

## NORTH DAKOTA LEGISLATIVE MANAGEMENT

## Minutes of the

**LEGISLATIVE REVENUE ADVISORY COMMITTEE**

Thursday, July 27, 2017  
Harvest Room, State Capitol  
Bismarck, North Dakota

Senator Ray Holmberg, Chairman, called the meeting to order at 10:00 a.m.

**Members present:** Senators Ray Holmberg, Dwight Cook, Joan Heckaman, Rich Wardner; Representatives Larry Bellew, Jeff Delzer

**Members absent:** Representatives Al Carlson, Corey Mock

**Others present:** Jim W. Smith, Director, Legislative Council  
Representative Jim Schmidt, member of the Legislative Management  
Representative Bob Martinson, Bismarck  
See [Appendix A](#) for additional persons present.

The Legislative Council staff reviewed the [Supplementary Rules of Operation and Procedure of the North Dakota Legislative Management](#).

Chairman Holmberg said the Legislative Assembly created a Legislative Revenue Advisory Committee to monitor state revenues and to review and analyze revenue forecasts. He said the Governor vetoed the section that created the committee, but the Legislative Management appointed a Legislative Revenue Advisory Committee with similar responsibilities. He said the committee's study will allow the Legislative Assembly to be more actively involved in the revenue forecasting process and will increase the transparency of the process through public meetings, which provide the opportunity for input from the public.

**BACKGROUND INFORMATION**

At the request of Chairman Holmberg, the Legislative Council staff presented a memorandum entitled [State Revenues and State Revenue Forecasts Study - Background Memorandum](#). The Legislative Council staff said the memorandum provides an overview of other revenue-related studies and the revenue forecasting process. He said the 2015-17 biennium revenue forecasts were adjusted during the 2015 legislative session in February 2016, and during the August 2016 special legislative session, due to significant decreases in oil activity and general fund revenue collections.

The Legislative Council staff presented a memorandum entitled [General Fund Revenue Trends](#). He said the memorandum provides information on ongoing general fund revenue for the 1995-97 biennium through the 2017-19 biennium forecast, including a comparison of actual and forecasted collections and changes in the major sources of revenue. He said the memorandum also includes information on commodity prices, major economic indices, and North Dakota per capita personal income.

The Legislative Council staff distributed a report ([Appendix B](#)) published by the Center on Budget and Policy Priorities regarding state revenue forecasting. He said the report identifies five best practices for revenue forecasting, of which two are utilized in North Dakota according to the report.

**REVENUE FORECASTING PROCESS****Office of Management and Budget**

Ms. Pam Sharp, Director, Office of Management and Budget, presented information ([Appendix C](#)) regarding 2015-17 biennium general fund revenue collections, the state's revenue forecasting process, and the status of a request for proposal related to state revenue forecasting. She said general fund revenue collections for June 2017 exceeded the March 2017 revised revenue forecast, resulting in total 2015-17 biennium collections of \$4,121 million or approximately \$28 million more than forecasted. She said the Office of Management and Budget in cooperation with the Tax Department, an economic consultant, and an advisory council on revenue forecasting, develop three forecasts each biennium. She said the Office of Management and Budget develops the forecasts, including the monthly cashflows, for the insurance premium tax, the gaming tax, mineral leasing fees, departmental

collections, interest income, and transfers from other state funds. She said the office is in the process of preparing a request for proposal for an economic consultant with selection of a consultant scheduled for October 2017.

### **Tax Department**

Ms. Kathryn Strombeck, Supervisor/Research Analyst, Research and Communications, Tax Department, presented information ([Appendix D](#)) regarding the Tax Department's process to forecast general fund tax revenues. She said during the development of the general fund revenue forecasts, the Tax Department provides updated historical tax base statistics to the economic consultant. She said the economic consultant uses economic modeling software to generate forecasted tax base statistics which are then provided to the department. She said the department applies the effective tax rates and other adjustments to the forecasted tax base statistics to develop the general fund tax revenue forecast. She said the tax base statistics include taxable sales and purchases, adjusted gross income, and oil price and production. She said the Tax Department develops the cashflow forecast for sales and use tax collections, motor vehicle excise tax collections, individual and corporate income tax collections, cigarette and tobacco tax collections, and wholesale liquor tax collections.

In response to a question from Representative Delzer, Ms. Strombeck said agricultural income is determined by self-identification on tax forms. She said agricultural income could include income from other sources, such as a spouse's part-time income from an administrative position, but the amounts are generally immaterial and do not have a significant impact on the agricultural income statistics.

In response to a question from Senator Cook, Ms. Strombeck said corporate income reflects some national trends, but primarily follows the trends of the agriculture and oil industries.

### **Bank of North Dakota**

Mr. Todd Steinwand, Chief Business Development Officer, Bank of North Dakota, presented information regarding the status of economic modeling software purchased by the Bank of North Dakota. He said the Bank purchased software from Regional Economic Models, Inc. (REMI) at a cost of \$136,000. He said ongoing maintenance costs for the software total \$28,000 per year. He said the software is designed to measure the total fiscal impact of proposed policy changes and would not be accurate for general revenue forecasting based on discussions with representatives of REMI. He said the Bank is in the process of contracting with a vendor to load the North Dakota data into the software with an estimated cost of \$30,000 to \$40,000. He said all of the costs will be paid from the Bank's appropriation. He said the software is anticipated to be operational in October 2017.

### **University of North Dakota**

Dr. David Flynn, Chair/Professor, Department of Economics and Finance, College of Business and Public Affairs, University of North Dakota, presented information ([Appendix E](#)) regarding revenue forecasting. He said key factors for effective forecasting include the frequency of the forecasts; involvement from legislators, agency staff, industry experts, and the public; awareness of any bias in the forecast; and the time horizon of the forecast. He said the forecasts should be based on high-quality, objective data reflecting the underlying economic activity of the tax base. He said economic models use either a structured approach, in which the specific relationships between the data and economic sectors are clearly defined, or an unstructured approach, in which any relationships from the data and economic sectors are inferred by the forecaster through additional statistical analysis. He said elements of the forecasting process used for the Minnesota state budget could be a model for forecasting in North Dakota. He said North Dakota's economic growth is unique because of economic ties to the fluctuations in commodity prices. He suggested the state's revenue forecast include projections for 2 or 3 bienniums beyond the next biennium to show long-term trends. He said North Dakota's population factors may be underestimated in economic models due to the constraints imposed by net migration and workforce availability.

### **North Dakota State University**

Mr. Andy Swenson, Extension Farm and Farm Resource Management Specialist, Department of Agribusiness and Applied Economics, North Dakota State University, presented information ([Appendix F](#)) regarding the economics of the agriculture industry. He said 80 percent of the agriculture industry in North Dakota is crop related. He said forecasting crop-related costs is more stable than forecasting crop revenues, which are weather dependent. He said the crop-related costs follow crop prices resulting in cost increases from 2009 to 2013 as prices increased. He said when the prices decreased in 2014, costs remained high but are beginning to decrease. He said government payments are an important source of income for farmers in North Dakota who are anticipated to receive approximately \$375 million from federal government programs in 2017. He said the Department of Agribusiness and Applied Economics develops price forecasts and crop budgets, which may be useful for the legislative revenue forecasting process.

Mr. Dean Bangsund, Research Scientist, Department of Agribusiness and Applied Economics, North Dakota State University, presented information ([Appendix G](#)) regarding the forecasting capabilities of the Department of Agribusiness and Applied Economics. He said the department uses dynamic modeling of economic output to model agricultural product demand and other scenarios and uses input-output analysis to measure the effects of economic changes. He said the department contracted with the Agricultural Products Utilization Commission to conduct a comprehensive study of the agriculture industry's economic impact in North Dakota. He said North Dakota State University provided revenue forecasting services to the state during the 1970s and 1980s using high, low, and trend estimates. He said tax revenue from the agriculture industry is derived primarily from farm operations, family living expenses, agricultural product processing, and transportation.

## **AGRICULTURE UPDATE**

### **North Dakota Wheat Commission**

Mr. Neal Fisher, Administrator, North Dakota Wheat Commission, presented information ([Appendix H](#)) regarding the status of the North Dakota agriculture economy, specifically the wheat industry. He said wheat prices have increased because of the drought. He said the drought is primarily affecting crops in the western area of the state. He said crop diversification may help alleviate some of the financial losses, particularly with strong demand for soybeans in China and for corn at domestic ethanol plants. He said farmers may sell inventory and other assets to cover financial obligations, including expenses and loan payments and may reduce farm and personal spending in response to lower income levels.

In response to a question from Representative Delzer, Mr. Swenson said an estimated 5 percent of farm loans are at risk for default.

### **North Dakota Stockmen's Association**

Ms. Julie Ellingson, Executive Vice President, North Dakota Stockmen's Association, presented information ([Appendix I](#)) regarding the status of the North Dakota agriculture economy, specifically the beef cattle industry. She said cattle marketings totaled \$894 million in calendar year 2016. She said the cattle inventory totaled 1.81 million as of January 1, 2017, but is anticipated to decrease because of drought conditions. She said the increased sale of cattle is anticipated to negatively impact ranching income for the next 2 years while the herds are replenished. She said several disaster-related programs are in effect, including cost-sharing from the State Water Commission for livestock water development, grazing and haying on Conservation Reserve Program lands, compensation through the federal Livestock Forage Program, and federal income tax provisions allowing producers to defer sales or postpone gains due to the weather-related emergency.

## **OIL AND GAS UPDATE**

### **Job Service North Dakota**

Ms. Syndey Sweep, Primary Researcher, Labor Market Information Center, Job Service North Dakota, presented information ([Appendix J](#)) regarding North Dakota's oil and gas economy, including employment and gross domestic product statistics. She said employment in the core oil-producing counties decreased by 17.8 percent from the fourth quarter of 2015 to the fourth quarter of 2016 compared to a decrease of 0.3 percent in the non-oil-producing counties. She said job openings in the core oil-producing counties have increased as the oil and gas industry has stabilized. She said approximately one resume is submitted for every two job openings in both the core oil-producing counties and in the non-oil-producing counties as of June 2017. She said the state's real gross domestic product peaked in the fourth quarter of 2014 with approximately 18 percent of the state's total gross domestic product directly related to the oil and gas industry. She said approximately 12 percent of the state's total gross domestic product was directly related to the oil and gas industry in the fourth quarter of 2016.

### **Department of Mineral Resources**

Mr. Bruce Hicks, Assistant Director, Oil and Gas Division, Department of Mineral Resources, Industrial Commission, presented information ([Appendix K](#)) regarding the current status of oil and gas activity in the state. He said approximately 13,900 wells are active in the state resulting in oil production of approximately 1 million barrels per day. He said the gas-to-oil ratio continues to increase as gas production increases, particularly in mature fields where reservoir pressures are starting to decrease. He said oil companies are researching enhanced oil recovery methods for use in the mature fields, but none of the pilot projects have been economically successful. He said a 1 percent increase in oil recovery is estimated to produce an additional 3 billion barrels of oil. He said the water-to-oil ratio is approximately 1.25 barrels of water produced for each barrel of oil. He said the ratio is anticipated to increase because the hydraulic fracturing process uses 10 times more water and proppant compared to 10 years earlier. He said additional infrastructure, including pipelines and disposal wells, will be needed to accommodate the increase in produced water.

### North Dakota Pipeline Authority

Mr. Justin Kringstad, Director, North Dakota Pipeline Authority, presented information ([Appendix L](#)) regarding oil price and oil production trends. He said the number of new oil wells drilled per month is anticipated to range from 60 to 85 during the 2017-19 biennium depending on the price of oil. He said average daily oil production could reach 2 million barrels per day by 2035 using existing technology. He said some analysts estimate oil production may be as high as 3 million barrels per day.

In response to a question from Senator Wardner, Mr. Kringstad said prior to the completion of the Dakota Access Pipeline, the price of a barrel of North Dakota oil was discounted from the West Texas Intermediate price by about \$6 to \$8 related to transportation costs. He said the completion of the pipeline is anticipated to reduced the discount by \$1 to \$2, resulting in a corresponding increase in proceeds received by producers when a barrel of North Dakota oil is sold.

In response to a question from Representative Delzer, Mr. Kringstad said companies are researching options for value-added natural gas processing solutions within the state, but the projects may be constrained by the economics of a low-price environment.

### OTHER

The committee discussed receiving economic data from a consultant pursuant to the committee's study of state revenues and state revenue forecasts.

**It was moved by Senator Wardner, seconded by Senator Cook, and carried on a roll call vote that the Legislative Council staff prepare a request for proposal to obtain economic data related to the state's revenue forecast.** Senators Holmberg, Cook, Heckaman, and Wardner and Representatives Delzer and Bellew voted "aye." No negative votes were cast.

No further business appearing, Chairman Holmberg adjourned the meeting at 4:05 p.m.

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Adam Mathiak  
Fiscal Analyst

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Allen H. Knudson  
Legislative Budget Analyst and Auditor

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