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Date: August 26, 2019

To: Honorable Toni Preckwinkle, President Cook County Board of Commissioners
Honorable Cook County Board of Commissioners

From: Ammar M. Rizki, Chairman Independent Revenue Forecasting Commission
Dr. David F. Merriman, Member Independent Revenue Forecasting Commission
Dr. Paula R. Worthington, Member Independent Revenue Forecasting Commission
Karen Walker**,** Member Independent Revenue Forecasting Commission

Re: Independent Revenue Forecasting Commission Report

Revising the Cook County financial forecasting model to improve the accuracy and transparency of the forecasting process.

In October of 2018, the Cook County Board of Commissioners approved an ordinance (18-2073) establishing an Independent Revenue Forecasting Commission, which is intended to help the Board make informed budgetary decisions by evaluating an annual five-year forecast of Cook County revenues. The Commission is chaired by Ammar Rizki, the Cook County Chief Financial Officer, and consists of three members who were approved by the Cook County Board of Commissioners this spring: Dr. Paula Worthington from the University of Chicago Harris School of Public Policy; Dr. David Merriman from the University of Illinois at Chicago College of Urban Planning and Public Affairs; and Karen Walker, Vice President for Finance and Operations for the Catholic Theological Union, a former investment banker, former Chief Financial Officer of the Chicago Transit Authority and former Director of Financial Services at the Illinois Finance Authority.

The Commission met for the first time on July 2nd, 2019 in order to review their scope and responsibilities and hear a presentation explaining the assumptions and projections for the major tax revenue sources to the County over the next 5 years. They met again on July 31st in order to discuss the models and assumptions underpinning the preliminary revenues forecast and elaborate on their recommendations to Cook County.

Throughout this process, the Commission members praised the transparency and collaborative effort made by the Bureau of Finance. In the interest of continuous improvement, members offer the following recommendations to the President and the Board of Commissioners:

- Explicitly describe the economic models and processes driving the County's revenues;
- Improve internal consistency of models;

- Where appropriate, expand the use of monthly data and event-specific information to improve forecasts;
- Document current and historical tax policies of County;
- Develop capacity to prepare alternative revenue forecasts;
- Strengthen the practice of forecasting new revenues based on a systematic comparison of County to other jurisdictions in terms of population, income, tax policies and other relevant factors;
- Clarify that the scope of the Commission includes the ability to review all County revenues

1. *The Commission recommends consistently and transparently documenting the basic economic models and processes driving the County's revenues, which depend on numerous distinct factors*. For example, when calculating future fuel tax revenues, the County should develop a model which allows consideration of trends in vehicle ownership, fuel efficiency, and vehicle miles travelled. Similarly, sales tax revenues are driven by economic activity, inflation, and tax policy (of the County as well as other governments), which should all be clearly stated.

On a related note, the Commission also recommends improving transparency around the rationale for choosing certain methodologies over others. For example, in its preliminary revenues forecast, released in July of this year, a 20-year cumulative average growth rate (CAGR) was used to project fuel tax revenues decreasing annually at 0.5%, while using a 3-year CAGR would predict annualized decreases of more than twice that magnitude (1.2%), a figure more consistent with the Congressional Budget Office's national projection of 1.0% annual decreases for federal fuel taxes. The County should clearly justify why a 20-year CAGR was chosen over a 3 or 5-year rate.

2. *The Commission recommends that the County's models be improved by striving for consistency around source economic indicators and data*. Assumptions about revenues should be listed in one place and linked to any dependent calculations in order to achieve internal consistency, and all projections, assumptions and historical data should be fully sourced so that reviewers can clearly track the logic and inputs of the County's models.

3. *The Commission recommends the County continues to systematically take advantage of monthly revenues data and other operational details to improve its revenue forecasts.* The County should examine monthly data to clarify how and when tax revenues fluctuate over the course of the year; for example, sales tax revenues rise sharply in November and December due to the holiday season, and fuel tax revenues may also have a pronounced seasonal pattern. Similarly, tracking annual events such as Lollapalooza aids the County in its efforts to forecast County revenues from sales taxes, Amusement taxes, Hotel Accommodations taxes, license fees, and other specific revenues. These County revenues may display marked annual, seasonal, and/or monthly variation, and continued careful review of the underlying events and processes driving these revenues will aid the County in its efforts to improve its revenue forecasts.

4. *The Commission recommends that the County prepare clear and thorough documentation of current and historical County tax rates and other policies that drive County revenues*. Such

documentation, recommended by the Government Finance Officers Association and used in conjunction with similar materials from the State of Illinois and other relevant jurisdictions, would allow the County to better understand the interactions between real economic activity, policy choices of the County and other governments, tax bases and rates, and ultimately its own tax revenues.

5. *The Commission recommends that the County develop a process by which alternative forecasts are prepared and reviewed*. Exploring base case/best case/worst case scenarios will help the County consider the effects of unexpected changes on all dependent taxes. For example, sales tax and use tax both depend on the economy, so a worst-case scenario would illustrate how they would both be affected if overall economic activity decreased unexpectedly. The GFOA's "Recommended Budget Practices" contains some possible examples to consider on this point.

6. *The Commission recommends that the practice of forecasting new revenues based on a systematic comparison of County to other jurisdictions, in terms of population, income, tax policies and other relevant factors, be strengthened*. For example, when forecasting possible adult use cannabis excise tax revenues, the County should consider and review multiple third-party estimates and analyses when available and then "scale" any revenue estimates by County-specific factors such as adult population, average use of cannabis, geographic distribution of taxed businesses (dispensaries), medical marijuana users, alcohol sales, and/or other factors as available. Given the high degree of uncertainty about the future path of legal adult use cannabis sales in Illinois, the County should take a conservative approach, reflecting experience in other states where legal sales started very slowly but then grew sharply over the first few years of legalization. Further, the County should monitor any potential interactions between cannabis tax revenues and other tax revenues, since adult use cannabis sales may cause other "sin" taxes to rise or fall depending on whether consumers choose to supplement or substitute the taxed goods with cannabis.

7. *The Commission wishes to clarify that its scope of review includes all County revenue sources.* The ordinance establishing the Commission states that:

"The purpose of the Commission will be to analyze the five-year revenue forecast developed by the Chief Financial Officer on an annual basis and provide quarterly updates to the Board of Commissioners. The forecast will include but not be limited to: Sales and Use Taxes, Property Taxes, Cigarette Taxes, Fuel Taxes and other sources of County revenue."

For example, while the Cook County Health and Hospital System is overseen and run by an independent Board, the system generates over $2.5 billion in annual revenue (FY2020 forecast), comprising nearly half of the County's revenue. Further, while far smaller in magnitude, revenues from fees and licenses are not trivial, exceeding $200 million in the FY 2020 preliminary forecast, and those revenues, derived from fees collected by the Clerk of the Circuit Court, the County Treasurer, and other officials, also fall under the Commission's purview. While the Commission initially focused on Home Rule Taxes, due to time and resource constraints, it expects to review other County revenues more thoroughly in the future.

In the coming year, the Bureau of Finance will work with Commission members to incorporate these recommendations into their forecasting process in line with the County's budget cycle. This will help to improve the transparency and accuracy of the County's financial forecasting in order to better predict future changes to Cook County revenues and protect the County's ability to serve residents.