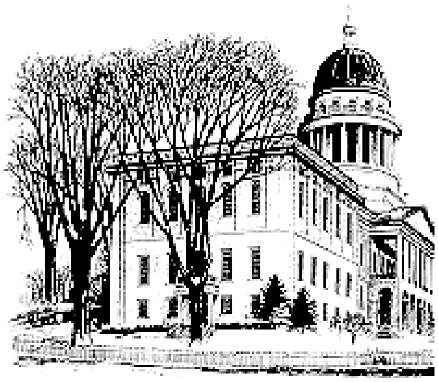
STRESS-TESTING MAINE GENERAL FUND REVENUES & RESERVES FY2023-FY2027

OCTOBER 5, 2022

Consensus Economic Forecasting Commission
and
Revenue Forecasting Committee



STATE OF MAINE

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October 5, 2022

TO: Governor Janet T. Mills
President of the Senate Troy D. Jackson
Speaker of the House Ryan M. Fecteau
Members, Joint Standing Committee on Appropriations and Financial Affairs

FROM: Dr. Sheena Bunnell, Chair
Consensus Economic Forecasting Commission
Christopher Nolan, Chair
Revenue Forecasting Committee

In accordance with Title 5, Chapter 151-B, Section 1710-G, the Consensus Economic Forecasting Commission (CEFC) and the Revenue Forecasting Committee (RFC) are pleased to present the biennial stress-test of sales and individual income taxes based on two economic recession scenarios: one a moderate recession, the other a severe recession. Additionally, this report includes an analysis of the sufficiency of the current level of the Maine Budget Stabilization Fund (MBSF) and an estimate of the reserves in the MBSF necessary to offset the declines in General Fund revenue because of potential economic recession scenarios. Maine is one of three states, Utah and North Carolina being the other two, that regularly performs a stress-test as part of their budget process.

The 2020 Stress-Test Report was issued as the national and state economies struggled to respond to the COVID-19 recession. This year's report is being issued after historic fiscal and monetary stimulus implemented by Congress and the Federal Reserve in the months immediately after the start of the pandemic have led to unprecedented revenue growth in FY2021 and FY2022 and a MBSF at 16.6 percent of FY2022 revenue. However, a reversal in Federal Reserve policy to address inflation rates not seen in 40 years, the Russian invasion of Ukraine, and continuing supply-chain constraints from the global pandemic are creating increased uncertainty about the direction of the US and global economies. As a result, this year's report is timely in providing policymakers with the estimated impact of a moderate and severe recession on sales and individual income tax revenues, and the sufficiency and needs of the Maine Budget Stabilization Fund in each of the recession scenarios.

Once again, unique circumstances have led the CEFC and the RFC to report alternative approaches to analyzing the sufficiency of the MBSF in meeting the state's spending limitation during the two recession scenarios. Conformity to the 2017 federal tax reform act (The Tax Cuts and Jobs Act (TCJA)) means that certain individual income tax provisions will expire beginning at the start of the 2026 tax year.[1] Since this exercise extends the budget window out to the FY2026-2027 biennium this is the first time the estimated revenue increase from the scheduled expiration of these conformity items has necessitated inclusion in the baseline revenue forecast. The estimated revenue increase is significant enough that we present the sufficiency of the MBSF assuming these provisions expire according to current law (the "Current Law" analysis) and assuming the federal government extends these policies beyond tax year 2025, thereby retaining current policy (the "Current Policy" analysis). The "Current Policy" forecast avoids a significant increase in individual income tax receipts in the FY2026-2027 biennium.

Table 1 below provides a summary of the primary macroeconomic parameters defining the hypothetical moderate and severe recession scenarios relative to the equivalent assumptions in the CEFC's February 2022 baseline forecast.

[1] The two individual income tax conformity provisions that are scheduled to expire after 12/31/25 that are estimated are the increase in the standard deduction amount and the replacement of the personal exemption with an increased child and other dependent tax credit that, until 12/31/2025 also applies to "non-qualifying child" dependents (for instance, dependents 17 and older).

Table 1

Calendar Years	2022	2023	2024	2025	2026	2027
Wage & Salary Employment (in Thousands)						
CEFC Forecast 02/2022	629.4	635.7	638.3	639.5	639.5	639.5
Hypothetical Moderate Recession	629.4	622.0	613.8	623.0	628.3	630.3
Hypothetical Severe Recession	629.4	602.7	587.9	592.7	604.1	611.8
Personal Income ($ Millions)						
CEFC Forecast 02/2022	79,222	83,164	87,273	91,255	95,457	99,748
Hypothetical Moderate Recession	79,305	81,772	84,431	89,081	94,522	98,972
Hypothetical Severe Recession	79,305	74,702	74,497	77,712	82,635	87,366
Wage and Salary Income ($ Millions)						
CEFC Forecast 02/2022	37,035	39,072	41,026	42,667	44,503	46,415
Hypothetical Moderate Recession	37,035	37,756	38,682	41,297	44,008	46,180
Hypothetical Severe Recession	37,035	34,610	34,082	35,316	37,704	40,037
CPI (Annual Percentage Change)						
CEFC Forecast 02/2022	5.0	4.0	2.5	2.5	2.5	2.5
Hypothetical Moderate Recession	5.0	3.4	2.0	2.4	2.6	2.6
Hypothetical Severe Recession	5.0	2.3	0.4	2.0	2.2	2.7

The two forecasting committees estimate that a hypothetical moderate recession beginning in the first quarter of CY2023, assuming either “Current Law” or “Current Policy” for the individual income tax, would reduce General Fund revenues relative to the March baseline revenue forecast by 1.2 percent in FY2023 and 6.4 percent in FY2024. The revenue decline would peak at 7.2 percent in FY2025 before narrowing to just under 3 percent by FY2027. The moderate recession scenario assumes a relatively weak and slow recovery, resulting in General Fund revenues still below the baseline revenue forecast in FY2027. The current MBSF level of $896.0 million and other available resources would be enough to maintain current FY2023 appropriations of $4.6 billion and provide sufficient resources to maintain the spending limitation throughout the FY2024-2027 period under the “Current Law” analysis. In the “Current Policy” analysis, the MBSF is large enough to offset the revenue shortfalls in FY2023-2025 but falls short of the spending limitation by a relatively small amount of $21 million in FY2026 and by a larger $200 million in FY2027. The current MBSF is equal to 16.6% of FY2022 General Fund revenue. If the MBSF was at its maximum level of 18% of the previous year’s General Fund revenue ($970.5 million) there would be sufficient funds to fully offset the “Current Policy” revenue shortfall through FY2026.

The two forecasting committees estimate that the hypothetical severe recession beginning in the first quarter of CY2023, assuming either “Current Law” or “Current Policy” for the individual income tax, will reduce General Fund revenues relative to the March baseline revenue forecast by 3.9 percent in FY2023, 15.2 percent in FY2024, peaking at 19.2 percent in FY2025, and then declining by 17.0 and 14.0 percent in FY2026 and FY2027, respectively. The current MBSF level of $896.0 million and other available resources would be exhausted by the start of FY2025 but provide approximately 15 months for the Governor and Legislature to address the revenue shortfalls caused by the severe recession. We estimate the MBSF would require a prohibitive level of funding to fully offset the reduction in revenue during the budget window studied. A MBSF equal to the current maximum of 18% of FY2022 General Fund revenue would allow for additional funding in FY2025 but would still fall far short of the FY2025 spending limitation appropriation amount.

It has been 17 years since enactment of 5 MRSA, Chapter 142: Maine Budget Stabilization Fund. While there have been minor amendments to Chapter 142 since 2005, primarily in 2015, the method of funding and uses of the MBSF and its relationship to the General Fund Appropriation Limitation have essentially remained the same. The achievement of funding K-12 education at the required 55% of Essential Programs and Services and the MBSF so close to its statutory maximum, may provide policymakers with the opportunity to review Chapter 142 and determine if changes are warranted to address the next economic recession.

Cc:

Kirsten LC Figueroa, Commissioner, Department of Administrative and Financial Service
Jeremy Kennedy, Chief of Staff, Office of the Governor
Members, Joint Standing Committee on Taxation
Julie Jones, Office of Fiscal and Program Review, Maine Legislature
Suzanne Gresser, Executive Director of the Maine Legislature

I: EXECUTIVE SUMMARY

Since the mid-1990s state revenue bases have become more elastic, magnifying revenue forecasting errors over the course of the business cycle. These forecasting errors have made it difficult for state policymakers, who are required to have balanced budgets, to determine how much incoming revenue during good economic times should be saved to offset the revenue shortfalls that will follow the inevitable onset of the next recession. Led by PEW Charitable Trusts, researchers since the end of the 2007-09 recession have been evaluating best practices that states can use to guide them in determining the method of funding and uses of "rainy day" funds that will best serve their states during a recession. One best practice is a regular "stress-test" of a state's revenue system to estimate the magnitude of revenue reductions during recessionary periods and the reserves necessary to achieve the policy goals of policymakers to offset those shortfalls.

The FY2018-2019 biennial budget included a proposal that was subsequently enacted in Public Law 2017, chapter 284, Part N requiring the CEFC and the RFC to perform a biennial stress-test of General Fund revenues assuming hypothetical moderate and severe recessions and to evaluate the sufficiency of the Maine Budget Stabilization Fund (MBSF) under each economic scenario.

Once again, this year, unique circumstances have led the CEFC and the RFC to report alternative approaches to analyzing the sufficiency of the MBSF in meeting the state's spending limitation during the two recession scenarios. Conformity to the 2017 federal tax reform act (The Tax Cuts and Jobs Act (TCJA)) means that certain individual income tax provisions will expire beginning at the start of the 2026 tax year. Since this exercise extends the budget window out to the FY2026-2027 biennium this is the first time the estimated revenue increase from the scheduled expiration of these conformity items has necessitated inclusion in the baseline revenue forecast. The estimated revenue increase is significant enough that we present the sufficiency of the MBSF assuming these provisions expire according to current law (the "Current Law" analysis) and assuming the federal government extends these policies beyond tax year 2025, thereby retaining current policy (the "Current Policy" analysis). The "Current Policy" forecast prevents a significant increase in individual income tax receipts in the FY2026-2027 biennium.

The two forecasting committees estimate that a hypothetical moderate recession beginning in the first quarter of CY2023, assuming either "Current Law" or "Current Policy" for the individual income tax, would reduce General Fund revenues relative to the March baseline revenue forecast by 1.2 percent in FY2023 and 6.4 percent in FY2024. The revenue decline would peak at 7.2 percent in FY2025 before narrowing to just under 3 percent by FY2027. The moderate recession scenario assumes a relatively weak and slow recovery, resulting in General Fund revenues still below the baseline revenue forecast in FY2027. The current MBSF level of $896.0 million and other available resources would be enough to maintain current FY2023 appropriations of $4.6 billion and provide sufficient resources to maintain the spending limitation throughout the FY2024-2027 period under the "Current Law" analysis. In the "Current Policy" analysis, the MBSF is large enough to offset the revenue shortfalls in FY2023-2025 but falls short of the spending limitation by a relatively small amount of $21 million in FY2026 and by a larger $200 million in FY2027. The current MBSF is equal to 16.6% of FY2022 General Fund revenue. If the MBSF was at its maximum level of 18% of the previous year's General Fund revenue ($970.5 million) there would be sufficient funds to fully offset the "Current Policy" revenue shortfall through FY2026.

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II: REVENUE VOLATILITY

Following the end of the "Great Recession" (2007-09) and the relatively weak recovery, economists, state budget experts and bond rating agencies began to study to what extent state government revenue streams had become increasingly volatile, and what policies could be enacted to stabilize state budgets over the business cycle. The general conclusion of researchers is that state revenue bases have become more elastic since the mid-1990s, particularly taxable sources of the individual income tax, and that there is no reason to believe this will change in the near term.[2]

State revenues have historically increased or decreased consistent with the underlying national economy, and more specifically with changes in their respective state economies. Recent research has concluded that sometime in the late 1990s the elasticity of state tax revenues to economic conditions increased, making the management of state budgets that are required to be balanced on an annual basis more difficult. The responsiveness of individual income tax receipts has become the primary source of this increased volatility. Sales and corporate income taxes have also contributed to revenue uncertainty, but four studies cited here conclude that changes in sources of income,

[2] Richard Mattoon and Leslie McGranahan, (2012), "Revenue Bubbles and Structural Deficits: What's a state to do?", Federal Reserve Bank of Chicago.
Yolanda K. Kodrzycki, (2014), "Smoothing State Tax Revenues over the Business Cycle: Gauging Fiscal Needs and Opportunities", Federal Reserve Bank of Boston.
Yolanda K. Kodrzycki and Bo Zhao, (2015), "Achieving Greater Fiscal Stability: Guidance for the New England States", Federal Reserve Bank of Boston.
Don Boyd (2022), "State Tax Revenue Volatility and its Impact on State Governments", PEW Charitable Trusts.

primarily investment income from capital gains, have made the individual income tax more difficult to forecast over the business cycle.

Mattoon and McGranahan (2012) find that the individual income tax elasticity doubled in the late 90s, and that two-thirds of the increase in cyclicality is from the income tax base, primarily from investment income. Structural changes in labor markets, especially at the high end of the income distribution, have made employee compensation more cyclical over the last 20 years as well.

Yolanda Kodrzycki (2014) of the Federal Reserve Bank of Boston focuses on the volatility of each state's revenue system. Like Mattoon and McGranahan, Kodrzycki finds that individual income taxes are the main source of the increased revenue volatility since the late 1990s, and that the concentration of capital gains and other investment income in the upper end of the income distribution has increased the elasticity of individual income tax receipts.[3]

Kodrzycki and Zhao (2015) build on prior studies by focusing on the revenue volatility of the six New England states and the size of rainy-day funds needed by each state to offset the revenue shortfalls from moderate and severe recessions. The authors calculate the estimated deviation of revenues from trend for the 1988-2013 period for each state, showing that revenue volatility has increased in most of the New England states since the late 1990s, with Maine being an exception. In Maine, the volatility was slightly higher in the 2000s, but its estimated deviation from revenue trend during economic expansions and recessions was generally consistent over the 25-year period reviewed.

Boyd (2022) examines various ways of measuring the volatility of a state's tax system to help policymakers and budget officials in understanding and managing volatility. Like the other studies, Boyd concludes that "tax revenue volatility increased substantially in the decade of the 2000s" and that the individual income tax has been the primary source for that increased volatility. While severance taxes and corporate income taxes are the most volatile sources of state revenues, the sales and individual income taxes are the most common and largest components of most states' systems and their structures have contributed to their rising volatility. Most states sales taxes are narrowly focused on durable and nondurable goods, which are volatile over the business cycle. A focus on individual income tax progressivity in many states have increased the reliance on a relatively small number of taxpayers that have volatile income sources such as capital gains and business income.

The first three papers explore policy options to smooth resources over the business cycle. Policy changes such as increasing (decreasing) income tax rates during recessions (expansions) could be made to offset the increasing volatility of the tax, but there are other tax policy objectives such as consistency, competitiveness, and equity to consider. Shifting to consumption taxes is another option, but most states have a narrow sales tax base that excludes many services that make up much of household spending offsetting the theoretical stability of consumption taxes. Reliance on federal

[3] Kodrzycki's results show that Maine's individual income tax is more cyclical than the sales tax, but it is one of seven states where the elasticity decreased in the 2000-2012 period compared to the 1980-1999 period.

assistance is one way states can limit raising taxes or cutting spending during recessionary periods, but the effectiveness of federal fiscal and monetary policy to offset state revenue shortfalls prior to the pandemic recession varies by state and the economic circumstances in which they are being implemented.[4] While Boyd's paper focuses on measuring revenue volatility and how the structure of a tax can increase or decrease its volatility, he does conclude like the other papers that managing a tax system's volatility is difficult and that "tools for managing volatility include reserve funds and conservative budgeting." The general conclusion is that state rainy-day funds (RDFs) or budget stabilization funds (BSFs) may be the best approach to smooth resources over the business cycle and act as a countercyclical policy measure. [5]

III: BUDGET STABILIZATION FUNDS

While policies to broaden state tax bases have been suggested to help reduce revenue volatility, most researchers have concluded that changes to the tax base will have a limited impact, and BSFs would be the best insurance against a recession for states, all of which must balance their budgets. This recommendation has been endorsed from groups across the ideological spectrum.[6] A well-funded BSF will lessen the need for spending cuts or tax increases during the recession, thereby lowering the fiscal drag on the state's economy and contributing to a faster recovery.

The PEW Charitable Trusts (PEW) has taken the lead on the use of BSFs to address revenue volatility, publishing numerous reports on the need for state BSFs and best practices around the design of such funds so that they best serve the unique characteristics of each state's economy, revenue structure, and budget needs.[7]

RDFs traditionally have been savings accounts that had little statutory language that directed funds into and out of the fund, or purposes for its use. BSFs have a defined purpose, primarily to smooth spending over the budget cycle so that spending and taxes can remain relatively constant during recessionary periods. Maine is a good example: it moved from a RDF that had little statutory

[4] Joe Peek, Eric Rosengren, and Geoffrey M.B. Tootell, (2018), "Some Unpleasant Stabilization Arithmetic", Federal Reserve Bank of Boston.
[5] Many people use the terms "Budget Stabilization Fund" and "Rainy Day Fund" interchangeably, but as this report will show most state budget experts believe there are important differences between the two.
[6] "Managing Uncertainty: How State Budgeting Can Smooth Revenue Volatility", (2014), The PEW Charitable Trusts.
Elizabeth McNichol, Iris Lav, and Michael Leachman, (2015), "Better State Budget Planning Can Help Build Healthier Economies", Center on Budget and Policy Priorities.
"A Primer on State Rainy Day Funds", (2015), Institute on Taxation and Economic Policy.
Joseph Henchman, (2013), "Tax Foundation and CBPP Agree: States Need Strong Rainy-Day Funds", Tax Foundation.
[7] "Why States Save: Using Evidence to Inform How Large Rainy-Day Funds Should Grow", (2015), The PEW Charitable Trusts.

language that set out its purpose, funding, or uses to a BSF that has clear statutory guidance on how and when it can be utilized.[8]

In PEW's "Why States Save" (2015), they recommend states consider three factors in constructing their BSFs: (1) the fund should have an explicit and narrowly defined purpose for its use, (2) states should perform a regular analysis of their revenue system to determine the degree of revenue volatility, and (3) the fund should have a target level of funding that is consistent with its stated purpose and guided by the findings of a revenue volatility study. In its December 2015 report PEW judged Maine to have an explicit and narrowly defined purpose for its BSF, but at the time of the report did not engage in a regular study of revenue volatility to estimate the reserves necessary during a recession.

IV: STRESS-TESTING STATE REVENUES AND RESERVES

Historically the general rule of thumb for RDFs and BSFs was 5 percent of general fund revenue.[9] The experience of state budgets over the last thirty years has demonstrated that for most states 5 percent of the previous year's revenues is below what is needed to adequately offset revenue shortfalls, even during a moderate recession. This is particularly true for resource-based states where commodity price fluctuations can lead to highly volatile revenue streams even during periods when the national economy is in an expansion phase. For states to estimate the level of reserves best for their budget needs, researchers have recommended a regular review of their revenue volatility over the business cycle.

Two approaches have emerged to measuring the volatility of state tax revenues and applying those measures to provide guidance on the level of reserves that would be necessary to counter recessions of varying magnitudes.[10] These studies conclude that the MBSF would need approximately 10 to 20 percent of General Fund revenue in reserve to offset a revenue shortfall associated with a moderate recession.[11]

Kodrzycki and Zhao (2015) utilize a look-back approach to calculate the funds necessary to fully offset a revenue shortfall, which is defined as the difference between "actual revenue for the fiscal year (adjusted for policy changes) and the amount that states would have collected if revenue had been consistent with long-run trends." In this study "fully offset" means sufficient funds to get

[8] See the next section for a description of Maine's Budget Stabilization Fund and how it is designed to interact with the State's appropriation limitation.
[9] National Conference of State Legislators (1983).
[10] Kodrzycki and Zhao (2015), Dan White, Bernard Yaros, and Brittany Merollo (2017), "Stress-Testing States", Moody's Analytics, Dan White, Todd Metcalfe, and Sarah Crane (2018), "Stress-Testing States 2018", Moody's Analytics, Sarah Crane and Colin Seitz (2019), "Stress-Testing States 2019", Moody's Analytics, and Emily Mandel, Haley Curtin, and Bridget Ryan (2022), "Stress-Testing States: Looking Toward the Next Recession", Moody's Analytics.
[11] The Moody's Analytics' reports calculate a "combined fiscal shock" which includes not only the revenue shortfall because of the recession, but the increased spending to fully fund the state's Medicaid program.

revenue resources back to the long-run revenue trend and prevent a reduction in services and/or revenue increases during the below trend period. For the 1988-2012 period the authors conclude that Maine would have needed reserves of 9.6 percent of General Fund revenue to fully offset a period of revenue shortfalls from a “Middle-Case Scenario”, and 14.9 percent for a “Worst-Case Scenario”.

The most recent Moody’s Analytics (2022) analysis uses a forward-looking approach by “stress-testing” each state’s revenues and Medicaid expenditures during a moderate recession scenario occurring in early fiscal year 2023. In this study the FY2023-FY2024 revenue “shortfall” is the estimated revenue during the recession scenario compared to a baseline revenue forecast for FY2023 and FY2024 that assumes actual FY2019 revenue increased by the annual rate of inflation over that period. An estimate of increased Medicaid costs during the FY2023-FY2024 period is added to the revenue shortfall to project the combined “fiscal shock” for each state. The “fiscal shock” is measured relative to actual FY2021 revenue in each state. Moody’s concludes that Maine would experience a revenue shortfall during FY2023-FY2024 equal to 18.8 percent of FY2021 revenue if a moderate recession started in early FY2023, and a fiscal shock equal to 22.5 percent of FY2021 revenue. The 18.8 percent tax revenue shortfall is well above the nation average of 8.8 percent as is the combined fiscal shock which far exceeds the national average of 12.1 percent.

Moody’s provides three “takeaways” from their latest stress-test study. First, the historic revenue growth most states have experienced since the start of the pandemic has left states with equally historic levels of RDF and total balances (RDF plus other cash balances). Second, on average other cash balances represent 50 percent of total balances available. Unlike RDFs, it’s unclear if those other cash balances are available to offset a revenue shortfall, and if available how quickly they could be deployed for such use. Third, having a plan to offset the revenue shortfall is important so that sufficient reserves can be generated, and how to deploy those reserves understood so that they can quickly be used to hasten the state’s economic recovery. It’s on this last finding that Moody’s commends Utah, North Carolina, and Maine for “implementing their own “stress-testing” exercises as a part of their normal budget procedures.”

Use of 2018 Stress-Test Report to Initially Forecast Impact of COVID-19

Following adjournment of the 129th Legislature in March 2020 due to the COVID-19 pandemic, the Department of Administrative and Financial Services (DAFS) utilized the 2018 report on “Stress-Testing Maine General Fund Revenues & Reserves FY2019-FY2023” to quickly inform the Governor of the expected revenue shortfall over the final quarter of FY2020 and the sufficiency of reserves to manage that shortfall.

Using the severe recession scenario from the 2018 report, DAFS estimated that the FY2020 revenue shortfall could be as much as $200 million: 5% of the approximately $4 billion revenue forecast. The supplemental budget, enacted as the Legislature adjourned, left a FY2020 balance of $193.2

million in the General Fund. Based on this initial analysis, it appeared that the State could absorb the estimated revenue shortfall without significant budget adjustments.

A more detailed analysis was performed to support the $200 million estimated revenue shortfall over the remaining three months of the fiscal year. The $200 million was assumed to be split evenly between sales and use and service provider taxes (consumption taxes) and individual and corporate income taxes, which represent over 85% of the State's General Fund revenue. Actual withholding taxes were much stronger than anticipated, primarily because of the increased taxable unemployment benefits included in the CARES Act. In total, the actual FY2020 shortfall was less than half that projected using the 2018 stress-test report. The Maine specific stress-test, however, provided a quick and reasonable assessment of the impact of an unprecedented pandemic-induced recession on state revenues and proved to be more accurate than many other estimates provided by out-of-state non-government entities.

V: MAINE APPROPRIATION LIMITATION & BUDGET STABILIZATION FUND

General Fund Appropriation Limitation[12]

As of December 1st, of each even-numbered year, a General Fund appropriation limit is established for the ensuing two fiscal years. For the first fiscal year, the General Fund appropriation limit is equal to the "biennial base year appropriation" multiplied by one plus the Growth Limitation Factor. For the second fiscal year, the General Fund appropriation limit is the General Fund appropriation limit of the first year multiplied by one plus the Growth Limitation Factor. As amended in 2015, "biennial base year appropriation" means the General Fund appropriation enacted for fiscal year 2016-17 as of December 1, 2016, and for subsequent fiscal years, the amount of the General Fund appropriation limit for the current year as of December 1, of even-numbered years. The Growth Limitation factor, as amended in 2015, means "Average personal income growth" which is defined as the average for the prior 10 calendar years, ending with the most recent calendar year for which data is available, of the percent change in personal income in this State, as estimated by the United States Department of Commerce, Bureau of Economic Analysis. The average personal income growth is determined by October 1, annually, by the State Economist. Table 2 below shows both the annual growth limitation factor and the base appropriation limitation.

The General Fund appropriation limit applies to all General Fund appropriations, except certain education costs. Section 1534 provides that the additional cost for certain essential educational programs and services ("Essential Programs and Services") for kindergarten to grade 12 education ("K-12 Education") over the FY2005 appropriation for General Purpose Aid for local schools

[12] 5 MRSA §1534

(GPA) is excluded from the General Fund Appropriations Limit until the State share of that cost reaches 55 percent of the total State and local cost (the "EPS Costs").

Table 2 shows the preliminary General Fund Appropriations Limit out to FY2027 as calculated by the State Budget Officer for the purposes of this stress test. The preliminary Limit is calculated using estimated Growth Factors from the State Economist. The Limit will be recalculated for the December 1st submission using actual data for the Growth Factors.

The State began funding 55% of EPS Costs in FY2022 (not including unfunded liability for teacher retirement, retired teacher health insurance and life insurance). The statutory language infers that when the 55% level is reached the excess GPA appropriations needed to reach this level would be incorporated into the appropriations limit. The Growth Factor would then be applied to this total in calculating subsequent appropriation limits with no appropriations excluded from those limits going forward. Consistent with this presumed intent, Table 2 shows the calculation of the Base Appropriations Limit, per the statutory definition of such, as well as an Appropriations Limit Including GPA. The Appropriations Limit Including GPA for FY2022 reflects the Base Appropriation Limit plus the actual GPA appropriations in FY2022 that exceed the FY2005 level. This total is the base to which the Growth Factor is applied in calculating the Appropriations Limit Including GPA for FY2023 and beyond.

Table 2: General Fund Appropriations Limits for 2022-2027 (limits for 2024-2027 are preliminary)

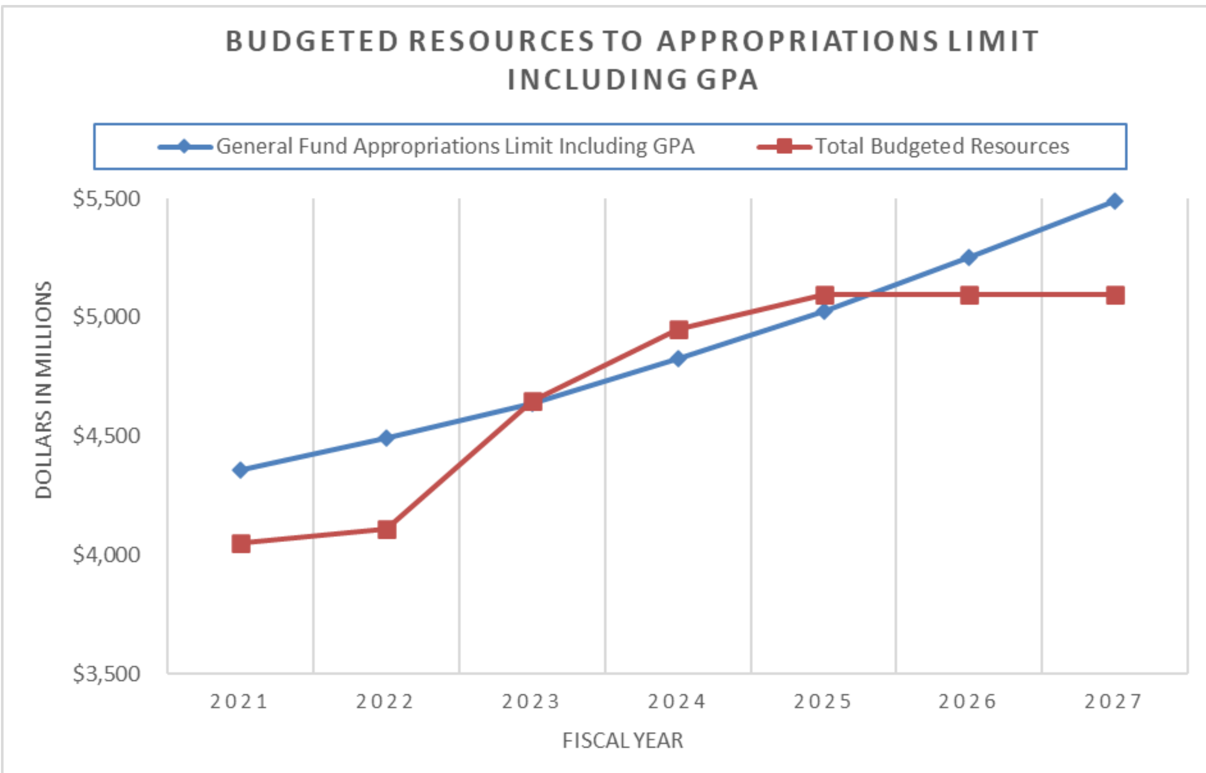
Calculation of Preliminary General Fund Appropriation Limit as per 5 M.R.S. § 1534 (Dollars in millions - rounded) - as of 9-23-22							
Fiscal Year	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**
Annual Growth Limitation Factor (FY24 - FY27 estimated)		3.30%	3.30%	4.06%	4.06%	4.55%	4.55%
Base Appropriations Limit	$3,801	$3 926	$4,056	$4,220	$4,392	$4,591	$4,800
Appropriations Limit Including General Purpose Aid (GPA) **	$4,358	**$4,492**	$4,640	$4,828	$5,024	$5,253	$5,492

****** Statute provides that the amount of General Purpose Aid for Local Schools (GPA) appropriations exceeding the amount appropriated for this program in FY2005 are excluded from the Base Appropriations Limitation until the State reaches the 55% share of Essential Programs and Services funding level. The State began funding 55% of EPS Costs in fiscal year 2022 (not including unfunded liability for teacher retirement, retired teacher health insurance and life insurance). The statutory language infers that when the 55% level is reached the excess GPA appropriations needed to reach this level would be incorporated into the appropriations limit to which the Growth Factor would be applied in calculating subsequent appropriation limits with no appropriations excluded from those limits going forward. Consistent with this presumed intent, the table shows the calculation of the Base Appropriations Limit, per the statutory definition of such, as well as an Appropriations Limit Including GPA. The Appropriations Limit Including GPA for fiscal year 2022 reflects the Base Appropriation Limit plus the actual GPA appropriations in fiscal year 2022 that exceed the fiscal year 2005 level. This total is the base to which the Growth Factor is applied in calculating the Appropriations Limit Including GPA for fiscal year 2023 and beyond.

Table 3 shows the current forecast of budgeted resources and how budgeted resources compare to the General Fund Appropriations Limitation Including GPA. Budgeted resources are based on the March 1, 2022, revenue forecast and laws enacted through the Second Regular Session of the 130th Legislature. The graph illustrates the comparison of the Appropriation Limit Including GPA to the projected level of budgeted resources.

Table 3: Budgeted Resources and Appropriations Limitation Including GPA: Fiscal Years 2022-27

Comparison of General Fund Budgeted Resources to Appropriations Limit Including General Purpose Aid (Dollars in millions - rounded)							
Fiscal Year	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**
General Fund Budgeted Resources							
Beginning Budgeted Balance	$184	$155	$34	$35	–	–	–
Net Transfers/Adjustments to Fund Balance	($305)	($905)	($143)	–	–	–	–
Net General Fund Revenue	$4,172	$4,857	$4,758	$4,914	$5,095	$5,095	$5,095
Total Budgeted Resources	$4,051	$4,107	$4,649	$4,949	$5,095	$5,095	$5,095
Amount Budgeted Resources are (below) above the GF Appropriations Limit Including GPA	($307)	($385)	$9	$121	$71	($158)	($397)



Historically, budgeted resources have consistently fallen well below the state's spending limitation. The baseline revenue forecast for the next two biennia, however, estimates that budgeted resources will exceed the General Fund Appropriations Limit Including GPA in the FY2024-2025 biennium and fall below the limitation again for the FY2026-2027 biennium.

According to 5 MRSA §1535, "Baseline General Fund revenue" and other available budgeted General Fund resources that exceed the spending limitation must be transferred to the Maine Budget

Stabilization Fund (the "Stabilization Fund").[13] In addition, pursuant to 5 MRSA §1536, eighty percent of fiscal year end General Fund unappropriated surplus must be transferred to the Stabilization Fund.

The General Fund appropriation limitation may be exceeded for certain extraordinary circumstances which must be outside the control of the Legislature, including (a) catastrophic events, such as natural disaster, terrorism, fire, war, and riot, (b) unfunded or underfunded State or Federal mandates, (c) citizens' initiatives or other referendum, (d) court orders or decrees or (e) loss of Federal funding. Extraordinary circumstances do not include changes in economic conditions, revenue shortfalls, increases in salaries or benefits, new programs or program expansions that go beyond existing program criteria and operation. The General Fund appropriation limit may be temporarily increased for such other purposes only by a vote of both Houses of the Legislature in a separate measure that identifies the intent of the Legislature to exceed the General Fund appropriation limit. Finally, the statutes relating to the MBSF, and the appropriation limitation are subject to modification or repeal at any time by the Legislature.

Maine Budget Stabilization Fund[14]

The Maine Budget Stabilization Fund, formerly known as the "Rainy Day Fund", was restructured in Public Law 2005, Chapter 2 and recently updated in Public Law 2021, Chapter 398, to be expended primarily to offset a general fund revenue shortfall. Amounts in the stabilization fund may not exceed 18% of the total General Fund revenues in the immediately preceding state fiscal year, and except as provided by 5 MRSA §1533, may not be reduced below 1% of total General Fund revenue in the immediately preceding state fiscal year. If the stabilization fund is at its limit of 18% of General Fund revenue of the immediately preceding year, then amounts that would otherwise have been transferred to the stabilization fund must be transferred to the Maine Department of Transportation's Highway and Bridge Capital program in accordance with 5 MRSA §1536, sub-§3.

The Maine Budget Stabilization Fund, coupled with both the Reserve for General Fund Operating Capital and the temporary curtailment of allotment in 5 MRSA §1668, is an important tool in maintaining a low overall tax burden and a structurally balanced budget, indicated by both a positive budgetary balance (revenue-expenditures) and Generally Accepted Accounting Principles, net position (assets-liabilities). The fund's balance provides a smoothing mechanism and allows lawmakers to address counter-cyclical fiscal policy, such as funding for Federal Medical Assistance

[13] "Baseline General Fund revenue" means the recommended General Fund revenue forecast reported by the Revenue Forecasting Committee in its December 1 report in even-numbered years, increased by the estimated amount of net General Fund revenue decrease, if any, for all enacted changes affecting the state and local tax burden included in that forecast.

[14] 5 MRSA §1532

Percentage (FMAP) and caseload in the MaineCare program that run counter to the economic cycle, as well as maintain appropriate funding levels of the State's long-term obligations such as retirement, retiree health and debt service without raising taxes.

The Maine Budget Stabilization Fund is integrated with the General Fund Appropriation limitation to provide funding consistent with the economic cycle. In addition, the fund receives deposits from the year-end General Fund unappropriated surplus. For example, in FY2022 actual revenues at year end exceeded budget revenues and, along with other year-end adjustments, resulted in a transfer of nearly $402 million to the Stabilization Fund in accordance with 5 MRSA §1535, bringing the total in the Stabilization Fund to nearly $896 million.

The following table displays the fund's deposit and withdrawal history since FY2005. To date, the General Fund appropriation limitation calculation has not resulted in any deposits to the fund partly due to the allowed exclusion from the limitation of education costs associated with reaching a state share of 55% of the total cost of education.

Table 4: History of Maine Budget Stabilization Fund

	Maine Budget Stabilization Fund (Formerly Maine Rainy Day Fund)									**Ending Balances as a % of General Fund Revenue**	
Fiscal Year Ending June 30th	**Beginning Balance**	**Deposits: GF Available Year-end, Unappropriated Surplus or "Cascade"**	**"Specified" Deposits: GF Unappropriated Surplus**	**Transfer to GF**	**Transfer to RPC Reserve**	**Transfer to Programs**	**Interest Earned**	**Ending Balance**	**Statutory Cap**	**General Fund Revenue**	
2005	33,158,244	13,121,679						46,279,923	279,084,505	2,790,845,053	2.5%
2006	46,279,923	30,662,369		-		-	2,960,695	79,902,987	351,819,082	2,931,825,687	4.1%
2007	79,902,987	-	29,000,000	-			6,576,879	115,479,866	362,351,447	3,019,595,389	5.2%
2008	115,479,866	-	10,000,000	-		(100,000)	3,497,143	128,877,009	370,538,280	3,087,818,992	5.5%
2009	128,877,009	-		(131,550,969)		(50,000)	2,919,303	195,343	337,364,195	2,811,368,295	0.0%
2010	195,343	19,626,525	5,597,244	-		(50,000)	15,970	25,385,082	330,681,900	2,755,682,500	1.3%
2011	25,385,082	46,080,951		-		(50,000)	50,781	71,466,814	353,394,811	2,944,956,756	3.0%
2012	71,466,814	-	4,000,000	(30,855,982)		(50,000)	247,677	44,808,509	361,864,587	3,015,538,222	2.1%
2013	44,808,509	55,065,933		(40,253,091)		(50,000)	129,123	59,700,474	371,326,061	3,094,383,842	2.0%
2014	59,700,474	8,453,337		-		(50,000)	167,728	68,271,539	373,619,632	3,113,496,933	2.4%
2015	68,271,539	23,854,159	18,803,702			(100,000)	254,141	111,083,541	599,278,778	3,329,326,547	3.3%
2016	111,083,541	707,300					561,446	112,352,287	605,914,404	3,366,191,131	3.3%
2017	112,352,287	36,837,024	46,017,246			(50,000)	1,133,541	196,290,098	621,882,695	3,454,903,862	5.7%
2018*	196,290,098	76,247,087		(2,000,000)	(65,000,000)	(200,000)	2,524,023	207,861,208	645,781,652	3,587,675,847	7.6%
2019*	207,861,208	18,123,960	19,800,000		(14,500,000)	(100,000)	5,718,984	236,904,152	692,731,996	3,848,511,092	7.7%
2020	236,904,152	-	17,431,338			(100,000)	4,511,388	258,746,878	714,481,866	3,969,343,702	6.5%
2021	258,746,878	223,607,793	8,000,000	0		(200,000)	1,760,856	491,915,527	813,706,406	4,520,591,145	10.9%
2022	491,915,527	401,897,486	0	0		(300,000)	2,483,732	895,996,745	970,490,442	5,391,613,569	16.6%

*Public Laws 2017 chapter 284, Part EEEEEEE and 2019 chapter 343, Part KKKK directed the State Controller to transfer a total of $79.5 million from the Budget Stabilization Fund to a reserve account to cover disallowed federal participation at the Riverview Psychiatric Center. Repayment to the Centers for Medicare and Medicaid Services were completed during fiscal year 2020.

VI: RECESSION SCENARIOS

Statute and Background: 5 M.R.S.A. §1710-A

> **4. Alternative economic scenarios.** No later than February 1st of each even-numbered year the commission shall provide to the State Budget Officer, the State Economist, and the Associate Commissioner for Tax Policy at least 2 additional economic forecasts that assume potential economic recession scenarios of varying levels of severity. These additional forecasts must include economic assumptions for the current fiscal biennium and the next 2 fiscal biennia. In each report the commission shall fully describe the methodology employed in reaching its recommendations.

The FY2018-2019 biennial budget included a provision requiring the CEFC to provide the State Economist, the State Budget Officer, and the Associate Commissioner for Tax Policy with at least two alternative economic recession scenarios of varying levels of severity. The alternative scenarios are required to be included in the CEFC's report due February 1st of each even-numbered year and must include assumptions for calendar years that encompass the current and next two biennia. It is important to note that these recession scenarios are hypothetical in nature and should not be considered a prediction by the CEFC.

Methodology

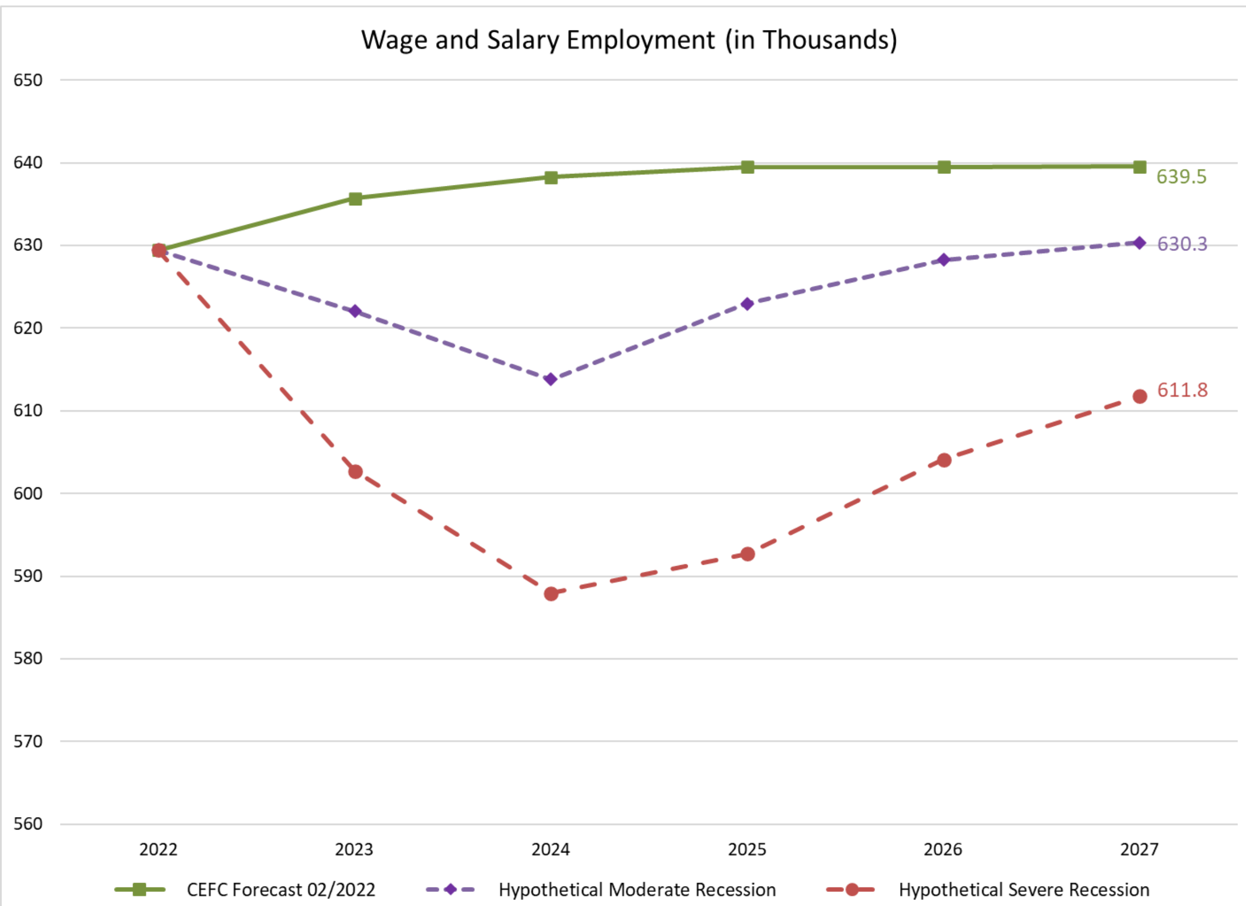
The CEFC spent time during their January 2022 meeting discussing how best to identify the alternative scenarios for use in the stress-test report described in statute. The Commissioners decided to designate two alternative scenarios provided by Moody's Analytics in January 2022 as the moderate and severe recession scenarios. While the scenarios describe a set of specific events surrounding the recessions, the CEFC does not ascribe to these specifics, instead selecting the scenarios based on the numbers and growth rates that seemed reasonable as generic "moderate" and "severe" recessions, with the "moderate" scenario intended to reflect pressures from higher rates of inflation. These scenarios provided plausible economic inputs for an analysis of the General Fund revenue projections in both a moderate and severe downturn. These recession scenarios were identified explicitly for the stress-testing required by statute and are not an official economic forecast by the CEFC.

The moderate and severe recession scenarios were compared to the Moody's Analytics baseline scenario for January 2022 to create a ratio that eliminates any extra variation stemming from the differences between the Moody's baseline and the CEFC forecast. This ensures that the alternative scenario captures only the differences resulting from the economic conditions and not from a differing baseline. Additionally, both recession scenario forecasts were adjusted so that the recession begins in the first quarter of CY2023. For CY2022, the CEFC forecast was used; the alternative economic scenarios were then used to provide forecasts for CY2023-2027. Revised actual personal income data as available were incorporated for CY2021.

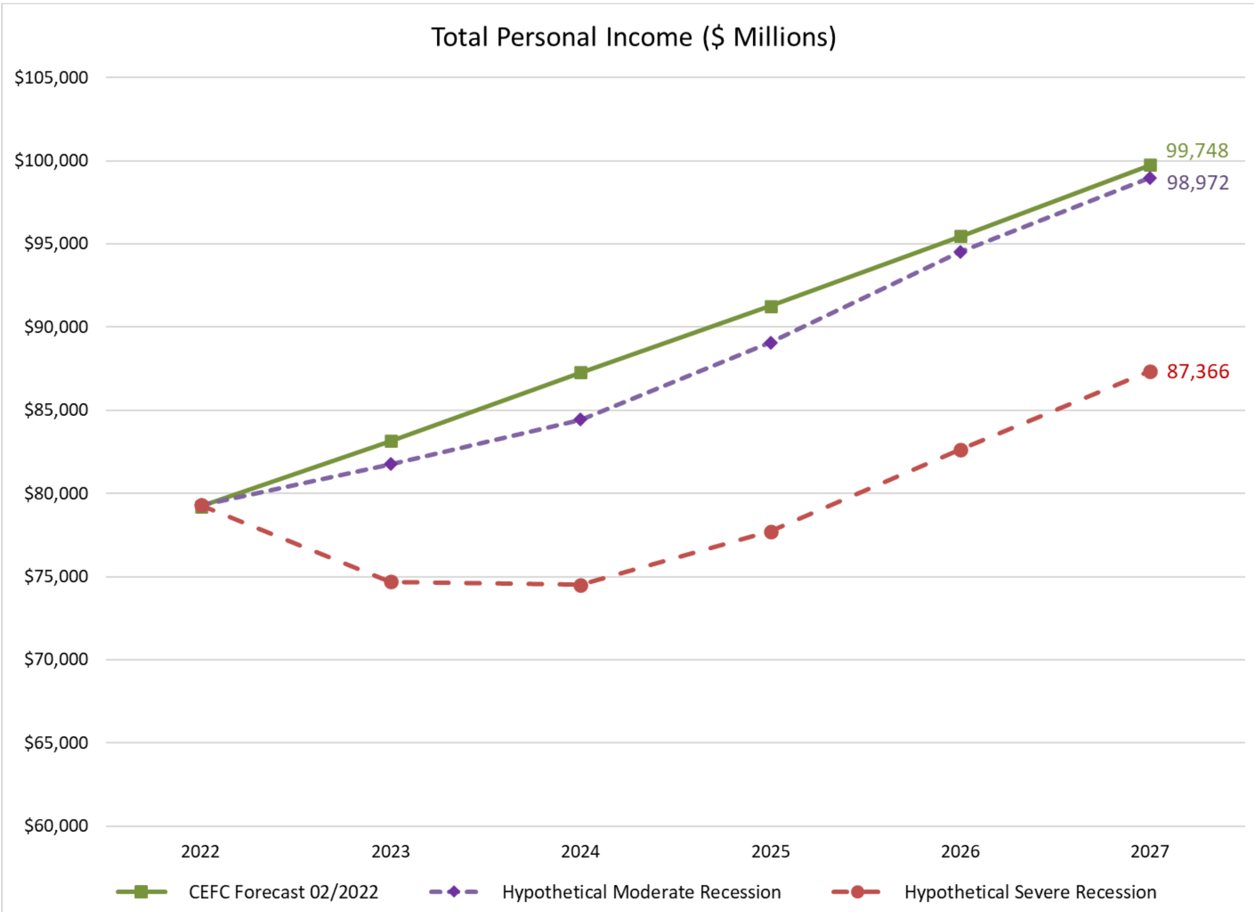
Detailed tables for the CEFC's February baseline economic forecast and the two recession scenarios are included in the Appendix to this report.

Key Economic Indicators

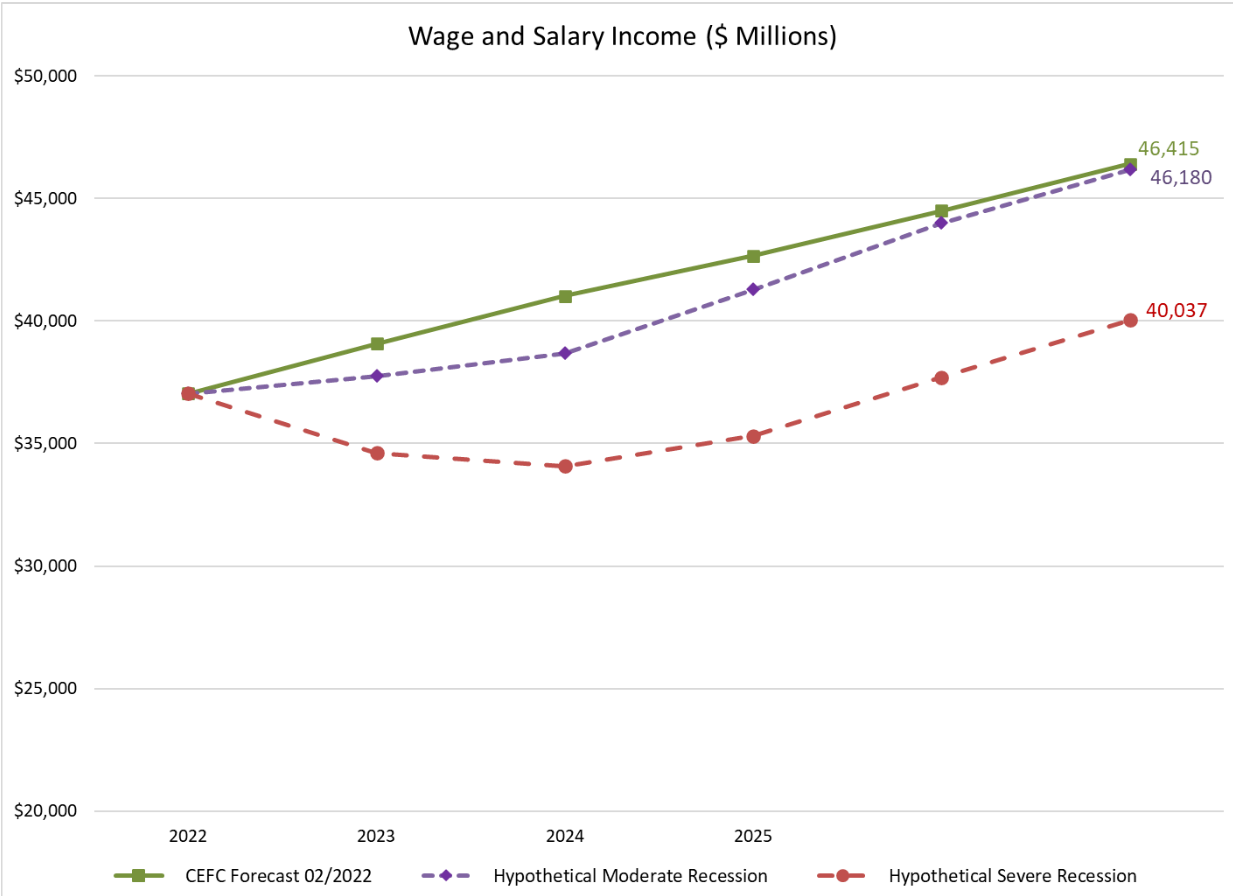
Total wage and salary employment in the baseline scenario from the CEFC is forecast to rise through CY2025 to 639,500 and then remain at that level through CY2027. In the hypothetical moderate recession scenario, employment declines to 613,800 before recovering to 630,300. In the hypothetical severe recession scenario, employment declines to 587,900 and only returns to 611,800 by CY2027.



Total personal income rises from $79.2 billion in CY2022 to $99.7 billion in CY2027 in the baseline scenario from the CEFC. The hypothetical moderate recession scenario sees total personal income rise to $98.8 billion in CY2027, but with a slower growth rate in the early years of the scenario and a faster growth rate in the later years. Total personal income in the hypothetical severe recession scenario falls to $74.5 billion in CY2024 and only increases to $87.4 billion in CY2027.



Wage and salary income in the baseline scenario increases from $37.0 billion in CY2022 to $46.4 billion in CY2027. In the hypothetical moderate recession scenario, wage and salary income grows at a slower pace for two years before increasing at a faster rate to $46.2 billion in CY2027. Wage and salary income declines to $34.1 billion in CY2024 in the hypothetical severe recession scenario and only increases to $40.0 billion in CY2027.


Wage and Salary Income ($ Millions)
$50,000
$45,000
$40,000
$35,000
$30,000
$25,000
$20,000
46,415
46,180
40,037
2022
2023
2024
2025
CEFC Forecast 02/2022
Hypothetical Moderate Recession
Hypothetical Severe Recession

VII: REVENUE IMPACT OF RECESSION SCENARIOS

Statute and Background: 5 M.R.S.A. §1710-G

> **Use of Revenue Forecasts.** No later than October 1st of each even-numbered year the commission and committee shall jointly issue a report to the Governor, the Legislative Council and the joint standing committee of the Legislature having jurisdiction over appropriations and financial affairs that uses the alternative economic scenarios recommended by the commission in accordance with section 1710-A, subsection 4. The report must include analyses and findings that detail the stress impact such potential economic recession scenarios would have on the current General Fund revenue projections of sales and income tax revenues. The report must include an analysis of the sufficiency of the current level of the Maine Budget Stabilization Fund and an estimate of the reserves in the Maine Budget Stabilization Fund necessary to offset the declines in revenue because of potential economic recessions of varying level of severity.

The FY2018-2019 biennial budget included a provision requiring the CEFC and the RFC to perform a biennial stress-test of General Fund revenues assuming hypothetical moderate and severe recessions, and the sufficiency of the MBSF under each economic scenario. The methodology for performing the stress-test is consistent with the approach used in the two Moody's Analytics papers discussed earlier in the report.

Methodology

The moderate and severe recession revenue forecasts were performed using the same methodology as the semiannual revenue forecasting exercises. The State Economist provided the Maine Revenue Services' Office of Tax Policy (OTP) with the CEFC's economic forecasts for the two recession scenarios presented in the Appendix, and an extended baseline forecast for CY2026 and CY2027. Additionally, the State Economist provided forecasts of supplemental economic variables consistent with each recession scenario and the baseline that are typically used by OTP in developing their recommended forecasts for tax revenue lines administered by Maine Revenue Services.

The March 1, 2022, baseline revenue forecast has been updated to account for all actions by the 130th Legislature through the Second Regular Session. These adjustments primarily impact the individual income tax and reduce the March 1st General Fund forecast by less than 3 percent.[15]

[15] The increase in the state Earned Income Tax Credit, the pension deduction amount, and the new Student Loan Repayment Tax Credit account for most of the individual income tax cuts.

The statute only requires a stress-test of sales and use and individual income taxes.[16] While these tax lines represent over 85 percent of General Fund revenue, we know that other General Fund revenue lines such as corporate income tax, estate tax and other consumption-based revenues (e.g., cigarette and tobacco taxes, real estate transfer tax, lottery revenues) will be negatively impacted in recessions as well. The revenue forecasts for the two recession scenarios include estimated changes for the corporate income tax and assume the other General Fund revenue lines are unchanged. This assumption regarding the other revenue lines will slightly understate the revenue shortfall estimated in the recession scenarios. Finally, unlike the Moody's Analytics reports the stress-test statute does not require an estimate of increased demands on Medicaid or other safety-net programs that historically rise during recessions. The omission of spending programs further understates the "fiscal shock" the budget will experience in a recession.

As explained earlier in the report, the CEFC and the RFC include two approaches to forecasting both the baseline and the two recession scenarios. Conformity to the 2017 federal tax reform act (The Tax Cuts and Jobs Act (TCJA)) means that certain individual income tax provisions will expire beginning at the start of the 2026 tax year. Since this exercise extends the budget window out to the FY2026-2027 biennium this is the first time the estimated revenue increase from the scheduled expiration of these conformity items has necessitated inclusion in the baseline revenue forecast. The estimated revenue increase is significant enough that we present the sufficiency of the MBSF assuming these provisions expire according to current law (the "Current Law" analysis) and assuming the federal government extends these policies beyond tax year 2025, thereby retaining current policy (the "Current Policy" analysis). The "Current Policy" forecast prevents a significant increase in individual income tax receipts in the FY2026-2027 biennium.

Moderate Recession Scenario

We estimate that a hypothetical moderate recession will reduce sales and use and service provider taxes by a minimal amount in FY2023, 4.3 percent in FY2024 and 4.4 percent in FY2025 (See Table 5). The percentage decrease in revenue moderates but remains below the baseline forecast (-2.9 percent) by FY2027. These percentage point reductions translate into a loss of $352.2 million in revenue over the forecast period, peaking at approximately $101.3 million in reduced revenue in FY2025. Sales tax revenue in this scenario is predicted to be more sensitive to the recession than personal income for a few reasons. First, a larger drop in Gross Domestic Product (GDP) than personal income results in taxable business spending to drop more than consumer spending. Second, the personal saving rate is forecast to only drop slightly below its level in the baseline scenario, peaking at one percentage point below the baseline, so most of the drop in personal income is translated into a drop in spending. Third, spending on goods is forecast to drop more than spending on services, so given the reliance of the Maine sales tax base

[16] We include the service provider tax in this report because the General Fund portion of the tax was originally part of the sales tax base, and the OTP models make no distinction between the two tax bases.

on goods, revenue is more sensitive to changes in economic conditions than total consumer spending.

Table 5

Sales & Use and Service Provider Taxes						
Fiscal Years		**2023**	**2024**	**2025**	**2026**	**2027**
March 2022 RFC Forecast		$2,164.6	$2,228.2	$2,292.2	$2,353.8	$2,421.6
Moderate Recession Forecast		$2,161.3	$2,131.5	$2,190.9	$2,273.6	$2,350.9
Variance		($3.3)	($96.7)	($101.3)	($80.1)	($70.8)
Percent Change		-0.2%	-4.3%	-4.4%	-3.4%	-2.9%

Individual income tax receipts under the "Current Law" approach declines by 2.2 percent in FY2023, followed by an 8.3 percent decline in FY2024, a 9.4 percent decrease in FY2025, and then declining in FY2026 and FY2027 by 5.2 and 2.0 percent, respectively (See Table 6). The primary impact on individual income tax receipts is through wage and salary income, which typically represents approximately 70 percent or more of Federal Adjusted Gross Income. The change in wage and salary growth (+5.0 percent to +3.1 percent) in CY2023 combined with a slow recovery that leaves wages below the baseline in CY2027 by $236 million results in individual income tax receipts never getting back to the baseline level during the forecast period. Note the significant increase in FY2027 revenues in both the "Current Law" baseline and moderate recession scenarios from the expiration of the federal TCJA provisions that Maine conformed to in 2018.

Table 6

Individual Income Tax (Current Law)						
Fiscal Years		**2023**	**2024**	**2025**	**2026**	**2027**
March 2022 RFC Forecast		$2,054.2	$2,128.4	$2,234.9	$2,371.0	$2,716.8
Moderate Recession Forecast		$2,008.7	$1,951.5	$2,025.7	$2,247.3	$2,661.5
Variance		($45.5)	($176.9)	($209.2)	($123.7)	($55.3)
Percent Change		-2.2%	-8.3%	-9.4%	-5.2%	-2.0%

When corporate income tax changes from the recession are added to the remaining baseline forecasts for General Fund revenues, the total estimated impact of the moderate recession on General Fund revenues is -1.2 percent in FY2023, -6.4 percent in FY2024, and -7.2 percent in

FY2025 (See Table 7). Because of the forecasted length of the recession and a relatively slow recovery General Fund revenues are estimated to remain below the baseline forecast in FY2026 by 4.8 precent ($257 million) and by 2.8 percent ($158 million) in FY2027. As discussed above, this should be a best-case scenario since the revenue forecast of the moderate recession scenario doesn't account for all revenue changes during the recession or additional spending needs.

Table 7

Total General Fund (Current Law)					
Fiscal Years	**2023**	**2024**	**2025**	**2026**	**2027**
March 2022 RFC Forecast	$4,758.5	$4,913.8	$5,095.5	$5,305.8	$5,726.7
Moderate Recession Forecast	$4,701.3	$4,600.9	$4,729.6	$5,049.1	$5,568.6
Variance	($57.2)	($312.9)	($366.0)	($256.6)	($158.1)
Percent Change	-1.2%	-6.4%	-7.2%	-4.8%	-2.8%

Individual income tax receipts and by extension total General Fund revenues under the "Current Policy" approach are the same as the "Current Law" approach for FY2023-FY2025 (See Tables 8 and 9). In the "Current Policy" approach the key TCJA provisions are extended at least through tax year 2027, thereby only impacting FY2026 and FY2027. Both the change in level and percent of baseline revenues are very close to the "Current Law" approach, but the level of individual income tax receipts is approximately $325 million lower per fiscal year.

Table 8

Individual Income Tax (Current Policy)					
Fiscal Years	**2023**	**2024**	**2025**	**2026**	**2027**
March 2022 RFC Forecast (Extended TCJA)	$2,054.2	$2,128.4	$2,234.9	$2,270.7	$2,422.9
Moderate Recession Forecast (Extended TCJA)	$2,008.7	$1,951.5	$2,025.7	$2,148.2	$2,370.3
Variance	($45.5)	($176.9)	($209.2)	($122.5)	($52.6)
Percent Change	-2.2%	-8.3%	-9.4%	-5.4%	-2.2%

Table 9

Total General Fund (Current Policy)					
Fiscal Years	**2023**	**2024**	**2025**	**2026**	**2027**
March 2022 RFC Forecast (Extended TCJA)	$4,758.5	$4,913.8	$5,095.5	$5,210.5	$5,447.4
Moderate Recession Forecast (Extended TCJA)	$4,701.3	$4,600.9	$4,729.6	$4,955.0	$5,291.9
Variance	($57.2)	($312.9)	($366.0)	($255.5)	($155.5)
Percent Change	-1.2%	-6.4%	-7.2%	-4.9%	-2.9%

Severe Recession Scenario

We estimate the severe recession scenario will reduce sales and use and service provider taxes by 1.9 percent in FY2023 and 9.4 percent in FY2024, peak at -12.4 percent in FY2025, and then moderate to -8.8 percent by FY2027 (See Table 10). These percentage point reductions translate into a loss of almost $1 billion in revenue over the forecast period, peaking at approximately $285 million in reduced revenue in FY2025. The severe recession modeled here is much different than the recent pandemic induced recession as lower incomes cause households to significantly cut back on purchases of durable and nondurable goods. This response significantly impacts the sales tax base, which is heavily dependent on goods, particularly automobiles and building supply store sales. Unlike the moderate recession scenario, sales and use and service provider taxes are less responsive than personal income for two reasons; (1) GDP drops less than personal income at its peak (-10.8 percent for GDP vs. -15 percent for personal income) resulting in business spending dropping less than consumer spending, and (2) the personal savings rate drops considerably in the severe recession scenario which offsets the drop in income through lower household saving or spending down any remaining excess saving that may have accumulated prior to the start of the recession.

Table 10

Sales & Use and Service Provider Taxes					
Fiscal Years	**2023**	**2024**	**2025**	**2026**	**2027**
March 2022 RFC Forecast	$2,164.6	$2,228.2	$2,292.2	$2,353.8	$2,421.6
Severe Recession Forecast	$2,123.4	$2,018.1	$2,007.2	$2,103.9	$2,208.8
Variance	($41.2)	($210.1)	($284.9)	($249.9)	($212.9)
Percent Change	-1.9%	-9.4%	-12.4%	-10.6%	-8.8%

Under the “Current Law” severe recession scenario the individual income tax is reduced by over 20 percent in FY2024-FY2026, and by 18.6 percent in FY2027 (See Table 11). The severe recession scenario is truly “severe” with wages and salary income falling by 17 percent below the baseline economic forecast in CY2024 and CY2025. The assumed federal response doesn’t appear to be anywhere near the fiscal policy response during the COVID-recession of 2020 and transfer payments in the severe recession scenario have limited impact in offsetting the significant drop in wage and salary income. The total loss in individual income tax receipts over the forecast period is more than $2 billion.

One finding from this exercise is that legislative changes in the individual income tax since 2015 have elevated the volatility of the tax during the business cycle; this finding applies to both the moderate and severe recession scenarios. The current large standard deduction and personal exemption amounts, and their phase-out for high-income returns, when combined with the expansion in refundable personal tax credits result in a much larger decrease in tax liability than the decrease in Maine adjusted gross income (MAGI). For example, in tax year 2023 of the severe recession scenario, we estimate positive MAGI falls 8.5 percent, positive taxable income falls 13.6 percent, and tax liability falls 18.9 percent. The percentage decline in tax liability is more than double the percentage decline in MAGI.

Table 11

Individual Income Tax (Current Law)						
Fiscal Years		**2023**	**2024**	**2025**	**2026**	**2027**
March 2022 RFC Forecast		$2,054.2	$2,128.4	$2,234.9	$2,371.0	$2,716.8
Severe Recession Forecast		$1,918.0	$1,646.8	$1,612.5	$1,803.3	$2,212.0
Variance		($136.2)	($481.6)	($622.5)	($567.7)	($504.8)
Percent Change		-6.6%	-22.6%	-27.9%	-23.9%	-18.6%

When the sales, service provider, “Current Law” individual income tax, and corporate income tax severe recession forecasts are added to the forecasts for the rest of General Fund revenues, the total estimated impact of the severe recession on General Fund revenues is -3.9 percent in FY2023, -15.2 percent in FY2024, -19.3 percent in FY2025, -16.9 percent in FY2026, and -13.9 percent in FY2027 (See Table 12). The shortfall in General Fund revenue averages $850 million from FY2024 to FY2027.

Table 12

Total General Fund (Current Law)					
Fiscal Years	**2023**	**2024**	**2025**	**2026**	**2027**
March 2022 RFC Forecast	$4,758.5	$4,913.8	$5,095.5	$5,305.8	$5,726.7
Severe Recession Forecast	$4,571.6	$4,167.1	$4,110.7	$4,407.1	$4,928.6
Variance	($186.9)	($746.6)	($984.8)	($898.7)	($798.1)
Percent Change	-3.9%	-15.2%	-19.3%	-16.9%	-13.9%

Tables 13 and 14 show the impact of the severe recession scenario on individual and total General Fund revenues assuming the TCJA tax cuts are extended beyond tax year 2025; the "Current Policy" approach. As was the case with the moderate recession scenario, the change in revenues is the same for FY2023-FY2025, and the relative changes in FY2026 and FY2027 are very similar to the "Current Law" approach.

Table 13

Individual Income Taxes (Current Policy)					
Fiscal Years	**2023**	**2024**	**2025**	**2026**	**2027**
March 2022 RFC Forecast (Extended TCJA)	$2,054.2	$2,128.4	$2,234.9	$2,270.7	$2,422.9
Severe Recession Forecast (Extended TCJA)	$1,918.0	$1,646.8	$1,612.5	$1,709.7	$1,935.6
Variance	($136.2)	($481.6)	($622.5)	($561.0)	($487.3)
Percent Change	-6.6%	-22.6%	-27.9%	-24.7%	-20.1%

Table 14

Total General Fund (Current Policy)					
Fiscal Years	**2023**	**2024**	**2025**	**2026**	**2027**
March 2022 RFC Forecast (Extended TCJA)	$4,758.5	$4,913.8	$5,095.5	$5,210.5	$5,447.4
Severe Recession Forecast (Extended TCJA)	$4,571.6	$4,167.1	$4,110.7	$4,318.1	$4,666.0
Variance	($186.9)	($746.6)	($984.8)	($892.4)	($781.5)
Percent Change	-3.9%	-15.2%	-19.3%	-17.1%	-14.3%

VIII: BUDGET STABILIZATION FUND SUFFICIENCY AND NEEDS

The stress-test results presented here are designed to determine if the current funding level of the MBSF is sufficient to provide resources to maintain spending at limitation levels during a period of revenue shortfall. This meets the third criteria of the PEW report that states set a BSF cap based on the unique characteristics of their revenue structure and economy.

We estimate that the "Current Law" moderate recession scenario will require $825 million of MBSF resources to offset a revenue shortfall over the FY2023-FY2027 budget period (Table 15).[17] The current MBSF level of $895.9 million is more than enough to cover the revenue shortfalls between FY2023-FY2026. Under the "Current Law" approach, the revenue increase from the expiration of the relevant TCJA conformity items results in General Fund revenues exceeding the spending limitation by $76.5 million in FY2027, despite the continuing effects of the moderate recession. At the close of FY2027 the MBSF would have reserves of approximately $200 million, 3.5 percent of FY2027 General Fund revenues.

Table 15

General Fund Appropriation Limitation and Sufficiency of the Maine Budget Stabilization Fund (Moderate Recession - Current Law)

Fiscal Years	2022	2023	2024	2025	2026	2027
Base Appropriations Limitation as of 10/1/22		$4,640.0	$4,828.4	$5,024.4	$5,253.0	$5,492.0
Revenues/Resources Minus Appropriations Limitation /1		($47.1)	($227.5)	($294.9)	($203.9)	$76.5
Budget Stabilization Fund at Fiscal Year End	$895.9	$848.8	$621.3	$326.4	$122.5	$199.1

In the case of the "Current Policy" moderate recession scenario the lower level of General Fund revenue in FY2026 and FY2027 because of the conformity to the extension of the TCJA provisions results in revenues shortfalls of approximately $500 million over the two-year period. With only $326.4 million remaining in the MBSF at the end of FY2025 and the requirement that the MBSF not fall below 1 percent of the previous fiscal year's General Fund revenue the MBSF falls short of meeting the FY2026 spending limitation by a relatively small amount of approximately $21 million. In this scenario, FY2027 revenues plus available MBSF resources falls short of the spending limitation by $200 million.

[17] 5 MRSA §1532(1) is clear that the MBSF may not be reduced below 1% of total General Fund revenue in the immediately preceding state fiscal year. For the purposes of that subsection, at the close of a fiscal year, "immediately preceding state fiscal year" means the fiscal year that is being closed. As a result, this analysis assumes the MBSF must have a minimum amount of approximately $54 million. An exception to the 1% minimum is if the Commissioner of DAFS declares a budget emergency (5 MRSA §1533).

Table 16

General Fund Appropriation Limitation and Sufficiency of the Maine Budget Stabilization Fund (Moderate Recession - Current Polic

Fiscal Years	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**
Base Appropriations Limitation as of 10/1/22		$4,640.0	$4,828.4	$5,024.4	$5,253.0	$5,492.0
Revenues/Resources Minus Appropriations Limitation /1		($47.1)	($227.5)	($294.9)	($298.1)	($200.2)
Budget Stabilization Fund at Fiscal Year End	$895.9	$848.8	$621.3	$326.4	$49.5	$52.9

The current statutory MBSF maximum of 18% ($970.5 million) is more than sufficient to offset the "Current Law" moderate recession revenue shortfall. In the "Current Policy" moderate recession scenario a MBSF at its maximum level of 18% of prior year revenues would provide enough resources to supplement annual revenues to maintain General Fund spending at the spending limitation levels over the FY2023-FY2026 period, only falling short in FY2027 by approximately $150 million.

Based on the results of this stress-test study a MBSF of 18% of FY2022 revenue would be sufficient to cover all the revenue shortfall through the forecast period in the "Current Law" moderate recession scenario and only fall short of fully covering the "Current Policy" scenario shortfall in FY2027 by a relatively small amount of $150 million. The 18% maximum level of the MBSF appears to be a reasonable level to offset the revenue impact of a moderate recession, even one as deep and long as the one modeled in this exercise.

In the severe recession scenario, a significantly increased level of MBSF resources would be required to fully offset a revenue shortfall over the FY2023-FY2027 budget period (Tables 17 and 18). The current MBSF level of $895.9 million is enough to cover the estimated revenue shortfall in FY2023 and FY2024 but has little left at the end of FY2024 to offset the shortfalls during the FY2025-FY2027 period. The benefit of such a well-funded MBSF is the time it provides the Governor and Legislature to thoughtfully make the difficult decisions that need to be made to bring the General Fund budget back into balance. A MBSF at its maximum level of 18% of prior year revenues would provide $75 million of additional resource to offset the FY2025 revenue shortfall but still leaves a relatively large difference between the spending limit and available resources.

Table 17

General Fund Appropriation Limitation and Sufficiency of the Maine Budget Stabilization Fund (Severe Recession - Current Law)						
Fiscal Years	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**
Base Appropriations Limitation as of 10/1/22		$4,640.0	$4,828.4	$5,024.4	$5,253.0	$5,492.0
Revenues/Resources Minus Appropriations Limitation		($176.8)	($661.2)	($913.7)	($845.9)	($563.4)
Budget Stabilization Fund at Fiscal Year End	$895.9	$719.1	$57.9	$41.1	$44.1	$49.3

Table 18

General Fund Appropriation Limitation and Sufficiency of the Maine Budget Stabilization Fund (Severe Recession -Current Poli						
Fiscal Years	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**
Base Appropriations Limitation as of 10/1/22		$4,640.0	$4,828.4	$5,024.4	$5,253.0	$5,492.0
Revenues/Resources Minus Appropriations Limitation		($176.8)	($661.2)	($913.7)	($934.9)	($826.1)
Budget Stabilization Fund at Fiscal Year End	$895.9	$719.1	$57.9	$41.1	$43.2	$46.7

IX: CONCLUSIONS

The 2020 Stress-Test Report was issued as the national and state economies struggled to respond to the COVID-19 recession. This year's report is being issued after historic fiscal and monetary stimulus implemented by Congress and the Federal Reserve in the months immediately after the start of the pandemic have led to unprecedented revenue growth in FY2021 and FY2022 and a MBSF at 16.6% of FY2022 revenue. However, a reversal in Federal Reserve policy to address inflation rates not seen in 40 years, the Russian invasion of Ukraine, and continuing supply-chain constraints from the global pandemic are creating increased uncertainty about the direction of the US and global economies. As a result, this year's report is timely in providing policymakers with the estimated impact of a moderate and severe recession on sales and individual income tax revenues, and the sufficiency and needs of the Maine Budget Stabilization Fund in each of the recession scenarios.

The two forecasting groups conclude that the current MBSF of $896 million is sufficient to fully offset the revenue shortfalls estimated as the result of a moderate recession assuming certain individual income tax conformity provisions to the 2017 federal TCJA expire as provided under current law. If those federal provisions are extended beyond 2027 and the state conforms to those extensions the MBSF is sufficient to meet the FY2023-FY2025 spending limits and comes within $21 million of meeting the FY2026 spending limit. A MBSF at its current maximum of 18% of FY2022 revenue ($970.5 million) would provide enough resource to meet the state's spending limit through FY2026 but continue to leave a revenue short fall of $150 million in FY2027.

While the MBSF at its current level or at its statutory cap would not be sufficient to fully offset a revenue shortfall because of a severe recession, it would provide enough resource to maintain spending at the spending limit in FY2023 and FY2024, providing approximately 15 months for the Governor and Legislature to bring the budget into balance.

It has been 17 years since enactment of 5 MRSA, Chapter 142: Maine Budget Stabilization Fund. While there have been minor amendments to Chapter 142 since 2005, primarily in 2015, the method of funding and uses of the MBSF and its relationship to the General Fund Appropriation Limitation have essentially remained the same. The achievement of funding K-12 education at the required 55% of Essential Programs and Services and the MBSF so close to its statutory maximum, may provide policymakers with the opportunity to review Chapter 142 and determine if changes are warranted to address the next economic recession.

APPENDIX

Baseline Scenario

The baseline economic scenario is the CEFC forecast from February 1, 2022. This scenario does not forecast a recession. Employment in Maine increases through 2025. Wage and salary income rises each year along with total personal income. Following slower total personal income growth in 2022, growth rates for the remainder of the forecast range from 4.5% to 5.0%, with the strongest growth in the near term of the forecast. For wage and salary income, growth is strongest in the near term.

Maine Consensus Economic Forecasting Commission						
February 2022 Forecast	Forecast - Calendar Years					
	2022	2023	2024	2025	2026	2027
CPI-U* (Annual Change)	5.0%	4.0%	2.5%	2.5%	2.5%	2.5%
CPI for Energy Prices** (Annual Change)	10.0%	-2.7%	0.8%	2.0%	2.2%	1.4%
Avg. Price of New Vehicles** (Annual Change)	5.6%	-11.2%	-3.3%	6.5%	10.0%	6.8%
New Vehicle Registrations** (Annual Change)	-7.0%	6.2%	0.8%	-1.6%	-3.2%	-1.5%
Personal Savings Rate**	5.6%	6.1%	6.5%	6.7%	6.7%	6.4%
Maine Unemployment Rate**	3.6%	3.1%	3.1%	3.1%	3.2%	3.2%
3-Month Treasury Bill Rate**	0.35%	1.09%	1.58%	1.92%	2.15%	2.36%
10-Year Treasury Note Yield**	1.78%	2.40%	2.73%	2.93%	3.03%	3.08%
Before-Tax Corporate Profits* (Annual Change)	4.0%	4.0%	6.0%	6.0%	6.0%	6.0%
Maine Wage & Salary Employment* (thousands)	629.4	635.7	638.3	639.5	639.5	639.5
Natural Resources	2.2	2.2	2.2	2.2	2.2	2.1
Construction	30.7	30.6	30.1	30.0	29.9	29.8
Manufacturing	53.9	54.0	53.7	53.1	52.7	52.3
Trade/Trans./Public Utils.	117.2	114.9	111.9	109.9	109.7	109.7
Information	6.4	6.5	6.7	6.8	6.7	6.6
Financial Activities	33.9	33.9	33.9	34.1	33.9	33.5
Prof. & Business Services	73.3	74.2	75.1	76.1	76.5	77.0
Education & Health Services	126.8	127.3	128.9	129.9	130.2	130.6
Leisure & Hospitality Services	63.4	68.5	71.5	72.6	72.9	73.0
Other Services	22.7	22.9	23.2	23.6	23.6	23.6
Government	98.8	100.8	101.2	101.3	101.3	101.3
Maine Wage & Salary Employment* (Annual Change)	1.8%	1.0%	0.4%	0.2%	0.0%	0.0%
Natural Resources	4.8%	-2.5%	-0.5%	2.2%	-0.5%	-3.1%
Construction	1.0%	-0.4%	-1.6%	-0.5%	-0.1%	-0.4%
Manufacturing	1.2%	0.2%	-0.5%	-1.1%	-0.8%	-0.6%
Trade/Trans./Public Utils.	-0.4%	-2.0%	-2.6%	-1.8%	-0.2%	0.0%
Information	-1.5%	0.1%	3.4%	1.3%	-1.0%	-1.2%
Financial Activities	3.1%	0.0%	0.0%	0.4%	-0.5%	-1.1%
Prof. & Business Services	3.9%	1.1%	1.3%	1.3%	0.5%	0.6%
Education & Health Services	0.8%	0.4%	1.2%	0.8%	0.2%	0.3%
Leisure & Hospitality Services	6.5%	8.0%	4.4%	1.6%	0.3%	0.2%
Other Services	4.0%	1.2%	1.0%	1.7%	0.2%	0.1%
Government	1.2%	2.0%	0.4%	0.2%	0.0%	0.0%
	2022	2023	2024	2025	2026	2027
Personal Income* ($ million)	79,222	83,164	87,273	91,255	95,457	99,748
Wages & Salaries*	37,035	39,072	41,026	42,667	44,503	46,415
Supplements to Wages & Salaries*	8,936	9,427	9,899	10,295	10,740	11,202
Nonfarm Proprietors' Income*	5,961	6,318	6,679	7,039	7,359	7,634
Farm Proprietors' Income**	142	140	140	135	132	133
Dividends, Interest, & Rent*	13,151	13,677	14,224	14,793	15,552	16,331
Dividends	4,032	4,254	4,481	4,645	4,868	5,095
Interest	5,567	5,826	6,131	6,539	7,014	7,545
Rent	3,551	3,597	3,613	3,610	3,670	3,691
Personal Current Transfer Receipts*	19,010	19,770	20,759	22,004	23,091	24,212
Less: Contributions for Social Ins.**	6,325	6,597	6,861	7,138	7,437	7,753
Adjustment for Residence**	1,312	1,355	1,408	1,460	1,516	1,574
Personal Income* (Annual Change)	1.7%	5.0%	4.9%	4.6%	4.6%	4.5%
Wages & Salaries*	6.5%	5.5%	5.0%	4.0%	4.3%	4.3%
Supplements to Wages & Salaries*	6.5%	5.5%	5.0%	4.0%	4.3%	4.3%
Nonfarm Proprietors' Income*	8.5%	6.0%	5.7%	5.4%	4.5%	3.7%
Farm Proprietors' Income**	-31.6%	-1.6%	-0.3%	-3.5%	-2.0%	0.7%
Dividends, Interest, & Rent*	4.2%	4.0%	4.0%	4.0%	5.1%	5.0%
Dividends	6.5%	5.5%	5.3%	3.7%	4.8%	4.7%
Interest	2.7%	4.7%	5.2%	6.7%	7.3%	7.6%
Rent	4.0%	1.3%	0.4%	-0.1%	1.7%	0.6%
Personal Current Transfer Receipts*	-10.0%	4.0%	5.0%	6.0%	4.9%	4.9%
Less: Contributions for Social Ins.**	6.4%	4.3%	4.0%	4.0%	4.2%	4.3%
Adjustment for Residence**	4.0%	3.3%	3.9%	3.7%	3.8%	3.8%

*CEFC Forecast

**From IHS Markit and Moody's Analytics baselines (Jan. 2022)

Remaining lines derived from CEFC forecast by CEFC staff and reviewed by CEFC

Moderate Recession Scenario

The moderate recession scenario selected by the Commission is the "S7" Next-Cycle Recession scenario. This scenario has the recession lasting four quarters and is brought on in part by persistently higher inflation. The cumulative decline in national real gross domestic product is 2.0 percent, comparable to the postwar average prior to COVID-19. Employment in Maine declines around 2.5 percent. Wage and salary income and total personal income in Maine continue to grow but at a slower pace.

Moody's Analytics January 2022 S7 - Next Cycle Recession

Hypothetical Moderate Recession	Forecast - Calendar Years					
	2022	2023	2024	2025	2026	2027
CPI-U (Annual Change)	5.0%	3.4%	2.0%	2.4%	2.6%	2.6%
CPI for Energy Prices (Annual Change)	10.0%	-9.1%	0.4%	6.9%	2.8%	1.6%
CPI for New Vehicles (Annual Change)	5.6%	-11.1%	-3.0%	7.7%	10.5%	6.9%
New Vehicle Registrations (Annual Change)	-7.0%	-4.7%	0.6%	4.9%	-1.0%	1.0%
Personal Savings Rate	5.6%	5.5%	5.5%	6.6%	7.5%	8.1%
Maine Unemployment Rate	3.6%	4.3%	5.3%	4.4%	3.9%	3.8%
3-Month Treasury Bill Rate	0.35%	0.44%	0.26%	0.42%	0.61%	0.68%
10-Year Treasury Note Yield	1.78%	2.05%	2.19%	2.74%	3.02%	3.02%
Before-Tax Corporate Profits (Annual Change)	4.0%	-10.6%	0.4%	9.6%	16.0%	12.4%
Maine Wage & Salary Employment (thousands)	629.4	622.0	613.8	623.0	628.3	630.3
Natural Resources	2.2	2.1	2.1	2.2	2.2	2.1
Construction	30.7	29.2	27.5	27.8	28.4	28.7
Manufacturing	53.9	52.8	51.6	52.1	52.3	52.2
Trade/Trans./Public Utils.	117.2	112.4	108.0	107.8	108.5	108.7
Information	6.4	6.3	6.4	6.6	6.6	6.5
Financial Activities	33.9	33.7	33.5	33.9	33.9	33.6
Prof. & Business Services	73.3	72.1	70.6	72.9	74.3	75.1
Education & Health Services	126.8	125.1	125.3	127.8	128.7	129.2
Leisure & Hospitality Services	63.4	66.2	67.5	69.5	70.4	70.6
Other Services	22.7	22.3	22.2	23.0	23.3	23.4
Government	98.8	99.8	98.8	99.0	99.3	99.9
Maine Wage & Salary Employment (Annual Change)	1.8%	-1.2%	-1.3%	1.5%	0.9%	0.3%
Natural Resources	4.8%	-5.5%	-1.6%	4.6%	0.1%	-3.0%
Construction	1.0%	-5.1%	-5.8%	1.4%	2.2%	0.7%
Manufacturing	1.2%	-2.0%	-2.2%	0.9%	0.5%	-0.3%
Trade/Trans./Public Utils.	-0.4%	-4.1%	-3.9%	-0.2%	0.6%	0.2%
Information	-1.5%	-2.2%	1.8%	2.9%	-0.2%	-1.0%
Financial Activities	3.1%	-0.8%	-0.5%	1.3%	-0.1%	-1.0%
Prof. & Business Services	3.9%	-1.7%	-2.0%	3.3%	1.8%	1.1%
Education & Health Services	0.8%	-1.4%	0.2%	1.9%	0.7%	0.4%
Leisure & Hospitality Services	6.5%	4.5%	2.0%	2.9%	1.3%	0.4%
Other Services	4.0%	-1.5%	-0.6%	3.7%	1.3%	0.3%
Government	1.2%	1.1%	-1.0%	0.2%	0.3%	0.6%
	2022	2023	2024	2025	2026	2027
Personal Income ($ million)	79,305	81,772	84,431	89,081	94,522	98,972
Wages & Salaries	37,035	37,756	38,682	41,297	44,008	46,180
Supplements to Wages & Salaries	8,936	9,186	9,469	10,046	10,657	11,172
Nonfarm Proprietors' Income	5,961	6,166	6,395	6,731	7,090	7,371
Farm Proprietors' Income	142	183	197	195	184	177
Dividends, Interest, & Rent	13,234	13,309	12,963	13,580	14,651	15,415
Dividends	3,983	4,126	4,006	4,223	4,674	4,917
Interest	5,783	5,723	5,457	5,785	6,183	6,659
Rent	3,467	3,460	3,500	3,572	3,795	3,838
Personal Current Transfer Receipts	19,010	20,239	21,869	22,731	23,793	24,814
Less: Contributions for Social Ins.	6,325	6,374	6,469	6,909	7,354	7,714
Adjustment for Residence	1,312	1,309	1,325	1,409	1,493	1,558
Personal Income (Annual Change)	1.7%	3.1%	3.3%	5.5%	6.1%	4.7%
Wages & Salaries	6.5%	1.9%	2.5%	6.8%	6.6%	4.9%
Supplements to Wages & Salaries	6.5%	2.8%	3.1%	6.1%	6.1%	4.8%
Nonfarm Proprietors' Income	8.5%	3.4%	3.7%	5.3%	5.3%	4.0%
Farm Proprietors' Income	-31.6%	28.4%	7.7%	-1.0%	-5.4%	-3.8%
Dividends, Interest, & Rent	4.6%	0.6%	-2.6%	4.8%	7.9%	5.2%
Dividends	-3.2%	0.5%	4.4%	5.8%	5.1%	5.1%
Interest	-5.2%	0.9%	6.5%	7.1%	5.8%	5.8%
Rent	-1.6%	0.2%	3.3%	3.1%	2.3%	2.3%
Personal Current Transfer Receipts	-10.0%	6.5%	8.1%	3.9%	4.7%	4.3%
Less: Contributions for Social Ins.	6.4%	0.8%	1.5%	6.8%	6.4%	4.9%
Adjustment for Residence	4.0%	-0.3%	1.3%	6.3%	5.9%	4.3%

Severe Recession Scenario

The severe recession scenario selected by the CEFC is the "S4" downside scenario. This scenario has the recession lasting five quarters with a much slower recovery. National real gross domestic product declines around 0.9 percent in the first year of the recession and 1.2 percent in the second year. Employment in Maine declines around 6.6 percent. Wage and salary income in Maine declines around 8.0 percent and total personal income declines around 6.1 percent.

Moody's Analytics January 2022 S4 Downside Scenario

Hypothetical Severe Recession	**Forecast - Calendar Years**					
	2022	**2023**	**2024**	**2025**	**2026**	**2027**
CPI-U (Annual Change)	5.0%	2.3%	0.4%	2.0%	2.2%	2.7%
CPI for Energy Prices (Annual Change)	10.0%	-19.0%	-10.6%	12.0%	6.1%	4.7%
CPI for New Vehicles (Annual Change)	5.6%	-10.7%	-3.5%	6.1%	9.3%	6.5%
New Vehicle Registrations (Annual Change)	-7.0%	-6.4%	-19.2%	13.6%	3.9%	2.3%
Personal Savings Rate	5.6%	1.8%	1.8%	2.5%	3.4%	3.5%
Maine Unemployment Rate	3.6%	5.1%	6.1%	5.8%	4.9%	4.4%
3-Month Treasury Bill Rate	0.35%	0.66%	0.48%	0.44%	0.64%	1.84%
10-Year Treasury Note Yield	1.78%	1.46%	1.28%	1.59%	1.93%	2.68%
Before-Tax Corporate Profits (Annual Change)	4.0%	-21.9%	-5.8%	11.2%	10.5%	11.5%
Maine Wage & Salary Employment (thousands)	629.4	602.7	587.9	592.7	604.1	611.8
Natural Resources	2.2	2.6	2.6	2.8	2.8	2.7
Construction	30.7	25.9	23.2	23.5	24.8	25.5
Manufacturing	53.9	50.7	48.8	48.7	49.5	49.8
Trade/Trans./Public Utils.	117.2	112.0	106.6	105.5	107.4	108.7
Information	6.4	6.1	6.1	6.3	6.3	6.3
Financial Activities	33.9	32.7	32.3	32.6	32.7	32.5
Prof. & Business Services	73.3	67.8	63.8	64.3	66.7	68.7
Education & Health Services	126.8	124.8	125.2	127.4	129.4	130.7
Leisure & Hospitality Services	63.4	57.6	59.1	61.0	62.6	63.4
Other Services	22.7	22.5	22.2	22.8	23.3	23.7
Government	98.8	100.1	97.6	97.7	98.3	99.2
Maine Wage & Salary Employment (Annual Change)	1.8%	-4.2%	-2.5%	0.8%	1.9%	1.3%
Natural Resources	4.8%	15.4%	3.2%	4.1%	1.2%	-1.7%
Construction	1.0%	-15.8%	-10.2%	1.0%	5.6%	2.9%
Manufacturing	1.2%	-5.9%	-3.7%	-0.1%	1.6%	0.6%
Trade/Trans./Public Utils.	-0.4%	-4.4%	-4.9%	-1.0%	1.8%	1.2%
Information	-1.5%	-6.0%	1.1%	2.2%	1.0%	0.0%
Financial Activities	3.1%	-3.6%	-1.1%	0.6%	0.3%	-0.5%
Prof. & Business Services	3.9%	-7.5%	-5.8%	0.6%	3.7%	3.1%
Education & Health Services	0.8%	-1.6%	0.3%	1.8%	1.6%	1.0%
Leisure & Hospitality Services	6.5%	-9.1%	2.6%	3.1%	2.6%	1.4%
Other Services	4.0%	-0.7%	-1.3%	2.7%	2.3%	1.4%
Government	1.2%	1.3%	-2.5%	0.1%	0.6%	0.9%
	2022	**2023**	**2024**	**2025**	**2026**	**2027**
Personal Income ($ million)	79,305	74,702	74,497	77,712	82,635	87,366
Wages & Salaries	37,035	34,610	34,082	35,316	37,704	40,037
Supplements to Wages & Salaries	8,936	8,661	8,663	8,995	9,571	10,133
Nonfarm Proprietors' Income	5,961	6,114	6,269	6,592	7,078	7,526
Farm Proprietors' Income	142	28	9	9	9	10
Dividends, Interest, & Rent	13,234	11,526	10,668	11,166	12,041	12,793
Dividends	3,983	3,389	3,051	3,406	3,793	3,979
Interest	5,783	5,544	5,185	5,181	5,455	5,949
Rent	3,467	2,593	2,432	2,579	2,793	2,866
Personal Current Transfer Receipts	19,010	18,463	19,388	20,389	21,307	22,257
Less: Contributions for Social Ins.	6,325	5,899	5,754	5,965	6,360	6,751
Adjustment for Residence	1,312	1,200	1,170	1,210	1,287	1,361
Personal Income (Annual Change)	1.7%	-5.8%	-0.3%	4.3%	6.3%	5.7%
Wages & Salaries	6.5%	-6.5%	-1.5%	3.6%	6.8%	6.2%
Supplements to Wages & Salaries	6.5%	-3.1%	0.0%	3.8%	6.4%	5.9%
Nonfarm Proprietors' Income	8.5%	2.6%	2.5%	5.2%	7.4%	6.3%
Farm Proprietors' Income	-31.6%	-80.5%	-65.7%	-5.8%	1.8%	6.3%
Dividends, Interest, & Rent	4.6%	-12.9%	-7.4%	4.7%	7.8%	6.2%
Dividends	-3.2%	0.5%	4.4%	5.8%	5.1%	5.1%
Interest	-5.2%	0.9%	6.5%	7.1%	5.8%	5.8%
Rent	-1.6%	0.2%	3.3%	3.1%	2.3%	2.3%
Personal Current Transfer Receipts	-10.0%	-2.9%	5.0%	5.2%	4.5%	4.5%
Less: Contributions for Social Ins.	6.4%	-6.7%	-2.5%	3.7%	6.6%	6.1%
Adjustment for Residence	4.0%	-8.6%	-2.5%	3.4%	6.3%	5.8%