



# **Revenue Forecasting Committee** **November 2014 Forecast**

## **Appendix E**

### **Economic Background Information**

#### **Table of Contents**

Consensus Economic Forecasting Commission Report .....	1
Comparison of November 2013 and February 2014 Economic Variables .....	9
Assumptions Used by Tax Models .....	10
Economic Variables Used in Forecast .....	11

**Report of the  
CONSENSUS ECONOMIC FORECASTING COMMISSION  
November 1, 2014**

**Commissioners**

James A. Clair, Chair  
*Vice President*  
*Goold Health Systems, an Emdeon Company*

Gradon R. Haehnel  
*Manager of Engineering & Asset Management*  
*Emera Maine*

Joel D. Johnson  
*Economist*  
*Maine Center for Economic Policy*

J. Scott Moody  
*Chief Executive Officer*  
*Maine Heritage Policy Center*

Eric N. Stinneford  
*Vice President – Controller, Treasurer & Clerk*  
*Central Maine Power*

## Summary

The Maine Consensus Economic Forecasting Commission (CEFC) convened on October 24, 2014, to review and revise the forecast through 2017 and newly forecast 2018 and 2019. This report provides a summary of the Commission's findings.

The Maine and U.S. economies continued to show signs of improvement since the CEFC met in January 2014.

Maine's Gross Domestic Product for 2013 was 0.9% higher than 2012, with all of the growth coming from private industry, but total GDP growth for the state was half the national growth of 1.8%. Personal income in Maine grew 3.4% year-over-year in the first half of 2014, while wage and salary income, which makes up around half of total personal income, grew 2.7% over the same period. In the second quarter of 2014, the debt-to-income level for Maine businesses and households rose to its highest point since the first quarter of 2008. The Consumer Price Index was 1.7% higher in August 2014 than it was in August 2013.

Nationwide, consumer sentiment in September 2014 was 9.2% higher than one year ago while small business optimism increased 1.5% over the previous year's level.

The price of crude oil decreased 5.8% in the third quarter of 2014 to around \$103 per barrel. Heating oil prices were considerably lower at the start of the current heating season compared to the past three years and gasoline prices have also declined recently. The number of new automobile titles issued by the Maine Bureau of Motor Vehicles increased 7.0% in FY 2013 compared to FY 2012, while the number of used auto titles decreased just 0.3%.

Existing single-family home sales in Maine were up 6.6% in September 2014 compared to September 2013 and housing permits for the September 2013-August 2014 year were 6.6% higher than the previous 12-month period. The median home price in the Portland Metropolitan Statistical Area (York, Cumberland, and Sagadahoc Counties) decreased 2.6% year-over-year in the second quarter of 2014. Mortgage delinquency rates in Maine have been declining but at a slower pace than nationally. The foreclosure rate in Maine was 0.57% in the second quarter of 2014 and remained above the national rate for an eighth straight quarter.

Historical employment and income data have both been revised since the CEFC last met. These revisions contributed to adjustments in the forecast. Additionally, the Commission decided to largely follow an alternative scenario ("LowPop") created by the Office of Policy and Management, which provides staff support to the CEFC. This alternative scenario is based on the Moody's Analytics baseline with adjustments that lowered the population and employment growth forecasts. These adjustments are a result of the consensus that the national level forecasts are based on overly optimistic population projections for the state of Maine, causing employment forecasts, among other things, to grow at an unattainable rate.

During the meeting, the Commission discussed the alternative scenario and decided to target an employment level of around 607,700 for 2014, based on current data and an assumption that year-to-date figures will be revised downward during the March 2015 benchmarking process. This is a slightly lower 2014 employment growth forecast than the LowPop scenario. The growth rates for the remaining years were taken from the LowPop scenario.

This results in an employment growth forecast that was revised upward from the previous CEFC forecast for 2014 and 2015, while 2016 and 2017 were each revised downward by 0.1 percentage point. Total personal income growth was revised downward for 2014-2017, while wage and salary income growth was revised downward in 2014 but upward in 2015-2017. Both of these forecasts were taken from the LowPop scenario. CPI was revised upward for 2014-2017 and matches the Moody's Baseline forecast for consistency with the LowPop scenario.

The table below provides the forecast's major indicators.

Calendar Years	2013	2014	2015	2016	2017	2018	2019
<b>Wage &amp; Salary Employment (Annual Percentage Change)</b>							
CEFC Forecast 02/2014	0.5	0.7	0.7	0.7	0.5		
CEFC Forecast 11/2014	0.6	1.0	0.9	0.6	0.4	0.1	0.1
<b>Personal Income (Annual Percentage Change)</b>							
CEFC Forecast 02/2014	2.3	4.3	3.7	4.0	4.2		
CEFC Forecast 11/2014	2.6	3.3	3.5	3.7	3.9	3.4	3.1
<b>Wage and Salary Income (Annual Percentage Change)</b>							
CEFC Forecast 02/2014	2.4	3.4	3.4	3.4	3.4		
CEFC Forecast 11/2014	2.2	2.9	3.9	4.0	3.6	3.4	3.0
<b>CPI (Annual Percentage Change)</b>							
CEFC Forecast 02/2014	1.5	1.6	1.7	1.9	1.9		
CEFC Forecast 11/2014	1.5	1.8	2.1	2.4	2.8	2.9	2.6

Prior to the forecasting meeting, the CEFC held a data gathering session during which they heard from a variety of Maine industry associations. The presenters included the Maine Bankers Association, Maine Hospital Association, Manufacturers Association of Maine, Maine Automobile Dealers Association, Maine Medical Association, and the Maine Energy Marketers Association. Maine Association of REALTORS also provided written testimony. The summary of this data gathering session is available in a separate report. Overall, these business perspectives helped confirm the CEFC's subsequent findings that Maine's economy continues to see slow growth with considerable challenges posed by the state's aging population and lack of population growth.

In deliberations leading to consensus, the CEFC considered information presented by several state agencies, including the Maine Department of Labor, Maine Revenue Services, and the Office of Policy and Management. The following sections summarize these reports.

### Office of Policy and Management

In 2013, Maine's real Gross Domestic Product was \$51.2 billion, with \$44.1 billion coming from private industries and \$7.1 billion from government (federal, state, and local). All of Maine's recent growth in GDP has come from private industry. Maine's total real GDP increased 0.9% from 2012 to 2013, the second year in a row of GDP growth. However, this was half the rate of national GDP growth, which was 1.8% from 2012 to 2013.

According to preliminary estimates from the U.S. Bureau of Economic Analysis, total personal income grew 3.4% year-over-year and wage and salary income grew 2.3% year-over-year in the first half of 2014. Total personal income for the second half of 2014 would need to be 1.7%

higher than the first half of 2014 to hit the CEFC's annual forecast for 2014. Wage and salary disbursements would also need to be 1.3% higher. Wage and salary disbursements, which are the largest component of personal income, averaged around \$25 billion in the first half of 2014 (seasonally adjusted at annual rates). Total personal income averaged around \$56 billion. Maine's debt to income ratio was 24.0% in the second quarter of 2014. The ratio is at its highest point since the first quarter of 2008.

The Consumer Price Index (CPI) rose 1.7% from August 2013 to August 2014. Core inflation, which excludes food and energy prices, also rose 1.7% over that same period. The Chained Consumer Price Index (Chained CPI) rose 1.6% from August 2013 to August 2014. Core inflation rose 1.5% over the same period. Chained CPI allows for substitutions in the basket of goods and services being measured.

In September 2014, the survey-based University of Michigan Consumer Sentiment Index increased 2.5% month-over-month and was up 9.2% from a year ago. The survey-based National Federation of Independent Business (NFIB) Small Business Optimism Index decreased 0.8% from the previous month but was up 1.5% from September 2013.

The price of Brent crude oil was \$103.42 per barrel in the third quarter of 2014, a decrease of 5.8% from the second quarter of 2014 and a 5.7% decrease from the third quarter of 2013. The price of heating oil in Maine began declining near the end of the 2013-2014 heating season and has continued to drop, starting the 2014-2015 heating season at \$3.27/gallon. The price of heating oil in Maine had been fairly steady over the past three heating seasons, averaging around \$3.75/gallon. The price of gasoline in New England on October 13, 2014 averaged \$3.44, a decrease of \$0.06 per gallon over the previous week and \$0.16 lower than one year ago. The price of gasoline has ranged between approximately \$3.50 and \$4.00 per gallon since March of 2011.

The number of new automobile titles issued by the Maine Bureau of Motor Vehicles increased 7.0% from FY 2012 to FY 2013, while the number of used automobile titles issued decreased 0.3%. A major registrant re-titled a very large fleet of trailers, leading to the substantial increase in trailer titles.

Single family existing-home sales in Maine were up 6.6% in September 2014 compared to September 2013. Home sales in Maine have continued to grow year-over-year in recent months while sales in the U.S. have been declining. Average monthly single unit housing permits in Maine in the 12-month period from September 2013 through August 2014 were 6.6% higher than in the previous 12-month period. The median home price in the Portland – South Portland – Biddeford metropolitan area decreased 2.6% year-over-year in the second quarter of 2014. The median home price in the second quarter of 2014 was \$227,400. The share of mortgages in Maine that are delinquent 30 days or more was 6.7% in the second quarter of 2014. The rate of delinquencies in Maine has been above the U.S. rate for eight straight quarters now. Maine's foreclosure rate was 0.57% in the second quarter of 2014, up slightly from the previous quarter. Maine's foreclosure rate has been above the U.S. rate for eight straight quarters now.

Full background materials are available at:  
<http://www.maine.gov/economist/forecasts/index.shtml>

## **Maine Department of Labor**

At first glance, metrics from the monthly household workforce survey appear to point to deteriorating conditions in recent months. The unemployment rate is up to 5.8% in September from lows of 5.5% in the summer and the employment to population and labor force participation rates are down nearly a full percentage point since spring. A closer look at what underlies these metrics indicates that preliminary estimates are not very accurate, tending to move in a direction for several months before changing course. This is due to some smoothing techniques the U.S. Bureau of Labor Statistics uses to prevent large monthly changes. Annual revisions to these estimates tend to remove those undulations. There is little reason to believe conditions are deteriorating.

Estimates from the larger employer payroll jobs survey indicate continued growth. For September the program estimated there were 611,800 nonfarm jobs, up 9,400 over the year, which was the largest 12 month increase since 2001. The lagging complete job count from employer quarterly unemployment insurance tax filings that is used to replace monthly estimates when they are revised in the spring indicates that jobs estimates were slightly high through June, mostly in the retail trade, financial activities, healthcare, and hospitality sectors.

Maine's advancing age structure continues to be a significant concern for workforce growth. In the short period between 2010 and 2013 the total population was unchanged, but the number of people age 65 to 74 increased 21,000 and the number age 55 to 64 increased 12,000. Some in these groups have already retired or moved to more limited work arrangements. Many others will do so over the next several years. Based on the size of today's labor force, an unemployment rate reduction to 4.5% would increase employment about 8,000. As the economy continues to improve and unemployment declines, the question is what the balance will be between job gains from lower unemployment and job reductions from retirements.

The presentation is available at [www.maine.gov/labor/cwri/publications/pdf/CEFC\\_October\\_2014.pdf](http://www.maine.gov/labor/cwri/publications/pdf/CEFC_October_2014.pdf).

## **Maine Revenue Services**

Total general fund revenues for the month of September 2014 were over budget by \$5.3 million and over budget for the first quarter of FY15 by \$9.9 million (1.5%). Overall, revenues are running very close to budget. The individual income tax was under budget by \$6.9 million (2.2%), with both withholding and estimated payments below budget. The corporate income tax was over budget by \$3.8 million (9.3%) year to date. The estate tax was over budget by \$6.1 million (281.4%), but this is likely just catching up from last fiscal year.

The sales and use tax line was just 0.2% under budget for the fiscal year to date and \$47,438 over budget for the month of September 2014. September receipts represent August sales and the peak of the summer tourism season. Year-over-year taxable sales growth in August was 3.1%, and the 12-month moving total ending in August 2014 was also 3.1% higher than the previous year. Auto/transportation sales continue to bolster taxable sales growth, with August coming in 5.9% higher than a year ago. Looking at a three-month average, both restaurant and lodging sales were up over the previous year (4.2% and 3.8%, respectively), indicating a decent summer tourism season.

The highway fund was \$2.4 million over budget fiscal year-to-date, with a 3.2% positive variance in fuel tax collections and a 7.1% variance in motor vehicle registrations and fees driving the fiscal year surplus. In addition, fuel taxes were up 0.4% for the first quarter of FY15 compared to FY14, which is the first growth in fuel taxes in a long time. This is likely helped by a decline in prices at the pump.

Overall, revenues seem to be on track. One of the observations made was that at the recent national conference, there is no general pattern to what states are seeing, even region by region. States are simply all over the place with their revenue trends.

### **Macroeconomic Assumptions**

Two different baseline economic forecasts were examined at the meeting: the Moody's Analytics baseline scenario and the IHS Economics baseline scenario, both for October 2014. Additionally, OPM provided an alternative scenario based on assumptions of low population growth that limit employment growth (LowPop). Each forecast was based on a different set of national macroeconomic assumptions. The LowPop scenario was based on the Moody's Analytics baseline scenario with population projections taken from OPM's *Population Outlook to 2030* (<http://www.maine.gov/economist/projections/index.shtml>), adjusted for recent Census Bureau estimates, and industry sector employment growth adjustments by OPM staff. These forecasts were then compared to the CEFC's January 2014 forecast. Overall, the CEFC felt the LowPop assumptions and forecast better reflected their current views of the economy. The key national macroeconomic assumptions from Moody's Analytics are outlined below.

- The Fed will end bond-buying in October 2014. Long-term rates will rise gradually with ten-year yields settling around 4.75% by 2017.
- The Bipartisan Budget Act of late 2013 will hold and prevent any government shutdown in the next year or so. The budget deficit will settle around \$500 billion in the next several years. The end of the emergency unemployment insurance program is causing fiscal drag of about 0.15 percentage point this year, mostly in the first quarter.
- West Texas Intermediate crude oil prices have declined recently due to weaker global demand and increased production from the U.S. and Canada. Prices are expected to rise to around \$100 per barrel by early 2015 and will trend higher in the long run at a pace slightly higher than overall inflation.

### **Consensus Forecast**

The CEFC members continued to believe that the national forecasts are likely overly optimistic in their population and employment projections for the state. The previous forecast lowered employment growth to reach a level more in line with current population trends and historical employment to population ratios. The new forecast relies on the LowPop scenario, designed to address these concerns. This forecast targets employment of 607,700 in 2014 and reaches 620,600 in 2019.

Personal income growth and the components of personal income were adopted from the LowPop scenario. Wage and salary income growth was revised downward for 2014 and upward for 2015-

2017. Supplements to wages and salaries; dividends, interest, and rent; and transfer receipts were revised downward for 2014-2017. Nonfarm proprietors' income was revised upward for 2014-2017. The overall result for total personal income was a 1.0 percentage point revision downward for 2014, 0.2 percentage points downward in 2015, and 0.3 downward in 2016 and 2017. Growth for 2018 and 2019 was forecast at 3.4% and 3.1%, respectively.

The CEFC took its forecast for inflation, as measured by the Consumer Price Index, from the Moody's Analytics baseline for the sake of consistency with the LowPop scenario. The inflation forecast calls for 1.8% growth in 2014 followed by stronger growth between 2.1% in 2015 increasing to 2.9% in 2018 and then 2.6% in 2019. The forecast for corporate profits also followed the Moody's Analytics baseline with growth over 9% in 2014 and 2015 before slowing to 6.0% in 2016 with 1.4% in 2017 and 1.3% in 2018. 2019 rebounds slightly to 4.2%.

In general, primary source of concern for the CEFC continues to be Maine's demographic situation, with an aging population and little to no population growth.

The following page provides the full forecast.



**Maine Consensus Economic Forecasting Commission**

November 2014 Forecast	Forecast						
	History						
	2013	2014	2015	2016	2017	2018	2019
CPI-U* (Annual Change)	1.5%	1.8%	2.1%	2.4%	2.8%	2.9%	2.6%
CPI for Energy Prices** (Annual Change)	-0.7%	1.5%	2.9%	3.0%	3.9%	3.6%	2.9%
CPI for New Vehicles** (Annual Change)	1.1%	0.3%	1.0%	0.9%	0.5%	0.2%	0.0%
New Vehicle Registrations** (Annual Change)	8.4%	9.6%	-9.6%	-1.1%	-0.7%	1.3%	2.3%
Personal Savings Rate**	4.9%	4.2%	2.9%	2.5%	1.9%	1.8%	1.4%
Maine Unemployment Rate**	6.7%	5.7%	5.4%	5.3%	5.2%	5.1%	5.1%
3-Month Treasury Bill Rate**	0.06%	0.04%	0.22%	1.78%	2.95%	3.34%	3.45%
10-Year Treasury Note Rate**	2.35%	2.66%	3.41%	4.48%	4.74%	4.52%	4.53%
Before-Tax Corporate Profits* (Annual Change)	4.6%	9.3%	9.9%	6.0%	1.4%	1.3%	4.2%
Maine Wage & Salary Employment* (thousands)	601.7	607.7	613.2	616.9	619.4	620.0	620.6
Natural Resources	2.5	2.5	2.6	2.6	2.6	2.6	2.6
Construction	25.4	26.0	26.1	25.8	25.8	26.1	26.3
Manufacturing	50.5	50.5	50.3	50.2	50.0	49.5	49.1
Trade/Trans./Public Utils.	118.1	119.6	120.8	121.7	121.8	121.5	121.4
Information	7.7	7.4	7.4	7.3	7.3	7.3	7.3
Financial Activities	31.8	32.1	32.4	32.3	32.2	31.7	31.4
Prof. & Business Services	59.9	61.9	64.1	65.6	66.4	66.6	66.8
Education & Health Services	122.2	123.6	125.4	127.2	128.7	129.6	130.8
Leisure & Hospitality Services	62.6	63.8	64.5	64.5	64.8	65.1	65.2
Other Services	20.6	20.6	20.6	20.6	20.5	20.3	20.2
Government	100.4	99.6	99.1	99.1	99.2	99.6	99.7
Agricultural Employment	17.0	17.0	17.0	17.0	17.0	17.0	17.0
Maine Wage & Salary Employment* (Annual Change)	0.6%	1.0%	0.9%	0.6%	0.4%	0.1%	0.1%
Natural Resources	-2.0%	3.5%	2.8%	0.0%	0.1%	-0.3%	-0.4%
Construction	0.8%	2.1%	0.4%	-1.2%	0.0%	1.4%	0.6%
Manufacturing	-0.3%	0.0%	-0.3%	-0.3%	-0.4%	-1.0%	-0.8%
Trade/Trans./Public Utils.	0.8%	1.3%	1.0%	0.8%	0.0%	-0.2%	-0.1%
Information	-1.5%	-3.5%	-0.3%	-0.3%	-0.2%	-0.2%	0.4%
Financial Activities	1.2%	1.0%	0.7%	-0.1%	-0.4%	-1.7%	-1.0%
Prof. & Business Services	2.2%	3.3%	3.6%	2.2%	1.3%	0.3%	0.3%
Education & Health Services	0.4%	1.1%	1.5%	1.4%	1.2%	0.7%	0.9%
Leisure & Hospitality Services	1.2%	2.0%	1.1%	0.0%	0.5%	0.4%	0.1%
Other Services	2.7%	0.0%	-0.1%	-0.2%	-0.4%	-0.7%	-0.8%
Government	-0.5%	-0.8%	-0.5%	0.0%	0.1%	0.4%	0.1%
Agricultural Employment	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	2013	2014	2015	2016	2017	2018	2019
Personal Income* (\$ million)	54,359	56,167	58,159	60,286	62,622	64,747	66,759
Wages & Salaries*	24,848	25,571	26,569	27,624	28,615	29,594	30,486
Supplements to Wages & Salaries*	6,357	6,465	6,609	6,791	6,987	7,187	7,385
Nonfarm Proprietors' Income*	4,043	4,324	4,612	4,888	5,137	5,361	5,561
Farm Proprietors' Income**	97	114	127	134	141	149	156
Dividends, Interest, & Rent*	9,477	9,738	9,988	10,474	11,097	11,500	11,824
Dividends	2,661	2,754	2,820	2,870	2,985	3,105	3,252
Interest	4,327	4,356	4,531	5,017	5,526	5,830	6,030
Rent	2,489	2,629	2,638	2,591	2,586	2,564	2,542
Personal Current Transfer Receipts*	12,521	13,044	13,488	13,765	14,177	14,630	15,149
Less: Contributions for Social Ins.**	4,147	4,305	4,472	4,647	4,810	4,972	5,120
Adjustment for Residence**	1,163	1,217	1,238	1,257	1,277	1,298	1,318
Personal Income* (Annual Change)	2.6%	3.3%	3.5%	3.7%	3.9%	3.4%	3.1%
Wages & Salaries*	2.2%	2.9%	3.9%	4.0%	3.6%	3.4%	3.0%
Supplements to Wages & Salaries*	3.4%	1.7%	2.2%	2.8%	2.9%	2.9%	2.8%
Nonfarm Proprietors' Income*	5.9%	6.9%	6.7%	6.0%	5.1%	4.4%	3.7%
Farm Proprietors' Income**	18.8%	17.7%	11.4%	5.5%	5.2%	5.7%	4.7%
Dividends, Interest, & Rent*	2.4%	2.8%	2.6%	4.9%	5.9%	3.6%	2.8%
Dividends	-0.7%	3.5%	2.4%	1.8%	4.0%	4.0%	4.7%
Interest	-0.5%	0.7%	4.0%	10.7%	10.1%	5.5%	3.4%
Rent	11.6%	5.7%	0.3%	-1.8%	-0.2%	-0.8%	-0.9%
Personal Current Transfer Receipts*	6.3%	4.2%	3.4%	2.1%	3.0%	3.2%	3.6%
Less: Contributions for Social Ins.**	16.0%	3.8%	3.9%	3.9%	3.5%	3.4%	3.0%
Adjustment for Residence**	2.4%	4.6%	1.7%	1.5%	1.6%	1.6%	1.5%

\*CEFC Forecast

\*\*From OPM Low Pop Scenario and Moody's Analytics Baseline, Oct. 2014

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

## Consensus Economic Forecasting Commission

### Comparison of February 2014 and November 2014 Economic Forecasts

Calendar Years	2014	2015	2016	2017	2018	2019
<b>• Wage &amp; Salary Employment (Annual Percentage Change)</b>						
> Consensus 2/2014	0.7%	0.7%	0.7%	0.5%		
> Consensus 11/2014	1.0%	0.9%	0.6%	0.4%	0.1%	0.1%
Difference	0.3%	0.2%	-0.1%	-0.1%		
<b>• Personal Income (Annual Percentage Change)</b>						
> Consensus 2/2014	4.3%	3.7%	4.0%	4.2%		
> Consensus 11/2014	3.3%	3.5%	3.7%	3.9%	3.4%	3.1%
Difference	-1.0%	-0.2%	-0.3%	-0.3%		
<b>Major Components of Personal Income</b>						
Wage and Salary Disbursements						
> Consensus 2/2014	3.4%	3.4%	3.4%	3.4%		
> Consensus 11/2014	2.9%	3.9%	4.0%	3.6%	3.4%	3.0%
Difference	-0.5%	0.5%	0.6%	0.2%		
Supplements to Wages and Salaries						
> Consensus 2/2014	3.5%	3.6%	3.7%	3.9%		
> Consensus 11/2014	1.7%	2.2%	2.8%	2.9%	2.9%	2.8%
Difference	-1.8%	-1.4%	-0.9%	-1.0%		
Non-Farm Proprietors' Income						
> Consensus 2/2014	5.3%	4.9%	4.5%	3.3%		
> Consensus 11/2014	6.9%	6.7%	6.0%	5.1%	4.4%	3.7%
Difference	1.6%	1.8%	1.5%	1.8%		
Dividends, Interest and Rent						
> Consensus 2/2014	7.0%	5.2%	5.6%	8.0%		
> Consensus 11/2014	2.8%	2.6%	4.9%	5.9%	3.6%	2.8%
Difference	-4.2%	-2.6%	-0.7%	-2.1%		
Transfer Payments						
> Consensus 2/2014	4.8%	4.0%	4.6%	3.8%		
> Consensus 11/2014	4.2%	3.4%	2.1%	3.0%	3.2%	3.6%
Difference	-0.6%	-0.6%	-2.5%	-0.8%		
<b>• Consumer Price Index (Annual Percentage Change)</b>						
> Consensus 2/2014	1.6%	1.7%	1.9%	1.9%		
> Consensus 11/2014	1.8%	2.1%	2.4%	2.8%	2.9%	2.6%
Difference	0.2%	0.4%	0.5%	0.9%		
<b>• Before Tax Corporate Profits (Annual Percentage Change)</b>						
> Consensus 2/2014	14.2%	0.8%	0.1%	-1.0%		
> Consensus 11/2014	9.3%	9.9%	6.0%	1.4%	1.3%	4.2%
Difference	-4.9%	9.1%	5.9%	2.4%		

Prepared by the Office of Fiscal and Program Review

## **Assumptions Used in Sales & Excise Model**

- (1) Total Personal Income
- (2) Inflation (CPI-U)
- (3) Total Employment Growth
  - (a) Growth by Sector
- (4) Forecast of CPI for Energy Prices (Moody's Analytics – October 2014)
- (5) Forecast of new passenger car & light truck registrations in Maine (Moody's Analytics – October 2014)
- (6) Forecast of average price of new vehicle (Moody's Analytics – October 2014)
- (7) Forecast of Personal Savings Rate (Moody's Analytics – October 2014)

## **Assumptions Used in Individual Income Tax Model**

- (8) Total Personal Income
  - (a) Growth by Component
- (9) Inflation (CPI-U)
- (10) Total Employment Growth
- (11) Unemployment Rate
- (12) 3-Month Treasury Bill Rate
- (13) 10-Year Treasury Note Rate

## **Assumptions Used in Corporate Income Tax Model**

- (14) Inflation (CPI-U)
- (15) Total Employment Growth
  - (a) Growth by Sector
- (16) Forecast of Before-Tax Corporate Book Profits (Moody's Analytics – October 2014)

**Economic Variables Used in Revenue Forecast - Actuals 2009-13 & October, 2014 Moody's Analytics Forecast 2014-19**

	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>
Oil - Brent Crude (\$ per barrel)	62.47	80.26	110.83	111.71	108.72	105.53	108.41	110.73	115.95	120.43	123.16
Consumer Prices	-0.3	1.6	3.1	2.1	1.5	1.8	2.1	2.4	2.8	2.9	2.6
Fuel Oil & Other Fuels	-34.2%	17.8%	30.0%	2.3%	-1.6%	1.2%	-0.2%	1.0%	2.3%	2.0%	1.1%
Electricity	3.0%	0.2%	1.9%	0.0%	2.1%	3.7%	1.6%	2.3%	2.6%	2.7%	2.4%
Natural Gas	-22.0%	-2.0%	-2.8%	-9.6%	4.8%	10.0%	2.3%	2.3%	3.0%	2.9%	2.3%
New Motor Vehicles (%)	1.1	1.8	2.8	1.7	1.1	0.3	1.0	0.9	0.5	0.2	0.0
Motor Vehicle Fuels, Lubricants & Fluids	-26.9%	18.3%	26.1%	3.3%	-2.9%	-2.5%	3.7%	1.8%	3.4%	2.8%	1.7%
Saving Rate (%)	6.1	5.6	5.7	5.6	4.9	4.2	2.9	2.5	1.9	1.8	1.4
Maine New Passenger Car & Light Truck Registrations	44,908	45,559	46,812	51,989	56,368	61,993	56,724	56,474	55,655	56,224	57,608
Maine Population (Thous.)	1329.24	1327.43	1327.94	1328.49	1328.49	1329.68	1331.23	1333.37	1335.78	1337.40	1339.35
Population US, Millions	307.1	309.6	311.9	314.2	316.4	318.8	321.4	324.3	327.3	330.4	333.5
Maine Home Price, Existing Median (Thousands of Dollars)	\$ 161.021	\$ 172.114	\$ 166.719	\$ 168.844	\$ 175.888	\$ 174.258	\$ 178.411	\$ 184.223	\$ 190.892	\$ 198.532	\$ 207.467
Maine Home Sales, Existing Single-Family (Thousands)	16.21	16.74	16.54	18.90	21.21	20.09	22.90	23.24	20.73	20.61	21.32
Household Net Worth (Percent change)	-6.0	7.8	3.3	5.9	12.4	10.4	8.8	5.1	4.4	4.6	5.2
Before-Tax Corporate Profits	6.2	25.0	-1.8	18.2	4.7	9.3	9.9	6.0	1.4	1.3	4.2