

New Hampshire Fiscal Policy Institute

100 North Main Street, 4th Floor

Concord, New Hampshire 03301



January 25, 2024

To Chairman Gregory Hill and Honorable Members of the Legislative Administration Committee of the New Hampshire House of Representatives:

I am writing to share informational testimony, as NHFPI takes no position on currently pending legislation. This testimony represents a high-level overview of available research about current state revenue projection practices, and provides comparisons of estimated revenues to actual results. Thank you for your time.

COMPARISONS OF REVENUE ESTIMATING PROCESSES AMONG STATES

Revenue estimating processes vary considerably by state. Revenue forecasts might be produced by the executive branch, the legislative branch, or groups of academics or economic consultants.¹

Several researchers have sought to evaluate and compare revenue estimating processes, with significant attention paid to differences in practices among states during and after the Great Recession of 2007 to 2009, when states generally faced difficulty accurately forecasting revenues in a dynamic economic environment.²

Most research focuses on the steps in the revenue estimating process, such as who compiles the revenue estimates and which groups are included. For example, a National Association of State Budget Officers survey published in 2021 found that 28 states used a consensus forecasting method, creating binding estimates produced by a group that included legislative and executive branch officials; the survey description noted outside experts, such as a council of economic advisors, were often involved. New Hampshire was one of 12 states that had competing forecasts from the executive and legislative branches, while ten states gave sole responsibility for forecasting revenue to the executive branch.³ Research appears mixed on whether consensus forecasting methods provide more accurate forecasts; however, research more clearly indicates that combining separate forecasts does improve accuracy.⁴

In the 2021 survey, 18 states reported having a council of economic advisors. The survey also included analysis of functions performed by executive branch budget agencies, which incorporated the Departments of Revenue Administration and Administrative Services in

New Hampshire. The survey found that in 40 states, including New Hampshire, the executive branch budget office provided revenue estimates. In 37 states, not including New Hampshire, the budget office had a role in economic analysis, while in 19 states, also not including New Hampshire, the budget office assisted with demographic analysis.⁵

A detailed analysis from the Rockefeller Institute of Government at the State University of New York, published in 2011, provides more insight into the data available at the time that compared state revenue estimating processes. As this analysis summarizes, “[p]reviously published academic studies do not point to any single technical method as superior to others; although they generally have found that the use of quantitative techniques and formal statistical methods improve forecast accuracy, these studies tend to suffer from data limitations and difficulties in interpretation. Our findings are in line with that view, revealing that the methods and systems states use to estimate revenue are not significantly linked to the size of errors.” The report continues with discussion of different methods, saying “[a] number of factors can conspire to throw projections off. To start, most states use national economic data from firms such as Moody’s Analytics Inc., IHS Global Insight or Macroeconomic Advisers. If those source numbers turn out to be wrong, the state-level forecasts derived from them will be wrong, too.”⁶

This analysis included survey data from states that was collected in 2008 and offered more detail than the more recent surveys from the National Association of State Budget Officers. In 2008, New Hampshire was one of 27 states, of 40 responding, that reported using simple trend line analysis for revenue forecasting. However, New Hampshire was not one of the 27 states that used time series modeling, the 32 states that used linear regression modeling, the 16 states that used a simulation, or 14 states that used a private consultant.⁷

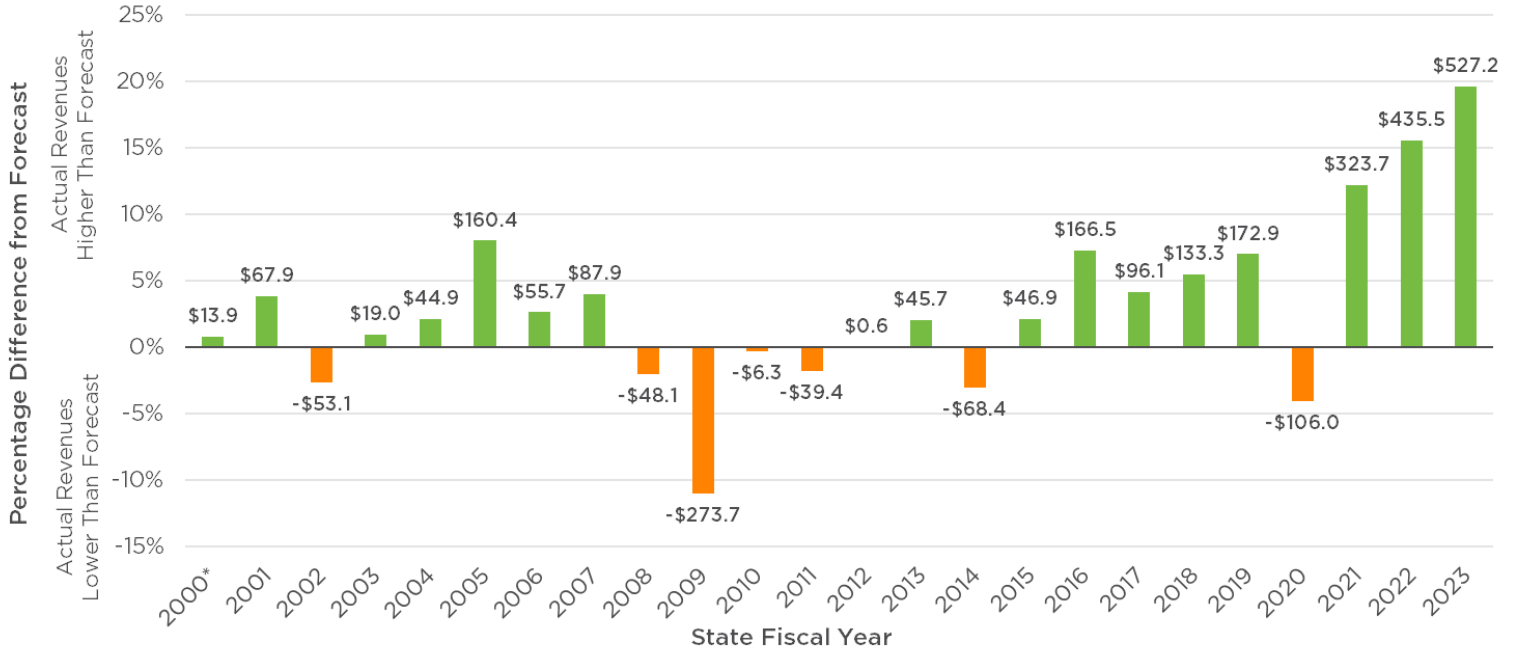
NEW HAMPSHIRE’S HISTORICAL REVENUE FORECASTING PERFORMANCE

Relative to actual revenues, New Hampshire’s revenue forecasts have projected, on average, somewhat less revenue than has been actually collected between State Fiscal Year (SFY) 2000 and SFY 2023. During this period, the revenue estimates adopted in the State Revenue Plan were \$75.1 million (3.0 percent) lower, on average, than the actual revenues throughout the year. That average includes both positive and negative numbers. The absolute value error, which measures the difference between the estimates and the actual revenues without regard to whether the direction is positive or negative, averaged \$124.7 million (5.1 percent).

Revenues are more difficult to predict in recessions and other dynamic economic conditions.⁸ The largest differences between New Hampshire’s estimates and actual revenues were during and following the Great Recession of 2007-2009 and the COVID-19 pandemic. Evaluating only SFYs 2000-2019 reduces the average error to \$31.1 million (1.5 percent) and the average absolute error to \$80.0 million (3.6 percent) per year.

NEW HAMPSHIRE STATE REVENUE FORECAST ERRORS

State Revenue Plans Relative to Actual Revenues, Unrestricted General and Education Trust Funds Revenues, Percentage Difference Shown in Bars, Dollar Differences Labeled in Millions



*Note: Incorporates Revenues Raised and Retained Locally Through Statewide Property Tax in Forecast.

Sources: New Hampshire State Revenue Plans, New Hampshire Annual Comprehensive Financial Reports, Year-End Monthly Revenue Focus Reports

nhfpi.org

As these errors represent unrestricted General and Education Trust Funds revenues, their aggregate State Budget impacts might be larger. For example, forecasting fewer General Fund revenues may reduce appropriations that unlock federal matching funds, such as Medicaid, making the budgetary impact larger than only the errors in estimates, depending on the eventual uses of these funds.

Please do not hesitate to contact me if you have any questions. I am happy to provide references and links to more information as requested.

~Phil Sletten, Research Director, New Hampshire Fiscal Policy Institute

psletten@nhfpi.org

¹ The Urban Institute, Revenue Forecasting Practices: How States Estimate Future Revenues, November 2017.

² New England Public Policy Center, Revenue Forecasting Processes in New England, April 2009.

³ National Association of State Budget Officers, Budget Processes in the States, Spring 2021, Table 6.

⁴ The Nelson A. Rockefeller Institute of Government, State Tax Revenue Forecasting Accuracy, September 2014.

⁵ National Association of State Budget Officers, Budget Processes in the States, Spring 2021, Tables 2 and 6.

⁶ The Nelson A. Rockefeller Institute of Government and the Pew Center on the States, States' Revenue Estimating: Cracks in the Crystal Ball, March 2011.

⁷ The Nelson A. Rockefeller Institute of Government and the Pew Center on the States, States' Revenue

Estimating: Cracks in the Crystal Ball, March 2011.

⁸ The Nelson A. Rockefeller Institute of Government, State Tax Revenue Forecasting Accuracy, September 2014.