Cook County, Bureau of Finance

Forecasting Methodologies

Selected Revenues and Expenses

FY2025 Update

Prepared by the Office of the Chief Financial Officer

Contents

Introduction

Each quarter, the Office of the Chief Financial Officer (OCFO) develops a long-term financial forecast to evaluate potential fiscal challenges Cook County may face in the future. The OCFO utilizes a range of methodologies in forecasting county revenue sources as well as expenses. This document aims to provide an overview of the County's forecasting methodologies for several revenue sources in the General Fund as well as expenditure categories. Over time, the OCFO will work towards expanding the number of revenue sources covered in this report, as well as updating the report to reflect new or revised forecasting methods.

In October 2018, the Cook County Board of Commissioners approved an ordinance establishing the Independent Revenue Forecasting Commission (IRFC).[1] The IRFC is intended to help the Board of Commissioners make informed budgetary decisions by evaluating an annual five-year forecast of Cook County revenues. In FY2022, the IRFC recommended that the OCFO publish a document explaining General Fund revenue forecasting methods and data sources for assumptions for several key revenue sources.[2] This report provides this documentation, including explanations of statistical methodologies and qualitative assumptions used in the long-term forecasting.

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[1] Ordinance 18-2073, https://cook-county.legistar.com/LegislationDetail.aspx?ID=3336038&GUID=3819EFE7-B095-44FF-B866-A2542871A0ED

[2] Recommendations of the IRFC 2022, https://cook-county.legistar.com/View.ashx?M=AO&ID=122136&GUID=c78f5d65-0cb5-496c-99c7-fc713b232094&N=UmVjb21tZW5kYXRpb25zIG9mIHRoZSBJUkZDIDguMjkuMjAyMi5wZGY%3d

Revenues

For revenue sources administered or collected by county departments, the OCFO collaborates with each department to develop and review revenue projections used in the County's General Fund forecast. This process first involves performing statistical extrapolations and/or regression analyses on all revenue streams within the General Fund. The first stage also entails considering any recent or potential administrative changes and pending or approved legislation which may impact revenues, so they can be properly accounted for in the forecast. Next, the OCFO reviews the analyses conducted and shares selected forecasts on each revenue stream with appropriate departments. Upon receiving feedback from departments on a recommended forecast to utilize in the overall General Fund forecast, the OCFO evaluates each department's recommendation along with all supporting documentation and data provided by the departments reinforcing their recommendation.

The following provides an overview of the specific methodology used for several revenue sources.

Sales tax

The Cook County sales tax is projected to account for approximately 55.0%, or $1,207.1 million, of the County's total General Fund revenues in FY2025. As of January 1, 2016, the County's sales tax rate is 1.75%.

Sales tax components and methodology

The County's home rule sales tax is forecast using a multiple linear regression that forecasts the County's sales tax base using several economic indicators as well as other factors. The dependent variable of the regression model is the monthly sales tax base after adjusting for the state administrative fee and varying tax rates across the 11 years of the regression. The following variables are used as independent variables:

Seasonality

Retail sales tend to vary by month due to factors including the length of each month, weather, tourism, and holiday consumption. As a result, the sales tax forecast uses monthly observations to capture any seasonality when projecting revenues. Each month of the year, except the month of June, is included as an independent variable.

Time

Each month is considered a time period, in order to account for sales tax revenue trends over time varying from trends in economic factors.

Remote sales

Beginning January 1, 2021, the State of Illinois began requiring that out-of-state retailers charge Illinois consumers for all state and local taxes based on where the purchase is delivered with passage of the Leveling the Playing Field for Illinois Retail Act. This policy change has continued to bolster the County's sales tax base. To account for this in the forecast, a dummy variable is used to factor in this change, including a phase-in period as compliance ramped up. The forecast utilizes sales tax data from the Illinois Department of Revenue to observe the additional disbursements from these remote sales as a basis for developing the phase-in variable. The remote sales variable was also evaluated by its impact on the statistical significance of the forecast.

Economic factors

The sales tax forecast uses several economic indicators for the Chicago-Naperville-Elgin Metropolitan Statistical Area as projected by Moody's Analytics. Specifically, the model integrates Moody's baseline scenario projections of real Gross Domestic Product and Consumer Price Index for the Chicago-Naperville-Elgin Metropolitan Statistical Area.

Summary statistics

The overall strength of the sales tax regression model is evaluated by the R-squared value, which represents the percentage of variation in revenue that can be explained by the variables used. For instance, an R-squared value of 0.95 indicates that approximately 95% of sales tax revenue (the dependent variable) is explained by the changes in the explanatory variables considered in the model (the independent variables). In addition to considering the R-squared value, p-values for each independent variable are considered to ensure that each of the coefficients produced in the regression model have a statistically significant relationship with the sales tax. The regression model seeks to include only variables with statistically significant relationships to the sales tax, or p-values less than 0.05.

Regression coefficients for forecast, August 2024

Variable	Coefficient	*Sig.*
Intercept	-8,902,979,516	**
Time	-14,469,244	**
January	-1,181,546,573	**
February	-1,217,241,453	**
March	-500,401,927	**
April	-629,085,412	**
May	-213,645,319	**
July	-305,515,542	**
August	-304,374,558	**
September	-334,831,723	**
October	-416,532,551	**
November	-451,571,935	**
December	417,229,334	**
Remote	868,185,079	**
Gross Metro Product	17,692,587	**
CPI: Total – All Urban Consumers, (Index 1982-84=100, SA)	20,804,815	**

Significance: *$p < 0.05$, **$p < 0.01$

Accelerated payments

In addition, the County receives an accelerated payment—if applicable—every March from the Illinois Department of Revenue.[3] The accelerated payments are calculated using the average amount of the lowest 10 months of disbursements for the most recent calendar year (CY), minus the average amount of the lowest 10 months of disbursements for the CY prior to that. Below is an example of this accelerated payment calculation for CY 2025.

[3] (55 ILCS 5/5-1006) (from Ch. 34, par. 5-1006) Sec. 5-1006. Home Rule County Retailers' Occupation Tax Law. https://www.ilga.gov/legislation/ilcs/ilcs5.asp?ActID=750&ChapterID=12

$$\text{CY2024 average lowest 10 months} - \text{CY2023 average lowest 10 months} = \text{March 2025 accelerated payment}$$

Based on the example above, if the CY2024 average amount for the 10 lowest months is greater than the CY2023 average amount for the 10 lowest months, the County will receive an accelerated payment in March of CY2025 equaling the difference between these CY2024 and CY2023 averages. The OCFO calculates these parameters using the monthly forecasted revenues to project any accelerated payments the County would receive in future years in addition to the projected sales tax disbursements.

New legislation

The OCFO's sales tax forecast also factors in a fiscal impact of Public Act (PA) 103-0983 which amends the Retailers' Occupation Tax Act effective January 1, 2025.[4] The legislation changes which tax out-of-state sellers—a seller located outside Illinois that has a physical presence in Illinois—are subject to remitting to the state.[5] Prior to this legislation, out-of-state retailers with a presence in Illinois who fulfilled orders from inventory out-of-state were subject to remitting state use tax. Effective January 1, 2025, PA 103-0983 requires that these retailers begin collecting and remitting state and local sales tax instead. The OCFO is using a conservative estimate of the fiscal impact that is now factored into the FY2025 and outyear sales tax projections. Since PA 103-0983 takes effect on January 1, 2025, the County should begin seeing the impact of the legislation in the April 2025 sales tax disbursement from the Illinois Department of Revenue. Below are the OCFO's estimates of additional sales tax revenue generated from PA 103-0983:

FY2025	FY2026	FY2027	FY2028	FY2029
$33,889,918	$63,851,561	$65,455,927	$66,766,140	$66,783,000

[4] Public Act 103-0983. https://www.ilga.gov/legislation/publicacts/fulltext.asp?Name=103-0983

[5] PIO-104, Leveling the Playing Field for Illinois Retail Act Flowchart. https://tax.illinois.gov/content/dam/soi/en/web/tax/research/taxinformation/sales/documents/levelingtheplayingfieldretailerflowchart.pdf

Property tax

The Cook County total property tax levy is made up of two basic components:

- Base property tax levy
- Revenue attributable to additional property value returning to the tax base

Base property tax levy

The County's base property tax levy is $720.5 million. This base levy amount was approved in 1996 by the County Board of Commissioners, and it has remained flat at $720.5 million in subsequent years. The OCFO assumes this base levy will continue to remain flat in its out-year revenue forecast.

Incremental property tax levy increases

Regarding the second component, as TIF districts and incentives expire and new property through construction and economic activity is added, the County recognizes additional property tax revenue in its property tax levy. Increasing the levy in this manner does not increase the property tax burden on other Cook County taxpayers. That said, all else being equal, the burden may be shifted if properties are removed from the tax roll.

Estimating new property

The OCFO estimates the amount of revenue that can be added to the tax levy to account for new property and expiring incentives and TIF districts using data from the County Clerk's Taxing Agency Reports.[6] Unless they are extended, Cook County's incentive classifications phase out after ten years, and TIF districts expire after 23 years.

The *New Property Report* details the equalized assessed valuation (EAV) of all property within the district or agencies boundaries that is considered *new property* and *recovered tax increment value* under the Property Tax Code.[7] To calculate this part of the levy, the OCFO sums up the New Property Equalized Assessed Value, the Recovered Tax Increment Value, and the Expired Incentives amounts, and multiplies this sum by the Final Tax Rate from the *Agency Rate Report*.

Long-term estimates

For the out-year forecasts, the OCFO estimates how much new property can be added to the tax levy. For new EAV and expired incentives, it is assumed these will grow by taking an average of prior fiscal years and factoring in the projected growth rate for real gross metro product (GDP). For recovered TIF value, the OCFO estimates how many TIFs will be expiring each year using publicly available data from the County Clerk and the Illinois Department of Revenue. The OCFO sums up how much value will be recovered from TIFs by totaling the expiring EAVs for each year and then multiplying these sums by the forecasted Final Tax Rates for each corresponding year.

The OCFO also utilizes the projected growth rate for real GDP when estimating out-year tax rates for new property calculations. It is assumed that the overall tax base will grow with the economy, resulting in a proportionately lower property tax rate.

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[6] Cook County Clerk, Tax Agency Reports, https://www.cookcountyclerkil.gov/property-taxes/tax-agency-reports

[7] (35 ILCS 200/18-185) Property Tax Code. (n.d.). Retrieved February 14, 2023, from https://www.ilga.gov/legislation/ilcs/ilcs5.asp?ActID=596&ChapterID=8

Forecasting assumptions

The OCFO considers a range of gross domestic product projections from financial organizations and institutions to project out-year Final Tax Rates, an input to the estimate of new property.

The OCFO also forecasts for loss in property tax collections using a rate of 3%, which is based on historic amounts. The loss in collections is eventually deducted from the gross tax levy, and the amount remaining is the net tax levy for the fiscal year.

Distribution

Property tax revenue is first allocated to:

- General Obligation Bond Debt Service
- the County's pension contribution from property tax, less Personal Property Replacement Tax
- Election Fund contribution
- Capital funds

Then, the forecast assumes that the County will continue allocating property tax revenues to the Health Enterprise Fund for the purposes of supporting the cost of the Department of Public Health as well as correctional health care. After these distributions are made, the remaining net tax levy is disbursed to the Public Safety Fund. Below is an overview of how property tax revenue was forecasted for FY2025:

Property tax overview – FY2025	Amount
Base property tax levy	$720,483,542
Estimated new property (current year)	
New TIF	$0
New Incentives	$0
New Property	$0
Total estimated new property (current year)[8]	$0
Estimated new property (prior years)	$95,076,416
Total Gross Tax Levy	**$815,559,958**
Allowance for uncollected (3%)	$11,178,757
Distributions	
General Obligation Bond Debt Service	$259,631,599
Statutory Pension Contributions (less PPRT revenue)	$183,303,117
Election-related Contributions	$31,050,933
Capital Equipment funds	$19,953,856
Health Enterprise Fund	$157,704,920
Public Safety Fund	$152,736,776

[8] The total estimated new property amount of $0 for FY2025 is the result of a one-time true-up relating to the "New TIF" estimate from FY2024. In 2023, there was a delay in the release of the annual *New Property Report*, therefore, the OCFO estimated an amount of New TIF for FY2024. This estimate was higher than the actual amount in the report. To adjust for this overestimate, the County will not include an incremental increase in new property for the 2025 levy.

Tax increment financing district surplus

Tax increment financing (TIF) is a financial tool that is used by governments to advance economic development that would not have occurred had incentives not been offered. If there are unused TIF funds in a district at the end of the year, a surplus can be declared by the municipality collecting tax revenue for the TIF district. This surplus is distributed back to the taxing agencies overlapping the TIF district, based on each agency's share of the property tax bill distribution within the TIF district.

The OCFO forecasts TIF surpluses accruing to the County's General Fund. The OCFO develops the forecast for TIF surplus based on the total estimated TIF surplus that will be declared by the City of Chicago. While the County also receives TIF surplus from other municipalities, the OCFO does not forecast these other surpluses as they are less predictable and comprised of a minimal portion of the revenues. The City of Chicago outlines how much TIF surplus it plans to declare in their annual *Budget Overview* report, which is a summary of the annual budget recommendation and is usually released in the fall. The OCFO also confers with the City of Chicago to receive an estimated TIF surplus it plans to declare when the County is developing its annual Executive Recommendation.

The OCFO takes the total estimated TIF surplus that the City of Chicago expects to declare and multiplies that amount by the County's estimated distribution proportion based on tax extensions from the most recent tax year. The County Clerk issues an annual tax rate report outlining the distribution of tax dollars to taxing districts in the City of Chicago. The OCFO refers to the Clerk's report to confirm Cook County's updated portion of the distribution of taxes.[9] The following table outlines Cook County's portion of the tax distribution from previous tax years:

Tax Year	Cook County Portion	Date Release of Tax Report
2023	5.59%	Jul 02, 2024
2022	6.24%	Oct 30, 2023
2021	6.66%	Dec 05, 2022
2020	6.55%	Aug 19, 2021
2019	6.59%	Jun 29, 2020

The FY2025 TIF surplus was based on an estimated total surplus of $363.7 million, received prior to the release of the City of Chicago's 2025 *Budget Overview* document. Of the $363.7 million total surplus, Cook County's distribution would be approximately 5.59%, or $20.3 million.

$$\$363{,}651{,}532 \times 5.59\% = \$20{,}328{,}121$$

Note that while Cook County receives TIF surplus distributions from the City of Chicago each year, annual declared TIF surpluses are not guaranteed. When forecasting the out-year TIF surpluses, the OCFO takes an average of the TIF surpluses from the prior five fiscal years for each projected fiscal year. For example, the TIF surpluses forecasted for FY2026 is an average of the TIF surpluses from FY2021 through FY2025.

FY2021	FY2022	FY2023	FY2024	FY2025	FY2026
$19,213,092	$13,538,232	$25,872,500	$26,105,789	$20,328,121	$22,907,000

[9] Cook County Clerk, Tax Extension and Rates, https://www.cookcountyclerkil.gov/property-taxes/tax-extension-and-rates

Investment income

The County receives returns and interest on its financial investments. To calculate investment income, investible assets were multiplied by Moody's Analytics forecasted 2025 treasury rate for each month of the forecast.

To estimate income from investments, the forecast starts with the County's total investible assets. For the FY2025 forecast, it is assumed that investible assets will be equal to the projected cash balance for all funds, less a buffer equal to expected expenses for each month. The buffer includes salary, withholdings, debt service, pension contributions from the General Fund, as well as half of expected Health Plan Services revenues.

Start with the total cash balance	3,483,549,666
Remove a buffer	- 323,882,644
Starting balance less the buffer (investible assets)	3,159,667,022

To ensure the forecast is consistent with past results, the forecast is adjusted based on actual investment income relative to what would have been expected from the actual treasury yield. . The table below provides an example of how this factor is calculated for a historical month.

$\text{Factor} = \dfrac{\text{Actual investment income}}{\text{Investible assets } \times \text{Yield} \div 12}$	$\dfrac{\$14{,}241{,}066}{\$3{,}159{,}667{,}022 \ \times 4.25\% \div 12} = 127.3\%$
Where:	
Actual 10-year Treasury Yield	4.25%
Actual investment income revenue	$14.2 million
Estimate investible assets	$3.2 billion

The average of the monthly factors during the previous 12 months were used to calculate revenue for each projected month. The following table shows the calculation for revenue for a future month.

$\dfrac{\text{Projected investible assets } \times \text{Projected yield} \times \text{Average factor}}{12} = \text{Projected revenue}$	
$\dfrac{\$3{,}069{,}026{,}588 \ \times 4.2\% \times 120\%}{12} = \$12{,}886{,}572$	
Assumptions:	
Projected 10-yr Treasury Yield for the month	4.2%
Projected investible assets	$3.1 billion
Average factor	120%

For FY2025, this results in a forecast of $154.3 million in revenue. When this revenue is compared to total investible assets, the result is an estimated effective yield of 5.0%.

An estimate of the amount that would be directed to the General Fund was based on the proportion of total investment income that was deposited into the General Fund over the previous 12 months. This proportion was 37%, resulting in a General Fund estimate of $57.2 million.

Personal property replacement tax

The Personal Property Replacement Tax (PPRT) is a business income tax imposed by the State of Illinois and disbursed to local taxing districts. PPRT includes taxes on corporations, partnerships, trusts, S corporations, and on the invested capital of public utilities. Cook County's portion of the revenue disbursed statewide is 3.89%, and funds are distributed in January, March, April, May, July, August, October, and December.

To forecast revenue from these disbursements, the estimate provided by the State of Illinois for their fiscal year is used as a starting point.[10] The State's estimate incorporates their forecast for total PPRT revenues accruing to the state PPRT Fund, the State's appropriations of the PPRT Fund for specific purposes, deposits to the State's refund fund, and changes in annual reallocations. Because the State of Illinois fiscal year runs from July 1 through June 30, their fiscal year estimate only covers a portion of the County's December 1 through November 30 fiscal year. Therefore, this revenue estimate needs to be adjusted to account for this difference, for example, to exclude extra disbursements from the Refund Fund in the fall.

Before forecasting, the estimate is also adjusted to account for the State's annual true-up adjustments of overall business income tax revenues that can result in funds moving between the PPRT Fund and other funds holding revenues associated with state income taxes. Historically, these adjustments have been minimal. However, in state fiscal years 2024 and 2025, approximately $818.4 million and $1.0 billion, respectively will be shifted from the PPRT Fund. During FY2025, this is expected to reduce the County's disbursement by $39.8 million. The forecast assumes that the true-up adjustment would decrease in the following state fiscal year 2026 and then minimal true-up adjustments in subsequent fiscal years.

After accounting for these adjustments, the County increased this base PPRT disbursement annually using the percent change in Moody's baseline forecast for national corporate profits (with inventory valuation and capital consumption adjustments). To integrate this estimate into the forecast, the County uses historical average proportions to estimate how the funds will be distributed across the 8 months that the state disburses PPRT. Then, the true-up adjustments that had been removed before forecasting are re-inserted for in the months they are expected to occur.

PPRT revenues accrue to the Annuity and Benefit Fund and the General Fund. The County contributes PPRT disbursements to the Annuity and Benefit Fund in arrears, meaning that the disbursements received from the State of Illinois are being applied against the amount budgeted for the A & B Fund contribution in the County's previous fiscal year budget. Since FY2024, this contribution to the Annuity and Benefit Fund is $40 million annually. The remainder of the revenues are deposited into the General Fund into the Non-Property Taxes account.

[10] Illinois Department of Revenue, Fiscal Year 2024 Estimate for Replacement Taxes, https://tax.illinois.gov/localgovernments/replacementtaxestimate.html.

Disbursements of state income and use taxes

Cook County receives a portion of the receipts from income tax and use tax imposed by the State of Illinois.

Income tax

The State imposes a tax on individual and corporate income and deposits a portion of the revenue into the Local Government Distributive Fund (LGDF). The County receives 0.819% of LGDF deposits, based upon the population within unincorporated areas of Cook County as compared to the state population.

To forecast the disbursements related to the state income tax, the OCFO forecasts the total revenue the State may collect from the Individual Income Tax (IIT) and the Corporate Income Tax (CIT). The OCFO considers revenues estimates developed by the Illinois Commission on Government Forecasting and Accountability (CGFA) and the Illinois Municipal League (IML) when forecasting the total Individual and Corporate Income Taxes the State will collect in the outyears. After estimating how much revenue the State may collect from each of these taxes, the OCFO estimates how much of the collections will be deposited from the IIT and CIT tax into the State's Refund Fund. For the state fiscal year (SFY) 2025, the Refund Fund rate is 9.15% and 14.00% on the gross receipts of IIT and CIT collections, respectively.

The collections remaining after deposits are made into the Refund Fund are then multiplied by rates set forth by the State to be shared with local governments through the LGDF. For SFY2025, 6.47% and 6.85% of the remaining the gross receipts of IIT and CIT collections are deposited into the LGDF, respectively. Once funds are deposited into the LGDF, Cook County receives its 0.819% portion each month. The OCFO also considers in its forecast the timing of disbursements based on the state's fiscal year, which runs from July 1 through June 30.

Below is a table summarizing the different distribution rates informing the County's share of the income tax revenue deposited into the LGDF.

	Distribution to Refund Fund		Distribution to the LGDF		Distribution to Cook County	
State income tax	**SFY2024**	**SFY2025**	**SFY2024**	**SFY2025**	**SFY2024**	**SFY2025**
Individual income tax	9.15%	9.15%	6.47%	6.47%	0.819%	0.819%
Corporate income tax	14.00%	14.00%	6.85%	6.85%	0.819%	0.819%

Use tax

The State imposes a use tax on any item of tangible personal property that is purchased outside Illinois but is intended to be used in the State of Illinois. The State deposits a portion of the collected use tax revenue into the LGDF for distribution. As described above, the County receives 0.819% of LGDF deposits based on the population within unincorporated areas of Cook County relative to the state population.

To forecast the disbursements related to the state use tax, the OCFO utilized the latest forecast published by the IML in projecting the County's use tax disbursement.

Medical examiner fee revenue

The County receives revenue from fees generated by the Medical Examiner's Office (MEO) for a provision of services such as providing autopsy and toxicology reports, cremation permits, and death certificates.

To forecast the medical examiner fee revenue, the OCFO works with the MEO to obtain data on the monthly activity pertaining to each fee. Using data going back to FY2017, the OCFO forecasts fee activity in a particular month by taking the average of that month for each fiscal year since FY2017. For example, the OCFO will forecast the fee activity related to toxicology reports in November 2024 by averaging the number of toxicology reports generated in the month of November 2017 through 2023. Once the average for each fee is calculated, the OCFO multiplies the activity projected for each fee by the fee rate associated with each of the fees to arrive at a revenue estimate for the month.

One exception to the methodology relates to how the OCFO forecasts the number of cremation permits issued. Due to the unprecedented increase of cremations during the COVID-19 pandemic, the OCFO currently uses August 2021 as the starting point for calculating the monthly average for cremation permits. Additionally, the OCFO adjusts the monthly cremation permits forecast by multiplying the monthly average by a factor to account for an anticipated slowdown in cremations.

Amusement tax

The County imposes an amusement tax on many forms of entertainments, such as concerts, sporting events, motion picture shows, and theater performances. To forecast outyear amusement tax revenues, the OCFO tests several different forecasting methods, performs statistical extrapolations, and gathers feedback from the Cook County Department of Revenue. The forecast using real GDP growth was selected as most conservative and reasonable method. This method multiplies a preferred real GDP growth rate by estimated amusement tax revenues on an annual basis. For example, the FY2026 amusement tax revenue projection multiples the FY2025 estimate by the preferred real GDP growth rate for FY2026.

In selecting a preferred real GDP growth rate, the OCFO considers the real GDP projections published by the Federal Open Market Committee, the Congressional Budget Office, the Federal Reserve Bank of Philadelphia's Survey of Professional Forecasters, and The Wall Street Journal's Economic Forecasting Survey. The OCFO also considers the projected real gross metro product (GMP) growth rate published by Moody's Analytics for the Chicago metropolitan statistical area. In the latest County forecast, the OCFO utilized an estimate provided by the Federal Reserve Bank of Philadelphia's Survey of Professional Forecasters of real GDP growth to develop the estimated out-year growth.

Hotel accommodations tax

The County imposes a hotel accommodations tax on the use of any hotel accommodations in Cook County. To forecast outyear hotel accommodation tax revenues, the OCFO tests several different forecasting methods, performs statistical extrapolations, and gathers feedback from the Cook County Department of Revenue. The forecast using real GDP growth was selected as most conservative and reasonable method. This method multiplies a preferred real GDP growth rate by estimated hotel tax revenues on an annual basis. For example, the FY2026 hotel tax revenue projection multiples the FY2025 estimate by the preferred real GDP growth rate for FY2026.

In selecting a preferred real GDP growth rate, the OCFO considers the real GDP projections published by the Federal Open Market Committee, the Congressional Budget Office, the Federal Reserve Bank of

Philadelphia's Survey of Professional Forecasters, and The Wall Street Journal's Economic Forecasting Survey. The OCFO also considers the projected real gross metro product (GMP) growth rate published by Moody's Analytics for the Chicago metropolitan statistical area. In the latest County forecast, the OCFO utilized an estimate provided by Federal Reserve Bank of Philadelphia's Survey of Professional Forecasters of real GDP growth to develop the estimated out-year growth.

Expenditures

The County's expenditures were analyzed as falling into five primary categories. These categories are:

- Expenses that grow at or around the rate of inflation
- CountyCare medical claims estimated based on membership and claim costs
- Salary and Wages costs that are projected to grow in accordance with the rate negotiated in our Collective Bargaining Agreements
- Anticipated increases in health benefits

The OCFO considers the CPI projections published by Moody's Analytics, the Federal Open Market Committee, the Congressional Budget Office, the Federal Reserve Bank of Philadelphia, and The Wall Street Journal when developing a preferred CPI growth rate. The OCFO also reviews historical CPI data for the Chicago metropolitan statistical area and U.S. city averages for the categories of energy and medical care.

In the latest County forecast, the OCFO utilized an estimate provided by Moody's Analytics of the CPI to develop the estimated out-year growth in the following categories: communication & IS maintenance within the General Fund; contractual services, supplies and materials, operations and maintenance, energy, operating capital, and rental and leasing categories in both the General Fund and Health Enterprise Fund. These costs are expected to grow at an average rate of 2.2% annually. While contingencies in FY2025 are increasing significantly from FY2024 because of one-time fund balance transfers, as well as anticipated increases relating to computer equipment upgrades in the outyears, this category is otherwise expected to grow at or around the rate of inflation.

The category of CountyCare medical claims is based on Managed Care claims and, more specifically, the anticipated reimbursements to our third-party care providers for services provided to foreign and domestic health care providers. Managed Care Claims expenses are anticipated to initially drop due to lower membership levels, but the losses in membership are eventually expected to be offset by anticipated increases in average claim costs, resulting in an overall annualized growth rate of 0.8%.

The OCFO utilized negotiated rates as outlined in the County's CBAs to project salaries and other personnel costs, which is estimated to increase at an average of 2.8% through FY2029. Health benefits in both the General Fund and Health Enterprise Funds grow in accordance with rates consistent with an analysis provided by the County's actuarial service provider in FY2024. After FY2024, health benefits rates are expected to grow with the average annual change in the Medical Care CPI, increasing at a CAGR of 3.4%. Pension Reimbursements were expected to remain flat.

General Fund Balance Scenarios

The General Fund forecast leverages professional forecasts of local level economic indicators in scenarios for economically sensitive revenues from Moody's Analytics. Moody's Analytics also provides monthly narratives on what economic factors drive each forecast. The baseline scenario forecasts local economic indicators assuming a 50 percent chance that the economy will do better and a 50 percent chance that the economy will do worse. To develop optimistic and conservative scenarios, the forecast utilizes scenarios prepared by Moody's Analytics. The "S1 - 10th percentile forecast" has a 10% chance that the economy will perform better, and a 90% chance that the economy will perform worse. In the "S3 – 90th percentile forecast," there is a 90% chance the economy will perform better, and a 10 percent chance it will perform worse. These scenarios give mirrored likelihoods, allowing the optimistic and conservative forecasts to be equally probable.

The revenue forecasts based on the S1 and S3 scenarios are developed under the assumption that economically sensitive revenues will grow or decline depending on economic conditions. For each revenue source, the economic indicator, such as Gross Metropolitan Product, CPI, number employed, or unemployment rate, that has the highest correlation to historic data is used for the forecast. The following economically sensitive revenue sources are forecasted for each economic scenario:

- County sales tax
- County use tax
- Parking lot and garage operation tax
- Non-retailer trans use tax
- Gasoline / diesel tax
- Amusement tax
- Alcoholic beverage tax
- Hotel accommodations tax
- New motor vehicle tax

For each revenue source and the economic indicator identified as most closely correlated, a regression analysis is performed to generate a 5-year forecast. Then, the percent difference between the baseline scenario, and the S1 and S3 scenarios, respectively, is calculated for each year. That percent change is applied to the original forecast for each revenue source to develop the optimistic and conservative scenarios. The OCFO reviews the results with subject matter experts for reasonableness and adjusts accordingly. Finally, forecasts for other revenue sources not considered to be economically sensitive are added to the S1 and S3 forecasts for economically sensitive revenues, respectively, to generate the optimistic and conservative scenario General Fund forecasts.