INFORMATION REGARDING THE REQUEST FOR PROPOSAL AND PROPOSAL RESPONSE - ECONOMIC FORECASTING DATA

BACKGROUND INFORMATION

At the July 27, 2017, meeting, the interim Legislative Revenue Advisory Committee discussed receiving economic data from a consultant pursuant to the committee's study of state revenue and state revenue forecasts. At the meeting, the committee directed the Legislative Council to prepare a request for proposal to obtain economic data.

REQUEST FOR PROPOSAL

On October 17, 2017, as directed by the committee, the Legislative Council issued a request for proposal for consultant services for economic forecasting data. The information provided by the consultant during the 2018-19 time period will be used for updating the 2017-19 biennium revenue forecast and developing the 2019-21 biennium revenue forecast. The information provided by the consultant must include the following:

- 1. General economic forecasting data related to the national economy, including:
 - a. Projected interest rates through calendar year 2021;
 - b. Projected West Texas Intermediate oil prices though calendar year 2021;
 - c. Recent trends and projections in the value of the US Dollar;
 - d. An outlook for major economic sectors through calendar year 2021 (short-term outlook);
 - e. An outlook for major economic sectors through calendar year 2025 (long-term outlook); and
 - f. Upside and downside risks to the national economy;
- 2. Detailed economic forecasting data specific to North Dakota's economy, including:
 - a. Recent trends in the state's major economic sectors or major industries since calendar year 2013;
 - b. Key economic assumptions, in particular, those assumptions related to the oil and gas industry and the agriculture industry;
 - c. Changes in the state's tax bases, reflecting actual and forecasted values by fiscal year or tax year as applicable to the tax type for the years 2013 through 2025, for the following:
 - (1) Taxable sales and purchases, including new farm machinery sales;
 - (2) Motor vehicle sales;
 - (3) Total personal income, including farm and nonfarm income; and
 - (4) Corporate income;

NOTE: The forecasted values should reflect a low scenario, a high scenario, and a most likely scenario.

- d. Projected agriculture-related commodity prices and production values through calendar year 2021;
- e. Projected North Dakota oil production levels through calendar year 2021;
- f. Projected population changes through calendar year 2021;

- g. Projected trends in job prospects or job demand through calendar year 2021; and
- h. Upside and downside risks to North Dakota's economy;
- 3. A qualitative analysis of general economic conditions and demographic trends related to the national economy, the Midwestern regional economy, and North Dakota's economy; and
- 4. Disclosure of the limitations of the organization's economic model and the risks related to forecasting error associated with the organization's economic forecasting data.

Proposals were due to the Legislative Council office by November 21, 2017.

SUMMARY OF REQUEST FOR PROPOSAL RESPONSE

Below is a summary of consultant background and proposal information gathered from the proposal submitted by IHS Markit.

Consultant Profile

- IHS is a leading source of information, insight and advisory services in the pivotal areas that shape today's business and policy landscape--economics, financial markets, energy, chemicals, technology, logistics and transportation, health care, geopolitical risk, sustainability, and supply chain management.
- IHS was founded in 1959 and became a publicly traded company on the New York Stock Exchange in 2005.
- Headquartered in Englewood, Colorado, IHS is committed to sustainable, profitable growth and employs approximately 9,000 people in 34 countries around
 the world.

Key Personnel

- Brendan O'Neil, Managing Director.
- James Diffley, Executive Director.
- Laura Hand, Associate Director.
- Dr. Yan Jiang, Associate Director.
- · Karl Kuykendall, Principal Economist.

Expertise and Experience

- IHS has been providing revenue estimates to the Senate Finance Committee for the state of New York for over 20 years. The revenue estimates include all state tax revenue sources, and the information is provided as a part of the state's annual budgeting process.
- IHS provides revenue estimates to the Office of Budget and Program Evaluation for the City of Philadelphia. The revenue estimates include modeling
 income, housing activity, and corporate profits and the impact of those revenue streams on city tax collections.
- IHS has been providing revenue estimates to the Department of Revenue for the state of Pennsylvania for over 20 years. The revenue estimates include state revenue sources, and the information is provided as a part of the state's annual budgeting process.

Forecasting Plan

- The proposal includes a timeline for the forecasting team to meet with the committee, collect tax revenue data, develop tax models, track the model estimates, prepare draft reports, and submit final reports.
- IHS proposes to utilize their existing United States macroeconomic and regional modeling infrastructure to provide general economic forecasting data. The models use demographic and financial inputs to determine the growth of the economy based on technical progress, labor force changes, and capital stock availability. The models provide both short-term and long-term forecasts.
- To forecast the tax revenues for North Dakota, IHS proposes to develop an econometric model for the total taxes received by the state. The equations will be calibrated for each tax type, and all standard statistical regression test statistics and results will be made available to the committee.
- For industry-specific economic forecasting data, IHS agricultural commodity forecasts include grain; livestock; oils, oilseed, and meals; dairy; sugar and sweeteners; and biofuels. IHS conducts analytical services for the energy industry and has insight into every oil and gas geological play in North America. IHS regularly updates forward-looking analysis of the Bakken Formation play to understand anticipated drilling activity, production forecasts, and economic and operational benchmarking.

Forecasting Scenarios

IHS models are able to provide baseline projections, optimistic scenarios, and pessimistic scenarios.

Risks of Forecasting Error

IHS recognizes that any model will exhibit some degree of forecasting error. The models are approximations of economic activity and may not account for
unforeseeable or unusual events that influence economic activity. IHS uses best practices in constructing models and can provide alternative forecasts to
reflect other economic scenarios that might reasonably occur.

Sample Forecast

• The proposal includes a sample of a state-level analysis for North Dakota, which includes employment, personal income, and state gross domestic product data as well as a qualitative analysis of North Dakota's economy.

Proposal Costs

- The proposal cost is \$49,292.
- The proposal offers to provide an optional update to the forecasting data in March 2019 for no additional cost.