Support and to ensure successful billing from GoLive. RMHS will be asked to sign the Post GoLive Milestone indicating that training and completion of 1st month end close and payment posting. **RMHS expects to attain the Post GoLive Milestone by mid October 2019.**

Core Team

Staff	**Area/Role**
Jit Singh	Project Manager
Ellen Malone	Developmental Services (DS)
Dustin Redlein	DS - Residential and Specialized Supports
Laura Kass	Mental Health (MH)
Scott Louiselle	MH - Child and Family
Clay Gilbert	MH - Adults
Leslea Kessler	EMR Coordinator
Claire Waterman	Compliance and Front Desk Support
Linda Heald	Billing
Diana Fouracre	Records

Superusers

Staff	**Area/Role**
Deb Avison	Administration
Karen Grimm	MH - Child and Family
Ajay Shah	Emergency Services
Joanne Matthew	APRN
Hillary Ward	CRT
Natalie Brewster	DS - Child and Family
Jennafyr Flood	DS - Service Coordinator
Michel Kersten	DS - Shared Living
Melissa Hamblin	DS - Nurse
Jenna Laplante	Residential

D

FitchRatings

Fitch Downgrades Vermont's IDR to 'AA+'; Rates $125MM GOS 'AA+'; Outlook Stable

Fitch Ratings-New York-10 July 2019: Fitch Ratings has assigned a 'AA+' rating to the following State of Vermont general obligation (GO) bonds:

--$84 million GO bonds, 2019 series A (competitive);
--$41 million GO refunding bonds, 2019 series B (Vermont Citizens Bonds) (negotiated).

The bonds are expected to sell the week of July 22, 2019; the series A bonds through competitive bid and the series B bonds through negotiated bid.

In addition, Fitch has downgraded the following ratings for the state of Vermont:

--Issuer Default Rating (IDR) to 'AA+' from 'AAA';
--Outstanding GO bonds to 'AA+' from 'AAA';
--Outstanding Vermont Municipal Bond Bank (VMBB) bonds issued under the 1988 general resolution rated by Fitch to 'AA-' from 'AA'.

The Rating Outlook is Stable.

SECURITY

The bonds are general obligations of the state of Vermont backed by the state's full faith and credit.

ANALYTICAL CONCLUSION

The downgrade of Vermont's IDR and GO rating to 'AA+' from 'AAA' reflects Fitch's lowered assessment of the state's revenue framework, in particular, an expectation of slower growth prospects going forward. Fitch considers Vermont's growth prospects to be more consistent with most of its New England peers, which generally face similar economic and demographic headwinds.

The 'AA+' IDR and GO rating also reflects conservative financial management, including prompt action to address projected budget gaps as they emerge, and maintenance of sound reserves. The moderate long-term liability burden, measured as a percentage of personal income, is above the states' median but should remain relatively stable given Vermont's close oversight and management of debt issuance, and policy changes to improve pension sustainability over time.

The downgrade of the rating on the Vermont Municipal Bond Bank's 1988 General Resolution bonds to 'AA-' from 'AA' is due to the linkage with the state's IDR. The rating reflects the enhancement provided by Vermont's moral obligation pledge. The two-notch distinction is warranted by the broad state purposes served by the bonds and the state's involvement in the program as evidenced by the makeup of the board of directors (including the state treasurer and gubernatorial appointees) and a related state aid intercept provision.

Economic Resource Base
Vermont's small and modestly growing economy has a larger-than-average reliance on health and educational services, manufacturing, and tourism and remains exposed to several key large employers. During the Great Recession, Vermont's peak-to-trough monthly employment loss of 4.8% (seasonally adjusted levels) was less severe than the national 6.3% decline. But the state's jobs recovery has trailed the national trend. Vermont's population is older than most states and growth has been relatively limited. The state's labor force has been flat to declining over the past decade, in contrast to slow growth at the national level. As with several other New England states, high educational attainment levels provide some potential for economic gains, but Vermont has not fully benefited from that potential to date.

KEY RATING DRIVERS

Revenue Framework: 'aa'
Fitch anticipates Vermont's revenues used for state operations will grow at a modest pace, consistent with our expectations for the state's economy. Property taxes represent the largest component of state revenues and have grown at a robust rate, but these revenues do not drive the state's overall revenue framework. Property tax revenues are essentially passed through to school districts, and are adjusted annually based on multiple factors including decisions of voters in those school districts. The state has complete legal control over its revenues.

Expenditure Framework: 'aaa'
The state maintains ample expenditure flexibility with a low burden of carrying costs for liabilities and the broad expense-cutting ability common to most U.S. states. Vermont has been particularly focused on addressing healthcare spending, including Medicaid, which is a key expense driver.

Long-Term Liability Burden: 'aa'
Vermont's long-term liabilities burden is moderate and above the median for U.S. states.

Operating Performance: 'aaa'
Fitch anticipates Vermont will utilize its broad gap-closing capacity to manage through economic downturns while maintaining a high level of fundamental financial flexibility. The state has taken steps during the expansion to expand its flexibility and position itself well for the next downturn.

RATING SENSITIVITIES

FISCAL MANAGEMENT: Vermont's IDR is sensitive to the state's demonstrated commitment to improving its fiscal resilience and carefully managing its long-term liability burden, particularly in the context of modest revenue growth expectations.

ECONOMIC GROWTH: The IDR is also sensitive to changes in the state's fundamental economic growth trajectory. Material and sustained improvement in the state's demographic profile, such as through consistent population and labor force gains, could support stronger revenue growth prospects and a more robust revenue framework assessment.

IDR LINKAGE: The rating on the Vermont Municipal Bond Bank's 1998 General Resolution bonds is linked to the state's IDR.

CREDIT PROFILE

Vermont's population has been largely unchanged since the turn of the century, falling off the national trend of slow and steady growth. Since 2012 the state had actually been in a slight decline. But over the past two years, population and labor force declines leveled off. While the state's unemployment rate is the lowest in New England and amongst the lowest nationally, labor force weakness has been the primary factor. Vermont's government remains focused on addressing its demographic challenges with multiple policy efforts to enhance the state's attractiveness for new residents and businesses including a grant program for remote workers relocating to Vermont. These efforts, along with economic improvement in the state, may have played a role in fostering the recent stabilization.

However, given Vermont's small population of 626,299 as of July 2018 (second lowest amongst the states), even minor shifts in migration trends could again lead to population and workforce declines. Fitch considers the state's economic growth trajectory modest and in the middle relative to its New England peers.

Revenue Framework
The state's revenues used for direct state operations consist primarily of personal and corporate income taxes, sales and use taxes, and a meals and rooms tax meant to export a share of the tax burden to visiting tourists. Vermont also levies a state property tax for education, an unusual feature for state governments, which is the largest source of total state revenues. Since Vermont essentially passes through property tax collections to local school districts, Fitch discounts the importance of this stream in the revenue framework assessment. There are no legal limitations on the state's ability to raise revenues.

Fitch anticipates limited growth in Vermont's revenues, relatively in line with inflation, given the state's modest economic growth prospects. Vermont's historical total tax revenue growth, adjusted for policy changes, has been slightly negative on a real basis over the past decade, which includes an extended multi-year decline during the Great Recession. Recent Fitch analyses of states' economic trends and likely trajectories (A Visualization of Demographic Strength and Stability Trends, July 2018 and U.S. States and the Growth Implications of an Aging Population, October 2018) illustrate some of the state's ongoing and anticipated constraints on economic and revenue growth.

Vermont has no legal limitations on its ability to raise revenues through base broadenings, rate increases, or the assessment of new taxes or fees.

Expenditure Framework
Education is the state's largest expenditure from own-source revenues, driven by the unique funding

system in Vermont with the state covering the full cost for locally administered K-12 schools primarily through the property tax, and the sales and use tax. Health and human services, primarily Medicaid, is the second-largest expenditure area.

Spending growth, absent policy actions, will likely be slightly ahead of revenue growth, driven primarily by Medicaid, requiring regular budget measures to ensure ongoing balance. The fiscal challenge of Medicaid is common to all U.S. states, and the nature of the program as well as federal government rules limit the states' options in managing the pace of spending growth. Federal action to revise Medicaid's programmatic and financial structure appears less likely in the near term given divided control in Congress.

Vermont has been particularly aggressive in addressing the long-term national trend of steadily rising healthcare costs (including Medicaid), with the most recent effort being a shift towards outcome-based care under an 'all-payer' system, rather than the traditional fee-for-service model. Under terms of agreements with the federal government for the all-payer system, Vermont is transitioning Medicare and Medicaid to an outcome-based accountable care organization model, with the goal of getting participation from private insurers and providers as well over the program's initial five-year period. The state began an initial all-payer pilot program with Medicaid patients in January 2017.

MEDICAID SPENDING LEVELLING OUT

Healthcare spending in recent years has leveled off with the state reporting that actual expenditures for the Agency for Human Services (AHS, responsible for Medicaid in the state) and acute care spending specifically are seeing either declines or essentially no growth since fiscal 2016. The state also reports that Medicaid enrollment declined sharply in this period (by 21% between fiscals 2016 and 2019), a trend seen by many other states as well given the ongoing economic expansion, and a key factor in slower Medicaid spending growth. Between fiscal years 2003 and 2016 AHS spending increased at nearly 6% annually. Fitch notes Vermont's change in spending trajectory has been particularly sharp, even relative to other states seeing enrollment declines, which may reflect benefits of the policy efforts such as the all-payer model.

EDUCATION FUNDING CHANGES

For education, state spending growth pressure is somewhat offset by the funding structure as school districts' homestead property tax rates (collected by localities on behalf of the state) increase when voter-approved school district budgets increase. Revenue growth does not fully mitigate spending increases though, exposing the state to a level of ongoing expenditure growth which had been reflected in the steadily growing annual state general fund appropriation to the education fund.

In 2018, the legislature revised funding mechanisms and replaced the general fund appropriations with full dedication of the state's sales and use tax and a portion of the meals and rooms tax to the education fund and away from the general fund beginning in fiscal 2019.

LAKE CHAMPLAIN CLEANUP COSTS

Following a June 2016 agreement between the EPA and the state to address pollution issues in Lake Champlain, Vermont's legislature enacted legislation (S.96) this year in an effort to address a federal requirement to establish an ongoing source of funding for cleanup efforts. S. 96 dedicates 6% of the meals and room tax (MRT) collections to a clean water fund, which in combination with other allocated revenues the state estimates will have $50 million available in fiscal 2020. The EPA is reviewing the legislation and will make a final determination on whether it addresses the requirement.

Fitch notes that the MRT allocation to the clean water fund modestly reduces the share for the general fund; in fiscal 2020 the shift will cost $7.5 million and will grow to an estimated $10 million - $11 million in fiscal 2021. These amounts are very small relative to estimated general fund tax revenues that exceed $1.2 billion in both years, but they will require offsetting growth from existing general fund revenues, enactment of new revenue sources, or matching expenditure cuts. For fiscal 2020, the state anticipates recent upticks in general fund revenue performance discussed further below will cover the $7.5 million allocation.

Vermont's fixed carrying cost burden is low and Fitch anticipates it will remain stable given the state's commitment to at least full actuarial contributions to its pension systems and careful management of debt issuance. The state has regularly contributed in excess of actuarially determined amounts for pensions in an effort to manage and reduce the net pension liabilities. Overall, the state retains ample flexibility to adjust main expenditure items.

Long-Term Liability Burden

On a combined basis, Vermont's debt and net pension liabilities as of Fitch's 2018 state pension update report ("2018 State Pension Update", dated November 2018) totaled 11.9% of 2017 personal income, compared with a statewide median of 6.0%. Based on the most recently available data, Fitch calculates a long-term liability burden of 11.5%. This ratio includes special obligation transportation infrastructure bonds (TIBs) supported by a dedicated share of Vermont's gasoline and diesel taxes. Fitch notes that Vermont considers the TIBs as self-supporting from the dedicated tax revenues as part of its legal and policy calculations for tax-supported debt.

Debt levels remain modest at just 2% and are closely monitored through the state's Capital Debt Affordability Advisory Committee (CDAAC). The governor and legislature consistently stay within CDAAC's recommendations for annual bond issuance.

Net pension liabilities are more significant with Fitch-adjusted net pension liabilities representing approximately 10% of personal income. The pension liability calculations include essentially 100% of the liability in the Vermont State Retirement System and the State Teachers' Retirement System, for which the state makes the full actuarial contribution. Market losses during the last two recessions contributed to recent growth in net liabilities for both systems.

Since the Great Recession the state has negotiated with employee groups and implemented multiple changes including to benefits, contributions, and actuarial methods to improve pension sustainability over time. Given recent shifts to somewhat more conservative actuarial assumptions, including a decrease in the investment return assumption to 7.5% from 7.95%, Fitch anticipates Vermont's long-term liability burden will remain consistent with a 'aa' assessment over the long term.

OPEB liabilities are also significant with the reported 2018 net OPEB liability equal to approximately 7% of the state's personal income. Fitch notes positively that the state has taken some modest steps towards pre-funding OPEB liabilities and has also made some progress in reducing liabilities through collective bargaining with unions. The state has also benefitted from recent favorable health care claims experience.

Operating Performance

Vermont's exceptionally strong gap-closing capacity derives from institutional and statutory mechanisms, and a demonstrated ability to prudently manage through economic downturns. Official revenue forecasts are updated at minimum twice a year through the Emergency Board, a consensus process involving the administration and legislature. During the Great Recession, the state moved to quarterly updates to enhance its ability to respond to rapidly changing fiscal circumstances.

The governor can implement a spending reduction plan unilaterally (if a revenue forecast lowers revenues less than one percent from the prior forecast), or with approval of the legislature's Joint Fiscal Committee (a bipartisan and bicameral committee of legislative fiscal leaders) for larger forecast revenue shortfalls. During the Great Recession, and again in a more recent shortfall, the governor, legislature, and other key stakeholders including employee unions, worked quickly to develop spending rescission plans to address emerging deficits. The state's recent trend has been to focus on expenditure cuts, such as negotiated wage reductions or programmatic cuts, rather than revenue increases.

Vermont maintains multiple budget reserves including fully-funded budget stabilization reserves (5% of prior year appropriations) in each of its three primary operating funds (general, education and transportation), and separate, fund-specific reserves or unreserved balances of lesser amounts. At fiscal year-end 2018, the various general fund reserves totaled $133 million, representing approximately 9% of total general fund uses. Education fund reserves of $79 million were approximately 5% of total education fund uses. On a combined basis, total general and education fund reserves at the end of fiscal 2018 of $212 million covered approximately 7% of total general and education fund uses. Fitch considers the transportation fund, reliant primarily on dedicated fuel and motor vehicle related taxes as relatively distinct from the general and education fund. As detailed below, Fitch anticipates general fund reserves will increase in the near-term, providing further financial resilience.

The state's budgeting practices tend to be conservative in forecasting and proactive through the fiscal year, with most fiscal years ending with at least a modest general fund budget surplus despite the lack of a statutory or constitutional balanced budget requirement. Through the economic expansion Vermont has maintained its primary budget reserves. Recently, the state has taken steps to build in additional fiscal capacity through additional reserves including the general fund balance reserve (established in 2012 to replace the revenue shortfall reserve), a human services caseload reserve (established in 2017 and primarily for Medicaid), and a 27/53 reserve (established in 2016 to address years with a 27th biweekly payroll or a 53rd week of Medicaid disbursements).

CURRENT DEVELOPMENTS

Based on the January 2019 emergency board forecast and mid-year budget adjustments under the 2019 Budget Adjustment Act (BAA), Vermont projects a sizable increase to general fund reserves for the year that just ended on June 30. Under this current law scenario, the state estimates total general fund reserves will increase to approximately $209 million, or 13% of total general fund uses as of June 30, 2019. Education fund reserves are on track to remain stable while combined general and education fund reserves are projected to total roughly $278 million or 9% of total general and education fund uses.

These projected general fund reserve gains largely reflect transfers of funds from the Global

Commitment Waiver fund, totaling nearly $80 million at the end of fiscal 2018, to the general fund in fiscal 2019. The funds will be reserved in the general fund's human services caseload reserve and 27/53 reserve, which are both related to Medicaid which the Global Commitment Waiver Fund was also intended to support. Excluding those specific reserves, the current law forecast indicates the broader general fund budget stabilization and general fund balance reserves will remain relatively stable at $94 million, or 6% of total general fund uses as of June 30, 2019.

Robust revenue performance in the second half of fiscal 2019 has improved the revenue outlook and the administration now estimates a roughly $50 million general fund surplus will result in a $15 million contribution to the general fund balance reserve, leading to a combined budget stabilization and balance reserve total of $109 million, or 7% of total general fund uses.

General fund revenue for fiscal 2019 is tracking ahead of the January 2019 estimate by approximately $50 million, or 4%, through May, and 6% up over the prior year. These estimates adjust both years for the full allocation of the sales and use tax (SUT) to the education fund as of fiscal 2019. Personal income tax (PIT) and corporate income tax (CIT) have been particularly strong, up $43 million and $11 million respectively from forecast, and 5% and 43% respectively from the prior year. PIT also increased sharply in fiscal 2018, up 10% over 2017.

In developing its revenue forecasts, the emergency board noted that, as in many other states, effects of the December 2017 federal tax changes (commonly referred to as the Tax Cuts and Jobs Act, or TCJA) heavily influenced PIT and CIT collections in 2018 and 2019. The next emergency board forecast due by the end of July will assess what portion of the 2019 PIT and CIT increases are sustainable and recurring. While economic performance in the state remains positive, Fitch anticipates the bulk of the above-forecast PIT and CIT revenue performance in fiscal 2019 was one-time or otherwise short-lived. SUT collections, now captured solely in the education fund, are up just under 4% for the year through May, essentially in line with the January 2019 forecast implying economic growth has been largely within expectations.

In addition to the anticipated $15 million contribution to the general fund balance reserve, the state anticipates allocating approximately $9.4 million of the estimated fiscal 2019 surplus as carry-forward resources for fiscal 2020 and $25 million to the state employees OPEB trust fund. In fiscal 2019, the state used a portion of the surplus revenue to help fully retire an interfund loan to the teachers OPEB trust fund ahead of schedule, and set the state up for pre-funding in future years.

FISCAL 2020 BUDGET OVERVIEW

Vermont enacted its fiscal 2020 budget in mid-June when the Governor signed H. 542 into law. The tone of budget negotiations differed considerably from last year. Last June, a dispute over the governor's push to use surplus revenues to keep state property tax rates flat versus legislator's push for competing priorities including pay down of teachers' pension system liabilities led to two gubernatorial vetoes and just a day before the start of the new fiscal year, the governor allowed the legislature's budget to become effective without signing or vetoing it.

For fiscal 2020 the budget uses a portion of undesignated education fund reserves to limit state property tax rate increases, while maintaining a modest $5 million cushion beyond the $38 million education fund budget stabilization reserve. The education fund enacted budget also reflects a bill passed by the legislature to expand SUT provisions to online marketplace facilitators, building off last year's U.S. Supreme Court Wayfair decision, to generate an estimated $13.4 million in new revenue. The current estimate calls for robust nearly 7% growth in the SUT in fiscal 2020 based on the new law.

In the general fund, the enacted budget includes only modest tax code changes including a medical expense deduction for the PIT ($2 million loss to the general fund) and a new limit on the capital gains exclusion ($2 million gain). As noted, to address Lake Champlain cleanup efforts, the budget also dedicates a modest portion of the meals and rooms tax (MRT, and roughly $8 million) to the clean water fund, away from the general fund. The MRT diversion requires sustaining a portion of the anticipated revenue surplus in fiscal 2019 into fiscal 2020 to backfill the re-allocated tax revenue. The dedicated portion of the MRT will grow to $10 million-$11 million annually in future years, according to the administration.

The enacted budget also permanently shifts recognition of nearly $300 million in State Health Care Resources Fund (SHCRF) revenues to the general fund. The change, first implemented in the fiscal 2019 BAA, is essentially an accounting change.

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July 2019 Economic Review and Revenue Forecast Update

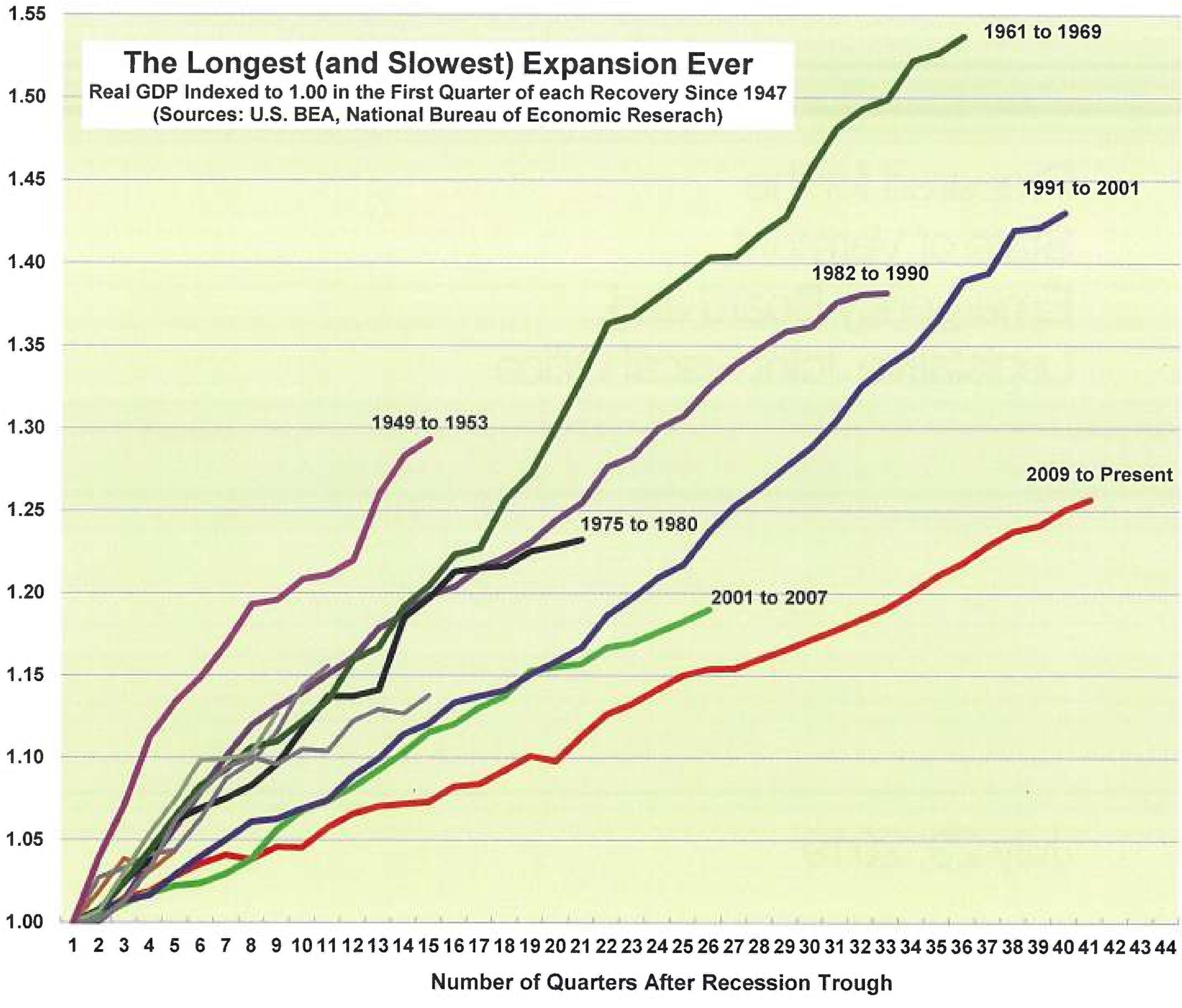
Prepared for the
State of Vermont
Emergency Board and
Legislative Joint Fiscal Office

July 29, 2019

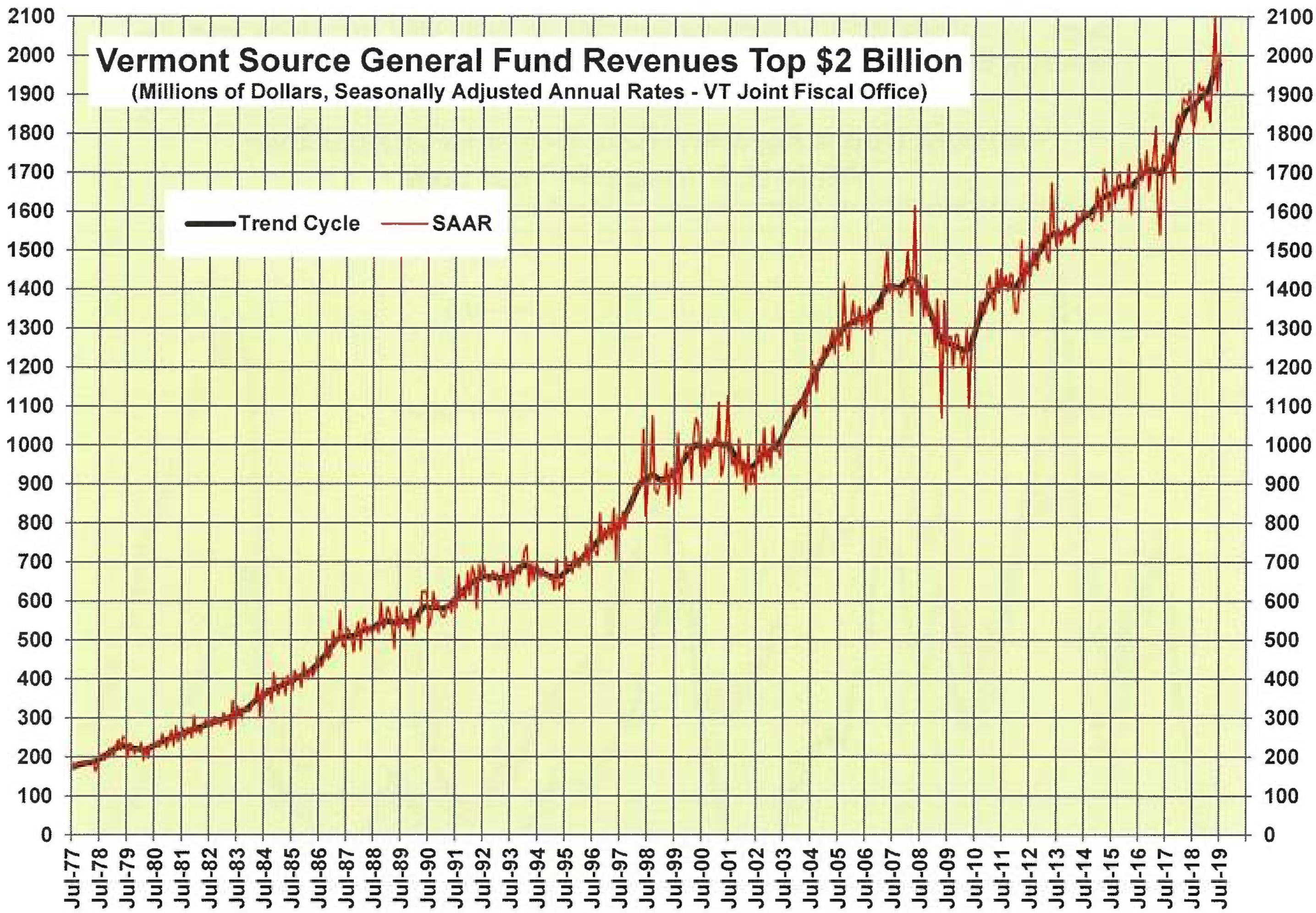
Economic Review and Revenue Forecast Update
July 2019

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.



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).

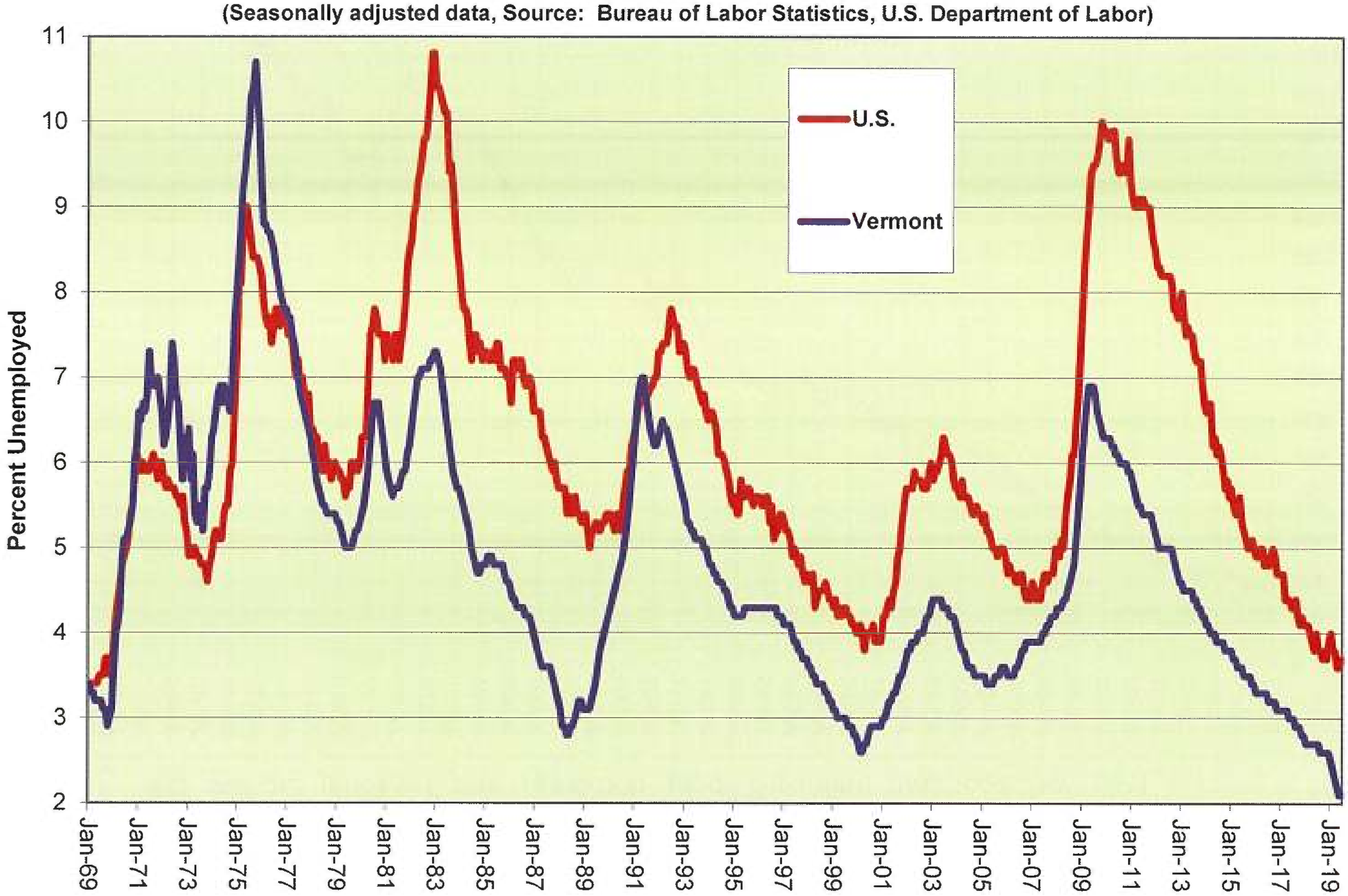


With the economy humming, both corporate and personal income tax receipts in Vermont were extremely strong in FY19, lifting Source G-Fund revenues over $2 billion in both April and June (at seasonally adjusted annual rates) for the first time ever. Total FY19 revenues across all three major funds ended 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.

- 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.

Vermont Unemployment Rate Drops to Lowest Ever, While U.S. Nears 50 Year Low

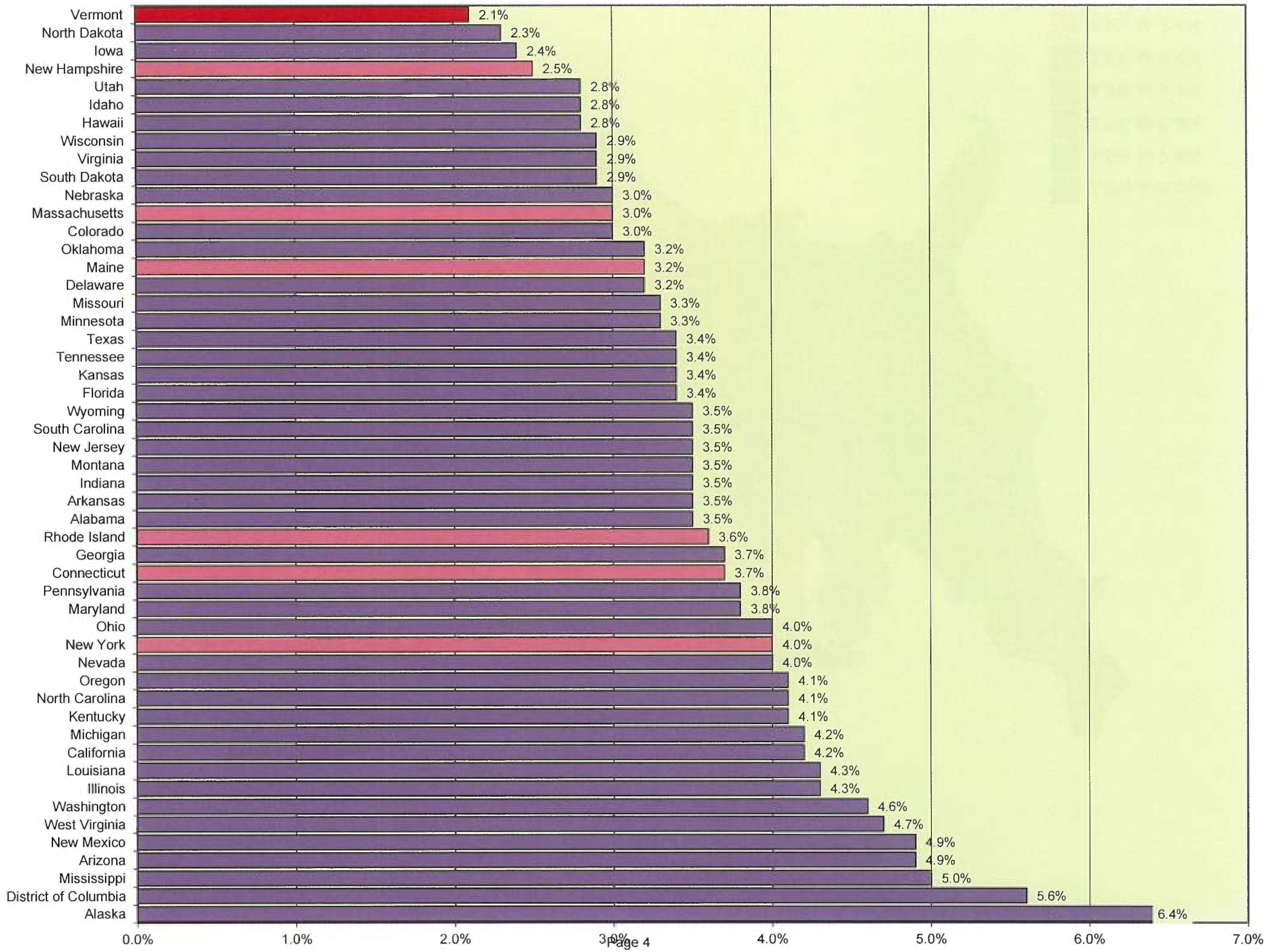
(Seasonally adjusted data, Source: Bureau of Labor Statistics, U.S. Department of Labor)



- 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.

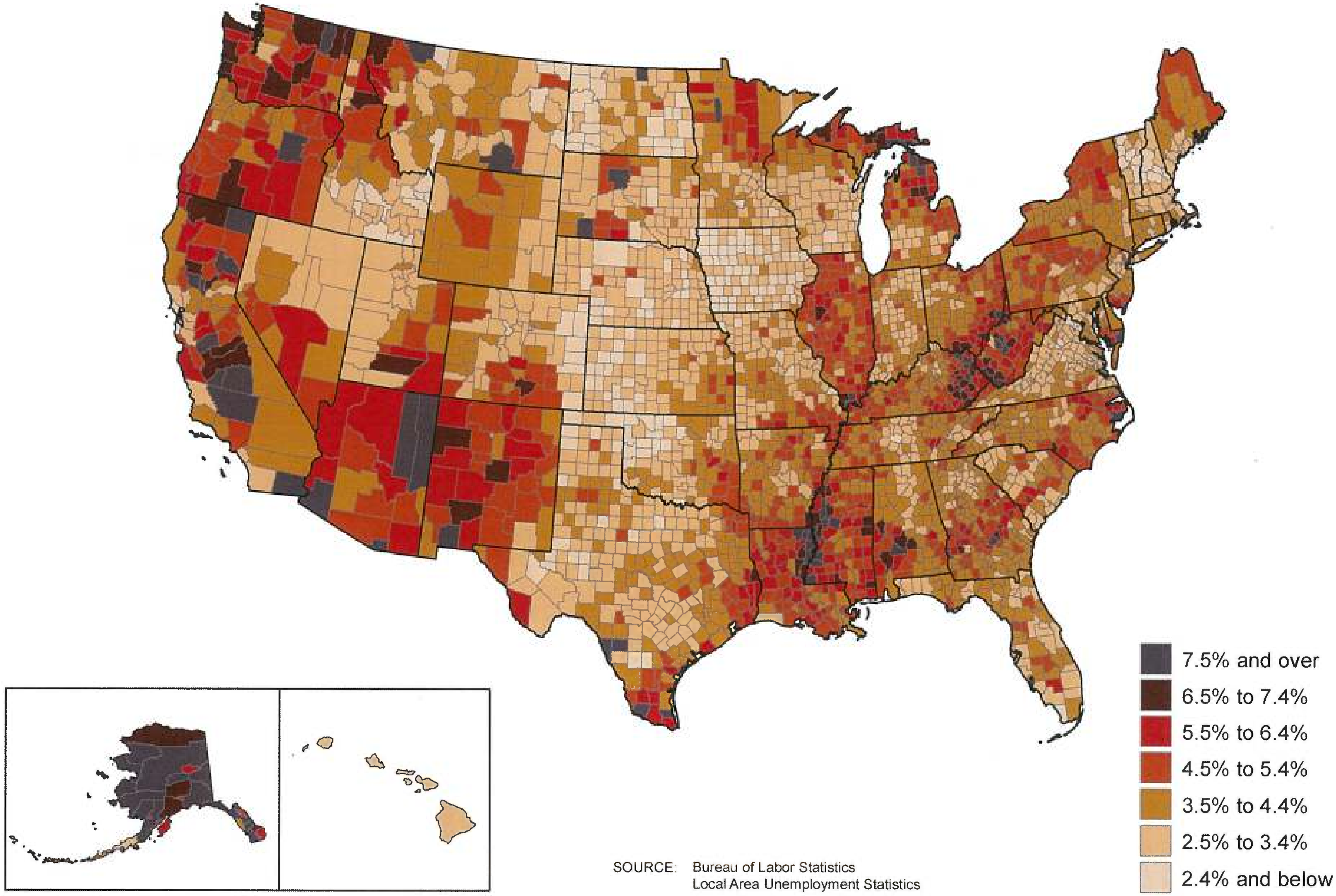
Unemployment Rate by State - June 2019

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

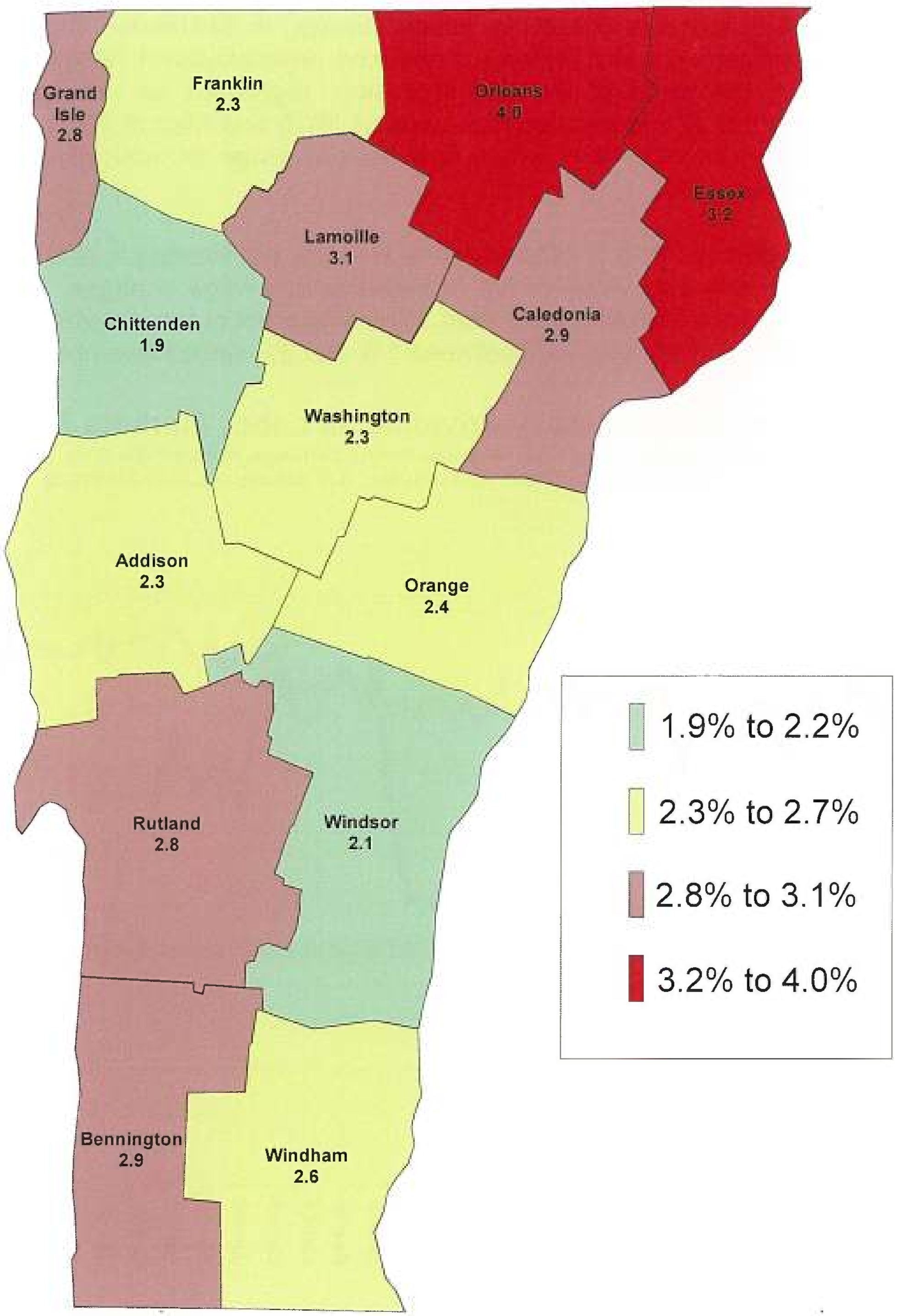


Unemployment rates by county, June 2018-May 2019 averages

(U.S. rate = 3.8 percent)



SOURCE: Bureau of Labor Statistics
Local Area Unemployment Statistics



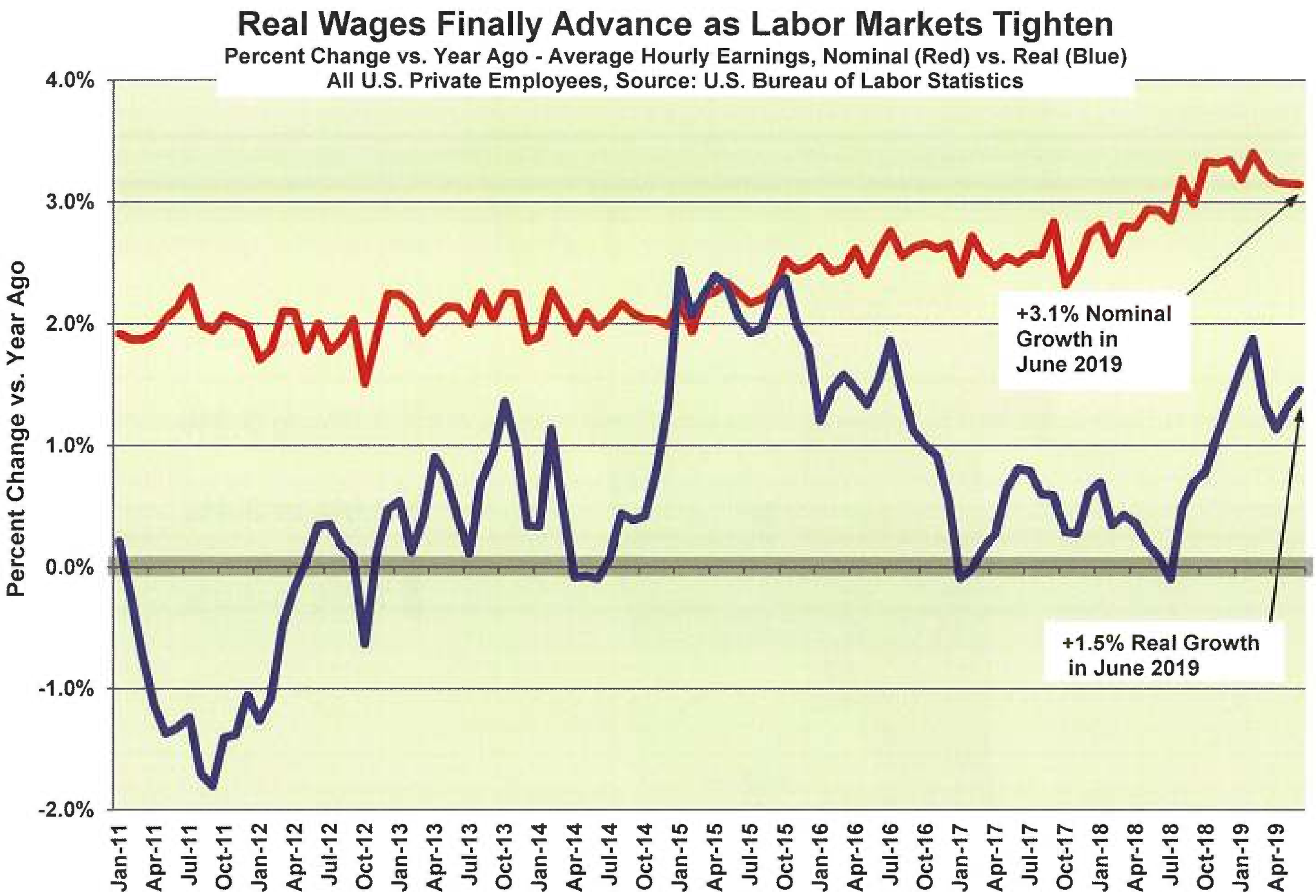
Vermont Unemployment Rates by County

12 Month Average, June 2018 to May 2019

Source: Vermont Department of Labor

- 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 inflation-adjusted growth has been between 1% and 2% since November of 2018.

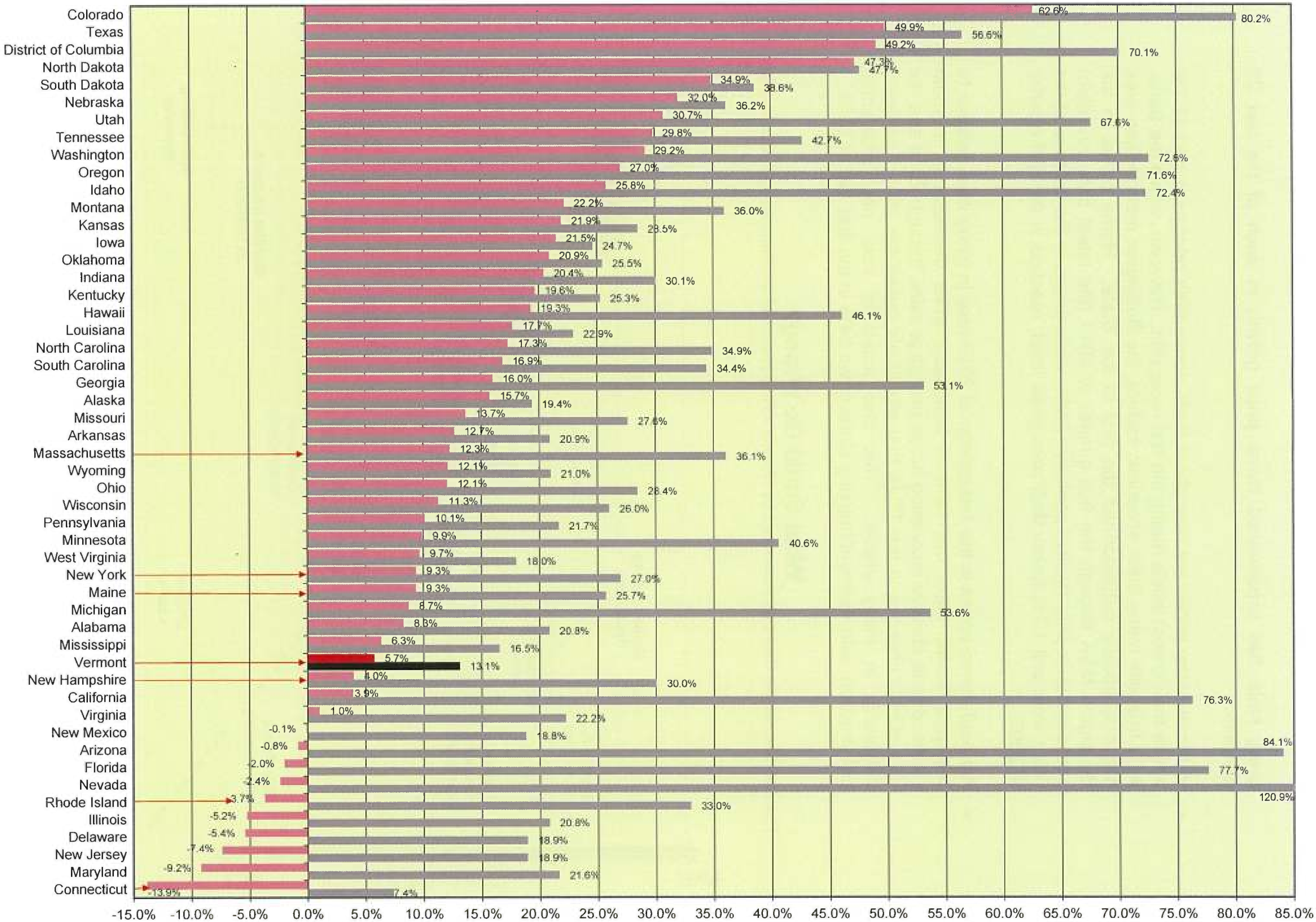


- As illustrated in the chart on the following page, real estate markets continue to improve throughout the nation – though with stark regional differences. Home prices have now exceeded their pre-recession peaks in all but 10 states – roughly characterized by a group that experienced huge speculative 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



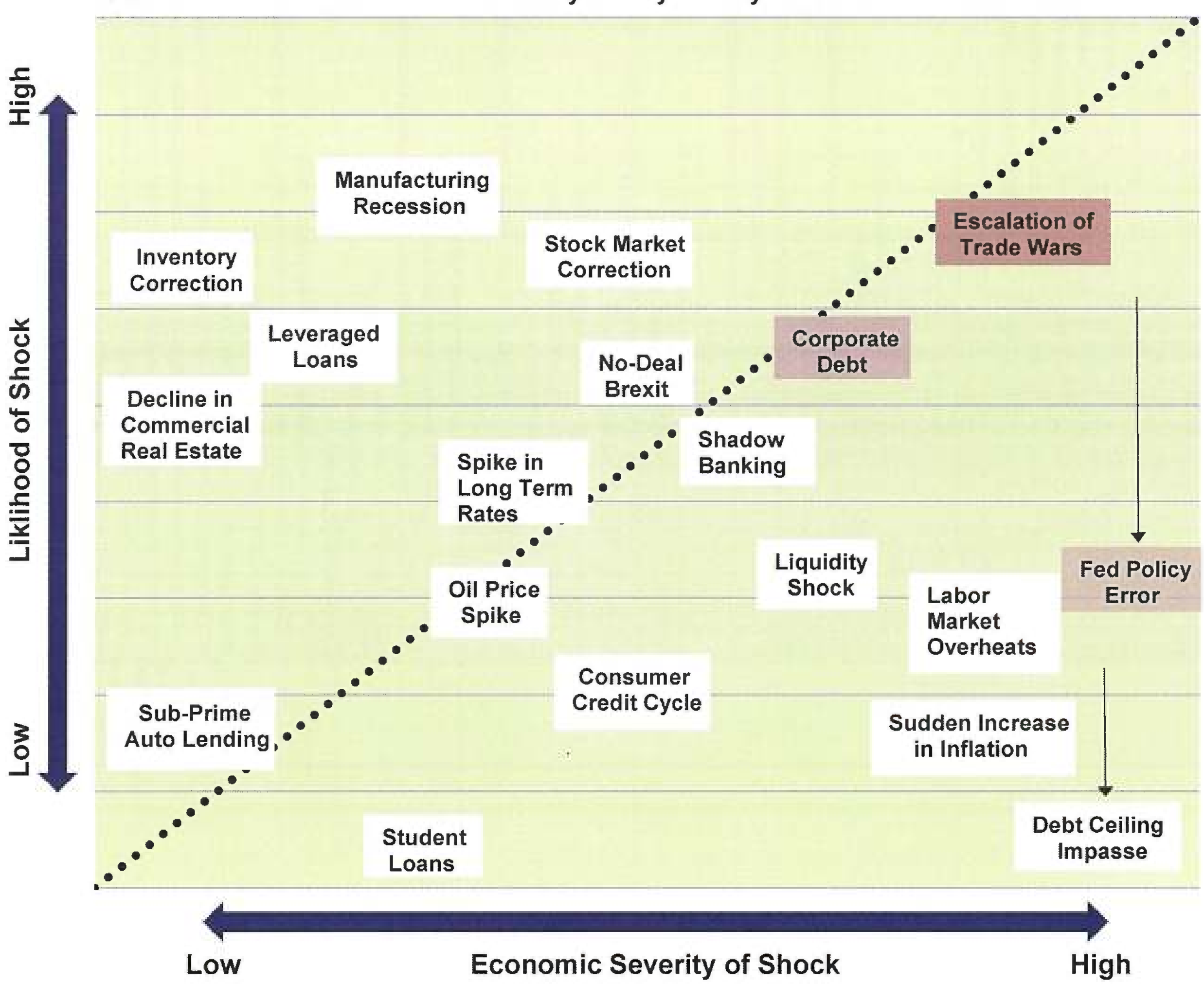
every state has experienced home price growth in each of the last 20 quarters.

- 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.

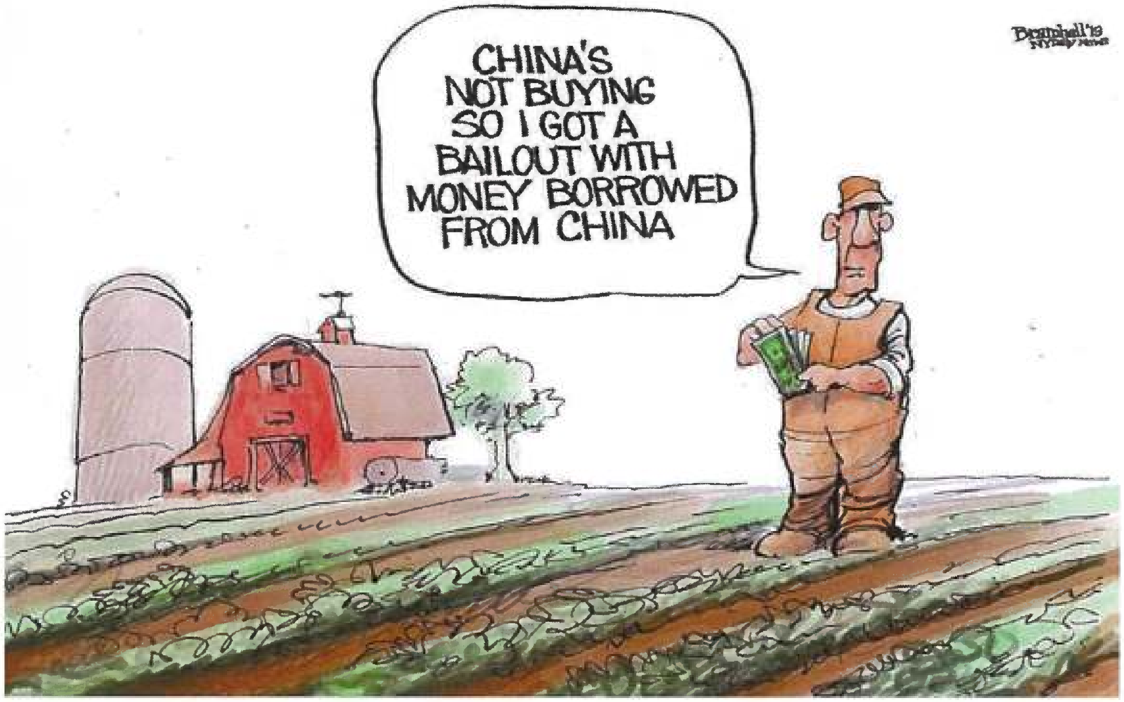
- Although home prices in the first quarter of 2019 rose in every state relative to year-ago levels, there has been a noticeable price deceleration in most states, due to steadily increasing home mortgage rates through 2018 and tax deductibility changes in the TCJA that effectively raised the cost of 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

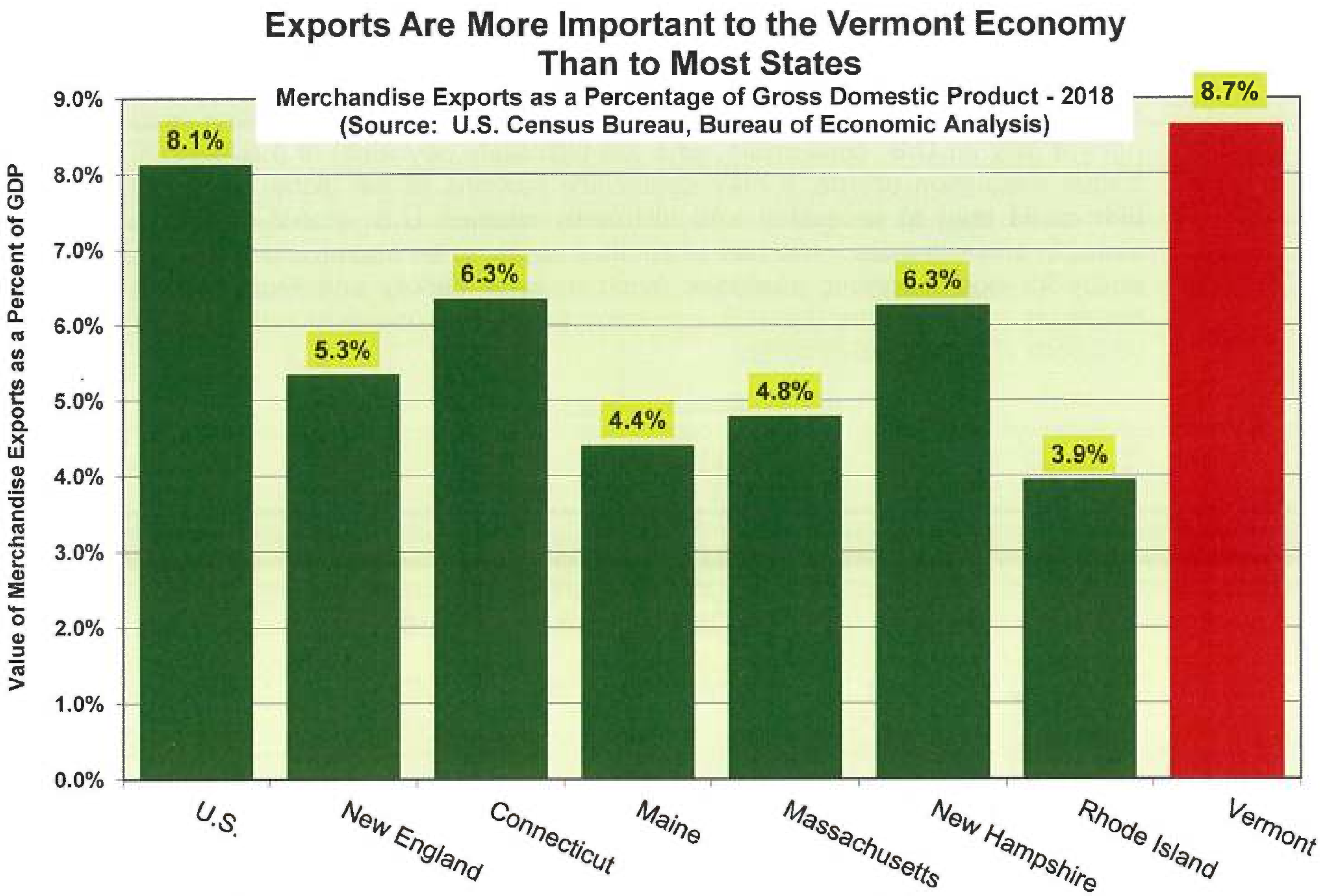


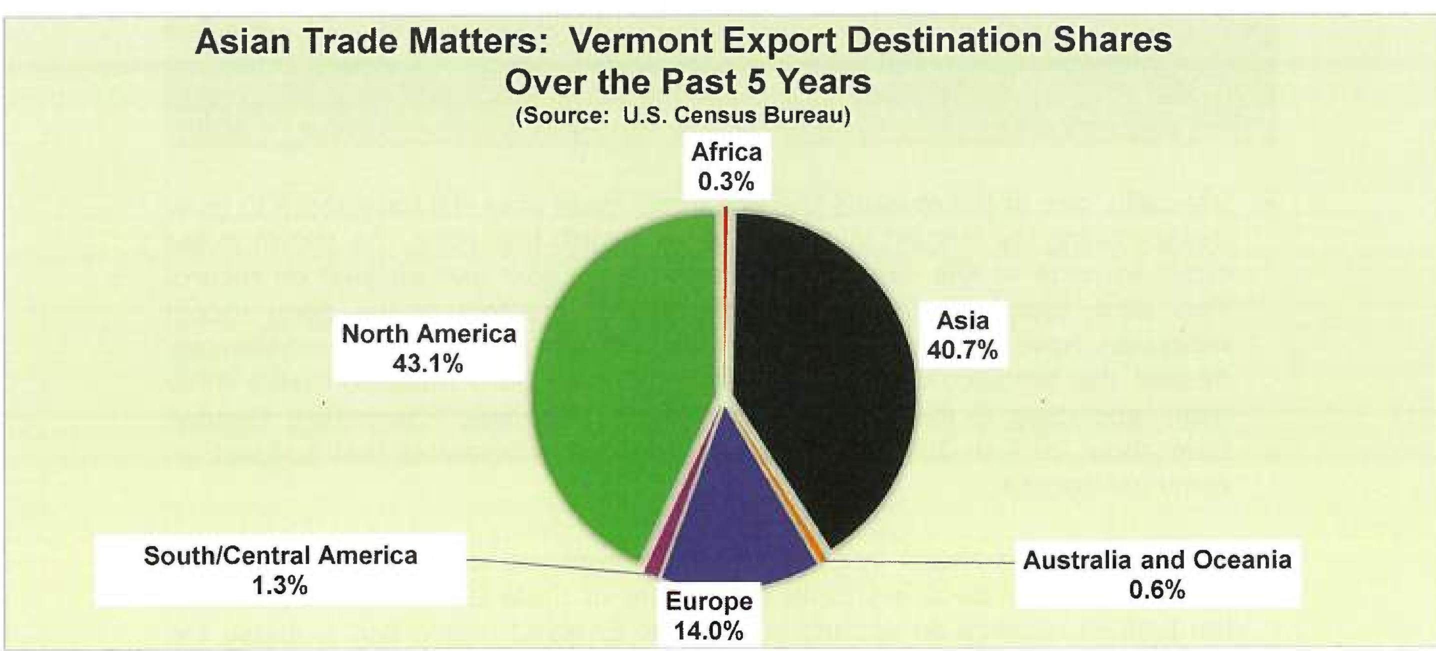
- At this stage of the business cycle, forecast risks abound. The chart on the preceding page outlines a number of events (many of which are interrelated) that could dent or terminate the current expansion. Prominent in this risk matrix, is the rising likelihood of trade war escalation, particularly 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.



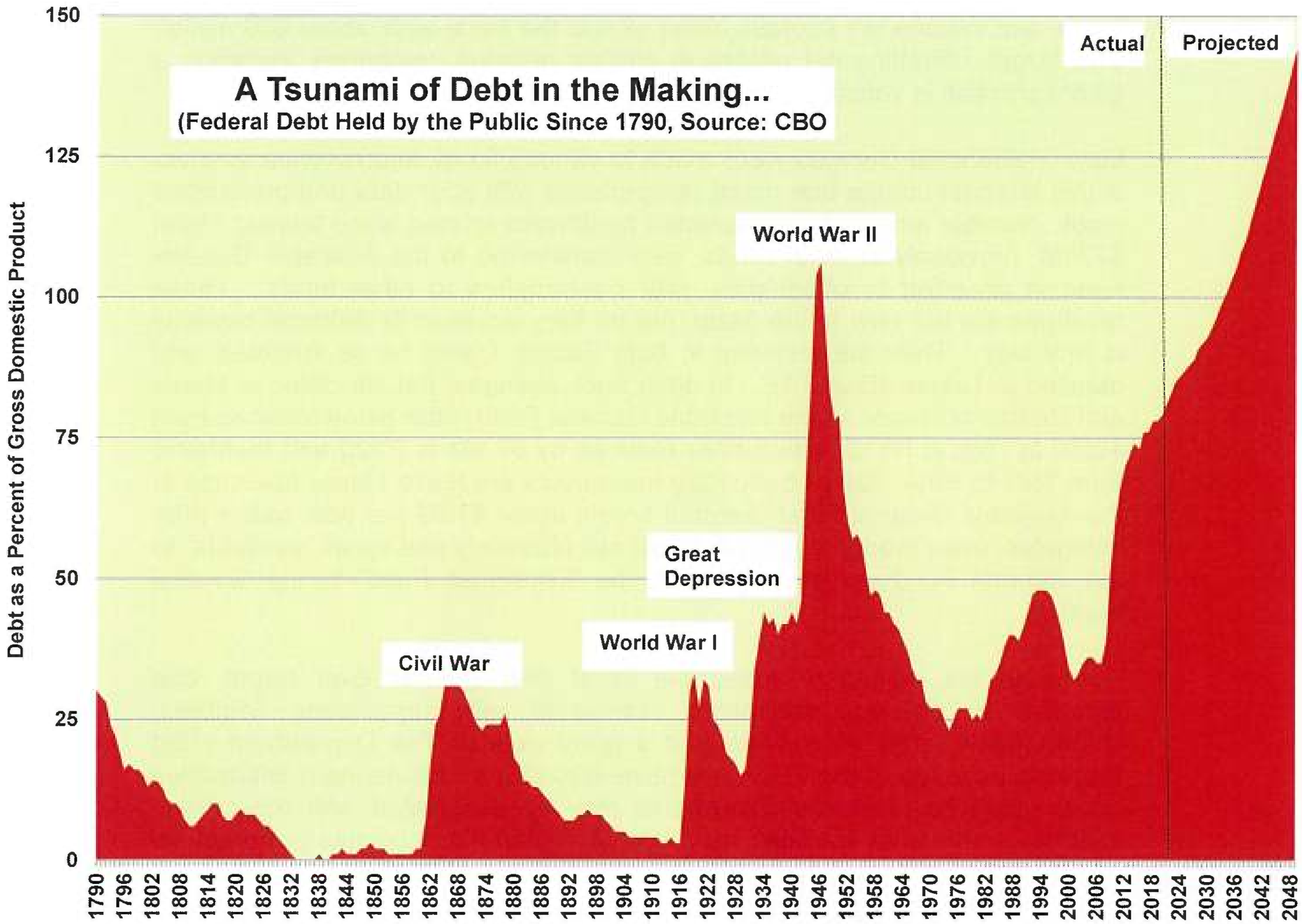
- Ironically, one of the reasons this economic cycle may still have room to grow despite being the longest ever, is its tepid growth trajectory. As shown in the chart on page 1, this expansion is both the longest and slowest on record. This slow, steady pace, and the institutional memory of the deep 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.





- 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

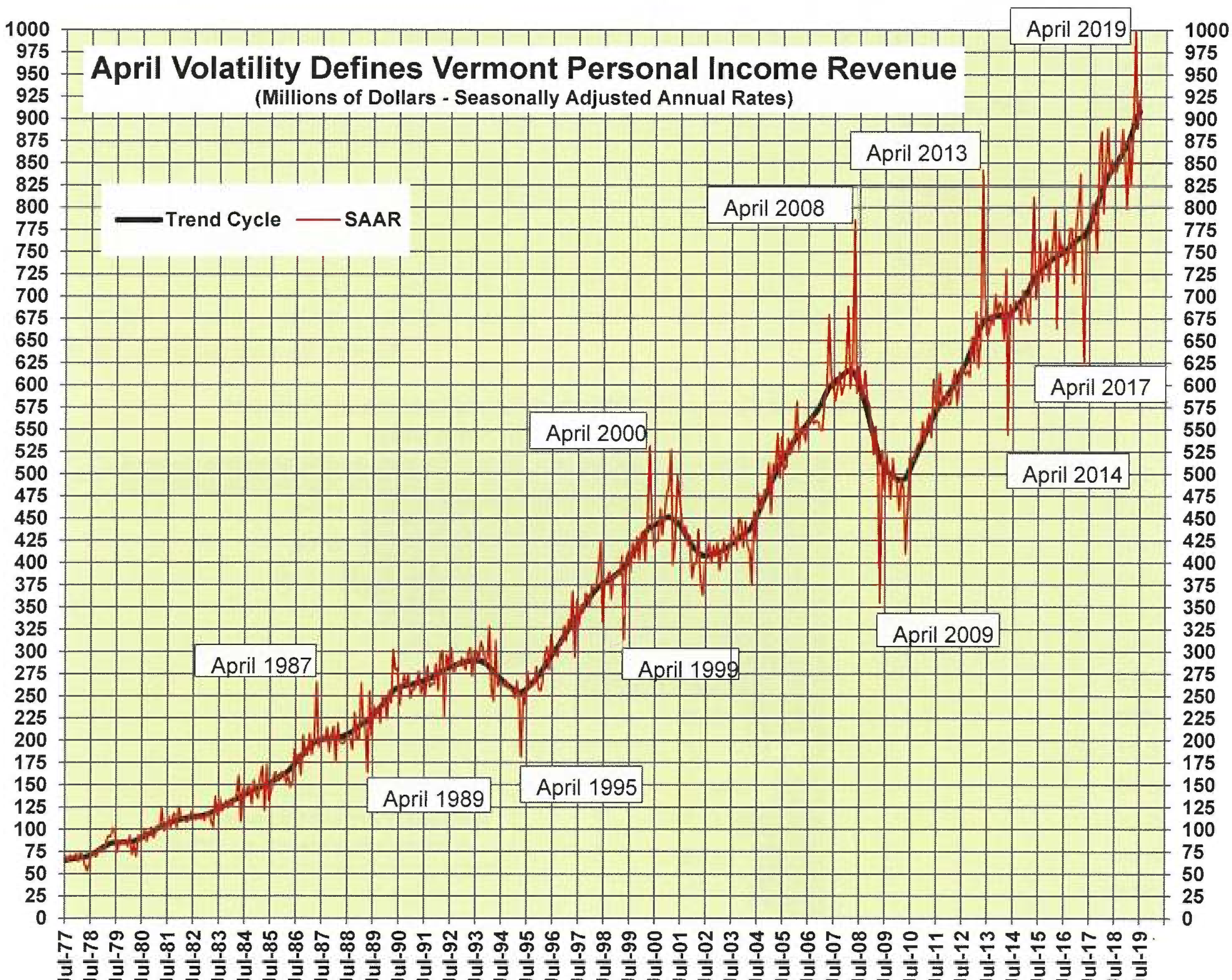
- Aggregate revenues across all three major funds forecast herein closed the fiscal year more than $50 million (2.5%) above prior January expectations. Revenues benefitted from a strong economy, continued concentrations of wealth and income among high-income taxpayers, and provisions in the Tax Cuts 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.

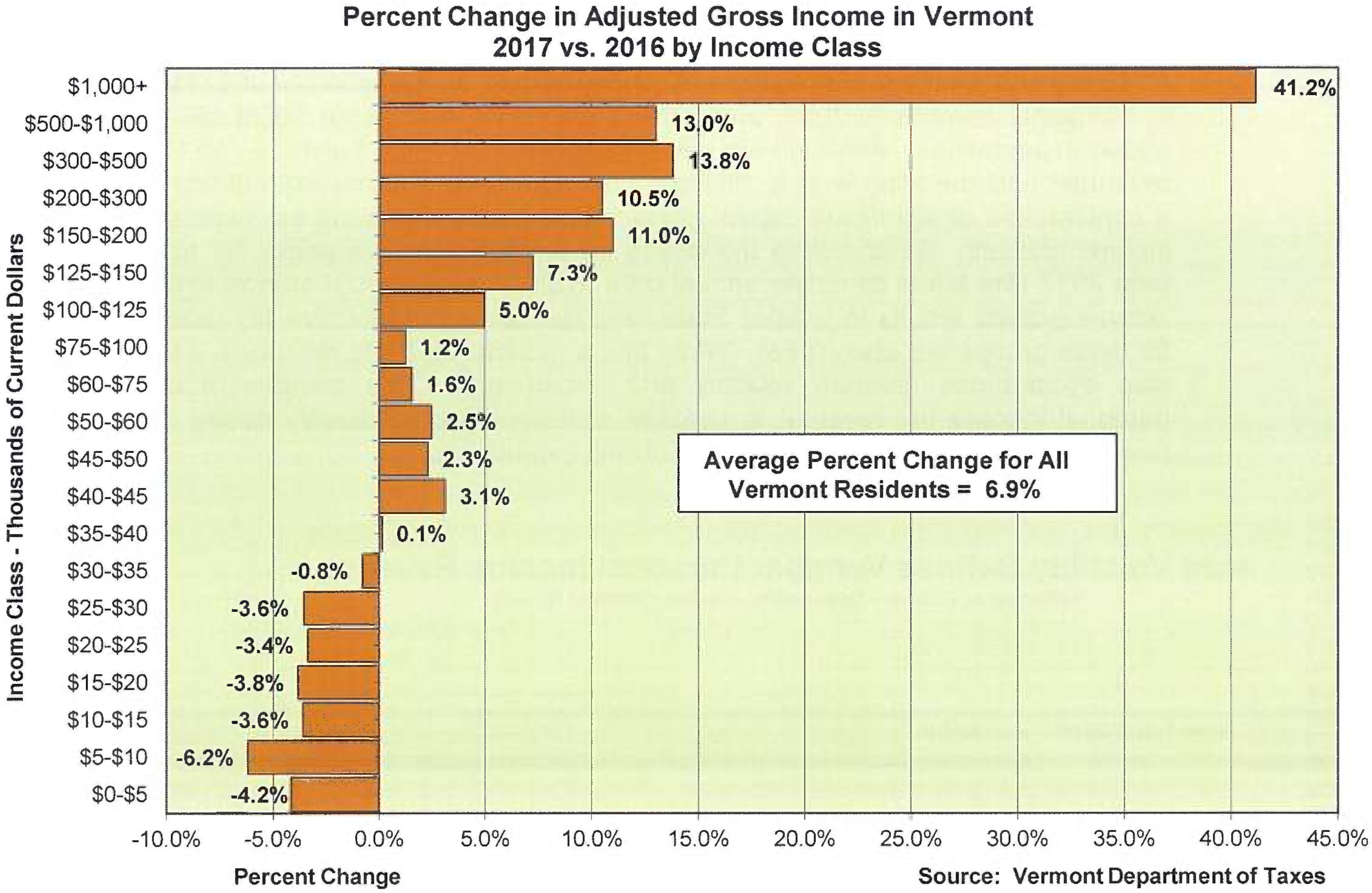
- Corporate tax revenues closed the fiscal year $11.7M over target, due primarily to one-time payments associated with repatriation liabilities. Unfortunately, after 18 months and a great deal of Tax Department effort following passage of the TCJA, we have very little additional hard information on exactly 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.

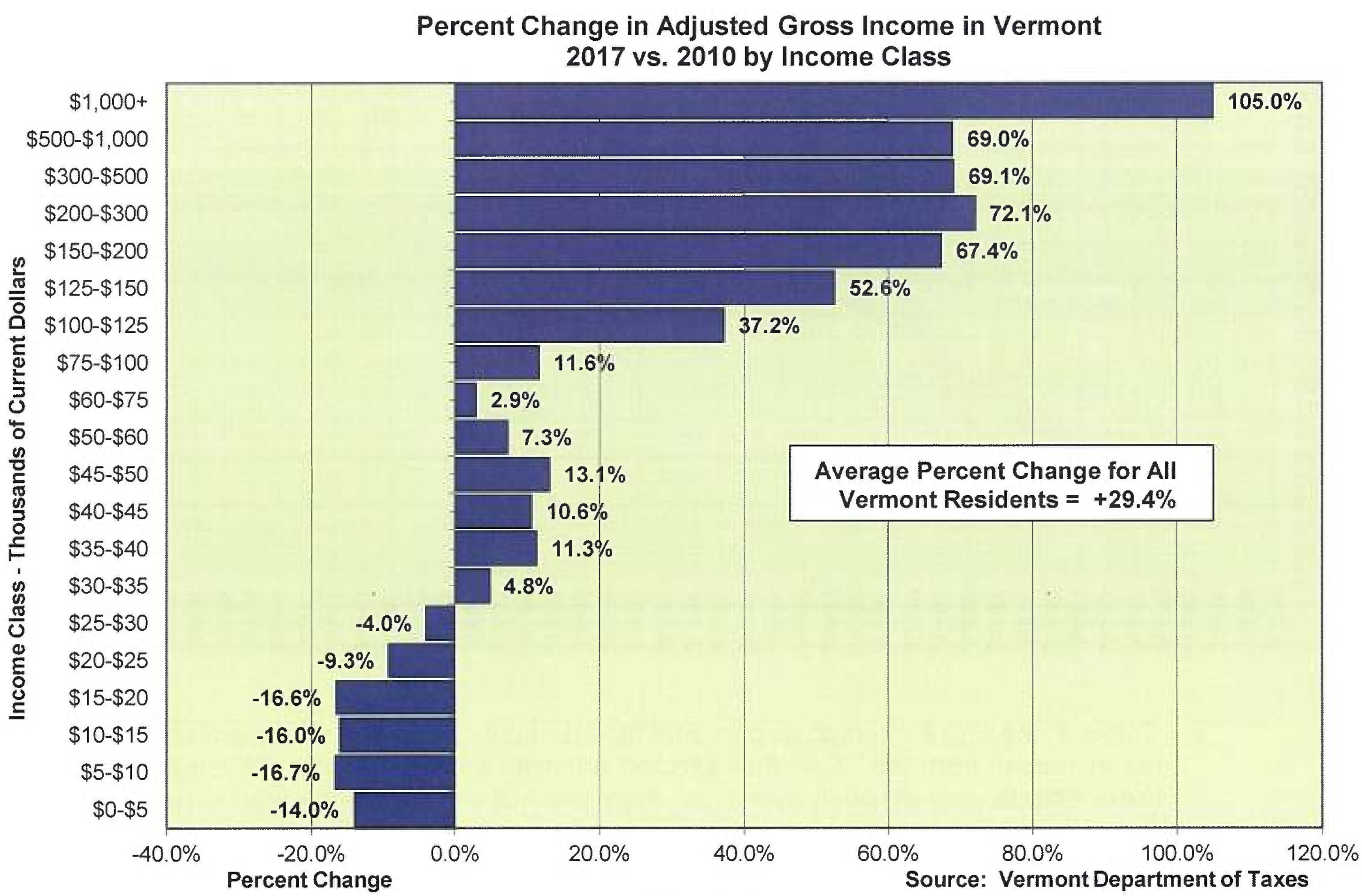
- Personal income tax receipts were exceptionally strong in April, topping $1 billion at seasonally adjusted annual rates for the first time ever. As shown in the chart on the following page, this revenue source is notoriously volatile and becoming more so over time. The chart illustrates seasonally adjusted monthly data and the sharp variations that can occur with April tax filings.

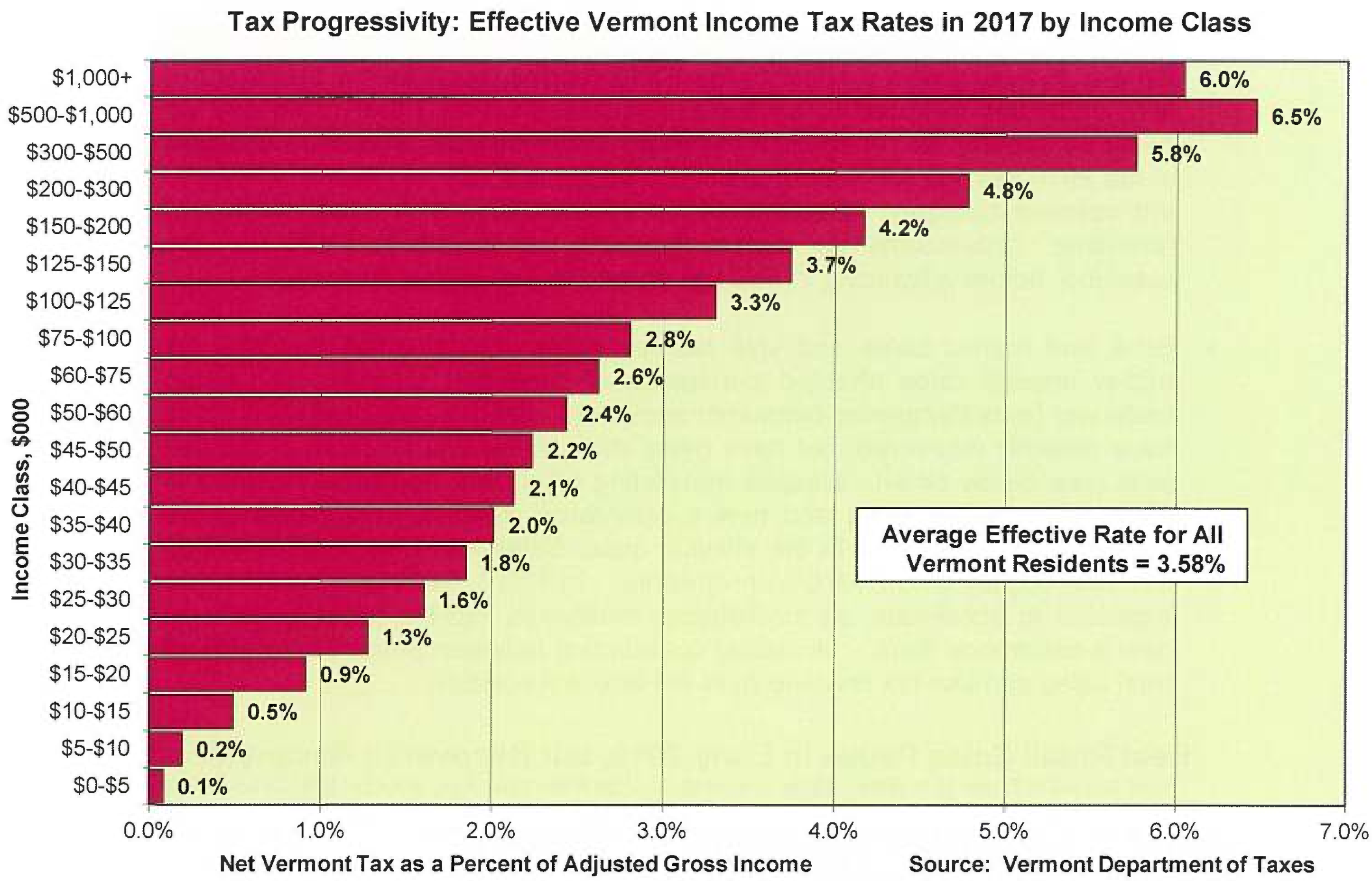
FY19 represented one of the largest such deviations, resulting in about $37M in additional revenue in April, and closing the fiscal year about $50M (6%) above expectations. Although we will not know the full story behind FY19 PI revenues until the filing year is closed in October, early information indicates 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.

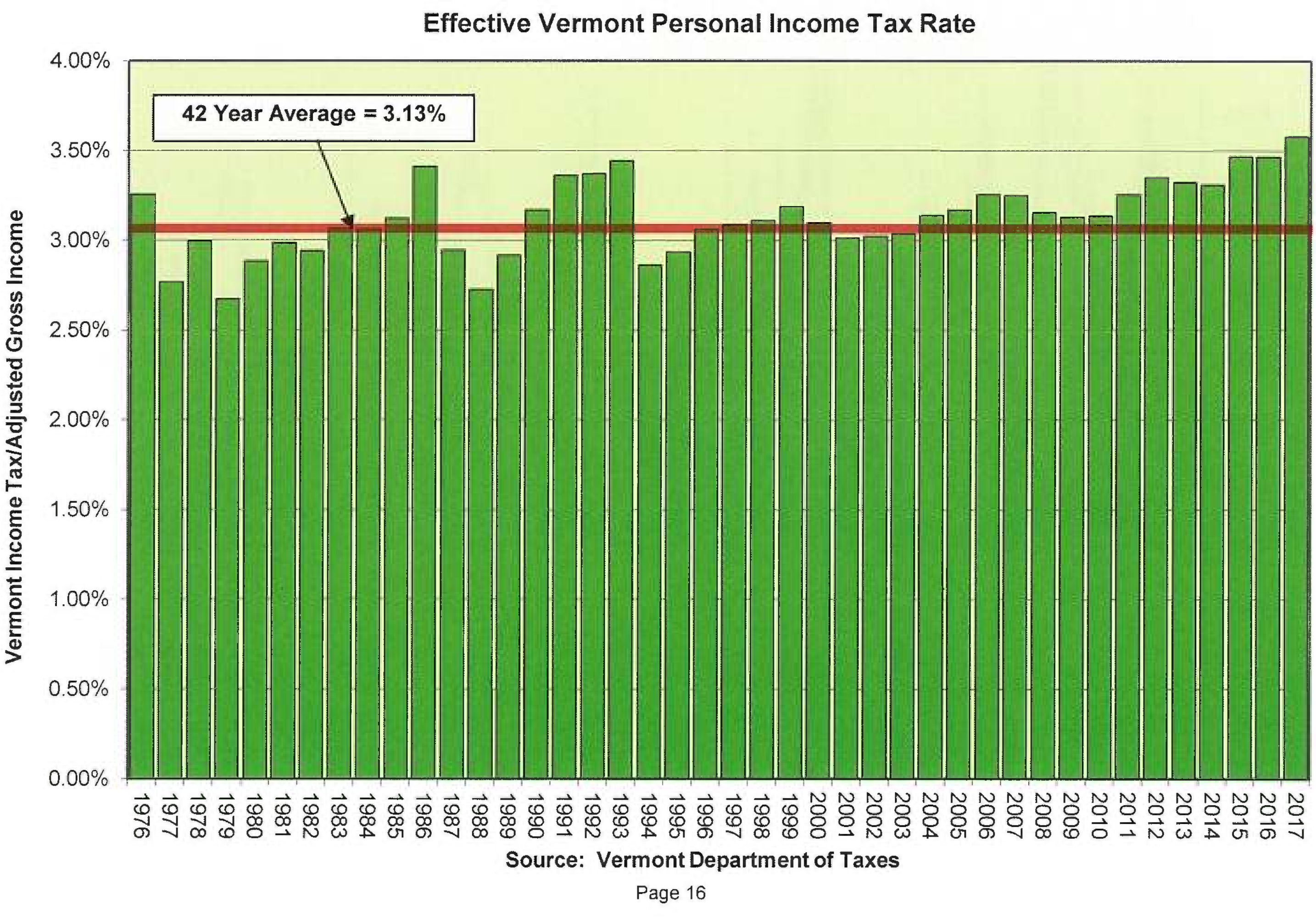


- Some of the FY19 strength in personal income taxes is due to effective Sate tax increases from the TCJA that affected a limited subset of filers. Although these effects may diminish over time, there are still aspects of the legislation


Percent Change in Adjusted Gross Income in Vermont
2017 vs. 2016 by Income Class
Income Class - Thousands of Current Dollars
$1,000+ 41.2%
$500-$1,000 13.0%
$300-$500 13.8%
$200-$300 10.5%
$150-$200 11.0%
$125-$150 7.3%
$100-$125 5.0%
$75-$100 1.2%
$60-$75 1.6%
$50-$60 2.5%
$45-$50 2.3%
$40-$45 3.1%
$35-$40 0.1%
$30-$35 -0.8%
$25-$30 -3.6%
$20-$25 -3.4%
$15-$20 -3.8%
$10-$15 -3.6%
$5-$10 -6.2%
$0-$5 -4.2%
Average Percent Change for All Vermont Residents = 6.9%
-10.0% -5.0% 0.0% 5.0% 10.0% 15.0% 20.0% 25.0% 30.0% 35.0% 40.0% 45.0%
Percent Change
Source: Vermont Department of Taxes


Percent Change in Adjusted Gross Income in Vermont
2017 vs. 2010 by Income Class
Income Class - Thousands of Current Dollars
$1,000+ 105.0%
$500-$1,000 69.0%
$300-$500 69.1%
$200-$300 72.1%
$150-$200 67.4%
$125-$150 52.6%
$100-$125 37.2%
$75-$100 11.6%
$60-$75 2.9%
$50-$60 7.3%
$45-$50 13.1%
$40-$45 10.6%
$35-$40 11.3%
$30-$35 4.8%
$25-$30 -4.0%
$20-$25 -9.3%
$15-$20 -16.6%
$10-$15 -16.0%
$5-$10 -16.7%
$0-$5 -14.0%
Average Percent Change for All Vermont Residents = +29.4%
-40.0% -20.0% 0.0% 20.0% 40.0% 60.0% 80.0% 100.0% 120.0%
Percent Change
Source: Vermont Department of Taxes





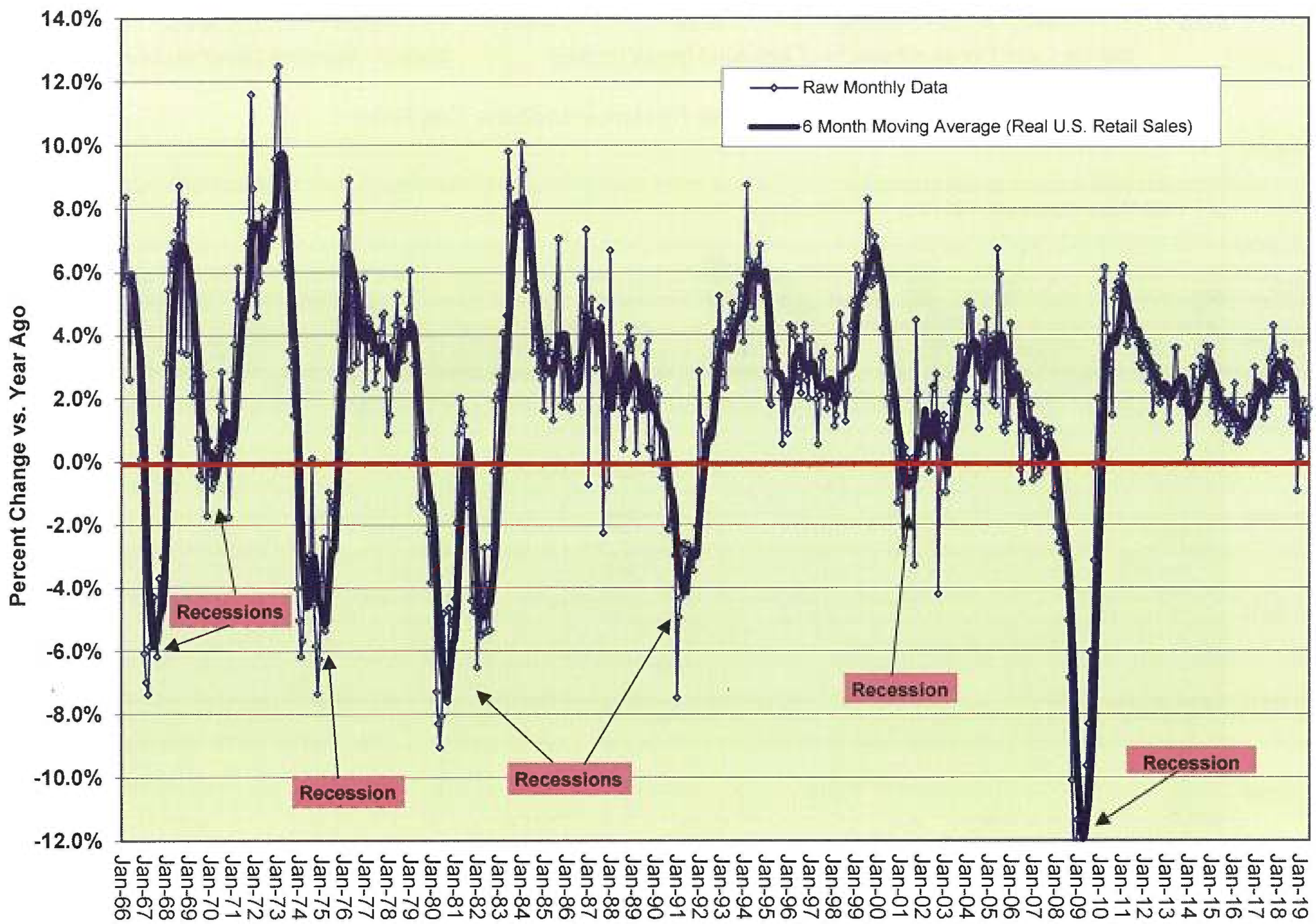
Source: Vermont Department of Taxes

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.

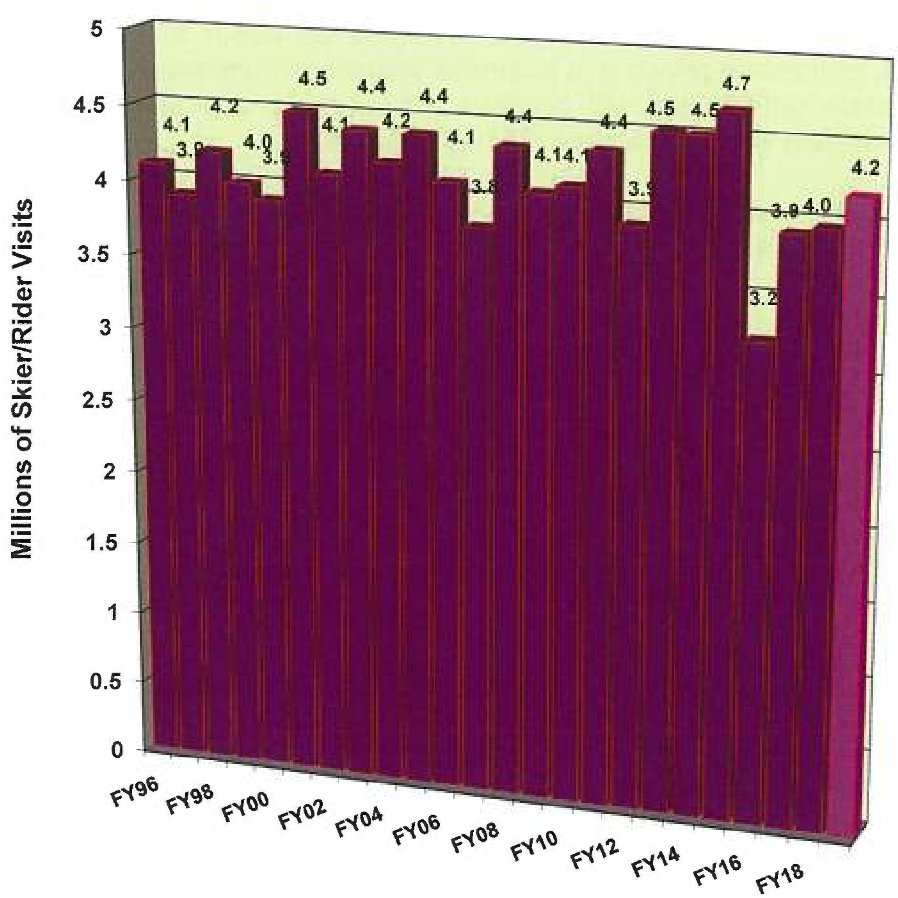
Real Retail Sales Pause in Early 2019, but Recover in Recent Months

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



- 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 anti-smoking 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.

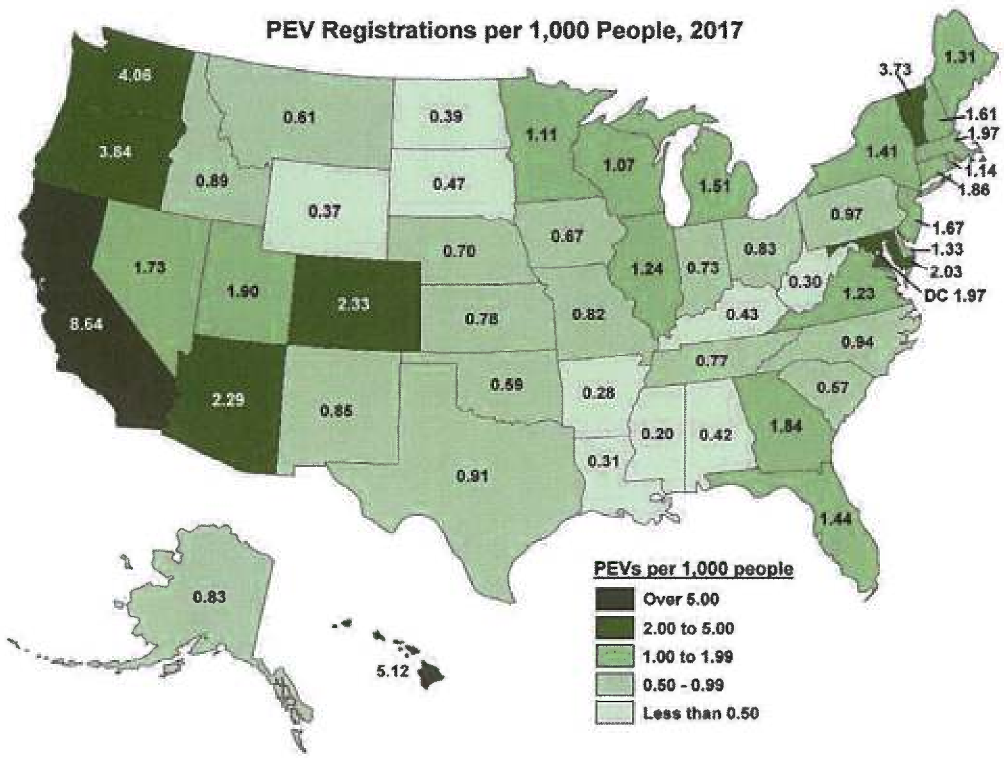
- Property Transfer Tax revenues in FY19 were affected by rising mortgage rates throughout 2018, slowing both property price appreciation and the volume of transactions, and leading to a $1M year-end shortfall. Lower mortgage rates heading into FY20 and legislation in the last session that extends taxation 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*	*3.26*	*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*
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*	*2.1*	*2.4*	*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

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, 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 - July 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 (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														
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[1]	$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[2]	$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[3]	$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 Revenue[4]	$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 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														
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[1]	$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[6]	$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[2]	$9.4	-28.2%	$0.0	NM	$0.0	NM	$0.0	NM	$0.0	NM	$0.0	NM	$0.0	NM
Estate[3]	$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 Other[4]	$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 Revenue[5]	$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[1]
revenues are prior to all allocations and other out-transfers; used for analytic and comparative purposes only

REVENUE SOURCE	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
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

REVENUE SOURCE	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
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%**

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 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 *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														
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[1]	$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	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[2]	$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[3])														
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[4]	$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[1] 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 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[2]	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[3]	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

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

REVENUE SOURCE	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
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 & Use[1]	$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%	$460.3	2.7%	$472.0	2.5%	$483.6	2.4%
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%	$182.1	5.1%	$192.6	5.8%	$200.1	3.9%	$207.8	3.8%	$215.6	3.8%	$223.6	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[2]	$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%	$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%
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%	$12.64	0.5%	$12.72	0.6%	$12.79	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[3]	$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	$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[4]	$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 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																				
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[1]	$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[6]	$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[2]	$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[3]	$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[4]	$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 Revenue[5]	$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[1]

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

REVENUE SOURCE	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
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

REVENUE SOURCE	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
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 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	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*	$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[1]	$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[2]	$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[3])																				
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[4]	$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[1] 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 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	FY2022 (Forecast)	% Change	FY2023 (Forecast)	% Change	FY2024 (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[2]	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[3]	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%

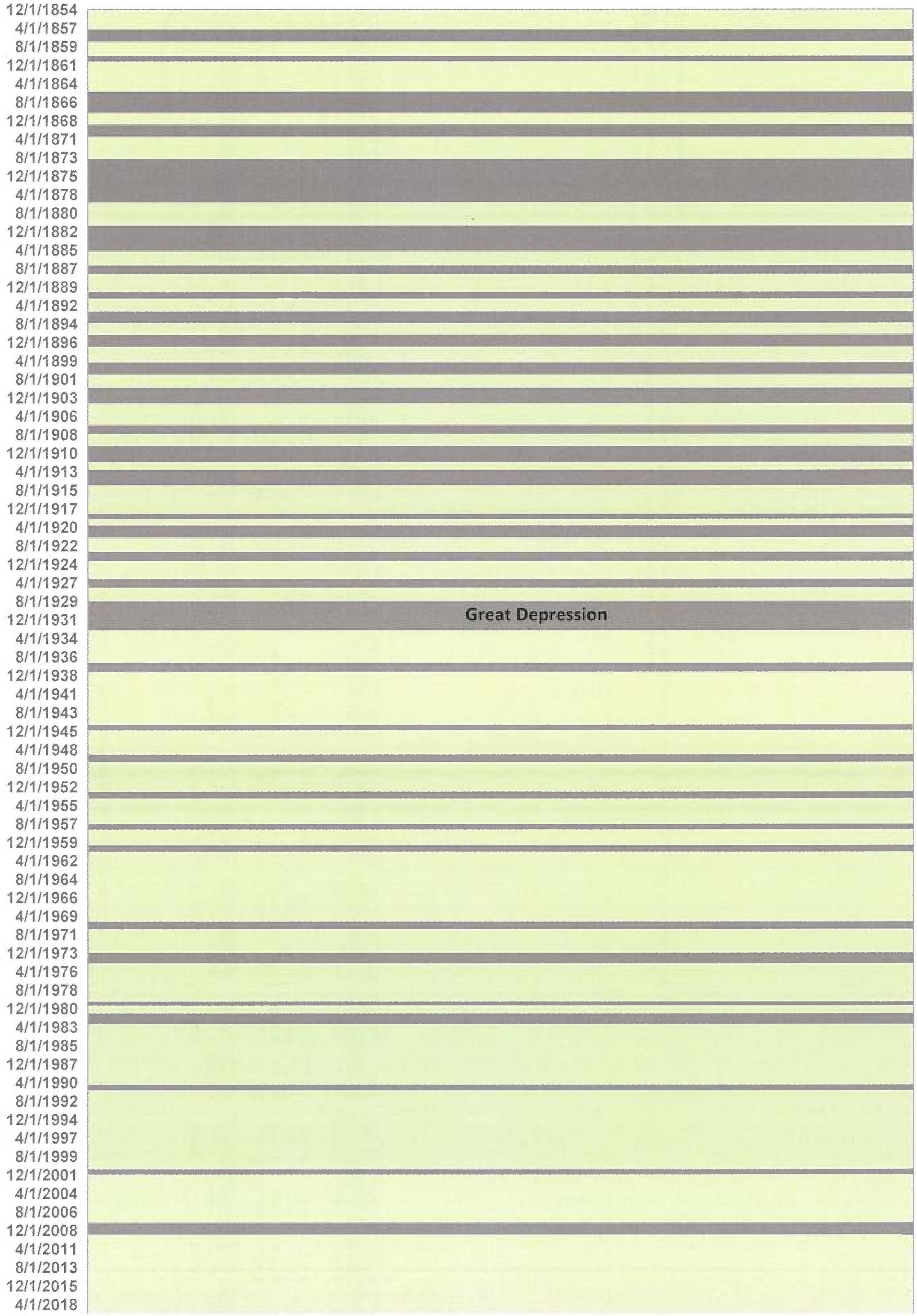
1) Includes only General and Transportation Fund taxes allocated to the Education Fund.
This Table excludes all Education Fund property taxes, which are updated in October/November of each year and are the largest Education Fund tax sources.

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

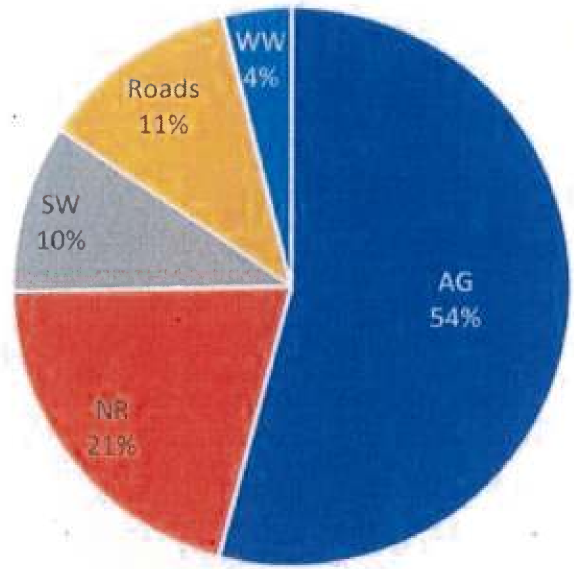
Economic Policy Makes a Difference: U.S. Business Cycles Since 1854

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

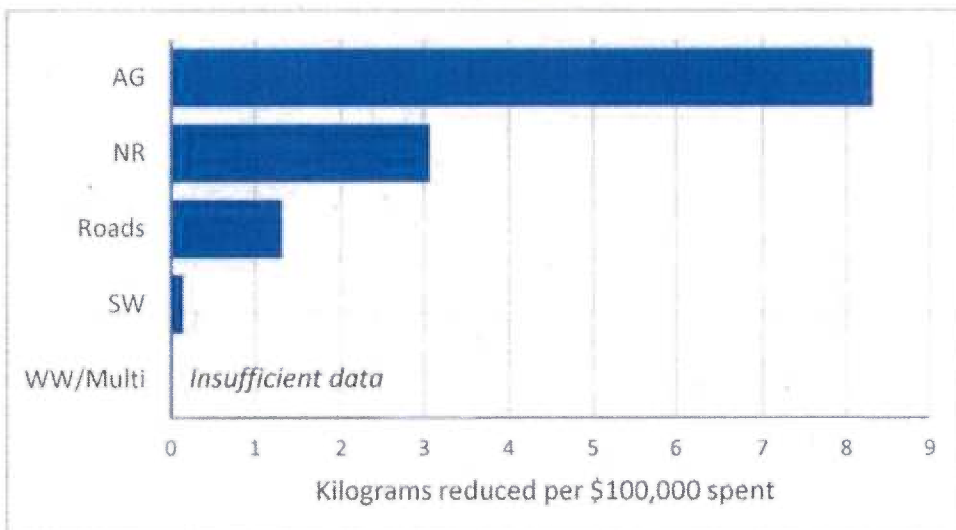


F. Hoffer

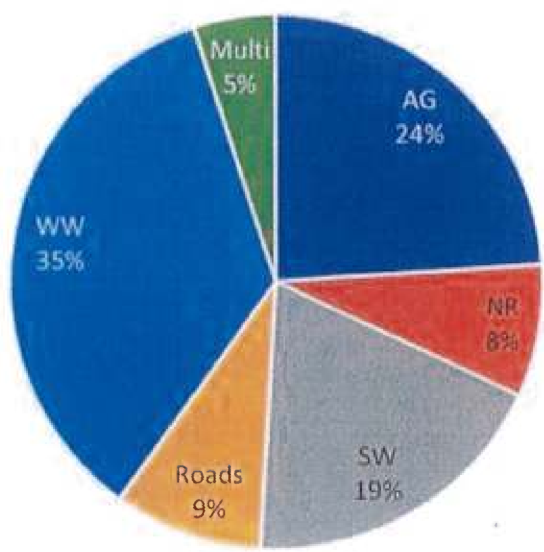
Lake Champlain Phosphorus Sources



Cost-effectiveness of phosphorus reduction in Lake Champlain Basin, by sector



State Clean Water Expenditures, Lake Champlain (FY16-FY18)



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STATE AUDITOR DOUG HOFFER
Press Release

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Phone: 802.828.2281; 802.828.1094
E-mail: Doug.Hoffer@vermont.gov; Andrew.Stein@vermont.gov
Release Date: 15 July 2019

New Report: "Where's the Money Flowing? Cost-Effectiveness of Lake Champlain Cleanup Efforts"

MONTPELIER, VT – Vermont State Auditor Doug Hoffer today released the findings of a months-long analysis evaluating the cost efficiency, or "bang for the buck," of $66 million spent in the Lake Champlain Basin on clean water efforts between fiscal years 2016 to 2018.

Vermont's lakes and streams are critical to public health, vital to sustaining Vermont's ecosystems, and they attract hundreds of millions of dollars to the economy through tourism, real estate, and business investment. However, phosphorus pollution is compromising the quality of Vermont's waterways and poses a risk to the State's health, environment, and economy.

"In recent years, the conversation about raising revenues for clean water initiatives has taken center stage in the discussion about how to clean up Lake Champlain," Auditor Hoffer said. "Meanwhile, tens of millions in public dollars have been spent on clean water efforts. My team and I wanted to identify the highest value areas for clean water investment and determine whether taxpayer dollars have been targeted there."

The exercise produced two main findings. First, a majority of clean water funding was allocated to low-impact infrastructure projects instead of the cost-effective sectors of agriculture and natural resources, which contribute the majority of phosphorous to Lake Champlain. Wastewater and stormwater projects received 53% of funding, even though they are among the least cost-effective solutions to reduce phosphorus. Though such projects are necessary in certain locations, their comparatively poor cost-effectiveness raises important questions about the allocation of scarce clean water funds. The Legislature charged the Clean Water Board with achieving "the greatest water quality gain for the investment," and these investments do not seem to meet this charge.

Second, the analysis identified data quality problems for assessing the impact of clean water projects. State agencies cannot yet measure phosphorus reductions for certain project types, and they did not consistently measure reductions for others. Furthermore, 95 percent of state clean water expenditures did not yield measurable phosphorus reductions. These data limitations preclude the State Auditor's Office and State agencies from verifying whether the State of Vermont is meeting federally mandated phosphorus reduction targets at the lowest possible cost.

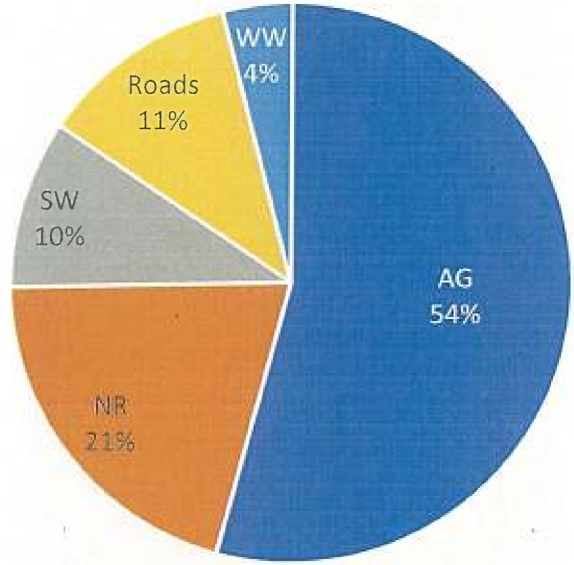
"The purpose of this analysis is to help guide the efforts of the State in addressing the urgent issue of Vermont's water quality," Auditor Hoffer said. "Many talented state officials are making important progress on these matters. But, with limited public dollars available, the State needs to make more cost-effective use of its investments to address this problem."

The report begins with an overview of phosphorus sources in the Lake Champlain Basin and then summarizes expenditures across land-use sectors and watersheds. It continues by describing the types of projects in each sector and identifies their costs. Using these data, the State Auditor's Office calculated the cost-effectiveness of clean water projects across sectors and watersheds.

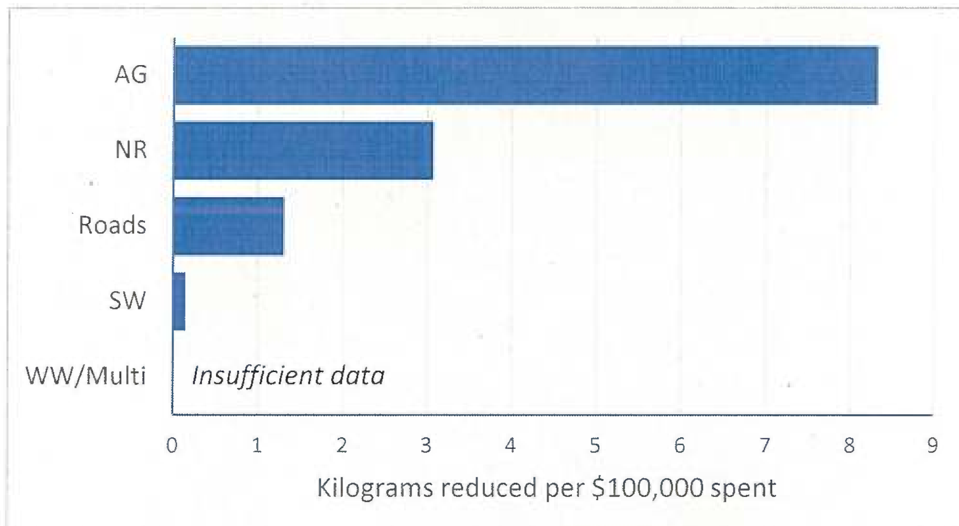
To view the report, please click here.

F. Hoffer

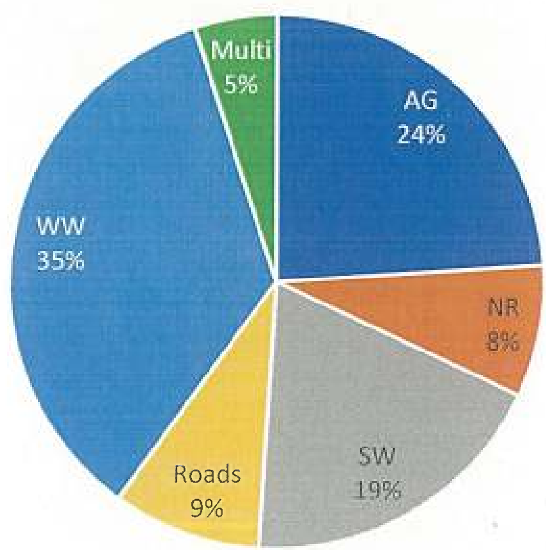
Lake Champlain Phosphorus Sources



Cost-effectiveness of phosphorus reduction in Lake Champlain Basin, by sector



State Clean Water Expenditures, Lake Champlain (FY16-FY18)



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Vermont State Auditor

Douglas R. Hoffer

Report to the Governor, the Vermont Legislature, and the Clean Water Board

Where's the Money Flowing? Cost-Effectiveness of Lake Champlain Clean Water Efforts

7/15/2019 • Office of the Vermont State Auditor • Non-Audit Report 19-01

Mission Statement

The mission of the Vermont State Auditor's Office is to hold government accountable. This means ensuring taxpayer funds are used effectively and efficiently, and that we foster the prevention of waste, fraud, and abuse.

Principal Investigator

Geoffrey A. Battista

Non-Audit Inquiry

This is a non-audit report. A non-audit report is a tool used to inform citizens and management of issues that may need attention. It is not an audit and is not conducted under generally accepted government auditing standards. A non-audit report has a substantially smaller scope of work than an audit. Therefore, its conclusions are more limited, and it does not contain recommendations. Instead, the report includes information and possible risk-mitigation strategies relevant to the entity that is the object of the inquiry.

Table of Contents

Executive Summary

Vermont's waterways are among its most valuable assets. They are critical to public health, vital to sustaining Vermont's ecosystems, and they attract hundreds of millions of dollars to the economy through tourism, real estate, and business investment. However, phosphorus pollution is compromising the quality of Vermont's lakes and rivers. Not only do polluted waters pose risks to human and environmental health, but they come with a price tag. UVM researchers predict that the Lake Champlain region loses nearly $20 million for every one-meter decrease in water clarity during the summer months.

The State of Vermont's Interagency Clean Water Initiative (ICWI) strives to reduce phosphorus pollution in state waterways, which include: Lake Champlain, Lake Memphremagog, the Connecticut River (also targeted for nitrogen pollution), and smaller bodies, like Lake Carmi. Lake Champlain has been ICWI's focus since the Environmental Protection Agency (EPA) mandated the State to reduce phosphorus entering the lake from 631 to 418 metric tons per year (34%). The State responded to this mandate by allocating $66 million, two-thirds of all clean water spending between FY16 and FY18, to projects in the Lake Champlain Basin.

Since a state-mandated audit of these expenditures will not be completed until Winter 2021, the State Auditor's Office (SAO) chose to examine the cost-effectiveness of FY16-FY18 ICWI expenditures in the Lake Champlain Basin. This report begins with an overview of phosphorus sources in the Basin and then summarizes expenditures across land-use sectors and Lake Champlain watersheds. It continues by describing the types of projects in each sector and identifies their costs. Using these data, we calculate the cost-effectiveness, or "bang for the buck," of clean water projects across sectors and watersheds.

This exercise produced two main findings. First, a majority of clean water funding was allocated to low-impact infrastructure projects. Wastewater and stormwater projects received 53% of State funds, including 41% of all State grants, even though most phosphorus comes from agricultural and natural resource lands. Wastewater and stormwater projects are among the least cost-effective solutions to reduce phosphorus. Though such projects are necessary in certain locations, their comparatively poor cost-effectiveness raises important questions about the allocation of scarce clean water funds. The Legislature charged the Clean Water Board with achieving "the greatest water quality gain for the investment," and these investments do not seem to meet this charge.

Second, the analysis identified data quality problems for assessing the impact of ICWI projects. State agencies cannot yet measure phosphorus reductions for combined sewer system upgrades and several types of natural resource projects. State agencies also did not consistently measure reductions among the remaining project types. Furthermore, 95 percent of state clean water expenditures did not yield measurable phosphorus reductions. These data limitations preclude the SAO and State agencies from verifying whether the State of Vermont is meeting federally mandated phosphorus reduction targets at the lowest possible cost.

Introduction

Vermont's waterways are critical to public health and attract hundreds of millions of dollars to the economy through tourism, real estate, and business investment. This activity, in turn, supports thousands of jobs and generates revenue for Vermont's infrastructure and public services.[1] Lake Champlain, the largest lake in New England, is the end point for many of the state's longest rivers, including the Winooski, the Missisquoi, the Lamoille, and Otter Creek.[2] These waterways sustain our towns, irrigate our farms, and create boundless opportunities for outdoor recreation. Maintaining the quality of these waterways is vital to the health and prosperity of current and future residents of the Green Mountain State.

Unfortunately, phosphorus pollution is compromising the health of Vermont's lakes and rivers. Phosphorus is an element that occurs naturally in small amounts. It comes from a range of sources, such as plants, animals, and mineral deposits. In recent decades, Vermonters have added excessive levels of phosphorus to the state's soil and water from:

- Phosphorus-rich fertilizers for improved crop yields;
- Manure from livestock, which gets washed into waterways and applied to fields;
- Stormwater and wastewater pollution from developed areas and;
- Dirt roads, forest harvesting, and waterway changes that cause soil erosion.[3]

Excess phosphorus damages ecosystems. Algae and other aquatic plants grow too quickly, which in turn deprives aquatic wildlife of oxygen.[4] Cyanobacteria, also known as blue-green algae, thrive in phosphorus-rich environments. These bacteria release toxins that are poisonous to humans, causing digestive, neurological, and allergy-like symptoms.[5] In 2017, State employees and trained volunteers identified cyanobacteria in 69 of 1,350 routine inspections along Lake Champlain.[6]

Polluted water also comes with a price tag. Researchers at the UVM Gund Institute for Ecological Economics predict that every one-meter decrease in water clarity during summer

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1 Office of the State Treasurer. "Clean Water Report, Required by Act 64 of 2015," January 17, 2017. https://dec.vermont.gov/sites/dec/files/wsm/erp/docs/_FINAL_CleanWaterReport_2017.pdf.

2 Water also flows into Lake Champlain from New York and Québec. Twenty-three percent of all phosphorus in Lake Champlain comes from New York, while 8% comes from Québec. See p. 17 of the EPA's "Phosphorus TMDLs for Vermont Segments of Lake Champlain," June 17, 2016. https://www.epa.gov/tmdl/lake-champlain-phosphorus-tmdl-commitment-clean-water

3 DEC Watershed Management Division. "Chapter 1. Strategic Framework for Statewide Efforts to Guide Surface Water Management." In Statewide Surface Water Management Strategy, 2017. http://dec.vermont.gov/sites/dec/files/documents/wsmd_swms_Chapter_1_Introduction.pdf.

4 National Oceanic and Atmospheric Administration. "What is eutrophication?" June 28, 2018. https://oceanservice.noaa.gov/facts/eutrophication.html

5 "Cyanobacteria (Blue-Green Algae)." Vermont Department of Health, July 18, 2016. http://www.healthvermont.gov/health-environment/recreational-water/cyanobacteria-blue-green-algae.

6 Vermont Department of Health. *2017 Cyanobacteria Season Summary Data – Final*. 2017. https://apps.health.vermont.gov/gis/VTTracking/Cyanobacteria/2017Summary/2017CyanobacteriaSeasonSummaryData_Final.xlsx

results in the Lake Champlain region (including New York) losing nearly $20 million.[7] Beach closures, public health hazards, and poor fishing conditions ripple across Vermont's economy, threatening the State's reputation as a place to visit, invest, and live.

History of the Problem and Vermont's Response

Vermont has struggled for decades to reduce phosphorus pollution in Lake Champlain. In the early 1990s, Vermont, New York, and Québec agreed to collaborate to reduce phosphorus concentrations in the lake.[8] Québec focuses on the Missisquoi Bay, where it has assumed 40% of the responsibility to reduce phosphorus since 2002.[9] [10] New York and Vermont drafted strategies to reduce phosphorus according to federally mandated "total maximum daily loads" (TMDLs). TMDLs are "clean water restoration plans" that outline steps to meet pollution reduction targets from non-point and end-of-pipe sources of phosphorus.[11] New York and Vermont's TMDLs were approved by the U.S. Environmental Protection Agency (EPA) in September and November 2002, respectively.[12]

Vermont's 2002 TMDL did not stand up to outside scrutiny. The Conservation Law Foundation sued the EPA in 2008, alleging that the agency approved Vermont's TMDLs even though the TMDLs would not reliably reduce phosphorus to promised levels. The parties reached a settlement in the case in April 2010. The EPA "filed a motion with the court seeking a voluntary remand to allow the [New England EPA] Region to reconsider its approval decision" for Vermont's 2002 TMDLs.[13] The state objected to this motion, fought it in the courts, and lost in August 2010. The EPA withdrew its approval for Vermont's 2002 TMDLs in January 2011.[14]

The State of Vermont and the EPA then set out to design new TMDLs for Lake Champlain and its watersheds (Figure 1). These efforts included geospatial modelling, technical working groups, and outreach to stakeholders in industry and environmental protection, among others. Using

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7 Voigt, Brian, Julia Lees, and Jon Erickson. "An Assessment of the Economic Value of Clean Water in Lake Champlain. Technical Report #81." Grand Isle: Lake Champlain Basin Program, 2015. http://www.lcbp.org/publications/assessment-economic-value-clean-water-lake-champlain/.

8 Lake Champlain Basin Program. "Phosphorus Reduction Strategies." Lake Champlain Basin Program, 2019. http://www.lcbp.org/water-environment/water-quality/nutrients/phosphorus-reduction-strategy/.

9 Lake Champlain Basin Program. "Missisquoi Bay Agreement." Lake Champlain Basin Program, 2019. http://www.lcbp.org/water-environment/water-quality/nutrients/missisquoi-bay-agreement/.

10 Ministère de l'Environnement et de la Lutte contre les changements climatiques du Québec. "Bassin Versant de La Rivière Baie Missisquoi, plan d'action et publications," 2019. http://www.environnement.gouv.qc.ca/eau/bassinversant/bassins/missisquoi/index.htm#champlain.

11 Vermont Clean Water Initiative Agencies. "Vermont Clean Water Initiative 2018 Investment Report," January 15, 2019, 10. https://dec.vermont.gov/sites/dec/files/wsm/erp/docs/2019-01-15%20Vermont%20Clean%20Water%20Investment%20Report%20SFY2018_Revised%202019-02-01.pdf.

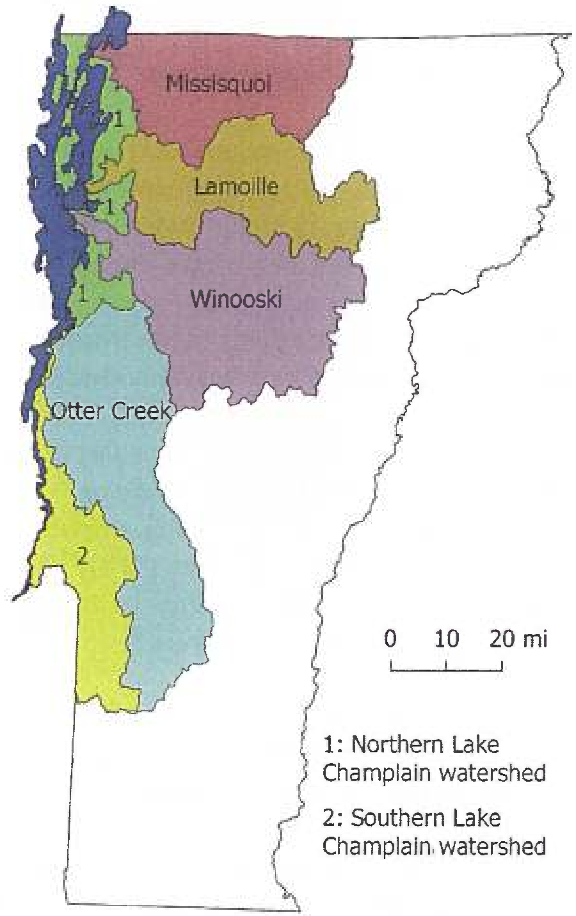
12 U.S. Environmental Protection Agency (EPA) and Vermont Department of Environmental Conservation (DEC). "Lake Champlain Phosphorus TMDL," September 25, 2002. https://www.dec.ny.gov/docs/water_pdf/champlain_final_tmdl.pdf

13 Ibid, 4.

14 EPA. "Phosphorus TMDLs for Vermont Segments of Lake Champlain," June 17, 2016. https://www.epa.gov/tmdl/lake-champlain-phosphorus-tmdl-commitment-clean-water

insights from these efforts, the State "developed a suite of programs to achieve the [necessary] phosphorus reductions" and gauged their support in public consultation sessions across Vermont.[16]

Figure 1. Lake Champlain Basin & Watersheds[15]



In May 2014, Governor Peter Shumlin submitted a draft implementation plan to the EPA. While the EPA evaluated this draft, the Vermont General Assembly passed Act 64,[17] also known as the Vermont Clean Water Act, which was signed into law in June 2015. The State of Vermont and the EPA revised the TMDLs over the following year.[18] The EPA published the latest TMDL for Vermont sections of Lake Champlain in June 2016.[19]

The 2016 TMDL mandates the State of Vermont to reduce phosphorus entering Lake Champlain from 631 to 418 metric tons per year (mt/y), a 34% reduction. Total reductions are broken down by phosphorus source: a 55% reduction from agriculture, 45% from stream banks, 19% from forests, and 18% from developed lands.[20] The TMDL projects a 28% *increase* in phosphorus from wastewater due to population growth and the diversion of phosphorus from other sources to wastewater systems (25 mt/y to 32 mt/y), even though it mandates phosphorus reductions from wastewater treatment facilities in certain lake segments.[21] The TMDL includes a margin of safety equal to 21 mt/y,[22] which gives the State of Vermont breathing room to meet overall phosphorus reduction targets without meeting every sector-specific target. The EPA required a margin of safety "to account

15 Created by SAO in QGIS using geodata from Vermont Open Data Portal. SAO edited watershed boundaries due to changes since the data's publication (see Appendix A).

16 EPA. "Phosphorus TMDLs for Vermont Segments of Lake Champlain," June 17, 2016, 6.

17 See: Act 64 of 2016.

18 EPA. "Changes from Proposed to Final TMDLs," June 17, 2016. https://ofmpub.epa.gov/waters10/attains_impaired_waters.show_tmdl_document?p_tmdl_doc_blobs_id=79220/.

19 EPA. "Phosphorus TMDLs for Vermont Segments of Lake Champlain," June 17, 2016.

20 Ibid, 48.

21 Ibid, 27-32.

22 Ibid, 48.

for lack of knowledge concerning the relationship" between phosphorus flows and concentrations "in a system as complex as Lake Champlain."[23]

Funding Sources and Responsibilities

Achieving these reduction targets will require substantial investment from governments and private entities. Between July 2015 and June 2018, the State of Vermont allocated nearly $100 million to the Interagency Clean Water Initiative (ICWI).[24] [25] More than two-thirds of this funding went to projects in the Lake Champlain Basin.[26] The remaining third went to clean water projects in other parts of the state, such as: nitrogen reduction projects in the Connecticut River Basin, as part of multi-state efforts to clean Long Island Sound; phosphorus reduction projects in the Lake Memphremagog Basin and; statewide clean water initiatives.[27]

Many financial sources funded clean water projects in FY16-FY18, including the Vermont Capital Bill (38%), the Clean Water State Revolving Fund (24%), the Vermont Clean Water Fund (16%), the Federal Transportation Fund (5%), the USDA National Resource Conservation Service (5%), and other state and federal sources (12%).[28] The EPA capitalizes 80% of Clean Water State Revolving Fund loans, while the State of Vermont capitalizes the remaining 20% through loan repayment and investment earnings.[29]

The State supports clean water grants using portions or the entirety of the following sources:

- Construction bonds (Vermont Capital Bill);
- Taxes on fuel, motor vehicle purchases and fees (State Transportation Fund);
- Taxes on income, sales, meals and rooms, insurance premiums, estates and inheritances, and property transfers (General Fund);
- Conservation license plate sales (Watershed Grant Fund);
- Act 250 mitigation fees (Act 250 Mitigation Fund);
- Property transfer taxes (Housing and Conservation Trust Fund);
- Surcharges on property transfers (Clean Water Fund) and;
- Beginning October 1, unclaimed bottle deposits (Clean Water Fund).[30]

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23 EPA. "Phosphorus TMDLs for Vermont Segments of Lake Champlain," June 17, 2016, 41.

24 This amount does not include $8.2 million in federal match and $21.4 million in local match/in-kind funding throughout the State of Vermont, as seen in Figure 9 of the 2018 CWIP Investment Report.

25 Vermont Clean Water Initiative Agencies. "Vermont Clean Water Initiative 2018 Investment Report," January 15, 2019.

26 Ibid, Appendix A.

27 Vermont Clean Water Initiative Agencies. "Vermont Clean Water Initiative 2018 Investment Report," January 15, 2019, 6 and Appendix A.

28 Ibid, 14.

29 Ibid.

30 Email from Emily Bird to Geoffrey Battista, May 22, 2019.

Recent legislation, signed into law on June 19, will divert 6% of total State meals and rooms tax revenue from the General Fund to the Clean Water Fund beginning on October 1, 2019.[31]

A range of entities are responsible for implementing projects with these funds, including State agencies, regional planning offices, municipalities, and non-profits.[32] Several State agencies oversee project implementation, including the Agencies of Administration (AOA); Agriculture, Food, and Markets (AAFM); Commerce and Community Development (ACCD); Natural Resources (ANR) and; Transportation (AOT), as well as the Vermont Housing and Conservation Board (VHCB). ANR's Department of Environmental Conservation manages the Clean Water Investment Program (CWIP), which gathers data, accounts for pollution reductions, and reports clean water program data.

The secretaries of the five aforementioned State agencies and four members of the public appointed by the Governor sit on the Clean Water Board.[33] The Board recommends how to allocate funding from the Vermont Capital Bill and the Clean Water Fund—totaling 54% of all State clean water funding between July 1, 2015 and June 30, 2018 (Table 1).[34] It is also a forum for agencies to monitor revenue and coordinate expenditures from other funding sources, including agency budgets. Vermont statute notes that "all recommendations from the Board should be intended to achieve the greatest water quality gain for the investment"[35] (emphasis added).

Vermont statute requires an audit of the Clean Water Fund (CWF) by January 15, 2021.[36] However, CWF provided only 16% of all FY16-FY18 State clean water funding. As of its April 25, 2019 meeting, the Clean Water Board continues to debate the scope of the audit and whether it should include other sources of State clean water funding.[37] In the meantime, the Vermont State Auditor's Office (SAO) will periodically investigate clean water progress, regardless of funding source.

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31 See: S. 96 of 2019. Referenced June 24, 2019.

32 Vermont Clean Water Initiative Agencies. "Vermont Clean Water Initiative 2018 Investment Report," January 15, 2019, Appendix A.

33 See: Act 168 of 2018.

34 Vermont Department of Environmental Conservation. "Clean Water Fund Budget Process." Accessed April 24, 2019. https://dec.vermont.gov/watershed/cwi/cwf/budget-process.

35 See: 10 V.S.A. § 1389(d)(1).

36 See: 10 V.S.A. § 1389b.

37 Clean Water Board Meeting, April 25, 2019.

Table 1. Funding sources that account for least 5% of FY16-FY18 clean water funding[38] [39]			
Funding Source	**Decision-Making Entity**	**Financing Mechanism**	**% Funds**
Capital Bill	* Clean Water Board * State Legislature	* State bonds	38%
Clean Water Fund	* Clean Water Board * State Legislature	* Property transfer tax surcharge	16%
Clean Water State Revolving Fund	* U.S. Congress * U.S. EPA * State Legislature * VT Dept. of Environmental Conservation	* State capital construction bonds * EPA grant * Repayment funds * Investment earnings	24%
Federal Transportation Fund	* U.S. Congress * State Legislature * VT Agency of Transportation	* Federal transportation funds	5%
USDA NRCS Agricultural Conservation Easement Program	* U.S. Congress	* USDA Natural Resource Conservation Service funding	5%
		Total	**88%**

Note: This table excludes all funding sources contributing less than 5% of all FY16-FY18 State clean water funding. These funding sources include: the General Fund; the State Transportation Fund; the Transportation Alternatives Federal Fund; the Housing & Conservation Trust Fund; the Act 250 Mitigation Fund; the Watershed Grant Fund and; the Lake Champlain Basin Program. These sources altogether account for 12% of FY16-FY18 ICWI funding.

[38] Email from Emily Bird to Geoffrey Battista, May 22, 2019.

[39] Vermont Clean Water Initiative Agencies. "Vermont Clean Water Initiative 2018 Investment Report," January 15, 2019, 15.

Phosphorus Sources in Vermont

Phosphorus flows from many sources.[40] It exists naturally in soil and biomass (plants and animals), and, as soil and shorelines erode, it flows down rivers and collects in lakes and wetlands. Farmers use phosphorus-rich fertilizer to increase their crop yields, and livestock manure is rich in phosphorus. Stormwater washes phosphorus from parking lots, sidewalks, and rooftops into drainage systems, which are often released directly into waterways. Sewer and combined sewer[41] systems bring phosphorus from urban areas to wastewater treatment facilities that discharge outputs into waterways. Undermanaged dirt roads and poorly managed forest harvesting operations cause erosion that washes phosphorus into waterways.

The EPA and the Vermont Department of Environmental Conservation (DEC) took a two-step approach to estimate phosphorus sources for the 2016 TMDL. First, they input two decades of monitoring data[42] into a mathematical model[43] to determine how much phosphorus needed to be reduced among Lake Champlain's major tributaries to reach EPA-mandated levels in the lake. Since this approach does not pinpoint *how* phosphorus enters major tributaries, including land-use factors and sources along smaller rivers, the contractor Tetra Tech followed up with Soil and Water Assessment Tool (SWAT) modeling. SWAT modeling assigns phosphorus values to different types of land, like farms or forests, and uses the characteristics of the landscape to predict where the phosphorus will flow on its way to Lake Champlain.[44]

The State's Clean Water Roadmap Tool[45] provides phosphorus source estimates, excluding end-of-pipe wastewater sources and in-channel erosion sources,[46] [47] in the six watersheds that drain into Lake Champlain. Table 2 summarizes these estimates. Approximately 30% of phosphorus flows from the Otter Creek watershed, which includes most of Addison County and areas of Rutland County near Route 7. The Winooski, Missisquoi, and Southern Lake Champlain watersheds release similar amounts of phosphorus to one another (80-100 mt/y). The Lamoille and Northern Lake Champlain watersheds release less non-point phosphorus than other watersheds.

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40 DEC Watershed Management Division. "Chapter 1. Strategic Framework for Statewide Efforts to Guide Surface Water Management." In Statewide Surface Water Management Strategy, 2017. http://dec.vermont.gov/sites/dec/files/documents/wsmd_swms_Chapter_1_Introduction.pdf.

41 Combined sewer systems combine stormwater and sewage en route to treatment facilities.

42 The Lake Champlain Long-Term Monitoring Project includes 15 lake stations and 21 tributary stations in Vermont and New York. These stations measure stream flow and phosphorus content, among other variables, and are routinely checked from April to October.

43 Tetra Tech. "Lake Champlain BATHTUB Model Calibration Report," April 30, 2015. https://www.epa.gov/sites/production/files/2015-09/documents/lc-bathtub-model-calibration-report.pdf.

44 EPA. "Phosphorus TMDLs for Vermont Segments of Lake Champlain," June 17, 2016, 21.

45 State of Vermont. "Clean Water Roadmap," 2017. https://anrweb.vt.gov/DEC/CWR/CWR-tool/.

46 In-channel erosion signifies waterway erosion caused by natural or manmade phenomena.

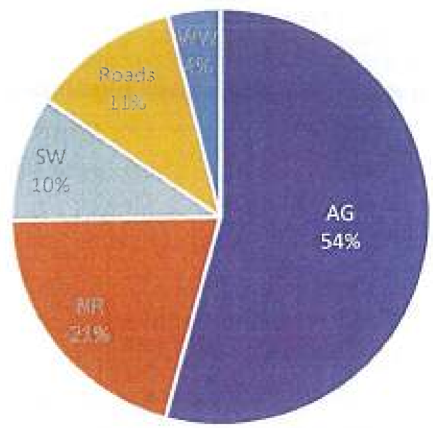
47 The SAO used Clean Water Roadmap Tool phosphorus source estimates because the Tool's land-use sector classifications and geographic units of analysis more closely correspond with ICWI expenditure data cited later in this report.

Table 2. Non-point phosphorus sources by watershed & sector, in metric tons per year[48 49]						
Watershed	Agriculture (AG)	Natural Resources (NR)	Stormwater (SW)	Roads	Total	% Basin
Otter Creek	106.6	27.5	11.5	13.9	**159.6**	**29.6%**
Winooski	27.9	37.3	14.8	18.4	**98.4**	**18.3%**
Missisquoi	51.6	21.1	7.3	8.4	**88.4**	**16.4%**
Southern Lake	54.8	14.3	5.0	6.8	**80.8**	**15.0%**
Northern Lake	37.1	4.5	8.8	7.0	**57.4**	**10.7%**
Lamoille	26.4	10.5	7.1	10.1	**54.1**	**10.0%**
Basin-wide	**304.3**	**115.3**	**54.5**	**64.6**	**538.6**	**100.0%**

Note: All values rounded from original calculations to nearest 0.1. One metric ton = 1,000 kg, or 2205 lb.

Looking at phosphorous sources by land-use sector, the largest share of phosphorus entering the lake comes from agriculture at 54%, followed by natural resources (including forests, grasslands, shrublands, and wetlands) at 21%, roads at 11%, and stormwater at 10% (Figure 2). This pattern is relatively consistent across watersheds, though non-agricultural sources account for more than half the phosphorus in the Lamoille and Winooski watersheds (Appendix A). Wastewater (WW) is not represented in the Clean Water Roadmap Tool, but it is estimated to be the source of 4% of all phosphorus in Lake Champlain.[52] Both Table 2 and Figure 2 exclude phosphorus from in-channel erosion due to lack of data in the Clean Water Roadmap Tool.

Figure 2. Phosphorus Sources, Lake Champlain[50 51]



The Clean Water Roadmap Tool's basin-wide total phosphorus loading (538.6 mt/y) differs from that published in the 2016 TMDL (631 mt/y) because the Clean Water Roadmap Tool does not include wastewater and in-channel erosion. The SAO used Clean Water Roadmap Tool source estimates because the Tool's land-use sector classifications and geographic units of analysis more closely correspond with State clean water expenditure data cited later in this report. The

48 State of Vermont. "Clean Water Roadmap," 2017. https://anrweb.vt.gov/DEC/CWR/CWR-tool/

49 Data were recoded using the following scheme: Agriculture from "Cropland," "Pasture/Hay," and "Farmstead" in the Clean Water Roadmap Tool. Natural resources from "Forest," "Grass/Shrubland," and "Wetlands." Stormwater from "Developed." Roads from "Roads."

50 State of Vermont. "Clean Water Roadmap," 2017. https://anrweb.vt.gov/DEC/CWR/CWR-tool/.

51 Data were recoded using the following scheme: Agriculture from "Cropland," "Pasture/Hay," and "Farmstead" in the Clean Water Roadmap Tool. Natural resources from "Forest," "Grass/Shrubland," and "Wetlands." Stormwater from "Developed." Roads from "Roads." Wastewater was added as 4% of the total phosphorus loading, based on 2016 TMDL estimates.

52 EPA. "Phosphorus TMDLs for Vermont Segments of Lake Champlain," June 17, 2016, 48.

DEC is currently considering whether to align watershed-scale expenditure and phosphorus reduction accounting with TMDL mandates at the lake segment scale—a considerable challenge given the complex relationship between watershed baseloads and lake segment phosphorus concentrations.[53]

[53] Email from Emily Boedecker to Doug Hoffer, June 24, 2019.

Phosphorus Reduction Expenditures in Vermont

The State of Vermont must reduce phosphorus pollution from many sources to successfully meet EPA-mandated targets. Strategies vary across land-use sectors (Appendix B). Farmers can adopt new practices and technologies. Waterway restoration projects can capture phosphorus in wetlands and along shorelines. Stormwater drainage and culvert investments can reduce pollution from paved surfaces and prevent erosion on dirt roads. Sewer and treatment facilities upgrades can capture phosphorus in wastewater and stormwater before being released into waterways.

Clean water projects in the Lake Champlain Basin received more than $66 million between FY16-FY18 (Table 3). The Winooski and Northern Lake Champlain watersheds received around $20 million each, and about 50% of their awards went to wastewater projects.[54] The Otter Creek watershed received about $9 million, with the largest share going to agriculture and 25% going to wastewater projects in the Rutland area. The Missisquoi watershed received more than $8 million, with a majority going to agriculture projects. The Southern Lake Champlain and Lamoille watersheds received the least amount of funding, focusing on agriculture while supporting projects in other land-use sectors.

Table 3. Interagency Clean Water Initiative Expenditures, FY16-FY18 (millions of dollars)[55]

Watershed	AG	NR	SW	Roads	WW	Multi	Total
Winooski	1.826	1.917	4.766	2.102	10.645	0.480	$21.736
North Lake	2.808	0.656	4.087	0.655	9.291	0.721	$18.219
Otter Creek	3.373	1.023	0.968	0.765	2.270	0.578	$8.977
Missisquoi	4.732	0.684	0.770	1.318	0.000	0.659	$8.162
South Lake	1.939	0.493	0.823	0.524	0.616	0.624	$5.019
Lamoille	1.064	0.836	0.965	0.649	0.068	0.537	$4.119
Basin-wide	$15.742	$5.610	$12.380	$6.012	$22.889	$3.599	$66.232

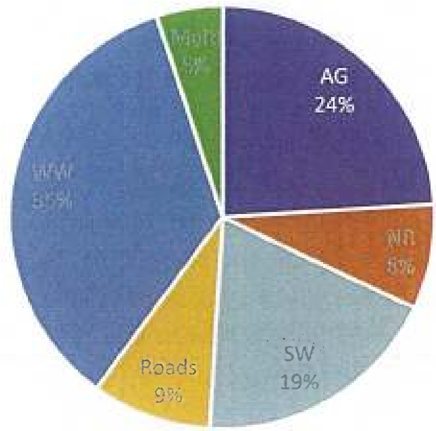
Note: Expenditures are classified by project type: "AG" is Agriculture; "NR" is Natural Resources; "SW" is Stormwater; "Roads" is Roads; "WW" is Wastewater and; "Multi" is Multi-sector. All values rounded to nearest 0.001 by DEC at SAO's request.

[54] "The Northern Lake Champlain and Winooski [watersheds] are outliers with investments at $18.2 and $21.7 million respectively. Significant investments in these basins are largely driven by municipal wastewater treatment and CSO abatement requirements, as well as municipal stormwater treatment requirements for Vermont's most populous municipalities" (2018 Clean Water Initiative Investment Report, 19).

[55] Email from Emily Boedecker to Doug Hoffer, June 24, 2019.

Multi-sector project expenditures varied by watershed. These expenditures went to the following project types: outreach & education; organizational capacity & development; mapping and analytical support and; water quality sampling.[56] [57] Expenditure data by watershed are available in Appendix A.

Figure 3. State Clean Water Expenditures, Lake Champlain (FY16-FY18)[58]



Combining these expenditures (Figure 3), we see that wastewater projects received the largest share of State clean water funding in the Basin even though the share of phosphorous pollution from this source is the lowest by far. Wastewater accounts for 4% of phosphorus pollution, but wastewater projects accounted for 35% of expenditures. The State of Vermont awarded two-thirds of wastewater funding as no- and low-interest loans from the Clean Water State Revolving Fund (CWSRF).[59] [60] [61] The remaining third came from Pollution Control Grants (Vermont Capital Fund),[62] which are provided to help municipalities pay back CWSRF loans.[63]

Smaller amounts of clean water funding went to other land-use sectors: agriculture is responsible for the largest share of phosphorus pollution (54%), but the State spent only 24% of total expenditures on agriculture projects. Stormwater received 19% of the funding, roads got 9%, and natural resources got 8%. Five percent of clean water spending went to multi-sector initiatives to build local partners' capabilities, provide technical assistance to farmers, and conduct public outreach.

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[56] Vermont Clean Water Initiative Agencies. "Vermont Clean Water Initiative 2018 Investment Report," January 15, 2019, Appendix A.

[57] Email from Emily Boedecker to Doug Hoffer, June 7, 2019.

[58] Vermont Clean Water Initiative Agencies. "Vermont Clean Water Initiative 2018 Investment Report," January 15, 2019, Appendix A.

[59] Ibid, 18.

[60] EPA. "Clean Water State Revolving Fund," February 20, 2019. https://dec.vermont.gov/facilities-engineering/water-financing/cwsrf/.

[61] The Clean Water State Revolving Fund is a national program. The EPA capitalizes 80% of loans. The State of Vermont capitalizes 20% of loans and allocates awards.

[62] VT Department of Environmental Conservation. "VT Pollution Control Grants," 2019. https://dec.vermont.gov/facilities-engineering/water-financing/vt-pollution-control-grants.

[63] Response provided by Amy Polaczyk in: Email from Emily Bird to Geoffrey Battista, May 1, 2019.

Cost-Effectiveness of Phosphorus Reduction Practices

The State of Vermont plans to invest hundreds of millions of dollars over the next couple decades to meet phosphorus reduction targets. Vermont statute emphasizes that Clean Water Board recommendations "should be intended to achieve the greatest water quality gain for the investment."[64]

But which projects give taxpayers the best bang for their buck? Evidence suggests it is cheaper to reduce phosphorus from agriculture and natural resources than from stormwater, roads, and wastewater.[65] [66] At the same time, expensive stormwater and wastewater projects are necessary to reduce phosphorus in certain places. These include shallow and sheltered bodies of water, such as: St. Albans Bay, the southern tip of Lake Champlain, and rivers passing through large towns.

Wastewater projects are costly capital investments with benefits beyond phosphorus reduction. These benefits include solid waste processing, sewer service extensions to existing properties, and laying the groundwork for future development. The 2016 TMDL specifically targets wastewater investments in lake segments where: 1) the "currently permitted wastewater load represents a significant proportion of the total phosphorus load from all Vermont sources" and 2) wastewater upgrades would "meaningfully reduce the phosphorus reduction burden placed on non-wastewater sources," such as stormwater flowing into municipal water systems.[67] These criteria generally prioritize wastewater investments in two watersheds: Northern Lake Champlain (including St. Albans and metro Burlington) and Winooski (including Waterbury and Barre-Montpelier).[68]

This section of the report shows the cost-effectiveness of projects throughout the Lake Champlain Basin by land-use sector to determine whether taxpayers are getting the greatest value for their investments. The SAO defines cost-effectiveness in this analysis as the kilograms of phosphorus reduced annually for every $100,000 in State clean water spending. Readers should consider the following data limitations when interpreting the cost-effectiveness calculations in this section and those presented in Appendix C:

1. ICWI has only released three years of data. ICWI expects phosphorus reductions to increase as agencies gain expertise, measurement improves, and early investments bear fruit.

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64 See: 10 V.S.A. § 1389(d)(1).

65 EPA. "A Compilation of Cost Data Associated with the Impacts and Control of Nutrient Pollution," May 2015. https://www.epa.gov/sites/production/files/2015-04/documents/nutrient-economics-report-2015.pdf.

66 USDA Agricultural Research Service. "Best Management Practices to Minimize Agricultural Phosphorus Impacts on Water Quality," July 2006. https://www.ars.usda.gov/is/np/BestMgmtPractices/Best%20Management%20Practices.pdf.

67 EPA. "Phosphorus TMDLs for Vermont Segments of Lake Champlain," June 17, 2016, 28.

68 Ibid, 30-32.

2. The cost-effectiveness of projects in the natural resource and stormwater sectors may calculate lower than actual cost-effectiveness. This is because State agencies cannot yet measure phosphorus reductions for the following types of projects: river and floodplain restoration, lakeshore restoration, wetland restoration, forest erosion control, and combined sewer overflow abatement.[69] It is difficult to quantify phosphorus reductions from these project types because they are complex and context-sensitive. However, State agencies contributing to ICWI have reviewed neither the data required to quantify phosphorus reductions nor the average impact of these projects as of the latest CWIP Investment Report.[70]
3. Cost-effectiveness calculations in all land-use sectors may calculate lower than actual cost-effectiveness because phosphorus reductions are not systematically estimated among measurable project types.[71] ICWI has estimated phosphorus reductions for the following project types between FY16 and FY17:
    - 100% of total acres for crop rotation and associated practices;
    - 69% of total acres for forested agricultural buffers;
    - 53% of total acres for annual conservation practices (FY17);
    - 41% of total acres for stormwater treatment practices;
    - 27% of total acres for non-agricultural forested riparian buffers and;
    - An unknown percent of total miles for road erosion control practices.[72]

    ICWI and its partner agencies have not yet calculated the proportion of projects quantified for FY18, which ended on June 30, 2018.[73] [74]

Figure 4 shows that the cost-effectiveness of phosphorus reduction projects varies by land-use sector. Agricultural projects are the most cost-effective, capturing an estimated 8.3 kg phosphorus annually per $100,000 spent (8.3 kg/$100k).[75] This is more than twice as cost-effective as natural resource projects (3.1 kg/100k) and five times as cost-effective as road projects (1.3 kg/100k).

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69 Vermont Clean Water Initiative Agencies. "Vermont Clean Water Initiative 2018 Investment Report," January 15, 2019, 93.

70 Ibid, Appendix C.

71 Vermont Clean Water Initiative Agencies. "Vermont Clean Water Initiative 2017 Investment Report," January 15, 2018. https://dec.vermont.gov/sites/dec/files/wsm/erp/docs/2017CleanWaterInitiativeInvestmentReport_5MB.pdf.

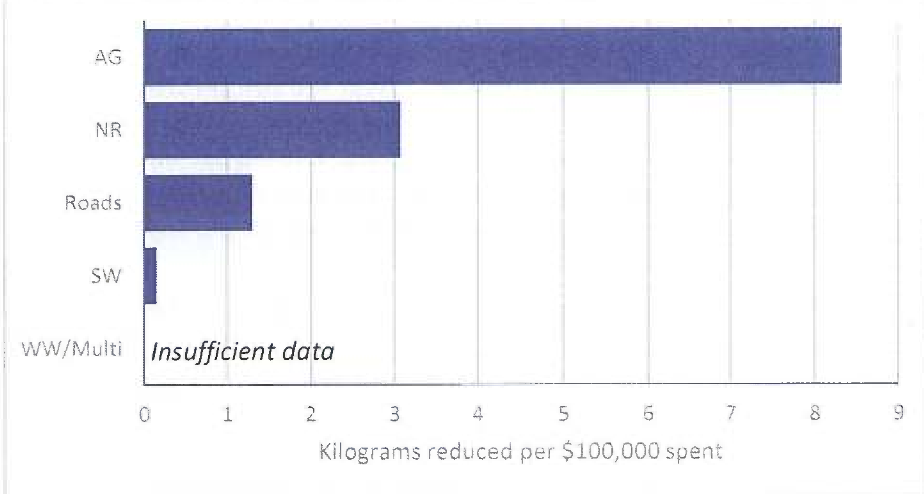
72 Vermont Clean Water Initiative Agencies. "Vermont Clean Water Initiative 2017 Investment Report," January 15, 2018.

73 Email from Emily Bird to Geoffrey Battista, April 23, 2019.

74 CWIP notes the FY18 Investment Report omitted summaries of the proportion of projects quantified by land-use sector "for the purposes of streamlining/simplifying the report." CWIP offered to calculate and provide data to the SAO within "a couple weeks" of April 23, 2019. Rather than wait for the data, which had been available by mid-April in previous years, the SAO continued with publication.

75 Please note that agricultural investments depreciate more quickly than those in other land-use sectors. Certain conservation practices have one-year lifespans, for example. Farm capital investments and agricultural forest buffers have longer lifespans.

Figure 4. Cost-effectiveness of phosphorus reduction in Lake Champlain Basin, by sector.[76]



The cost-effectiveness of stormwater projects is unclear because some expensive projects lack phosphorus reduction data. Four million dollars in stormwater spending in the Northern Lake Champlain watershed, for example, only yielded a 0.3 kg reduction in phosphorus from 0.2 acres of treated impervious surfaces across three locations: Lake Iroquois in Williston (erosion control); Burlington (installation of better-draining sidewalks) and; Shelburne (green stormwater management on a residential street).[77] In other watersheds, the cost-effectiveness of stormwater projects does not exceed 0.5 kg/$100k.

It is difficult to determine the cost-effectiveness of wastewater projects because investments may not directly relate to phosphorus discharges.[78] Seven of eight wastewater projects involved sewer extensions and refurbishments.[79] Phosphorus reductions cannot be calculated for extensions and refurbishments. ICWI justifies these investments because they are "important to maintain and improve aging infrastructure and provide sewer service to more areas."[80] While these investments may be important for these purposes, it is unclear how they relate to State phosphorus reduction objectives.

At the same time, a $6.3 million wastewater treatment facility upgrade in Waterbury was very cost-effective (12.1 kg/$100k).[81] [82] This result should not be generalized to other treatment

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76 Calculated from SAO using data from Vermont Clean Water Initiative Agencies. "Vermont Clean Water Initiative 2018 Investment Report," January 15, 2019, Appendix A.

77 Vermont Clean Water Initiative Agencies. "Vermont Clean Water Initiative 2018 Investment Report," January 15, 2019, 63.

78 Ibid., 39.

79 Email from Emily Bird to Geoffrey Battista, April 23, 2019.

80 Ibid.

81 Vermont Clean Water Initiative Agencies. "Vermont Clean Water Initiative 2016 Investment Report," December 30, 2016, 25. http://dec.vermont.gov/sites/dec/files/wsm/erp/docs/2016CleanWaterInitiativeInvestmentReport.pdf.

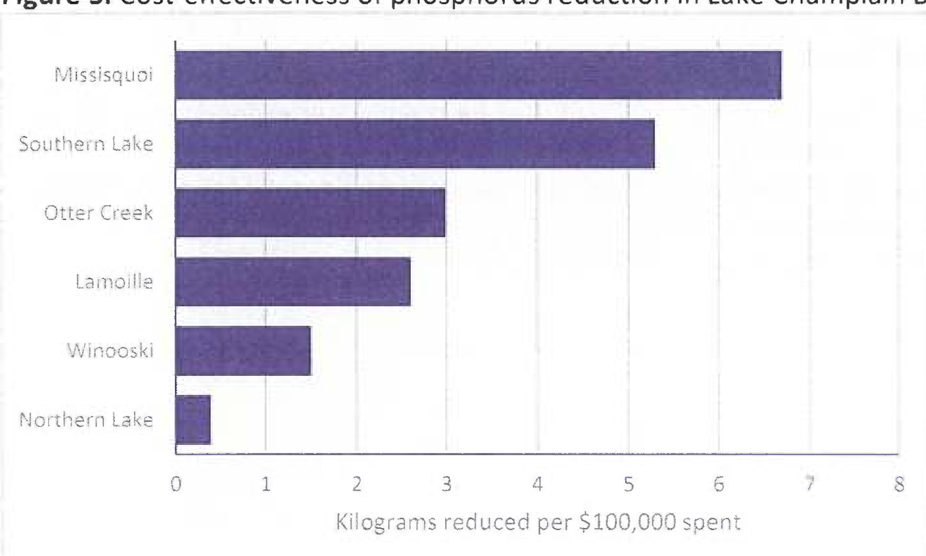
82 Email from Emily Bird to Geoffrey Battista, April 23, 2019.

facility upgrades, however, because their cost-effectiveness varies widely by facility type, size, volume, and upgrade measures.[83]

It is unclear what impact multi-sector expenditures have on phosphorus reduction, though other metrics related to the efficiency of agency operations may be more appropriate. The Vermont Department of Environmental Conservation plans to classify multi-sector projects by land-use sector, where appropriate, in future reporting years.[84]

Overall, every $100,000 spent on State clean water projects in the Lake Champlain Basin captured 2.4 kg of phosphorus per year. But cost-effectiveness varied by watershed (Figure 5). The most cost-effective watersheds were those whose projects had measurable phosphorus reductions: Missisquoi (6.7 kg/$100k), Southern Lake Champlain (5.3 kg/$100k); Otter Creek (3.0 kg/$100k) and; Lamoille (2.6 kg/100k). The Winooski watershed (1.5 kg/$100k) and Northern Lake Champlain watershed (0.4 kg/$100k) were less cost-effective because their wastewater and stormwater projects yielded little measurable reduction in phosphorus.[85]

Figure 5. Cost-effectiveness of phosphorus reduction in Lake Champlain Basin, by watershed[86]



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83 Tetra Tech. "Lake Champlain Phosphorus Removal: Technologies and Cost for Point Source Phosphorus Removal," January 13, 2014.

84 Email from Emily Boedecker to Doug Hoffer, June 7, 2019.

85 The $6.3 million wastewater treatment facility upgrade in Waterbury was not included in these calculations because it is not officially acknowledged in the 2018 Clean Water Initiative 2018 Investment Report. See Appendix C for source data.

86 Calculated from SAO using data from Vermont Clean Water Initiative Agencies. "Vermont Clean Water Initiative 2018 Investment Report," January 15, 2019, Appendix A.

Upon reviewing the cost-effectiveness calculations above, DEC presented three critiques:

1. The calculations included the cost of incomplete projects, even though phosphorus reductions are not reported until projects are complete;
2. The calculations included the cost of project types whose phosphorus reductions are not yet quantifiable, such as combined sewer overflow abatement and;
3. The calculations did not consider project lifespan, meaning that expensive but long-lasting investments could calculate as less cost-effective than inexpensive, short-term investments.[87]

The SAO requested higher-resolution data to address these critiques. DEC furnished a spreadsheet of all clean water projects funded and completed between FY16 and FY18, inclusive, with pairwise project lifespan and phosphorus reduction data.[88] This sample of projects overlaps (though does not precisely align) with that presented in the 2018 CWIP Investment Report—whose data are subject to the limitations above.

This new spreadsheet listed 1,423 projects within the Lake Champlain Basin, including statewide projects, at a total cost of nearly $77 million in state funds. These projects were collectively forecast to capture an average of 2,962 kg phosphorus annually during their lifespans. These numbers yield a lifespan-adjusted cost-effectiveness of 3.9 kg/$100k for clean water projects in the Lake Champlain Basin.

However, these new data also revealed that 95% of all state clean water expenditures did not yield any measurable reduction in phosphorus.[89] Most projects in all land-use sectors, including all wastewater projects, did not yield measurable phosphorus reductions. By failing to register project impacts, State agencies cannot demonstrate that they are meeting phosphorus reduction targets, let alone at the lowest cost to taxpayers.

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87 Email from Emily Boedecker to Doug Hoffer, June 7, 2019.

88 Email from Emily Boedecker to Doug Hoffer, June 24, 2019.

89 $3.44 million of $76.73 million in clean water project expenditures yielded measurable phosphorus reductions.

Conclusion

Vermont statute emphasizes that Clean Water Board recommendations "should be intended to achieve the greatest water quality gain for the investment."[90] The State has allocated more than $66 million to Lake Champlain Basin projects from FY16 to FY18. Wastewater and stormwater projects received 53% of these funds, including 41% of all State grants,[91] even though most phosphorus doesn't come from these sources; the majority of phosphorous comes from the agricultural and natural resource sectors. Wastewater and stormwater projects were among the least cost-effective solutions to reduce phosphorus. These projects are not cost-effective because they are expensive and, apart from one wastewater facility upgrade, have little to no measurable impact on phosphorus.

This finding raises an important question: why were projects with low cost-effectiveness prioritized in the early years of the Interagency Clean Water Initiative? Stormwater and wastewater projects provide many benefits to municipalities, from public sanitation to economic development. Because these projects are expensive, it is in the interest of municipalities to leverage State funds whenever possible. But, considering the immense resources required to meet EPA-mandated phosphorus reduction targets, does it make sense for the State to invest dollars aimed at this tangential goal on projects with little impact on phosphorus?

The State of Vermont has recently taken steps to clarify its clean water priorities.[92] Regional clean water service providers (CWSPs) will be established and "required to identify, prioritize, develop, construct, verify, inspect, operate, and maintain clean water projects" as they disperse state funds. CWSPs will consider projects' phosphorus reduction impacts among other criteria, including those unrelated to phosphorus pollution, as they weigh which projects to fund in their respective regions. The Secretary of Natural Resources will oversee CWSPs' progress and hold them accountable to meeting pollution reduction targets. DEC asserts these measures will improve the targeting of funds based on anticipated phosphorus reductions.[93]

In addition to matters of cost-inefficiency, this inquiry found issues concerning the quality of project impact data used by State agencies. Four years after the passage of Act 64, State agencies cannot measure phosphorus reductions for combined sewer system upgrades and several types of natural resource projects.[94] The State tracks wastewater treatment discharges using self-reported data from facility operators,[95] but phosphorus reductions from wastewater projects have neither been quantified nor published in CWIP Investment Reports. ICWI staff

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90 See: 10 V.S.A. § 1389(d)(1).

91 (Stormwater grants + Wastewater grants) divided by (Total funds – Wastewater loans) in Lake Champlain Basin.

92 See: S.96 of 2019.

93 Email from Emily Boedecker to Doug Hoffer, June 24, 2019.

94 Vermont Clean Water Initiative Agencies. "Vermont Clean Water Initiative 2018 Investment Report," January 15, 2019, 93.

95 Email from Emily Bird to Geoffrey Battista, April 23, 2019.

note that the impact of wastewater projects will feature in annual reports beginning with FY19.[96]

However, State agencies also did not consistently estimate phosphorus reductions among measurable project types. The percentage of project acres that were quantified varied by project type in FY16 and FY17 (see section "Cost-Effectiveness of Phosphorus Reduction Practices").[97] ICWI and its State agency partners also have not yet calculated the percentage of project acres that were quantified for FY18.[98] Additional project data provided by DEC show the vast majority of projects in all land-use sectors have not yielded any measurable reduction in phosphorus.[99] These omissions make it difficult to accurately assess the efficiency and effectiveness of the State's clean water investments.

State agencies are making progress in estimating phosphorus reductions: developing new methods and tools, investing in employees' capabilities, and registering phosphorus reductions in more areas, such Lake Memphremagog. Continuing this progress is necessary to maximize the value that taxpayers receive for their investments. We encourage state agencies to continue improving how they estimate, monitor, and publish phosphorus reduction data. As data quality improves, the State of Vermont can provide Vermonters and the EPA with a more robust and transparent accounting of its progress toward a cleaner Lake Champlain.

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[96] Email from Emily Bird to Geoffrey Battista, April 23, 2019.

[97] Vermont Clean Water Initiative Agencies. "Vermont Clean Water Initiative 2017 Investment Report," January 15, 2018.

[98] Email from Emily Bird to Geoffrey Battista, April 23, 2019.

[99] Email from Emily Boedecker to Doug Hoffer, June 24, 2019.

Appendix A: Watershed Summaries

This section summarizes four variables by watershed:

1. Phosphorus sources by land-use sector, excluding wastewater (at the watershed scale) and in-channel erosion;
2. ICWI project expenditures by land-use sector;
3. ICWI phosphorus reduction estimates by land-use sector and;
4. ICWI cost-effectiveness.

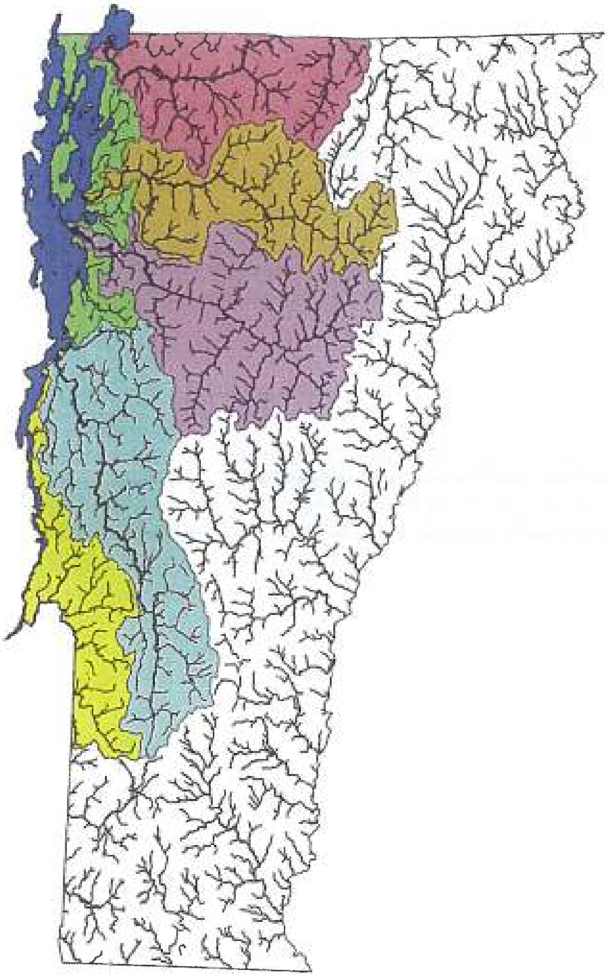
Each watershed features a map of rivers and their relationship to Lake Champlain. Maps are not to scale and have been enlarged to maximize detail.

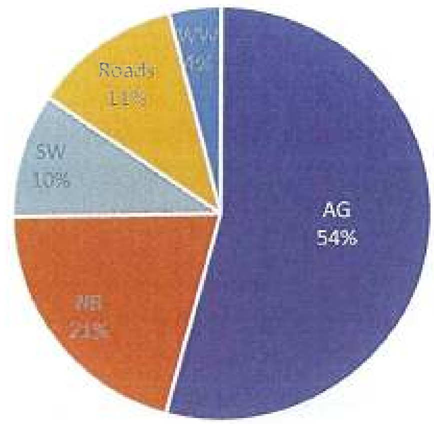
Data and their sources are listed below.

Data	Source
Watershed Phosphorus	Clean Water Roadmap Tool
ICWI Expenditures	2018 CWIP Investment Report
ICWI Phosphorus Reductions Estimates	2018 CWIP Investment Report
ICWI Cost-Effectiveness	Calculated by SAO
Geospatial - Watersheds	Vermont Open Data Portal
Geospatial - Rivers	Vermont Open Data Portal
Geospatial - Lake Champlain	Vermont Open Data Portal

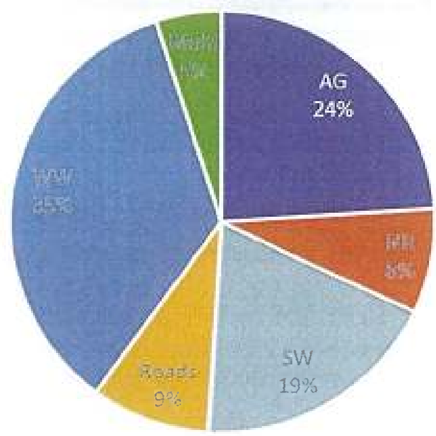
Note: SAO edited "Geospatial – Watersheds" due to boundary adjustments between 2008 and 2019.

Lake Champlain Basin





Phosphorus Sources, by sector*



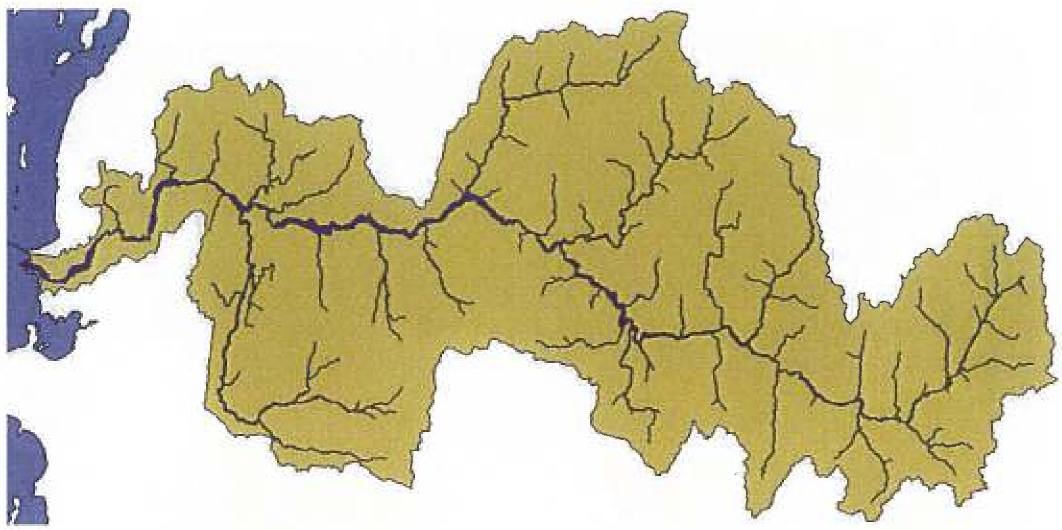
ICWI Expenditures, by sector

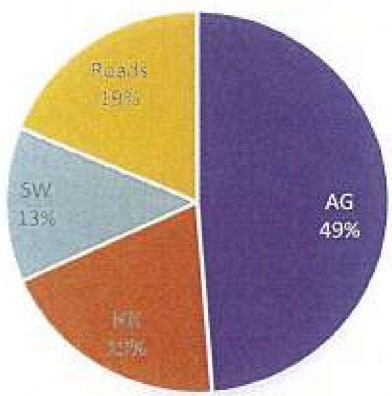
ICWI Performance (FY16-FY18)	
Basin Phosphorus	538,590 kg/y**
ICWI Expenditures	$66,232,457
ICWI Phosphorus Reduction Est.	1,575 kg/y
ICWI Cost-Effectiveness	**2.4 kg/$100k**

* "Phosphorus Sources, by sector" includes wastewater amount equal to 4% of 2016 TMDL total, added onto the "Basin Phosphorus" amount total derived from the Clean Water Roadmap Tool (CWRT) and proportioned as a percentage of the total. The CWRT data was used wherever possible because its land-use sector classifications and geographic units of analysis correspond with ICWI expenditure data.

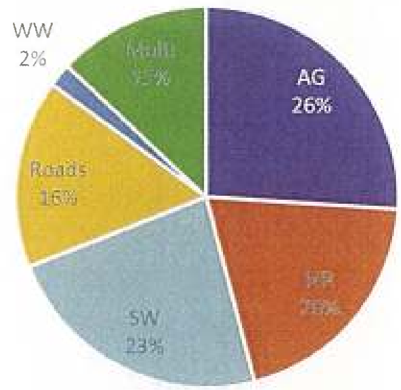
** The "Basin Phosphorus" total does not include wastewater or in-channel erosion.

Lamoille Watershed





Phosphorus Sources, by sector*

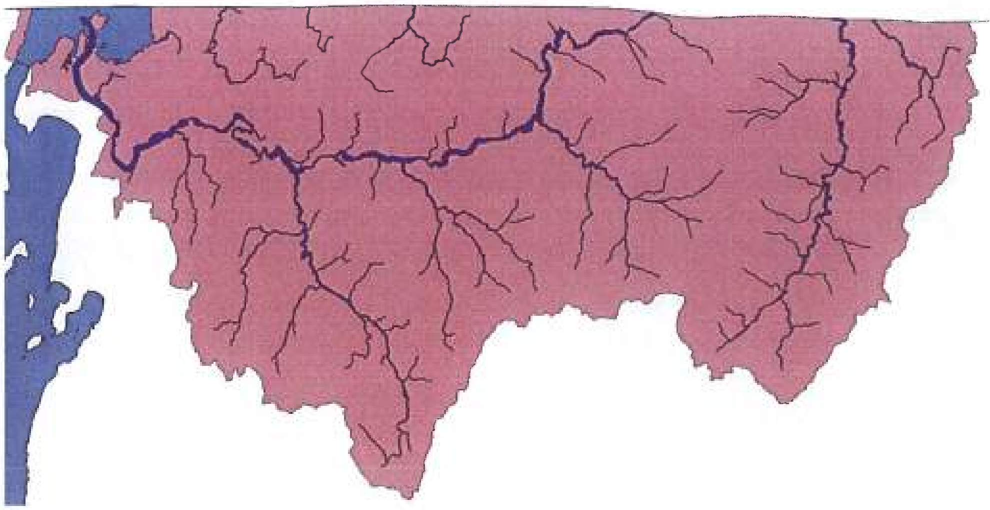


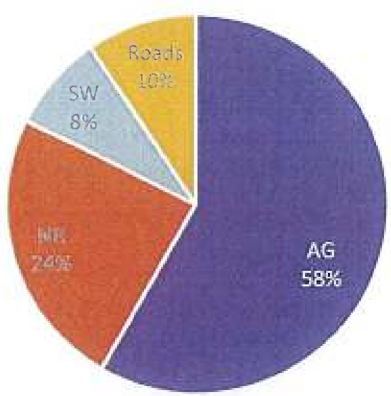
ICWI Expenditures, by sector

ICWI Performance (FY16-FY18)	
Watershed Phosphorus*	54,050 kg/y
ICWI Expenditures	$4,118,564
ICWI Phosphorus Reduction Est.	108 kg/y
ICWI Cost-Effectiveness	**2.6 kg/$100k**

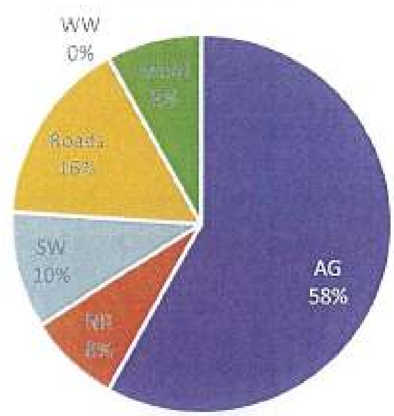
* Excludes wastewater and in-channel erosion sources.

Missisquoi Watershed





Phosphorus Sources, by sector*

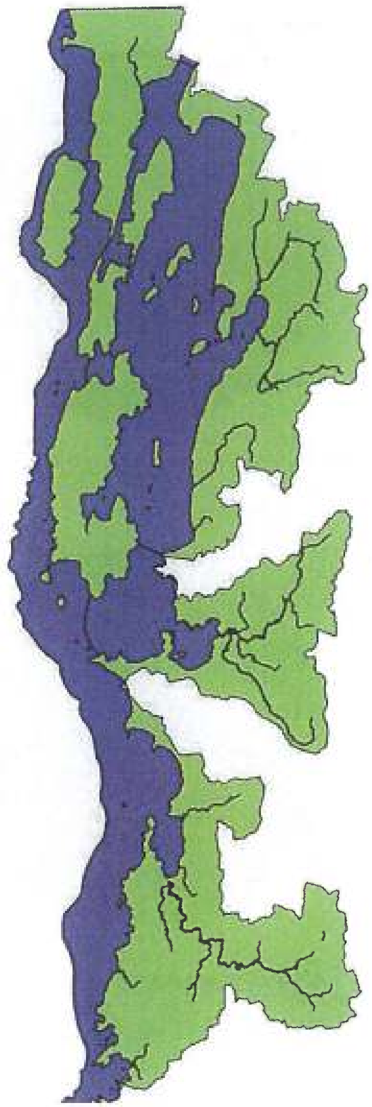


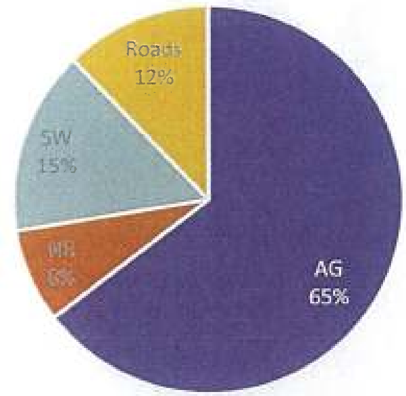
ICWI Expenditures, by sector

ICWI Performance (FY16-FY18)	
Watershed Phosphorus*	88,398 kg/y
ICWI Expenditures	$8,162,429
ICWI Phosphorus Reduction Est.	547 kg/y
ICWI Cost-Effectiveness	**6.7 kg/$100k**

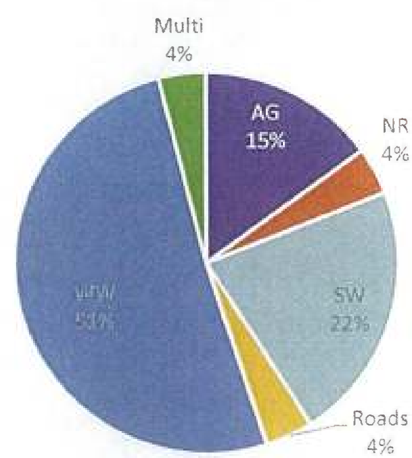
* Excludes wastewater and in-channel erosion sources.

Northern Lake Champlain Watershed





Phosphorus Sources, by sector*

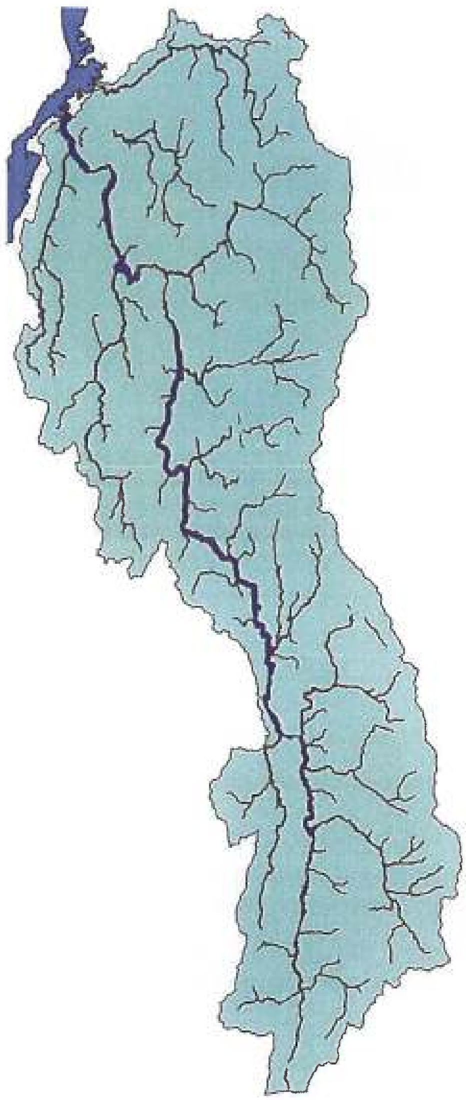


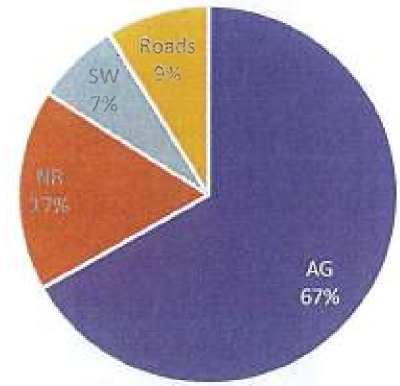
ICWI Expenditures, by sector

ICWI Performance (FY16-FY18)	
Watershed Phosphorus*	57,363 kg/y
ICWI Expenditures	$18,219,111
ICWI Phosphorus Reduction Est.	67 kg/y
ICWI Cost-Effectiveness	**0.4 kg/$100k**

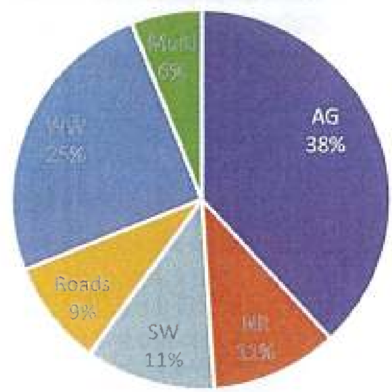
* Excludes wastewater and in-channel erosion sources.

Otter Creek Watershed





Phosphorus Sources, by sector*

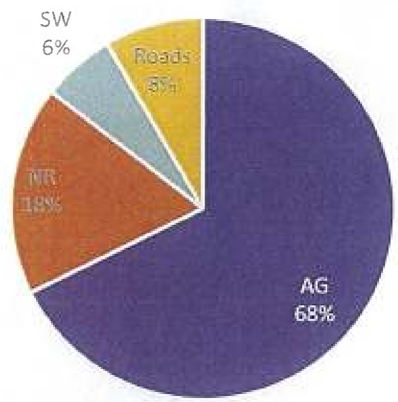


ICWI Expenditures, by sector

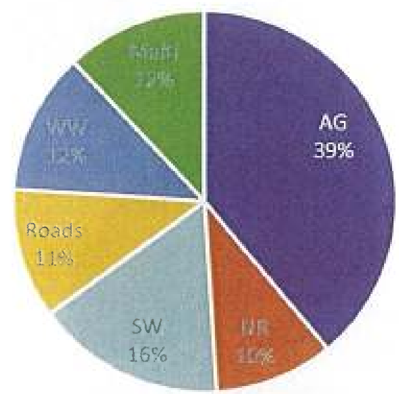
ICWI Performance (FY16-FY18)	
Watershed Phosphorus*	159,590 kg/y
ICWI Expenditures	$8,976,930
ICWI Phosphorus Reduction Est.	270 kg/y
ICWI Cost-Effectiveness	**3.0 kg/$100k**

* Excludes wastewater and in-channel erosion sources.

Southern Lake Champlain Watershed



Phosphorus Sources, by sector*

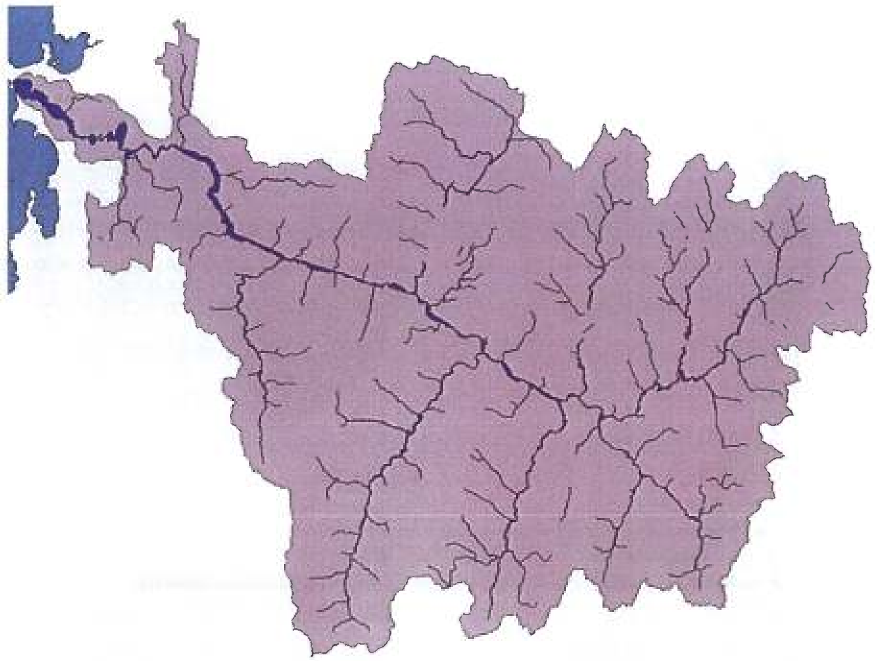


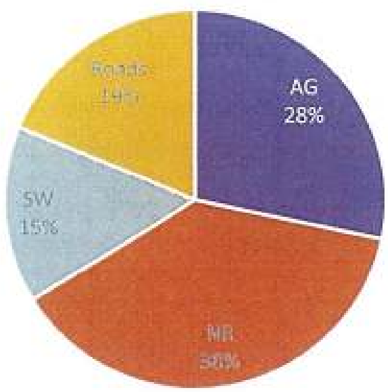
ICWI Expenditures, by sector

ICWI Performance (FY16-FY18)	
Watershed Phosphorus*	80,817 kg/y
ICWI Expenditures	$5,019,022
ICWI Phosphorus Reduction Est.	266 kg/y
ICWI Cost-Effectiveness	**5.3 kg/$100k**

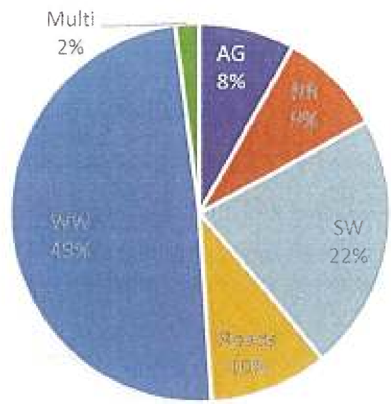
* Excludes wastewater and in-channel erosion sources.

Winooski Watershed





Phosphorus Sources, by sector*



ICWI Expenditures, by sector

ICWI Performance (FY16-FY18)	
Watershed Phosphorus*	98,372 kg/y
ICWI Expenditures	$21,736,401
ICWI Phosphorus Reduction Est.	318 kg/y
ICWI Cost-Effectiveness	**1.5 kg/$100k**

* Excludes wastewater and in-channel erosion sources.

Appendix B: Phosphorus Reduction Practices

Phosphorus Reduction Practices: Example Best Practices and Sample Projects (FY 2016-2018)				
Sector	**Example Best Practices**	**Sample Projects (FY18)**		
		Title	**Cost**	**Agency**
Agriculture	Fertilizing differently Managing livestock Storing waste Restoring forest buffers Using innovative technology and practices	Ridgeview Farm (Fairfield) – Alternative Manure Incorporation Vermont Land Trust – Agricultural Easement Farm #1 (Richford) Wastewater Storage Structure	$350, grant $264,000, grant $50,000. grant	AAFM VHCB AAFM
Natural Resources	Assessing waterways Buying and restoring easements Restoring riparian buffers Clearing waterways Restoring wetlands	Bouchard Farm Ditch Improvement Project – Rock River Town Garage Beecher Hill Brook – Floodplain restoration	$47,913, grant $43,398, grant	ANR ANR
Stormwater	Designing master plans Stemming illicit discharges Repairing and replacing infrastructure	Barre Town School Parking Lot Bioretention Lake Saint Catherine Watershed Master Planning	$6,520, grant $27,753, grant	ANR ANR
Roads	Remediating road erosion Investing in culverts and drainage Purchasing equipment	Essex - Vacuum Flusher / Pipeline Truck Central Vermont - Class 4 Road Erosion Remediation	$283,000, grant $113,000, grant	VTrans ANR
Wastewater	Extending sewer systems Phasing out combined sewer systems Upgrading or constructing treatment facilities	South Burlington – Wastewater Collection System Refurbishment, Final Design Waterbury – Wastewater Treatment Facility Upgrade, Construction	$306,720, 0% loan $6.4 million, grant	ANR ANR

Source: 2018 Clean Water Initiative Investment Report. Among agencies: "AAFM" is Agency of Agriculture, Food, and Markets; "ANR" is Agency of Natural Resources; "VTrans" is Agency of Transportation and; "VHCB" is Vermont Housing and Conservation Board.

Appendix C: Cost-Effectiveness Data

Row values were calculated in the following manner:

- "Cost" — State clean water expenditures divided by $100,000;
- "Impact" — Kilograms of phosphorus reduced per year by State programs and;
- "Cost-eff." — "Impact" / "Cost."

ND denotes "No Data." ID denotes "Insufficient Data."

Cost-Effectiveness Source Data (FY 2016-2018)								
		Missisquoi	Lamoille	North Lake	Otter Creek	South Lake	Winooski	LC Basin
AG	Cost	47.3	10.7	27.3	34.1	19.6	17.4	**156.5**
	Impact	519.0	86.0	52.0	216.0	215.0	214.0	**1,302.0**
	Cost-eff.	**11.0**	**8.0**	**1.9**	**6.3**	**11.0**	**12.3**	**8.3**
NR	Cost	6.5	8.2	7.3	9.9	5.0	19.6	**56.5**
	Impact	13.0	3.5	13.0	37.0	34.0	73.0	**173.5**
	Cost-eff.	**2.0**	**0.4**	**1.8**	**3.7**	**6.8**	**3.7**	**3.1**
SW	Cost	8.2	9.5	40.1	9.9	8.0	47.8	**123.4**
	Impact	3.4	4.4	0.3	2.5	ND	7.6	**18.2**
	Cost-eff.	**0.4**	**0.5**	**0.0**	**0.3**	**ND**	**0.2**	**0.1**
Roads	Cost	13.1	6.6	7.3	8.1	5.5	21.7	**62.3**
	Impact	12.0	14.0	1.4	14.0	17.0	23.0	**81.4**
	Cost-eff.	**0.9**	**2.1**	**0.2**	**1.7**	**3.1**	**1.1**	**1.3**
WW	Cost	0.0	0.8	92.9	22.4	6.0	106.5	**228.7**
	Impact	ND	ND	ND	ND	ND	776	**ID**
	Cost-eff.	**ND**	**ND**	**ND**	**ND**	**ND**	**7.3**	**ID**
Multi	Cost	6.5	5.4	7.3	5.4	6.0	4.4	**34.9**
	Impact	ND	ND	ND	ND	ND	ND	**ND**
	Cost-eff.	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
All	Cost	81.6	41.2	182.2	89.8	50.2	217.4	**662.3**
	Impact	547.4	107.9	66.7	269.5	266.0	317.6	**1,575.1**
	Cost-eff.	**6.7**	**2.6**	**0.4**	**3.0**	**5.3**	**1.5**	**2.4**

Source: Vermont Clean Water Initiative Agencies. "Vermont Clean Water Initiative 2018 Investment Report," January 15, 2019. All values rounded from original calculations to nearest 0.1.

Appendix D: Management Correspondence

This section summarizes report-related correspondence between the State Auditor and Emily Boedecker, Commissioner of Department of Environmental Conservation, including:

1. Email from Emily Boedecker to Doug Hoffer, June 7, 2019;
2. Email from Doug Hoffer to Emily Boedecker, June 13, 2019 and;
3. Email from Emily Boedecker to Doug Hoffer, June 24, 2019.

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Email from Emily Boedecker to Doug Hoffer, June 7, 2019

Thank you for sharing a copy of your Office's "non-audit" inquiry into the cost-effectiveness of expenditures on water quality projects by Vermont's Interagency Clean Water Initiative. Your focus on ensuring Vermont's clean water dollars are invested in the most cost-effective and impactful projects is one the Clean Water Initiative Program shares. In fact, the Agency of Natural Resources also identified barriers in both the current delivery system and the current funding sources that resulted in the recently passed S. 96, An Act Relating to the Provision of Water Quality Services, and the state budget that provides an ongoing source of general fund revenue to the clean water fund.

S. 96 focuses on the vast majority of Vermont's clean water work – which is to address diffuse, non-point sources of pollution – by establishing robust estimates of the efficacy and cost-effectiveness of individual practices. Over the next two years S. 96 requires the Agency of Natural Resources to evaluate, and then periodically re-evaluate, the magnitude of the investment required to implement discretionary projects that address diffuse sources of pollution and in consideration of the projected phosphorus reductions achieved by Vermont's regulatory programs. When fully implemented, S. 96 will prioritize Vermont's investments in discretionary clean water projects based on the anticipated phosphorus reduction. Discretionary clean water projects, such as natural resources restoration, are necessary to achieve the required phosphorus reductions for Lake Champlain but are not driven by regulation. Your report spotlights the challenges and areas for improvement that led the Administration and General Assembly to pass S. 96 in the first year of the 2019-2020 biennium.

While you did not request a management response to your conclusions, it is critical to note that the Report fails to acknowledge the broader statutory and regulatory framework that governs the work of the Clean Water Initiative Program. The failure to consider this context offers readers a false choice – suggesting that some of the less cost-effective investments are optional and could and should be reprogrammed. There are three important concepts that we believe should be included in your final report to provide context for stakeholders and decision-makers.

First, the report does not consider the statutory limitations of specific grants and funding sources administered by state agencies. Decisions about how to allocate available funds are often constrained by statutory and appropriations overlays. For example, the report is critical of the cost-effectiveness of investments made in municipal wastewater improvements. However, the report fails to consider the statutory requirement to direct the Clean Water State Revolving Fund (24 V.S.A. Chapter 120) and matched state appropriations to municipal wastewater improvements. As acknowledged in your report, the Clean Water State Revolving Fund investments are in the form of loans that are bonded by municipalities, which leverage local investment, and ultimately are paid back.

Second, both the federal Clean Water Act and the Vermont Clean Water Act (Act 64) require that many of these regulatory activities that you conclude are not as cost-effective as others must be completed regardless of their cost-effectiveness. Further, the Lake Champlain TMDL requires phosphorus reductions by specific sector, including wastewater, developed lands, agriculture, forests, and river systems. In order to meet our clean water goals, it is not an "either or" proposition, but an "all of the above" approach.

Finally, clean water work in Vermont cannot, legally or practically, be myopic in focusing on phosphorus pollution. While some investments may yield modest benefits in terms of phosphorus reduction, they are often mandated by law because they yield other important environmental and public health outcomes. The complex statutory and permit requirements that must be balanced when considering how to prioritize clean water investments cannot be ignored or oversimplified. For example, an upgrade at a wastewater treatment facility may yield modest reductions in phosphorous but result in significant reductions in an acute pollutant of concern, such as E. coli bacteria, or ammonia.

We hope that this additional context is helpful to you and your team in thinking about how you present the work of the Interagency Clean Water Initiative and the Agency's Clean Water Initiative Program. In addition to these general comments, we have identified a number of important factual inaccuracies and technical issues that we believe warrant correction and encourage you to consider in preparing your final report. These are described in the attached Appendix A.

In closing, we appreciate your interest in the important investments that Vermont is making in clean water. This work is significant, complex and essential not only to the Agency, but to all Vermonters. The additional context provided above, coupled with the factual corrections attached, will present a more complete and accurate review.

Sincerely,

Emily Boedecker

Email from Doug Hoffer to Emily Boedecker, June 13, 2019

Commissioner Boedecker,

Thank you again for your management response and appendix. It provided context in many areas, but we have some remaining questions (attached). We would appreciate responses to our questions, including available data, by EOB Wednesday, June 19.

Thank you,

Doug

Email from Emily Boedecker to Doug Hoffer, June 24, 2019

This memo provides additional information in response to questions received from your Office on June 13, 2019. Certain of your follow-up questions touch on the dynamic and evolving nature of this work. Our technical and financial staff continue to build upon the accounting and tracking tools necessary to implement the full suite of clean water requirements imposed by the Vermont State Law and the Lake Champlain TMDL (and other TMDLs). Like yours, our staff are also operating at full capacity on this work, which can be noted from the depth of responsiveness on your questions, and scope of technical tools your staff have reviewed, few of which were even in existence even three years ago.

I note your intention to conduct future similar non-Audit inquiry, and DEC welcomes this to ensure transparency and accountability to the processes we oversee on behalf of Vermonters. As appropriate to the manner in which non-audit inquiries are conducted, DEC requests advance notification and engagement in future inquiries. DEC can most effectively respond to your office's needs when the scope of inquiry and individual questions posed are mutually understood, and staff are provided sufficient advance warning to weave the necessary work into their workplans. Our staff have worked hard to establish the granting, accounting, and tracking systems discussed in your report, and welcomes future constructive feedback and recommendations.

Appendix E: Abridged DEC Technical Comments and SAO Responses

The DEC provided initial comments to the SAO's report draft on June 7, 2019 (plain text). The SAO submitted its comment responses on June 13 (marked in red and underlined). The DEC sent its final comments and supplementary data on June 24 (double-underlined). Actions taken in lieu of responses are written in brackets, e.g., [Data provided by DEC on June 24.] Minor changes have been made to the comments for clarity.

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Technical Corrections

DEC Comment #1: Page 7, second full paragraph. The accurate total reduction percentages, based on the Phosphorus TMDLs for Vermont Segment of Lake Champlain (the TMDL), are: 80% from agricultural production areas; 54% from agricultural fields and pastures and; 21% from developed lands. See Table 8 of the TMDL.

SAO Response #1: Thank you for directing us to Table 8. We drew from Figure 7 for our work. Table 8's phosphorus reductions roughly correspond with those in Figure 7 in the following categories: agricultural nonpoint, streams, forest, developed land, and total. However, Table 8 shows a decrease in wastewater phosphorus while Figure 7 shows an increase. Table 8 also does not account for the TMDL's margin of safety. Please clarify and justify which source is more appropriate to describe mandated phosphorus reductions for the purposes of this report.

DEC Response #1: Table 7 provides the lake segment-level requirements that DEC and USEPA consider the mandated phosphorus allocations. Regarding wastewater, Table 8 reports a percent wastewater reduction calculated by considering the pre-TMDL permitted load vs. the post-TMDL permitted load. In other words, there is an overall 42.1% reduction in the permitted load. However, even with that reduction in the permitted load, there is still an allowable wastewater load increase from what is being discharged currently, up to the new, post-TMDL allocation. Regarding the Margin of Safety in Table 8, we have confirmed that this is incorporated into the reductions in Table 8. We confirmed our understanding with Region 1 of the US Environmental Protection Agency. Please find confirmatory email correspondence in the attached email document #1.

DEC Comment #2: Page 10, Table 1. The Transportation Alternatives Fund (TA) is one component of the Federal Transportation Fund identified in the fourth row of the table. TA funds may be included in the Federal Transportation Funds row, which would elevate the percentage from 5% to 9% of total funds, to bring the total accounted funding to 92%. [SAO chose to maintain status quo.]

DEC Comment #3: Page 11, last paragraph, and Table 2. These numbers do not accurately reflect the TMDL, and DEC cautions against the use of the Clean Water Roadmap (CWR) to summarize baseloads to Lake Champlain for the purpose of the Report. The purpose of the

CWR is to downscale the load and wasteload allocations of the TMDL to as fine a geographic scale as practicable, to support tactical basin planning. While this is very useful from a planning perspective (see Tactical Basin Plans published since 2016), to be accurate the baseloads associated with lake segments must be taken from the TMDL. Documentation of the CWR acknowledges that the errors by-segment are +/- ~15%; however, the errors seem substantially larger in the case of agricultural land use in the Otter Creek basin, something that DEC will investigate. Figure 4, and Table 3 from the TMDL provide the most accurate information, broken down by land use sector. DEC recognizes the benefit of using the CWR in that basins are computed separately from lake segments, and roads are broken out as a sector separate from developed lands. Nonetheless, the TMDL presents the most accurate statement of baseloads to Lake Champlain. 4) Likewise, the data underlying Figure 2 of the Report would be more accurately reflected by reliance on the data in Table 3 of the TMDL.

SAO Response #3: Thank you for discussing baseloads. We have debated how to register baseloads since the earliest stages of this inquiry. Though the TMDL offers precise modelling data of baseloads, it is insufficient for the purposes of identifying the cost efficiency of investments for the following reasons:

1. Lake segments are the geographic unit of analysis in the TMDL, while the Interagency Clean Water Initiative (ICWI) publishes expenditure and phosphorus reduction data by watershed. We have not come across a replicable method to convert lake segment phosphorus loads into watershed loads.

2. CWR land-use sector classifications more closely match those used by ICWI when publishing expenditure and phosphorus reduction data. We understand that ICWI's classifications have evolved over time away from those in the TMDL, e.g., adding roads and folding CSO into wastewater. These changes make it difficult to measure ICWI progress against TMDL baseloads.

We acknowledge the limitations of our approach throughout the report and appendices. We are rewriting key paragraphs to more clearly convey these limitations. That being said, we welcome additional data should it address our above reservations with the TMDL data. Please provide these data if they are available.

DEC Response #3: The baseload attribution from lake segment to planning basin is one of the most technically complex components of planning and accounting for implementation of the TMDL, and an area of active engagement for DEC. The Clean Water Roadmap (CWR) does a great job of "downscaling" the original SWAT estimates for planning purposes, however, as noted in our prior response, there is error associated with modeling to develop the fine catchment-scale CWR estimates. There is another tool available that the Auditor may not be aware of, called the "HUC 12" tool, which is a spreadsheet model that expresses baseloads, reported directly by the SWAT model, at the "Hydrologic Unit Code – level 12" scale (the Dog River watershed would be a good example of a "HUC12" watershed). The HUC 12 tool was developed as a data visualization tool for output from the SWAT model. This tool is available from USEPA, and a copy of it is provided in as an attachment. DEC is in the process of considering whether to pivot Tactical Basin Planning watershed scale that Clean Water Initiative accounting occurs to align with the Lake Champlain TMDL segments. The content of the HUC12 tool is likely to assist this effort, but DEC cautions that doing so accurately will require careful cross-referencing to the original TMDL and underlying native SWAT data; a substantial analytical task.

DEC Comment #4: Page 14 and Figure 3. Wastewater accounts for 4% of the total load (see Table 3 of the TMDL), and 35% of spending in the Lake Champlain basin (see Vermont Clean Water Initiative 2018 Investment Report, Page 6). [Corrected by SAO from original values of 5% and 34%, respectively.]

DEC Comment #5: Page 14 last paragraph, agriculture comprises 41% of phosphorus loading (see Table 3 of the TMDL). [See *Technical Corrections*, SAO Response #3]

Minor Technical Points

DEC Comment #1: Introduction, page 4, uses the term "hazardous" to describe the levels of phosphorus in certain surface waters. Phosphorus in surface waters in and of itself is not hazardous. Certain impacts from high levels of phosphorus, specifically cyanobacteria blooms, may be hazardous. [Rewritten by SAO.]

DEC Comment #2: Page 8, first full paragraph. Lake Carmi is part and parcel of the Lake Champlain basin. [Rewritten by SAO.]

DEC Comment #3: Page 11, first full paragraph, concludes that dirt roads and forest harvesting cause erosion (...). More accurately, stormwater from undermanaged dirt roads, and poorly managed harvesting operations results in erosion. This is the reason that Act 64 required promulgation of the Municipal Roads General Permit and the revised Acceptable Management Practices for Maintaining Water Quality on Logging Jobs in Vermont. [Rewritten by SAO.]

DEC Comment #4: Table 3 presents sums computed based on percentages of total expenses from the Vermont Clean Water Initiative 2018 Investment Report, resulting in some rounding inaccuracies.

SAO Response #4: Please provide the expenditure data for each watershed in the Lake Champlain Basin, per the rows and columns in Table 3. Thank you. [Data provided by DEC on June 24.]

DEC Comment #5: Page 14 last full paragraph, multi-sector investments were not made in support of state employees. Rather, these investments benefitted the capacity and development of local partner organizations. [Rewritten by SAO.]

DEC Comment #6: In Footnote 74, regarding the depreciation of agricultural investments, please note that this applies to annual agricultural conservation practices only, which are accounted only for one year, based on the availability of record of payment for that year. However, farmers may implement for longer timeframes (see legend of Figure 17 page 28 of the Vermont Clean Water Initiative 2018 Investment Report for agricultural projects' anticipated lifespan). [SAO chose to maintain status quo, as some of these points were already noted elsewhere in the draft report.]

Clarifications of Policy and Narrative

DEC Comment #1: The Report is presented as an evaluation of the Clean Water Initiative Program (CWIP). DEC's Clean Water Initiative Program (CWIP) coordinates and manages: (1) gathering data, (2) accounting for pollutant reductions, and (3) reporting for the State of Vermont clean water funding programs shown in Table 1 on page 13 of the Vermont Clean Water Initiative 2018 Investment Report. DEC's CWIP does not influence or determine all clean water funding decisions across state government, including cost effectiveness of these investments. DEC's CWIP also relies on state funding programs to track, manage, and QA/QC check datasets. Since this Report evaluates data quality and cost effectiveness of funding decisions, which is the responsibility of all State of Vermont clean water funding programs and not just DEC's CWIP, this report would best be presented as an evaluation of the Interagency Clean Water Initiative. [Rewritten by SAO.]

DEC Comment #2: The executive summary highlights the high proportion of funds awarded to the stormwater and wastewater sectors and questions the allocation of scarce clean water funds to these sectors. As noted in our letter above, the Lake Champlain, Memphremagog, and other TMDLs establish sector allocations that are binding under the Federal Clean Water Act. While actions are required in all sectors, the State aims to direct funding to the most cost-effective projects within each sector. The State's policy is to supplement municipal costs of compliance with clean water regulations to minimize additional costs passed on to rate payers.

SAO Response #2: Please provide us with this policy, including source or authorization information, broken down by funding source as necessary.

DEC Response #2: Authority is conferred to the State to assist with municipal costs of compliance with clean water regulations by Act 64 of 2015 and modified in Act 154 (2016) and Act 168 (2018). More specifically see §10 V.S.A. 1389(e)(1)(A-D). For DEC, the Clean Water Initiative Granting Policy is updated annually, and the most recent copy may be found online, here. A comprehensive discussion on grant matching rates for municipalities (from multiple Agency funding sources) may be found in the 2017 "Act 73" report prepared by Treasurer Pearce. Please see specifically pages 25 and 26. Finally, S. 96 of 2019 amends priorities for Clean Water Fund usage in a manner that continues to support municipal stormwater mitigation, in §4(e)(2)(C) of that legislation, which amends §10 V.S.A 1389(e).

DEC Comment #3: Page 6, first full paragraph, describes the reasons for which EPA remanded the 2002 TMDL. A more accurate description is that the TMDL did not account for climate change and there were inadequate reasonable assurances that the nonpoint source load allocations were achieve. [SAO made minor revisions, weighing both 2016 TMDL language and the DEC comment.]

DEC Comment #4: Page 9, second paragraph, should also recognize the Vermont Housing and Conservation Board as an agency responsible for implementing clean water improvements. [Rewritten by SAO.]

DEC Comment #5: Page 13. Last paragraph. The complete list of multi-sector project types includes: Education & Outreach; Organizational Capacity & Development; Research; Technical Assistance; Mapping and Analytical Support and; Water Quality Sampling. During the next year of reporting, DEC plans to create sector-specific project categories for multi-sector project types, where appropriate, which will allow those projects to be grouped into land-use sectors (e.g., agricultural education and outreach). [Rewritten by SAO.]

DEC Comment #6: Page 15, second paragraph, summarizes requirements for wastewater treatment in certain segments of the Lake. While Rutland is called out in the report, the TMDL does not require this or any other facility in the Otter Creek segment to reduce loading relative to prior permitted loads. Section 6 of the TMDL details the specific segments and facilities where advanced wastewater treatment is necessary. These reductions are assigned based on proportion of wastewater contribution to the segment and facility size. Generally speaking, WWTFs discharging more than 200,000 gallons per day in critical lake segments (Missisquoi, St. Albans, and South Lake A and B) are required to reduce loads to a concentration equivalent of 0.2 mg/l, as are those facilities discharging to the Main Lake, Shelburne Bay, Burlington Bay, Missisquoi Bay, and South Lake Champlain segments. [Rewritten by SAO.]

Opportunities for Improved Cost-Efficiency

DEC Introduction: DEC appreciates the concluding paragraph of the Report which emphasizes the need for agencies to continue improving how they estimate and report phosphorus reductions. These improved methodologies may also inform agencies' abilities to make investments considering cost effectiveness of treatment of phosphorus, other nutrients, and sediment pollution. DEC and other agencies continue to dedicate staff time and resources to advance this work. We take this charge seriously. DEC offers the following observations to contextualize the intricacies in calculating cost effectiveness for the reader.

DEC Comment #1: The methodology used by the Report incorporated the costs of projects not yet complete (i.e., funded and in progress/ongoing) in its cost effectiveness calculation. However, phosphorus reductions and other project outputs are not reported until a project is fully constructed/implemented. For example:

a. State agencies funded 2,169 projects SFY 2016-2018, of which 1,428 were complete and 741 were ongoing at the close of the SFY 2018 reporting period.

b. The Report states, "Four million dollars in stormwater spending in the Northern Lake Champlain watershed, for example, only yielded a 0.3 kg reduction in phosphorus..." Forty-two stormwater projects in various project stages (e.g., project identification, design, and construction) have been funded in Northern Lake Champlain watershed in SFY 2016-2018; at the close of SFY 2018 reporting period, only 10 were complete, only 4 of which were categorized as construction/implementation.

SAO Response #1: Thank you for acknowledging this issue. To account for project completion, we would need pairwise project expenditure and phosphorus reduction data for all projects funded and completed between FY 2016 and FY 2018, broken down by land-use sector and watershed. These data must include completed projects with no measurable phosphorus reductions. These data must also include "projects constructed/implemented for which pollutant reductions are not yet quantifiable" (Opportunities for Improved Cost-Efficiency Information #2), such as the AAFM Best Management Practice Program, as these are included in expenditure data alongside phosphorus-reduction projects in CWIP investment reports. Are these data readily available?

DEC Response #1: The attached Excel workbook contains all projects funded and/or completed SFY 2016-2018 in the Lake Champlain basin. The first worksheet contains completed projects with quantified phosphorus reductions. The second worksheet contains projects without quantified phosphorus reductions. Projects in the Lake Champlain basin may lack quantified phosphorus for the following reasons: a. the project is not yet constructed/implemented; b. the project step is not construction/implementation; c. insufficient data were available to quantify phosphorus reductions and; d. the methodology is not yet in place to quantify phosphorus reductions. This workbook includes statewide and multi-basin projects that overlap the Lake Champlain basin. State funds awarded to statewide and multi-basin projects were split equally across the applicable watersheds when presenting dollars awarded per watershed/basin in the Investment Report. Database fields shown as column headers in the Excel workbook are defined in Appendix A, along with important considerations for interpreting the dataset.

SAO Response #1: Additionally, we request clarification on three points:

SAO Response #1a: We understand that phosphorus reductions and other project outputs are not reported until a project is fully constructed/implemented. However, do any clean water funding sources use predicted phosphorus reduction as a criterion for approval? If so, is this criterion validated ex-ante, post-hoc?

DEC Response #1a: The DEC Clean Water Initiative Program review committees rank projects for funding based on scoring criteria defined in the request for proposals (RFP). Review committees consider projects' anticipated nutrient and sediment pollution reduction where information is available. Pollution reduction estimates may be available through: 1. sector-based assessments (e.g., Stormwater Master Plan) that identify and prioritize projects based on anticipated nutrient and sediment pollution reduction and 2. prior completed design estimates of nutrient and sediment pollution reduction.

It is important to note that anticipated pollution reductions are not always available at the grant application stage, especially for proposed design projects, since the design itself informs the anticipated pollution reduction. Additionally, DEC CWIP continues to work on developing accounting methodologies, where these are not yet available (please see further additional information regarding S. 96, below). Where pollution reduction estimates are not available to inform funding decisions, the review committee may consider anticipated project outputs (e.g., acres of floodplain restored) relative to cost.

DEC CWIP is developing tools to evaluate anticipated pollution reductions in its funding decisions, starting with the online Stormwater Treatment Practice Calculator. Applicants must complete the Stormwater Treatment Practice Calculator and attach to stormwater construction grant applications to demonstrate the project's anticipated phosphorus reduction to the review committee.

The review committee considers other important factors in its decision making, such as: 1. project readiness to proceed (e.g., design complete and permits in place); 2. local support (e.g., landowner agreement) and; 3. technical review by DEC programs to ensure projects are permittable and do not cause negative impacts to natural resources. Other state agency funding programs may incorporate other criteria and should be contacted to determine how they prioritize funding decisions awards.

The state acknowledges the need to target funds based to the most cost-effective projects for phosphorus treatment within each sector. Note that S. 96 "An act relating to the provision of water quality services" will require dispersal of funds to regional Clean Water Service Providers based on phosphorus reduction targets and the cost per unit of phosphorus reduction beginning November 1, 2021. This requirement will help improve targeting of funds based on anticipated phosphorus reductions.

SAO Response #1b: Subsection (1b) notes that among 42 stormwater projects in the Northern Lake Champlain watershed, "only 4 of which were categorized as construction/ implementation." This finding differs from the three projects cited in our report, as gleaned directly from correspondence with ICWI/CWIP (Email from Emily Bird to Geoffrey Battista, May 22). Please explain this difference.

DEC Response #1b: Four "Stormwater – Implementation" projects were completed in SFY 2016-2018 in the Northern Lake Champlain watershed. Three had quantified phosphorus reductions, as noted in the email from Emily Bird to Geoffrey Battista on 5/22 and listed below. Insufficient data were available to quantify phosphorus reductions for the fourth project, titled "Reducing Residential Stormwater Runoff in the City of Burlington" as the project was funded in SFY 2012 before reporting requirements were in place to support quantifying pollutant reductions.

SAO Response #1c: The above email also notes that CWIP(?) calculated partial phosphorus reductions for incomplete projects:

> *Since the Munroe Brook/Brook Lane, Shelburne Stormwater Treatment project was installed part-way through SFY 2018 (11/6/2017), a portion (approximately 0.1 kg/yr) of the 0.2 kg/yr total phosphorus load reduction is reported in SFY 2018, which is how the 0.3 kg/yr total phosphorus load reduction for Northern Lake Champlain in SFY 2016-2018 was calculated. In next year's report, this value will be 0.4 kg/yr, plus reductions from additional state-funded stormwater treatment practices implemented in SFY 2019 (to be determined). (Email from Emily Bird to Geoffrey Battista, May 22)*

Please clarify your phosphorus accounting approach on this issue.

DEC Response #1c: The email referenced did not intend to imply that the CWI calculates partial phosphorus reductions for incomplete projects. To clarify, total phosphorus load reductions are estimated as an annual average. If a project is active for a fraction of a reporting period, a fraction of the annual average load reduction may be attributed to the reporting period. For example, the Munroe Brook/Brook Lake project was completed November 6, 2017 and active for 65% of the SFY 2018 reporting period (July 1, 2017-June 30, 2018). The project's estimated annual average total phosphorus load reduction is 0.2 kilograms per year. Therefore 65% of the estimated annual average total phosphorus load reduction (0.13 kilograms) was attributed to SFY 2018.

DEC Comment #2: The methodology presented in the Report incorporated costs of projects constructed/implemented for which pollutant reductions are not yet quantifiable, but assigned these costs to other programs and practice types. For example: Over $19 million was awarded to agricultural clean water projects in SFY 2016-2018, of which over $6 million is through Agency of Agriculture, Food and Market's (AAFM) Best Management Practice Program to implement clean water projects on farm production areas/barnyards. Pollutant reductions on these sites will be assessed at the site-compliance status scale through AAFM inspections. Compliance status data were not available for SFY 2016-2018 reporting purposes; therefore, pollutant reductions were not assigned to projects implemented through AAFM's Best Management Practice Program. The method in the Report assigns the $6 million investment through AAFM's Best Management Practice Program to phosphorus reductions achieved by other programs and practice types, skewing the resulting cost effectiveness determination. This same issue applies to methods used to calculate cost effectiveness in other sectors. [SAO chose to maintain status quo, as it is investigating the cost-effectiveness of ICWI, not just projects that yield measurable phosphorus reductions.]

DEC Comment #3: The methodology employed by the Report does not consider project lifespan in cost effectiveness. Stormwater treatment practices and wastewater treatment projects may be relatively more expensive, but these investments, when properly maintained, will provide phosphorus reductions over a greater lifespan than, for example, an annual agricultural conservation practice. Grey infrastructure such as wastewater and stormwater is expected to have a lifespan of 20 to 30 years.

SAO Response #3: Thank you for bringing up this issue. To control for project lifespan, we would need expenditures and phosphorus reductions by project type, rather than land-use sector, and the lifecycles of these project types. We would further need these data disaggregated by watershed and year of funding and completion, subject to the parameters in the previous point (Opportunities for Improved Cost-Efficiency #1).

DEC Response #3: The attached Excel workbook contain projects' approximate lifespan and should address this request. [Workbook provided on June 24]

G.

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STATE OF VERMONT
OFFICE OF LEGISLATIVE COUNCIL

MEMORANDUM

To: Members, Joint Fiscal Committee

From: Rebecca Wasserman, Office of Legislative Council

Date: July 23, 2019

Subject: Approval to Release Funds for a Correctional Facility Assessment

Pursuant to the terms of 2019 Acts and Resolves No. 42, Sec. 2(d) (2019 Capital Bill), the Joint Fiscal Committee is being asked to consider whether to approve the release of FY 2020 capital funds to the Department of Buildings and General Services (BGS) for a correctional facility assessment.

In the 2019 Capital Bill, BGS is authorized to use up to $200,000.00 of the FY 2020 amount appropriated to them for Statewide planning, use, and contingency to assess relative costs and resource requirements for potential construction of a correctional facility that ranges in scale. The assessment shall be used to accommodate the results of a study currently being conducted by the Council of State Governments to assess the population trends and programming in the State's corrections system. BGS has provided examples of the terms "resource requirements" and "cost assessments," which are included as Attachment A to this memorandum.

The 2019 Capital Bill requires that the funds for the assessment only become available to BGS after approval by both the Joint Legislative Justice Oversight Committee and the Joint Fiscal Committee. At its July 18, 2019 meeting, the Joint Legislative Justice Oversight Committee voted to approve the release of funds with certain conditions. The terms of the approval are included as Attachment B to this memorandum.

ATTACHMENT A

Examples of "resource requirements" and "cost assessments" (as provided by the Department of Buildings and General Services)

- Examples of "resource requirements": depending on the number of beds, the supporting administrative and mechanical facilities that would need to be scaled accordingly.
  - How big of a sewer line or heat plant is needed?
  - How many acres of land or parking spaces are needed?
  - Kitchen space standards to feed [xx] number of people or infirmary bed standards for [xx] number of people.
- Examples of "cost assessments":
  - A rough idea of what it would cost to build (not including land acquisition).
  - Permitting (the physical construction piece), keeping in mind that there are a number of variables.

ATTACHMENT B

The Joint Legislative Justice Oversight Committee (Committee) approves the release of up to $200,000.00 in FY 2020 capital funds to the Department of Buildings and General Services to commence an assessment of the relative costs and resource requirements for potential construction of a correctional facility that ranges in scale, in compliance with 2019 Acts and Resolves No. 42, Sec. 2(d) (the 2019 Capital Bill).

For the purposes of this approval, "resource requirements" means the mechanical and administrative services necessary to support a correctional facility with a given number of beds, and "cost assessments" means an estimate of the costs of construction, excluding land acquisition and including permitting.

Committee approval is pursuant to the following conditions:

1. the Department of Buildings and General Services shall submit a draft version of the RFP for the assessment to the Committee at the August 29th meeting;
2. the assessment shall accommodate the results of the Council of State Government's study, which has an expected completion date by December 31, 2019;
3. the assessment shall be for a medium-security facility and shall include a comparison of no less than three sizes of facilities, including 50, 100, and 175 beds; and
4. the assessment shall not be for a facility with more than 200 beds.

H.

Joint Fiscal Office

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MEMORANDUM

To: Senator Ann Cummings, Chair
Representative Kitty Toll, Vice Chair
Members of the Joint Fiscal Committee

From: Stephen Klein, Chief Fiscal Officer

Date: July 25, 2019

Subject: July 2019 – Fiscal Officer's Report

As we look toward the July 29 meeting, here is an update of recent developments, some of which will be on the agenda of the Joint Fiscal Committee.

1. FY 2019 Revenues Preliminary Closeout

The closeout process for FY 2019 has been relatively complex as it has involved the merger of the Health Care Resources Fund and the General Fund. The final revenue report or final Schedule 2 came in on July 15. Preliminary closeout was completed on July 18.

- **The General Fund**: Overall, on a preliminary basis, the combined General Fund with the Health Care Resources Fund is $51.2 million over forecast.
  - Before the Fund merger and before direct applications and reversions, the General Fund was $57.6 million or 4.5% over the January 2018 target. The General Fund strength was, in large part, personal income tax, which was $50.5 million or 6.1% over target and corporate tax receipts, which were $11.7 million or 9.5% over target. Property transfer tax and other revenue were off $4.2 million.
  - The former Health Care Resources Fund revenue taxes that are now in the General Fund came in at $5.2 million below target as cigarette tax fell short of estimates by about $3 million and provider taxes fell short due, in part, to nonpayment of taxes by Springfield Hospital.
  - The DFR funds were over $8.8 million above estimates, but in accordance with the budget adjustment bill, $6 million stayed within the DFR funds for the FY 2020 budget adjustment and $2.8 million went directly to the Rainy Day Fund.
  - The forecast will be available the day of the meeting, but much of the FY 2019 strength is projected to be onetime in nature.

- **Where Does the General Fund Surplus Go?** The $51.2 million FY 2019 surplus is split as follows:
    - $25.6 million goes to the State Employee Other Post-Employment Benefits funding (OPEB);
    - $9.4 goes to repay the Federal receipt account which provided funds primarily to offset the dedication of General Funds for Clean Water; and
    - $16.2 million goes to the General Fund Rainy Day Reserve. This allocation, coupled with the $2.8 million from the DFR surplus, brings the Rainy Day Fund balance to $31.5 million at the end of FY19.
- **Reserves and Retirement Contribution' Impacts**:
    - Overall our General Fund reserves are 14.2% at the end of FY 2019.
    - Between State Employees' and Teachers' retirement and retiree health care funds, the Legislature has allocated over $87 million in surplus funds to assist with meeting the long-term retirement funding needs. $36 million was in the close of FY 2018 and the start of FY 2019 construct, $22 million for OPEB and $3.3 million for teachers' retirement was in the FY 2019 budget adjustment, and $25.6 is in the FY 2019 closeout for State employees OPEB. There may be additional funds depending on the forecast upgrade.
- **The Transportation Fund**: The receipts are down $3.4 million from projected year-end expectations. The Agency of Transportation expects to offset that with carryforward. The shortfall materialized in June, and there is a sense that, in part, it was a function of timing. Tom Kavet will look into it as he builds the FY 2020 forecast.
- **The Education Fund**: On net the actual FY19 revenues are up $0.4 million: strength in the Lottery Fund (+$1.3 million), Medicaid transfer (+$1.7 million) and property tax collections (+$700,000) offset reductions in purchase and use (-$700,000) and sales tax revenues (-$2.6 million). Of the increase in property tax collections, $400,000 is from wind property. The longer-term implications of revenue shortfalls associated with sales will be addressed in Tom Kavet's FY 2020 forecast.

2. FY 2020 Revenues

FY 2020 and beyond revenue projections are still being finalized by Tom Kavet and Jeff Carr. The revenue adjustment is likely to be positive, but the level of adjustment is unclear as much of the revenue strength is likely onetime in nature.

3. Medicaid Trending

In total, FY19 Medicaid and Medicaid-related program expenditures totaled $1.82 billion. This is 4% over the level of FY18. In terms of total dollars, this is lower than the FY19 budgeted level. However, in terms of State dollars, the FY19 spending came in just over expectations. This was a result of changes in the match rates in various parts of the program. In DVHA, the ACO "tail" was not budgeted, and Rx rebates came in below expectation. These DVHA cost overages were covered internally from transfers from other departments that spent under their Global Commitment budgets. The Success Beyond Six program came in under expectation, but this has no direct impact on State funding since the match in this program is provided by the schools. The Medicaid year-end report will provide more detail.

4. State Employees' and Teachers' Retirement Funds

Investment returns on FY 2019 retirement funds are estimated to have come in below the 7.5% assumed returns. Returns are anticipated to below that level for fiscal year 2019. With over $4 billion invested, the lower return will negatively offset the new funds being added. This summer's actuarial work will take these factors into account to produce the new actuarial position of the fund.

The State still faces large OPEB obligations, and while the funds added at the close of the year will be positive, they will not be a major step toward closing what remains a financial gap. As the actuary reports in his end of the year review, we will present more on this funding situation.

5. Action Items on the JFC Agenda

A. Proposed plan for an electronic medical/health records system for the State's Designated Agency System [Sec. C.100(a)(10) of Act 72 (H.542)2019][Action Item][1]
The Joint Fiscal Committee is charged with the review and approval prior to the release of $1.5 million to the Designated Agencies for an IT medical records system. The system is far along in its development, with three agencies expecting to go live with systems in September. The project was done as a cooperative effort among the Designated Agencies. There is no overall independent review or overall plan in place. Normal State requirements, such as an independent review and an estimate of total project costs, a sustainability plan, and a clear strategy for linkage with other health information are also

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[1] *Vermont Care Partners and the Agency of Human Services shall present a plan for review and approval by the Joint Fiscal Committee at its July 2019 meeting. The plan shall summarize the development and implementation of the system and demonstrate that this project will support the goals set forth in the statewide Health Information Technology (HIT) Plan (defined in 18 V.S.A. § 9351) and meet, at a minimum, the connectivity requirements set forth in the statewide HIT plan and the requirements of the Centers for Medicaid Services (CMS). The plan shall support current payment reform initiatives and include the projected project timeline and total budget including the allocation of this appropriation. No funds shall be released prior to review and approval by the Joint Fiscal Committee*

not part of the initial submission to the Committee. Vermont Care Partners is coordinating this effort and will be presenting at the meeting. We have asked for more information on the long-term planning and fiscal demands of the project. A revised report on the project is to be submitted Thursday and will be forwarded to the Committee. As continued requests are made for State support, the Legislature may want to consider an increase in project review and information.

B. Correctional Facility Assessment [Sec. 2 of Act 42 (H.543) of 2019] [Action Item] [BGS and the Joint Justice Oversight Recommendation]

The Joint Justice Oversight Committee has made a contingent recommendation regarding the assessment by BGS for funding a new correctional facility. The Joint Fiscal Committee is charged with further approval.[2] There is a memorandum from Rebecca Wasserman outlining the background to this action. Senator Sears and Rep. Mary Hooper will be able to offer details on the specific proposal as they are part of the Joint Justice Oversight Committee.

6. Legislative Budgets and Other

Legislative Budgets ended FY 2019 with carryforward, in part due to the slower implementation of the NCSL study recommendations than we budgeted for. As the full costs of those recommendations remain unclear, these funds will provide resources as the process of review and implementation continues.

The State House will be closed for 4-6 weeks in the late fall (November and maybe early December) due to electrical work that is taking place. Staff will be moving to National Life, and legislative meetings will be offsite. We are holding the BGS Board room for our November meeting.

7. An Increase in Vermont's Drug Overdose Deaths Despite a Drop for the U.S.

For the first time since 1990, drug overdose deaths in the United States declined in 2018, with a 5.1 percent drop from 2017 to 2018 based on provisional data from the CDC National Vital Statistics System. In Vermont, however, drug overdose deaths rose 11.6 percent while other New England states saw a decline. Drug overdose deaths include opioid-related deaths but also deaths, attributed to other drugs including alcohol or benzodiazepines (used for the treatment of anxiety, panic disorders, insomnia, PMS, and nervousness). The one-year data can be a bit volatile, and Vermont deaths related to alcohol or benzodiazepines have been especially volatile in recent years. The Vermont

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[2] *(d) For the amount appropriated in subdivision (b)(4) of this section, the Commissioner of Buildings and General Services is authorized to use up to $200,000.00 to assess relative costs and resource requirements for potential construction of a correctional facility that ranges in scale in order to accommodate the results of the Council of State Governments' study described in Sec. 28 of this act; provided, however, that the funds shall only become available after approval by the Joint Fiscal Committee and the Joint Legislative Justice Oversight Committee. On or before March 15, 2020, the Commissioner shall submit a copy of the assessment to the House Committee on Corrections and Institutions and the Senate Committee on Institutions.*

Department of Health reports that opioid-related deaths for Vermont increased 1.8 percent in 2018. Joyce Manchester has put together a short issue brief on this data, which will be available on our website soon.

8. Studies

- **Demographics and Revenues:** Both the Legislative Joint Fiscal Office and the Tax Structure Commission will be doing fiscal briefs/white papers on the demographic impacts on revenues. The Joint Fiscal Office report is being based on IRS data on taxpayer migration and should be released in August. The Draft Tax Commission paper is available HERE. It looks at the effects of border demographic changes on a number of Vermont revenue sources.

- **UVM Kids in Custody Study**: The Legislature funded a research project at the University of Vermont (UVM) to identify and examine the factors contributing to Vermont's high rate of children entering the custody of the State. "Such research shall study the preventive and upstream services and interventions provided to families and the extent to which these supports to families have demonstrated effectiveness in allowing children to remain with their families." A legislative working group has been meeting with UVM to finalize the contract and study details. Aspects of the timing of this project may entail a language change in the budget adjustment process.

- **Review Minimum Wage Changes on Medicaid Contracts:** We are in the process of building our capacity to estimate the impacts on health care providers of changes in the minimum wage. This estimating work will need to be done by sampling as there are over 2300 vendors in the Medicaid program. Due to the close-out process taking much of the AHS staff's time, this work has been slow.

- **Incarcerated Women**: The Legislature appropriated $25,000 for Conference of State Government (CSG) consulting work on Vermont's incarcerated women. The CSG has indicated that they may be able to do this without funding, so we are holding the monies pending a legislative determination as to future use.

9. JFO Staff Updates

- Chloe Wexler has moved to full time, from 80% time for the fiscal year, due to increased use of her time.

- Joyce Manchester may be moving from 100% to 80% time through December. If this were to occur, Joyce would use her off time for some data-consulting work with the Agency of Human Services, as they carry out the strategic planning the Legislature required them to do.

- Graham Campbell is attending the Legislative Staff Management Institute (LSMI) during the week of July 22. He is increasingly becoming an important part of our revenue staff, and this training will help him with the transition to a more senior role.

- Neil Schickner has formally retired from the Joint Fiscal Office. We have agreed that he will do limited temporary work this fall and serve as a session staffer next session as we work toward replacing his services.

- During the off session, Sorsha is working to take over Grants from Dan Dickerson and helping the Tax Commission with its scheduling and production issues. Dan Dickerson will be out much of the summer and fall due to a mix of paternity leave and National Guard responsibilities.

- Dan Smith, who does IT consulting with us, will continue to provide IT support to legislative committees but will step back from his role doing projects reviews. We are thinking about how that work will continue to be done.

- Tom Kavet and Deb Brighton's contracts are up for renewal this summer and we are discussing what approach we will take.

- The Joint Fiscal Office will be hosting the Eastern States Legislative Fiscal Offices Association annual meeting in early September. The group will be here the week of September 9th and will be staying in Burlington but in Montpelier for a day. We least hosted this group ten years ago

REPORTS

State of Vermont
ANR Office of Planning & Legal Affairs
1 National Life Drive, Davis 2
Montpelier, VT 05620-3901 [phone] **802-595-0900**

Agency of Natural Resources

TO: The Legislative Joint Fiscal Committee

FROM: Billy Coster, Director of Planning

DATE: August 9, 2019

SUBJECT: Annual Report on 30 VSA § 20(a)(2) Bill-Backs – FY '19

In accordance with Title 30 VSA § 20(a)(2)(C), the Vermont Agency of Natural Resources (Agency) is required to report annually on all personnel costs authorized under that subsection.

Pursuant to Title 30 V.S.A. § 20(a)(2)(D), for fiscal year 2019 (July 1, 2018 through June 30, 2019), the Agency authorized personnel costs of **$43,191.80** to NorthStar Group Services, Inc., and its various subsidiaries.

The allocation of costs was for assistance in monitoring the postclosure activities of a nuclear generating plant within the State in the context of Public Utility Commission Docket 8880.

A quarterly breakdown of allocations follows:

Q1 and Q2 = $11,516.14
Q3 = $6,509.18
Q4 = $25,166.48

Total FY18: $43,191.80

Please feel free to contact me with any question or with requests for additional information. Thank you.

1 BALDWIN STREET,
MONTPELIER, VT 05633-5701

PHONE: (802) 828-2295
FAX: (802) 828-2483

STATE OF VERMONT
JOINT FISCAL OFFICE

MEMORANDUM

To: Joint Fiscal Committee Members

From: Daniel Dickerson, Fiscal Analyst

Date: July 26, 2019

Subject: Small Grant & Gift Quarterly Report

In accordance with the provisions of 32 V.S.A. § 5(a)(3), the Joint Fiscal Office is required to submit quarterly reports for small grant and gift requests with a value of $5,000 or less.* For the quarters ending December 31, 2018, March 31, 2019 and June 30, 2019 (Q2-4 FY2019), the Joint Fiscal Office did not receive notification of any grants meeting these criteria.

Be advised that Act 72 of 2019, sec. E.127.2, alters the threshold for small grant reporting as follows:

- Previous small grant reporting threshold – any grant up to $5,000 (with exceptions, see footnote below)

- New small grant reporting threshold – any grant greater than $1,500 and up to $15,000, no exceptions.

Any grant less than $1,500 will no longer need to be reported in the small grants quarterly report. Any grant greater than $15,000 will go through the grant approval process set out in 32 V.S.A. §5. This change will apply to all small grant reports going forward.

* Act 146 of the Acts of 2009 Adj. Session (2010), Sec. B.15 amended 32 V.S.A. § 5(a)(3) to permit the Department of Forests, Parks and recreation to accept grants with a value of up to $15,000 under the "small grants" procedure. Act 179 of the Acts of 2013 Adj. Session (2014) permitted the Vermont Veteran's Home to accept grants with a value of up to $10,000 under the "small grants" procedure.

VERMONT

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Department of Finance & Management
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Adam Greshin, Commissioner

MEMORANDUM

TO: Joint Fiscal Committee
FROM: Adam Greshin, Commissioner of Finance & Management
DATE: July 16, 2019
RE: Excess Receipts Report – 32 VSA Sec 511

Pursuant to 32 VSA Sec 511, attached please find a report on Excess Receipts approved for expenditure through the fourth quarter of FY 2019 (4/1/2019 through 6/30/19). The full text of the governing statute is provided at the end of this memo.

Review Process

The Administration completes an extensive review prior to approving expenditure of excess receipts. The form required of departments can be found at: http://finance.vermont.gov/forms/budget. The review ensures approval does not overstep statutory guidelines. Requests that overstep statutory guidelines are either denied and/or held for the legislative budget process.

Departments are required to provide written answers to the following questions (although only the response to the first question is entered into the VISION database):

- Reason funds are available?
- Are additional funds anticipated from the same source available in this fiscal year and above the current appropriation?
- Is this increase one-time or ongoing?
- Why were funds not fully budgeted during budget development?
    - What is the current year appropriation or grant amount approved by the Joint Fiscal Committee for this fiscal year, from this source of funds for this purpose?
- If these are ongoing funds, will funds from this source be fully budgeted and appropriated next fiscal year?
- Were excess receipts requested from this source in the preceding two fiscal years? If so, explain why they were not budgeted?
- Are these excess receipts being received from another department (i.e., interdepartmental transfers)? If so, are they appropriated in that department or will excess receipts be required there as well?
- Relationship, if any, to the Budget Adjustment Act?

- Can excess receipts be used to reduce the expenditure of State funds?
- **Will excess receipts establish or increase the scope of a program, committing the State at any time to expend State funds?** [The form notes that in such instances, legislative approval is required.]
- For what, specifically, will excess receipts be used? What is the impact on programs if this excess receipt request is not approved?
- Are any of the excess receipts to be used for your department's administrative staff or operating expenses? If so, explain.
- Do the excess receipts have a matching fund requirement? If so, in which budget is the match found?
- If excess receipts are earned federal receipts, are the excess receipts being spent in the same (federal) program where they are earned? If not, explain.
- Have the excess receipts been received and deposited? If no, what date are funds expected?
- If approved, when will the expenditure first occur?

The VISION entry normally includes only the response to the first question – why are additional receipts available? However, for any individual Excess Receipt Request, the paper copy of the form with the full department response can be provided.

Broad Categories of Excess Receipt Requests

Requests for expenditure of excess receipts generally fall into several broad categories:

Interdepartmental Transfers: It is not uncommon for one department within state government ("Department A") to purchase services from another department ("Department B"). In that instance, Department A budgets these expenditures just as they would any other type of expenditure: by type of expenditure and by the source of revenue that will fund these expenditures. Department B also budgets these expenditures, and identifies the source of revenue as "interdepartmental transfers." This process results in a small amount of "double-booking" of spending authority but ensures that both departments have the necessary spending authority. In many cases, at the time of budget development, Department A has not yet decided from where to purchase the services in question, so Department B does not budget the interdepartmental transfer revenues. When Department A moves forward to contract for services with Department B after the budget has closed, then Department B must request an Excess Receipts approval for the additional spending authority to perform the services.

Federal Funds: Departments estimate their likely federal receipts in the fall for the upcoming budget year, meaning the estimate is as much as nine-months old at the start of the budget year, and another 12 months older by the end of the budgeted fiscal year. Interim developments may mean the budgeted federal spending authority is insufficient, either because the federal award for an existing grant has been increased or spending authority from grants from earlier federal fiscal years can be used in the current year. Additionally, extraordinary events – such as the federal American Recovery and Reinvestment Act (ARRA) or federal aid to Vermont due to Tropical Storm Irene – may cause large, unanticipated spikes in federal receipts.

Other: Over 200 special funds exist under State law in which are deposited fees, user charges, penalties, specified taxes, etc. Departments estimate how much they will collect each year for each of these special funds, and base their spending plans accordingly. Actual collections may be higher than the original budget. Excess receipts may also be used in an instance where prior-year special fund spending authority was not utilized and needs to be created again in the subsequent year (similar to a carry-forward). In addition to restrictions in the excess receipts statute, each special fund has its own statutory restrictions that put guardrails around the use of special fund revenues.

Attached Report:

The attached report is a cumulative list of approved excess receipt requests for the first quarter of the current fiscal year. It includes ALL the data entered in VISION for that transaction, including:

- Agency/Department name
- Appropriation name and "DeptID"
- Transaction date
- Fund source – name and fund number
- Amount
- Comments in response to question: "Why are funds available?" (VISION allows for a limited number of characters per cell entry.)

The data are sorted into the three broad categories of requests discussed above.

Governing Statute:

32 V.S.A. § 511. EXCESS RECEIPTS

If any receipts including federal receipts exceed the appropriated amounts, the receipts may be allocated and expended on the approval of the Commissioner of Finance and Management. If, however, the expenditure of those receipts will establish or increase the scope of the program, which establishment or increase will at any time commit the State to the expenditure of State funds, they may only be expended upon the approval of the General Assembly. Excess federal receipts, whenever possible, shall be utilized to reduce the expenditure of State funds. The Commissioner of Finance and Management shall report to the Joint Fiscal Committee quarterly with a cumulative list and explanation of the allocation and expenditure of such excess receipts.

FY 2019 Excess Receipts Report - Q4 - Run 7/13/2019							
Agency/Dept Name	Appropriation Name	Appropriation Deptid	Date	Fund	Fund Name	Amount	Comments
Treasurer's Office	US Forest Sales to Towns	1260110000	5/20/2019	22005	Federal Revenue Fund	246,000	Federal Money
Public Safety	DPS-State Police	2140010000	6/6/2019	22005	Federal Revenue Fund	994,000	Funds are available from Homeland Security Grant Programs (HSGP16-HSGP18) and Recreational Boat and Safety 2019 (RBS19). The Homeland Security awards are each 3 year awards and the RBS19 is a 1 year award. Expenses for FY19 were underestimated.
Public Safety	DPS-Criminal Justice Services	2140020000	4/16/2019	22005	Federal Revenue Fund	155,000	Additional fund were allocated to the console project (to replace outdated dispatch consoles) from Federal Homeland Security grant after FY19 budget was submitted.
Military	Air Services Contracts	2150020000	4/22/2019	22005	Federal Revenue Fund	200,000	Request is based on the fact that the federal program has provided addition funding to complete additional projects that are 100% federally funded. The current available approp will not be sufficient to complete proposed work by 6/30/19 in fund 22005.
Agriculture, Food&Mrkts Agency	Ag Resource Mngmnt	2200040000	5/7/2019	22005	Federal Revenue Fund	50,000	21500 - MOU with Health Department; subrecipient of CDC grant for vector surveillance program (mosquito & tick); 22005 - EPA grant supporting pesticide management program.
Vermont Health Access	DVHA-Medicaid-Long Term Care W	3410016000	6/11/2019	22005	Federal Revenue Fund	1,100,000	Utilization of Money Follows the Person Grant over base federal appropriation.
Vermont Health Access	DVHA-Medicaid-Nonwaiver Prog	3410018000	6/30/2019	22005	Federal Revenue Fund	457,242	Actual federal Only Drug Rebate offsets for QE 06/30/2019 were less than estimated. DVHA received the actual breakdown of rebates from Change Health Care on 7/5/2019.
Vermont Health Access	DVHA-Medicaid-Nonwaiver Prog	3410018000	6/12/2019	22005	Federal Revenue Fund	87,000	Federal buy-in program spending above base federal appropriation & reduction of CHIP drug rebate receipts.
Vermont Department of Health	Administration	3420010000	6/19/2019	22005	Federal Revenue Fund	700,000	Excess receipts are associated with projected federal receipts to close-out fiscal year.
Vermont Department of Health	Public Health Appropriation	3420021000	6/19/2019	22005	Federal Revenue Fund	2,000,000	Excess receipts are associated with projected federal receipts to close-out fiscal year.
Children and Families	DCFS - Family Services	3440020000	6/10/2019	22005	Federal Revenue Fund	2,000,000	Family services has experienced an increase in caseload over the last few years that has resulted in increased staffing and sub-care expenditures. A significant portion of these increased costs are TANF eligible.
Children and Families	DCFS - Child Support Services	3440040000	6/6/2019	22005	Federal Revenue Fund	246,441	Title IV-D federal earnings on non-budgeted cost of cola and steps (i.e. payact)

Children and Families	DCFS - OEO Ofc of Economic Opp	3440100000	5/20/2019	22005	Federal Revenue Fund	103,000	Community Service Block Grant, Emergency Solutions Grant, and Continuum of Care award. Bot of these awards are granted on the federal fiscal year, and expenditures are estimated on the State fiscal year for budgeting purposes.
Children and Families	DCFS - OEO Ofc of Economic Opp	3440100000	5/20/2019	22005	Federal Revenue Fund	13,000	Community Service Block Grant, Emergency Solutions Grant, and Continuum of Care award. Bot of these awards are granted on the federal fiscal year, and expenditures are estimated on the State fiscal year for budgeting purposes.
Children and Families	DCFS - OEO Ofc of Economic Opp	3440100000	5/20/2019	22005	Federal Revenue Fund	34,000	Community Service Block Grant, Emergency Solutions Grant, and Continuum of Care award. Bot of these awards are granted on the federal fiscal year, and expenditures are estimated on the State fiscal year for budgeting purposes.
Children and Families	DCFS - OEO Weatherization	3440110000	5/20/2019	22005	Federal Revenue Fund	930,337	LIHEAP Federal Award designated for use in weatherization.
Disabilities Aging Ind. Living	Advocacy & Indep Living Grants	3460020000	4/24/2019	22005	Federal Revenue Fund	985,000	Higher than estimated earned federal receipts
Corrections	Correc-Correctional Services	3480004000	5/28/2019	22005	Federal Revenue Fund	125,000	The Department of Justice awarded a $1 million federal grant to DOC, which was approved by JFO #2726.
Environmental Conservation	Air & Waste Management Approp	6140030000	5/28/2019	22005	Federal Revenue Fund	400,000	Due to an increase in the funds available at the federal level, we received an unanticipated increase of 119k in our Leaking Underground Storage Tank federal grant that was not known at the time we build the FY19 budget.
Subtotal Federal Funds (Including "Regular" ARRA) Excess Receipts						**10,826,020**	
Buildings & Gen Serv-Gov'tal	BGS-Administrative Services	1150100000	6/20/2019	21500	Inter-Unit Transfers Fund	1,000	Funds are received from various programs within Agency of Administration to support the Administrative Services Division of BGS. Programs are charged to cover actual expenditures incurred or anticipated to be incurred by the Admin Services Approp.
Buildings & Gen Serv-Prop	BGS-Fee For Space	1160550000	4/15/2019	21500	Inter-Unit Transfers Fund	106,368	This is a grant being given to Fee for Space from the Department of Public Safety to implement a building flood mitigation plan for state buildings.
Buildings & Gen Serv-Prop	BGS-Fee For Space	1160550000	4/15/2019	21500	Inter-Unit Transfers Fund	103,439	AOT will draw down funds from FEMA that will be transferred to BGS Fee for Space program as part of payment to Cohn Reznic audit for Hurricane IRENE.
Buildings & Gen Serv-Prop	BGS-Fee For Space	1160550000	6/26/2019	21500	Inter-Unit Transfers Fund	5,206,528	AOT Centralized all recovery exp's thru BGS Fee For Space during the recovery effort for Tropical Storm Irene. Many of those projects are completed and granted funds from FEMA, through AOT. FEMA funds are transferred from AOT to BGS using fund 21500.

Criminal Justice Trng Council	Criminal Justice Trng Council	2170010000	6/12/2019	21500	Inter-Unit Transfers Fund	20,000	This ERR will be used for the payroll expenses for Chris Conway who was hired at the CJTC to develop and maintain statewide advanced levels of officer training and certification in various impaired driving programs.
Agriculture, Food&Mrkts Agency	Food Safety/Consumer Assurance	2200020000	5/7/2019	21500	Inter-Unit Transfers Fund	767	Dog licensure fees
Agriculture, Food&Mrkts Agency	Ag Resource Mngmnt	2200040000	5/7/2019	21500	Inter-Unit Transfers Fund	150,000	21500 - MOU with Health Department; subrecipient of CDC grant for vector surveillance program (mosquito & tick); 22005 - EPA grant supporting pesticide management program.
Public Service Department	Regulation & Energy Efficiency	2240000000	6/10/2019	21500	Inter-Unit Transfers Fund	53,102	Funds were received for WoodStove Change Outs program as part of MOA with DEC.
Human Services Agency	Administrative Management Fund	3400020000	5/23/2019	21500	Inter-Unit Transfers Fund	2,628,530	The funds will be used to process invoices in the Admin Fund, mainly for the ADS SLA invoice & BGS billbacks.
Vermont Health Access	DVHA-Programs-ST-Only Funded G	3410017000	6/18/2019	21500	Inter-Unit Transfers Fund	1,000,000	DVHA provided Springfield Hospital an advancement of their Medicaid claims through the State-Only Approrpriation due to the extraordinary financial situation of the hospital. The hospital has agreed to reapay the advancement beginning in Oct 2019.
Vermont Department of Health	Administration	3420010000	6/12/2019	21500	Inter-Unit Transfers Fund	45,000	Special Fund and IDT revenue.
Children and Families	DCFS Admin & Support Services	3440010000	6/10/2019	21500	Inter-Unit Transfers Fund	170,600	Transfers from DAIL, VDH, and AHS across 5 programs, all of which are over earning their budgeted amounts.
Children and Families	DCFS - Child Development	3440030000	5/15/2019	21500	Inter-Unit Transfers Fund	200,000	Act 11 of 2018 Special Session, C.106.2
Natural Resources Agency	"Admin., Management & Planning	6100010000	5/20/2019	21500	Inter-Unit Transfers Fund	180,653	Transfer from DEC to provide funding needed to execute and agreement between the ANR CO and the Army Corps of Engineers to complete a wetlands restoration project.
Fish & Wildlife	FW Support & Field Services	6120000000	4/8/2019	21500	Inter-Unit Transfers Fund	32,063	FEMA reimbursement from SFY18
Forests, Parks & Recreation	Forestry	6130020000	4/2/2019	21500	Inter-Unit Transfers Fund	388,411	Funds are available through a grant agreement from DEC. FPR submitted numerous applications through a competitive process and received the enclosed grants which fund multiple projects aimed at improving water quality.
Forests, Parks & Recreation	Lands Administration	6130040000	5/1/2019	21500	Inter-Unit Transfers Fund	18,075	Fed funds are available through the Dept of Fish and Wildlife. Funds will be used to upgrade a portion of the Moose Bog Trail. The upgrade will bring the trail in compliance with Universal Accessibility standards.

Economic Development	Economic Development	7120010000	4/24/2019	21500	Inter-Unit Transfers Fund	15,000	FY19 MOU agreement. DOL to transfer funds to DED in accordance with Apprenticeship Expansion Project MOU, attached.
Subtotal Interdepartmental Transfers						**10,334,536**	
Forests, Parks & Recreation	Lands Administration	6130040000	6/19/2019	21440	All Terrain Vehicles	50,000	Funds are available in the All Terrain Vehicles special fund per 23 V.S.A. 3513. FPR issues an annual grant to the Vermont Sportsman's Association (VASA) and payments are made under this grant agreement.
Finance & Management	Vt Council on the Arts	1110013000	4/15/2019	21445	Art Acquisition Fund	33,572	Funds received into the Acquisition of Art in State Building special fund for VT Arts Council to acquire art on behalf of the State.
Judiciary	Judiciary Appropriation	2120000000	6/11/2019	21811	Attorney Admission,Licensing,&	65,000	Gave an additional grant this year and this program is fully staffed.
Corrections	Correc-Correctional Services	3480004000	5/28/2019	21843	CORR-Supervision Fees	100,000	The collection of supervision fees has exceeded FY 2019 spending authority.
Education Agency	Administration	5100010000	6/17/2019	21764	ED-Medicaid Reimb-Admin	1,900,000	There is a sufficient balance in the Fund to process this request. Funds are received based on Medicaid billed claims for student receiving services.
Education Agency	Administration	5100010000	5/20/2019	21244	Education Financial Systems	200,119	Special funds dedicated to the financial management system, not fully appropriated.
Transportation Agency	Public Assistance Program	8100005500	6/3/2019	21555	Emergency Relief & Assist Fd	800,000	FEMA disaster declaration FEMA-4022-DR-VT. ERAF funds provide state match for the FEMA funds.
Vermont Department of Health	Public Health Appropriation	3420021000	5/8/2019	21912	Evidence-Based Educ & Advertis	350,000	Greater than anticipated revenue into the Evidence Based Education and Advertising Fund that receives fees from pharmaceutical manufacturers authorized by 33 VSA 2004.
Fish & Wildlife	FW Support & Field Services	6120000000	5/30/2019	20325	F&W Federal Revenues Fund	771,488	These funds are appropriated to state fish and wildlife agencies though the federal wildlife and sport fish restoration program on a reimbursement basis.
Buildings & Gen Serv-Prop	BGS-Fee For Space	1160550000	6/20/2019	58800	Facilities Operations Fund	350,961	Fee for Space provides separate work for customers that agreements are reached for the customer to pay the cost. These expenditures get paid by Fee for Space and then are backcharged to the customers. The customers pay BGS through billing.
Buildings & Gen Serv-Prop	BGS-Fee For Space	1160550000	4/15/2019	58800	Facilities Operations Fund	583,020	FFS provides separate work for customers that agreements are reached for the customer to pay the cost. These expenditures get paid by FFS and then are backcharged to the customers. Customers pay BGS through billing. Revenue will cover expenditures.

Finance & Management-FMS	Finance & Mgmnt - FinOps	1115001000	5/20/2019	59300	Financial Management Fund	160,000	The receipts come from billing for services to customers. This request is for additional spending authority for the program, to cover unanticipated expenditures.
Libraries	Department of Libraries	1130030000	5/20/2019	21883	Gates Foundation Grants	11,403	Dept of Libraries rec'd a grant for the Fiber Connect Project from the Gates Foundation. The money was never fully spent in the orig timeframe, an ext was requested, and the money was still not spent. The ext has now expired and funds are not needed.
Vermont Department of Health	Administration	3420010000	6/12/2019	21902	Health Department-Special Fund	80,000	Special Fund and IDT revenue.
Vermont Department of Health	Administration	3420010000	6/12/2019	21832	HE-Asbestos Fees	5,000	Special Fund and IDT revenue.
Vermont Department of Health	Administration	3420010000	6/12/2019	21731	HE-Food & Lodging Fees	65,000	Special Fund and IDT revenue.
Transportation Agency-Prop	Central Garage	8110000200	5/13/2019	57100	Highway Garage Fund	1,000,000	Revenues will have to be increased in the future if this shortfall becomes a trend.
Housing & Comm Development	Housing & Community Developmnt	7110010000	6/3/2019	21325	Historic Sites Special Fund	20,000	Revenues have been over projections in the past few years at our State Historic Sites due to new exhibits, raised ticket sales and a focused marketing plan.
Agency of Digital Services	Comm & Info Technology	1105500000	5/8/2019	58100	Information Technology	9,880,000	ADS operates under an ISF, but due to an executive order, agencies now have to buy IT needs using the Bespoke billing mechanism. As a result, three large contracts moved from AHS to ADS and there is a greater need for Bespoke items.
Vermont Department of Health	Administration	3420010000	6/12/2019	21460	Laboratory Services	85,000	Special Fund and IDT revenue.
Vermont Department of Health	Administration	3420010000	6/12/2019	21470	Medical Practice	15,000	Special Fund and IDT revenue.
Military	MIL Vet Affairs Office	2150050000	4/24/2019	21662	Mil-Vets Cemetary Contribution	117,462	Proceeds from interment of veterans and their families
Military	MIL Vet Affairs Office	2150050000	4/24/2019	21662	Mil-Vets Cemetary Contribution	30,000	Proceeds from interment of veterans and their families
Children and Families	DCFS - OEO Weatherization	3440110000	5/8/2019	21908	Misc Grants Fund	200,911	Award from Vermont Low Income Trust for Electricity
Auditor of Accounts' Office	Auditor of Accounts	1250010000	6/25/2019	21870	Misc Special Revenue	30,614	Per Statute - Town's Financial Responsibility of TIF Audit Performed by State Auditor's Office
Auditor of Accounts' Office	Auditor of Accounts	1250010000	6/25/2019	21870	Misc Special Revenue	7,476	Per Statute - Town's Financial Responsibility of TIF Audit Performed by State Auditor's Office
Auditor of Accounts' Office	Auditor of Accounts	1250010000	6/25/2019	21870	Misc Special Revenue	21,150	Per Statute - Town's Financial Responsibility of TIF Audit Performed by State Auditor's Office
Public Safety	DPS-Fire Safety	2140040000	4/29/2019	21870	Misc Special Revenue	161,190	Emergency Management Assistance Compact (EMAC) missions and miscellaneous revenue related to a damaged vehicle.

Mental Health	Mental Health	3150070000	6/11/2019	21870	Misc Special Revenue	1,021,932	These funds are receipts/revenue from billing patients or their ins provider for inpatient charges at both Middlesex Therapeutic Community Residence and the Vt Psychiatric Care Hospital. DMH is anticipating receipts above the orig appropriated amt.
Secretary of State's Office	Secretary of State	2230010000	5/9/2019	21150	Prof Regulatory Fee Fund	600,000	Existing ongoing funds are available
Public Utilities Commission	Public Utilities Commission	2250000000	6/21/2019	21709	PUC-Special Fds	11,000	Balance in special fund receipt account from previous FY's
Public Safety	DPS-Criminal Justice Services	2140020000	6/6/2019	21970	Registration Fees Fund	160,000	There is unspent revenue from prior fiscal years. The FY18 closing balance was a surplus of 342k
Agriculture, Food&Mrkts Agency	Ag Development Division	2200030000	5/7/2019	21889	Risk Manage Ag Producers	2,846	Voluntary produce safety inspection program outside the parameters requiring a federal inspection, and therefore not eligible to be covered under federal funding.
Defender General's Office	Securities Division	2210031000	5/24/2019	21080	Securities Regulatory & Suprv	500,000	Funds received are from Securities registration fees
Defender General's Office	Securities Division	2210031000	6/5/2019	21080	Securities Regulatory & Suprv	(500,000)	Reversal of JE# ER00000143 dated 5/24/19
Financial Regulation	Securities Division	2210031000	6/5/2019	21080	Securities Regulatory & Suprv	500,000	Funds received are from Securities registration fees
Labor Relations Board	State Labor Relations Board	1270000000	6/18/2019	21633	St Labor Relations Bd-Misc Rec	3,830	Additional receipts from publication sales, transcripts and training beyond what we budgeted.
Forests, Parks & Recreation	Parks	6130030000	6/19/2019	21270	State Forest Parks Fund	600,000	It is anticipated that balance will be available in the parks special fund to cover the additional costs. In FY19 operating expenses exceeded budget for factilities engineering, trash removal, ADS software development, and marine operations.
DLL - Div of Liquor Control	DLC - Enforcement & Licensing	2300002000	6/21/2019	21584	Surplus Property	12,185	Sale of three retired vehicles at May 11, 2019 live auction.
DLL - Div of Liquor Control	Warehousing & Distribution	2300007000	6/21/2019	21584	Surplus Property	3,872	Sales of recyclable materials
Vermont Department of Health	Administration	3420010000	6/11/2019	21584	Surplus Property	3,505	Surplus property sale of vehicle at auction.
Treasurer's Office	St Building Efficiency Invest	1260891801	6/20/2019	21370	Tobacco Litigation Settlement	500,000	One time appropriation in FY2019 Budget Act
Human Services Agency	Tobacco Eval & Review Plan	3400891801	4/2/2019	21370	Tobacco Litigation Settlement	1,000,000	Per Sec.C.105.1(a)(4) of Act 11 of the 2018 special session - $1,000,000 Tobacco Litigation Settlement funds for use pursuant to the plan specified by the Tobacco Evaluation and Review Board.
Transportation Agency	Program Development	8100001100	6/5/2019	20193	Transp Improvement District Fd	178,077	Funds are available from Transportation Impact Fees paid per 10 V.S.A. chapter 151, sub-chapter 5

Transportation Agency	Public Assistance Program	8100005500	4/29/2019	20150	Transportation FEMA Fund	5,000,000	FEMA disaster declaration FEMA-4022-DR-VT
Transportation Agency	Public Transit	8100005700	5/15/2019	20145	Transportation FTA Fund	1,000,000	Funds are prior year grant agreements for the purchase of public transit capital assistance (buses).
Disabilities Aging Ind. Living	Administration & Support	3460010000	4/4/2019	21813	VR Fees	495,000	We have collected higher than anticipated receipts from the Employee Assistance Program (EAP) due to new companies enrolling in the program throughout the fiscal year.
Disabilities Aging Ind. Living	Administration & Support	3460010000	5/24/2019	21813	VR Fees	100,000	Collected higher than anticipated receipts from the Employee Assistance Program (EAP) due to new companies enrolling in the program throughout the fiscal year
Forests, Parks & Recreation	Lands Administration	6130040000	6/19/2019	21455	Vt Recreational Trails Fund	28,000	Funds are available for prior year budgeted activity that was planned in a prior year and expended in FY19.
Fish & Wildlife	FW Support & Field Services	6120000000	5/28/2019	20390	Watershed Management Fund	43,000	These funds were acquired by the Department through the sale of conservation license plates.
Subtotal Other Fund Excess Receipts						**28,357,614**	
TOTAL:						**49,518,169**	

VERMONT

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Adam Greshin, Commissioner

MEMORANDUM

TO: Joint Fiscal Committee
FROM: Adam Greshin, Commissioner of Finance & Management AKG
DATE: June 18, 2018
RE: 2018 Act 11 Sec. E.335 Report

Per 2018 Act 11 Sec. E.335, the Secretary of Administration may, upon recommendation of the Secretary of Human Services, transfer unexpended funds between the respective appropriations for correctional services and for correctional services out-of-state beds.

One transfer was made in fiscal year 2019 in the amount of $681,255.09. Authorization from the Secretary of Administration, which was sent to the Joint Fiscal Office on June 18th, is attached.

Please contact me if you have any questions. Thank you.

VERMONT

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Agency of Human Services
APPROVED

Secretary of Administration

Date 6/17/19

To: Susanne Young, Secretary of Administration

Through: Al Gobeille, Secretary, Agency of Human Services AG

From: Michael Touchette, Commissioner, Department of Corrections MT

Date: June 10, 2019

Subject: Appropriation Transfer

The Department of Corrections is requesting $681,255.09 be transferred from the Correctional Services – Out of State Beds Appropriation (3480006000) to the Correctional Services Appropriation (3480004000). The legislative language supporting this request resides in Section E. 335 within Act 11 from the 2018 Special Session "An act relating to making appropriations for the support of government, financing education and vital records", which states:

> Sec. E.335 CORRECTIONS APPROPRIATIONS; TRANSFER; REPORT
>
> (a) In fiscal year 2019, the Secretary of Administration may, upon recommendation of the Secretary of Human Services, transfer unexpended funds between the respective appropriations for correctional services and for correctional services – out-of-state beds. At least three days prior to any such transfer being made, the Secretary of Administration shall report the intended transfer to the Joint Fiscal Office and shall report any completed transfers to the Joint Fiscal Committee at its next scheduled meeting.

The Department is requesting that these funds be transferred no later than June 24, 2019, in order to establish the necessary actions within VISION and process payments before end of year deadlines.

All monthly contract payments have been made for the supplemental out of state housing contract in FY19, and these remaining funds will be used for unbudgeted ADS-related expenses that the department was unaware of prior to FY19.

If there are any questions, please do not hesitate to call.

Cc: Sarah Clark, CFO, Agency of Human Services
Matt D'Agostino, Financial Director, Department of Corrections

VERMONT

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November 8, 2019

State of Vermont
LEGISLATIVE JOINT FISCAL COMMITTEE
One Baldwin Street
Montpelier, VT 05633-5701

To: The Legislative Joint Fiscal Committee

Enclosed is the Quarterly Report of costs and expenditures for proceedings of the Federal Energy Regulatory Commission pursuant to *30 V.S.A. § 20 (b)(9)*, covering the period from October 1, 2018 through June 30, 2019.

Respectfully Submitted,

Riley Allen
Deputy Commissioner
Vermont Department of Public Service

Enclosure

Public Service Department Expenditures
Related to Proceedings
At the
Federal Energy Regulatory Commission
For the period
July 1, 2018 – June 30, 2019

General Description of Activity
The Department takes action at the Federal Energy Regulatory Committee (FERC) to protect the interest of Vermont ratepayers in many different proceedings. For example, the Department has been active at FERC in ensuring fairness in cost allocations for utility projects and in ensuring Vermont's interests are represented in New England transmission projects. The issues vary from quarter to quarter but it is crucial to Vermont consumers that the Public Service Department intervenes at FERC when necessary to ensure that the costs flowing back to Vermont ratepayers as a result of FERC activity and proceedings are true, accurate, just and reasonable. The Department has contracted Synapse Energy Economics, Inc to monitor FERC activities, and certain in-house expenses are also attributed to FERC activities. These costs are billed back to the utilities based upon their pro rata share.

Expenditures

For FERC related activity affecting Vermont[1]		
	Q1 FY2019 $	1,883.04
	Q2 FY2019 $	834.29
	Q3 FY2019 $	0
	Q4 FY2019 $	1,971.22
		$ 4,688.55
Indirect Expenditures[2]		**$**
Total Expenditures[3] YTD for the Year FY2019		**$ 4,688.55**

[1] In accordance with Title 30, § 20 (b) (9) the department of public service provides the following quarterly report for expenditures related to FERC proceedings affecting the State and Vermont Utilities for the period July 1, 2018 through June 30, 2019.
[2] Indirect expenditures include telephone, postage and coping expense.
[3] Expenditures include amounts actually paid for the quarter.