QUARTERLY UPDATE OF THE LONG-TERM REVENUE FORECAST

Statutory Report to the Cook County Board of Commissioners

April 27, 2022

Contents

Introduction

In accordance with Section Sec. 2-78 of the Cook County Code which states:

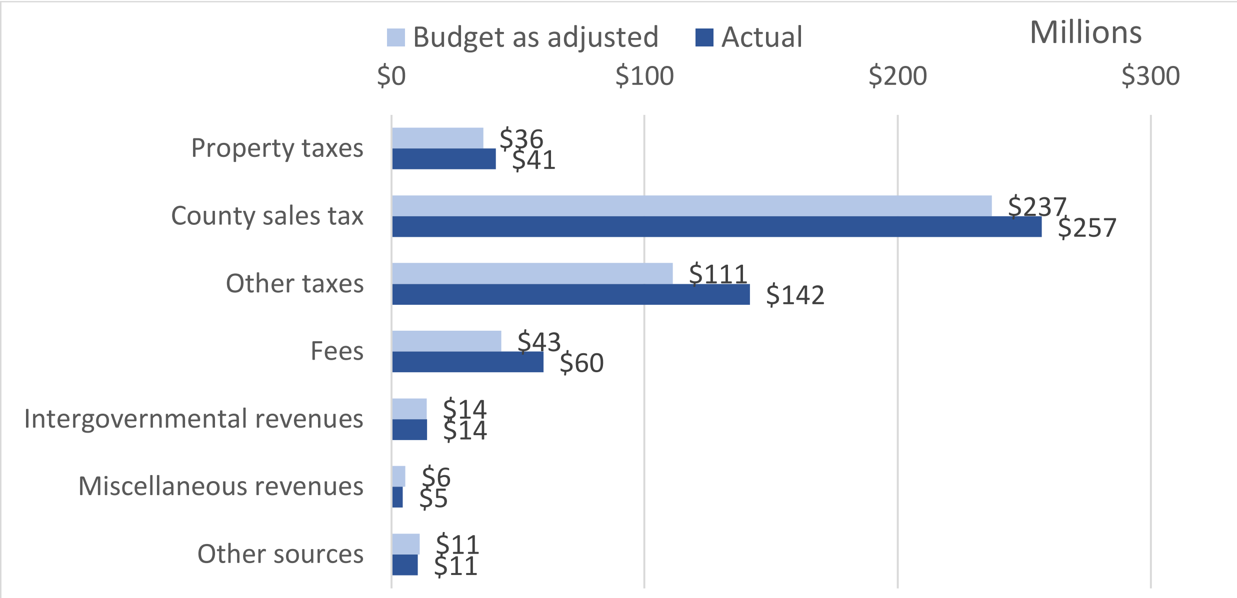
b) The purpose of the Independent Revenue Forecasting Commission (IRFC) will be to review and analyze an annual five-year revenue forecast (the "forecast") for the County as developed and prepared by the Chief Financial Officer (the "CFO"). Updates pertaining to the forecast will be provided to the IRFC, the Board and posted on the IRFC website on a quarterly basis by the CFO. The forecast will include, but not be limited to, analysis of the following County revenue streams: Sales and Use taxes, Property Taxes, Cigarette Taxes, Fuel Taxes and other sources of County revenue.

The following provides an update between the Long-term Financial plan provided to the IRFC and posted on the County's Website in January 2022, and the most up to date forecast. This report includes a variance analysis comparing the two forecasts and provides an explanation for the significant variances, along with additional supporting detail outlining progress made on the County's Sales Tax Projections and a summary of the impact of the Revenue projections on our Long-term Expense Projections for both the General and Health Funds. We conclude with FY2022 project plans, an analysis of factors impacting revenue forecasting, and an update on recent regional and relevant economic activity.

FY22 General Fund revenues year-to-date

General Fund revenues for FY22 generated December through February were $70 million more than budgeted. Figure 1 illustrates the variances by revenue type. There were several factors that contributed toward this 15 percent variance. Sales tax revenues, which accrued from sales made during September, October, and November 2021, came in higher than anticipated by $19.7 million. Taxes other than sales and property taxes generated $30.5 million more than expected overall, with higher parking tax and use tax revenues offsetting other taxes that generated less revenue than budgeted, like the gas tax. Fee revenue was 38.3 percent higher than budgeted, driven by a $34 million variance from fee revenue from the Treasurer's Office, which offset lower than anticipated fee revenue from other sources.

Figure 1. FY 2022 General Fund revenues as compared to budget, December - February



Changes in forecasts since January 2022

Table 1 shows the nominal variance between the current forecast and what was presented at the last quarterly IRFC meeting on January 31, 2022.

In total, the FY23 forecast was lowered by $21.4 million. As the FY23 budget process approaches, FY23 forecasts have been refined with departmental feedback. Depending upon the specific methodology used for each revenue, these changes may carry through to the out years.

The increase in property taxes was due to high Personal Property Replacement Tax (PPRT) revenues FY22 year to date raising the forecast in the out years as well. The Parking Lot and Garage Operation tax was determined to be too optimistic in the out years, and a new methodology was selected to keep revenues closer to FY22 instead of returning fully to pre pandemic levels.

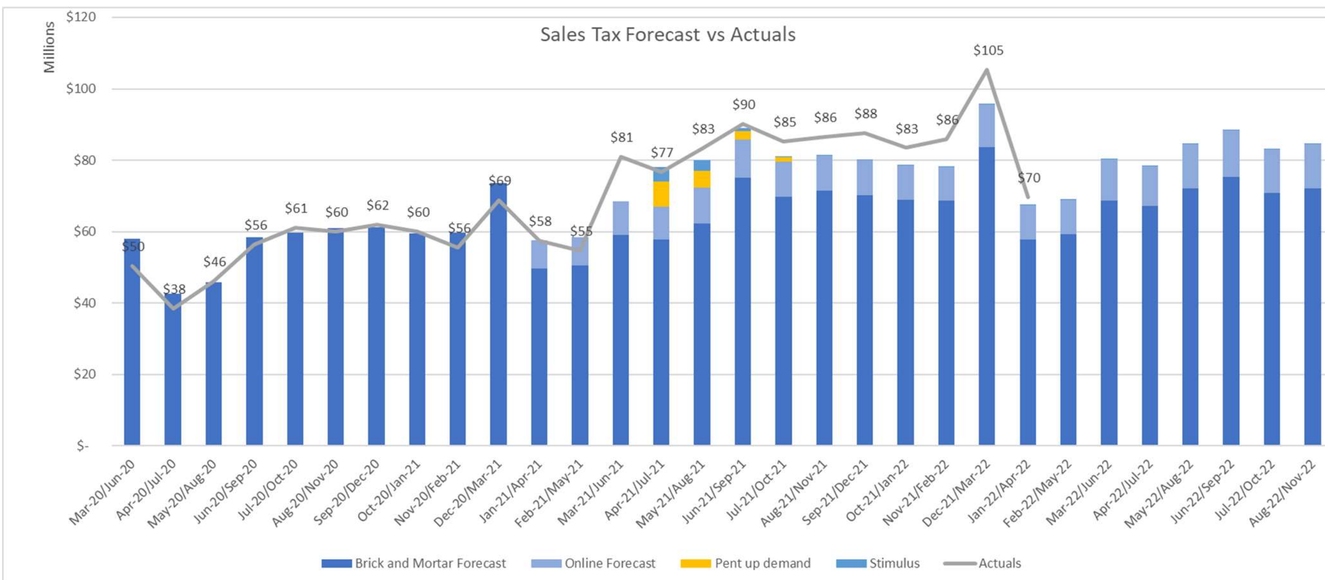
Table 1. Significant nominal variances between 1/31/2022 and 4/27/2022 forecast

	Forecast (in millions)			
	FY23	FY24	FY25	FY26
400010-Property Taxes	$4.9	$5.4	$6.0	$6.6
401170-County Use Tax	$4.8	$0.0	$0.0	$0.0
401190-Gasoline / Diesel Tax	($3.6)	$0.0	$0.0	$0.0
401350-Amusement Tax	($2.4)	$0.0	$0.0	($0.0)
401370-Parking Lot and Garage Operation	($6.2)	($8.8)	($8.9)	($9.1)
401550-Hotel Accommodations Tax	($9.1)	$0.0	$0.0	$0.0
401580 - Cannabis Tax	($6.6)	$0.0	$0.0	$0.0
401590 - Sports Wagering Tax	$1.5	$1.5	$1.5	$1.5
402950-Sheriff General Fees	($1.8)	$0.7	$0.7	$0.7
Total Significant Revenue Changes	**($18.5)**	**($1.2)**	**($0.7)**	**($0.3)**
Other Revenue Changes	$1.3	($0.3)	($0.3)	($0.4)
Total Revenue Changes	**($17.1)**	**($1.5)**	**($1.1)**	**($0.7)**

Sales tax estimate

Sales Tax from remote sales is estimated to grow from $132.9 million in FY2022 to $285.5 million in FY2026, a CAGR of 21.1%. The brick-and-mortar component of Sales Tax is projected to largely grow with the economy, with an expected increase of $52.8 million or 1.5% annually, but it is also subject to potential economic volatility and sensitive to social distancing policies. Considering that FY2021 included the introduction of taxing remote sales, which was forecasted with extremely limited data, these forecasts have met our goal of being reasonable and conservative.

Figure 2. Sales tax, actual and forecasted revenue

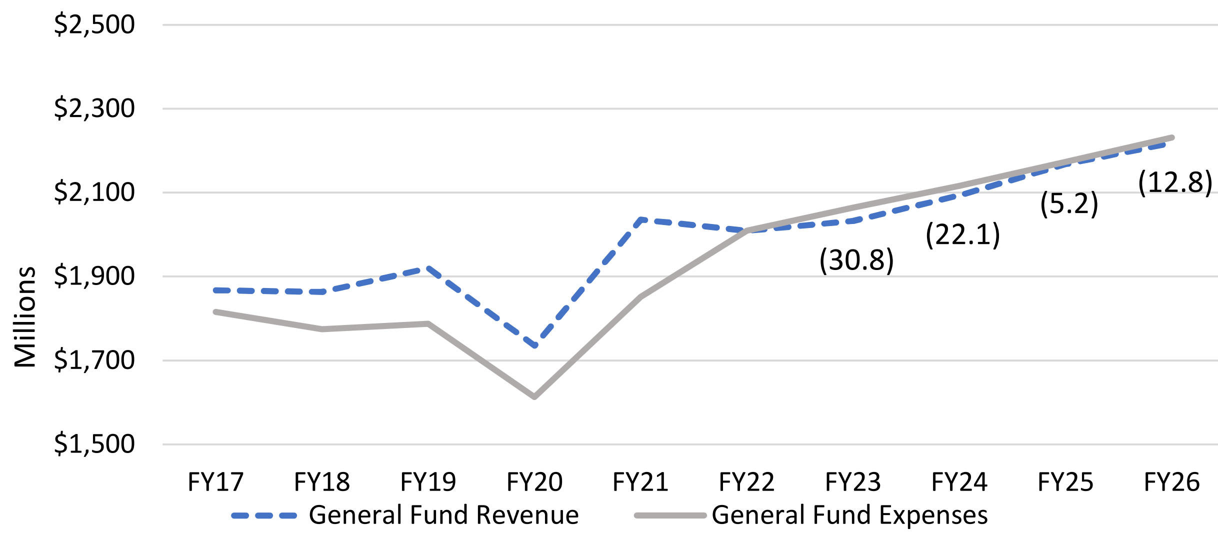


Long term fiscal plan

Pursuant to Executive Order 2012-01, Cook County prepares a long-term financial forecast to support responsible long-term planning. Cook County's $8.11 billion budget helps support vital public safety, public health and property tax related services for its residents. Although Cook County has a diverse revenue base, expenditures rise over time due to inflationary pressures, with medical trends for health benefits and several other categories of expenditures growing faster than general inflation, meanwhile natural growth in revenues struggle to keep pace. Several critical revenue sources are declining over time or growing at rates below general inflation. This makes structurally balancing the budget challenging and necessitates difficult decisions. The addition of Cannabis tax revenue, Sales Tax on remote sales, and Sport-wagering Tax in FY2021 has the potential to help offset these structural deficits in the out-years. However, these new revenues represent an additional source of uncertainty that will not be fully understood until the County has received payments from the State for a longer period.

Between FY2022 and FY2026, total expenses for the General Funds are expected to increase $222.2 million, at a Compound Annual Growth rate (CAGR) of 2.7%. By FY2026, the total revenue for the Cook County General Fund is estimated to increase by $209.5 million, a CAGR of 2.5%. Revenues are still expected to largely keep pace with expenses without large deficits looming in the near future.

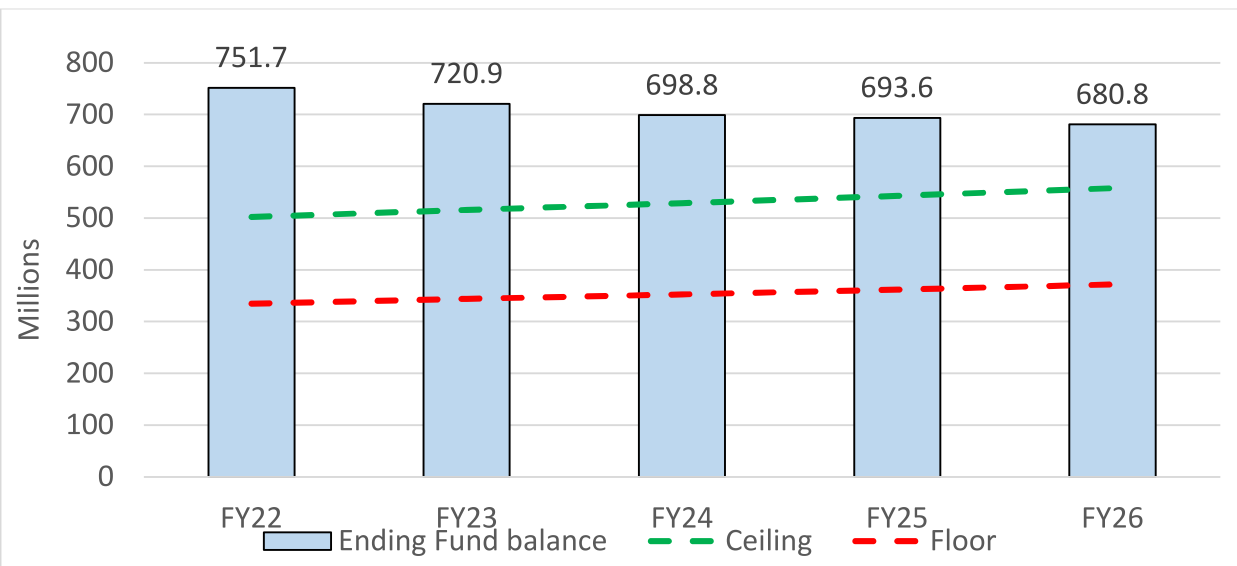
Figure 3. General Fund net surplus/(deficit) projections



Fund balance projection

In FY2021, the County's beginning fund balance within the General Fund was $506.0 million. The FY2021 anticipated end-of-year fund balance will be approximately $751.7 million all things considered, which is just over 37% of the County's FY2022 annual budgeted expenditures. Figure 4 illustrates the projected ending fund balances based on the long-term revenue and expense forecasts for FY2022 to FY2026. The Green dotted line (Ceiling) represents 3 months of Projected general fund expenses, and the Red dotted line (Floor) represents 2 months' worth of Projected Annual General Fund Expenses. The floor is the GFOA's minimum recommended value that local governments maintain in their unassigned ending fund balance.

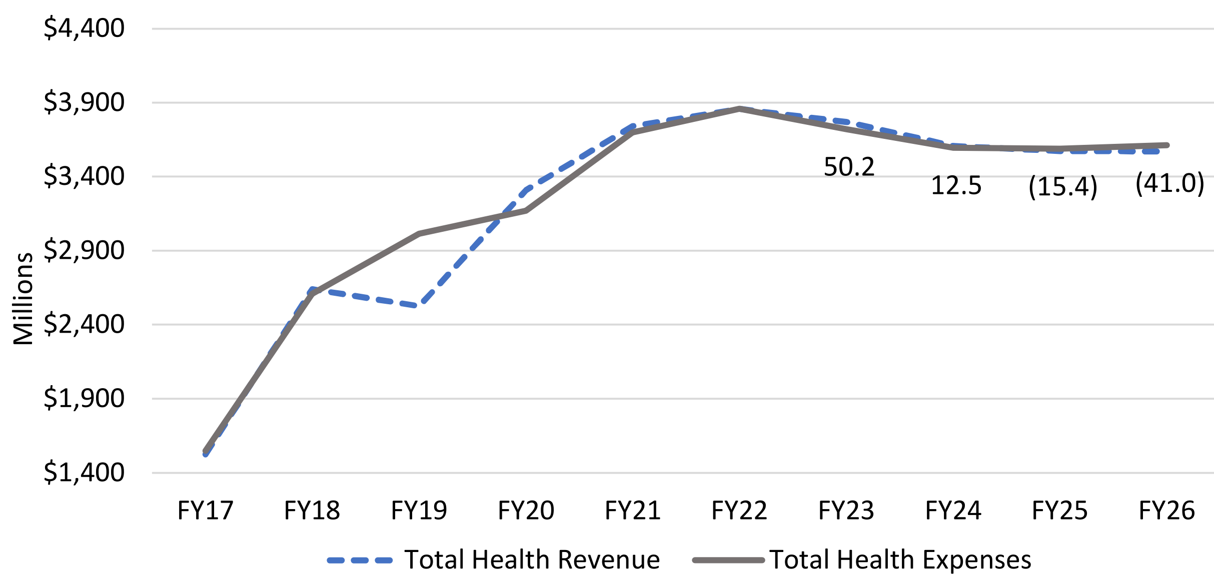
Figure 4. Unassigned ending fund balance projection



Health Fund update

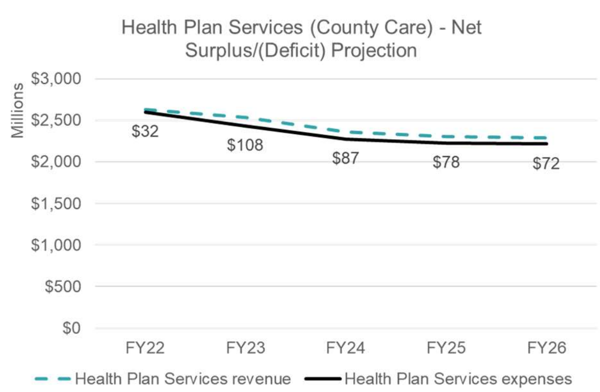
By FY2026, CCH revenues, after the Property Tax allocation, are expected to decrease by $287.4 million over the FY2022 budget, a CAGR of negative 1.9%. Expenditures within the Health Enterprise Fund are expected to decrease by $246.4 million at an annualized growth rate of -1.6% from FY2022 to FY2026. Property tax allocations to the Health Fund are expected to increase by $10 million annually, and exceed the General fund allocation by FY26. Declines in revenues and expenses in FY23 can be attributed to the reinstatement of redeterminations at Health Plan Services and return to auto assignment levels.

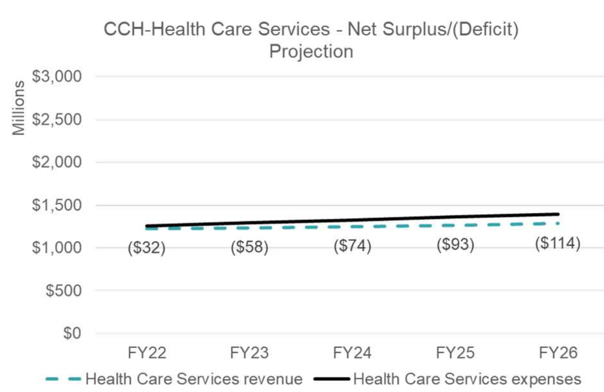
Figure 5. Health Fund net surplus/(deficit) projections



Health Plan Services surpluses are projected to offset Health Care Services deficits. Although CountyCare revenues are projected to decline in the outyears, expenses will decline as well.

Figure 6. Health Plan Services and Health Care Services net surplus/(deficit) projections





HPS membership projection

CountyCare membership is estimated to be 429,632 average monthly patients with a revenue projection of $2.78 billion in FY2022. In the out years, we project revenues to decline between FY2023 and FY2026 to $2.49 billion, $2.29 billion, $2.01 billion, and $2.16 billion, respectively. Average monthly membership will decrease by a total of 122,509 average monthly patients from FY2022 through FY2026, which is a -8% CAGR. This assumes the auto-enrollment process will drop to 35% and that re-determinations are estimated to resume by the third quarter of FY2022. Our estimates for CountyCare Membership represent our most conservative scenario, which is somewhat different from the convention used in the General Fund where best- and worst-case scenarios were created, and the middle scenario was used to develop the budget.

For our optimistic scenario, CountyCare membership is estimated to be 439,939 average monthly patients with a revenue projection of $2.89 billion in FY2022. In the outyears we project revenues to increase between FY2023 and FY2026 to $3.18 billion, $3.20 billion, $3.25 billion, and $3.32 billion, respectively. Furthermore, average monthly membership will also decrease by a total of 15,914 average monthly patients from FY2022 through FY2026, which is a -0.9% CAGR. This increase assumes that 50% of members from the auto-enrollment pool will be assigned to CountyCare, and that re-determinations are estimated to resume in the first quarter of FY2023.

For our baseline scenario, CountyCare membership is estimated to be 438,465 average monthly patients with a revenue projection of $2.86 billion in FY2022. In the outyears we project revenues to decline between FY2023 and FY2026 by $2.80 billion, $2.61 billion, $2.49 billion, and $2.41 billion, respectively. Average monthly membership will decrease by a total of 113,506 monthly patients from FY2022 through FY2026, which is a -7.2% CAGR. This decrease assumes that 35% of members from the auto-enrollment pool will be assigned to CountyCare starting October 2022, and that re-determinations are estimated to be turned back on in the fourth quarter of FY2022.

Table 2. HPS membership scenario assumptions

Scenario	Redeterminations Resumes	Attrition after Turned On	Next Month Choice Add Projection	Next Month No Reason Given Term Projection	No Reason Given Attrition	Future Month Auto-Enrollment	Auto-Enrollment Pool Projection
Worst	Q3 2022	2.5%	Historical Average: 0.9K	Historical Adj. Projection: 2.9K	COVID Attrition: 11.2%	50%, February 2021 35%, July 2022	Historical average
Base	Q4 2022	2.5%	Historical Average: 0.9K	Daily Adj. Projection: 2.9K	COVID Attrition: 11.2%	50%, February 2021 35%, October 2022	EVH adjusted
Optimistic	Q1 2023	2.2%	Daily 834 Adj. Projection: 1.0K	Historical Adj. Projection: 2.6K	Historical Attrition: 10.2%	50%, February 2021 50%, through 2022	EVH adjusted

Figure 7. CountyCare average monthly membership projections

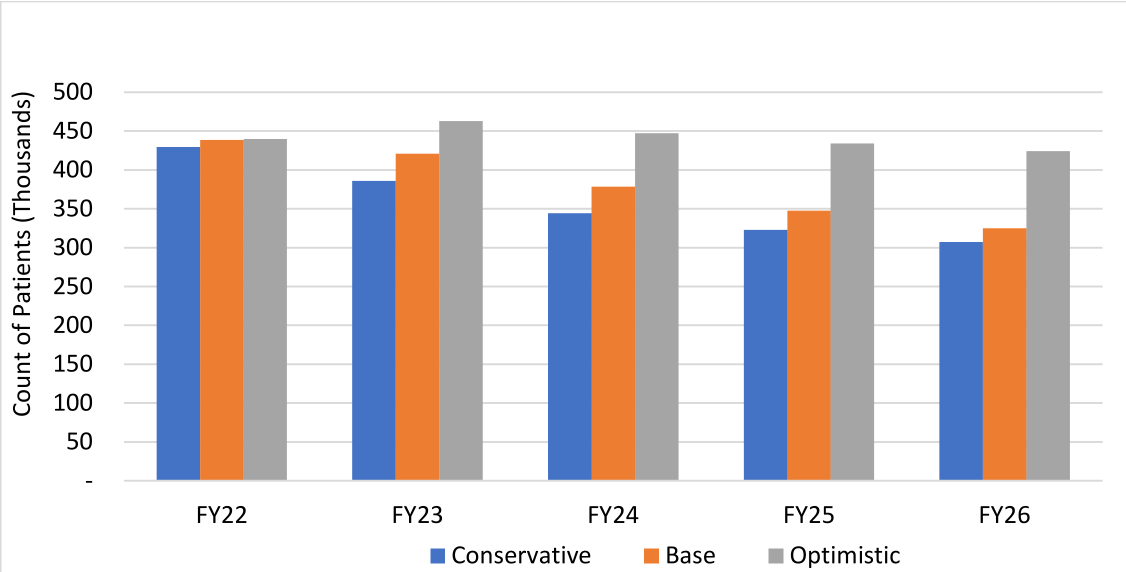
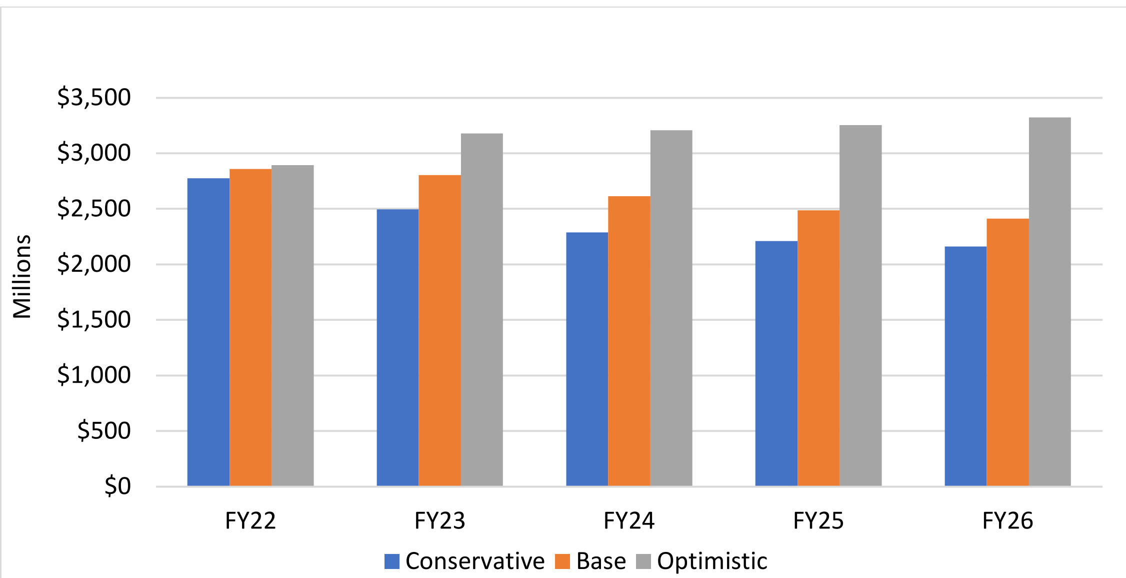


Figure 8. CountyCare projected revenues through FY26



Net patient service revenue projections

Net patient service revenue (NPSR) before adjustments projections for the baseline scenario, the optimistic scenario, and a conservative scenario for FY2022 to FY2026 are illustrated in Figure 9. In our baseline scenario, we project NPSR to be $524.1 million in FY22. We assume no growth in gross charges and consistency in payer mix but assume that our reimbursement rate increases 2% for Medicaid and Managed Care year-over-year after FY22. Rates for Medicare and Medicaid are established in part based on CCH cost reports that tend to increase at the rate of inflation.

The optimistic scenario projects NPSR to be $545.3 million in FY22. We assume a positive 2% growth in gross charges by payer year-over-year, assuming CCH can optimize capacity and increase the number of patients it serves. For payer mix, we assume a positive 1% for Medicaid and CountyCare as well as a negative 2% adjustment for self-pay, assuming the state continues to expand coverage for the undocumented. For the reimbursement rate, we assume a positive rate increase of 3% for Medicaid and Managed Care, at the higher end of inflation, assuming our costs in our annual cost report will drive this higher.

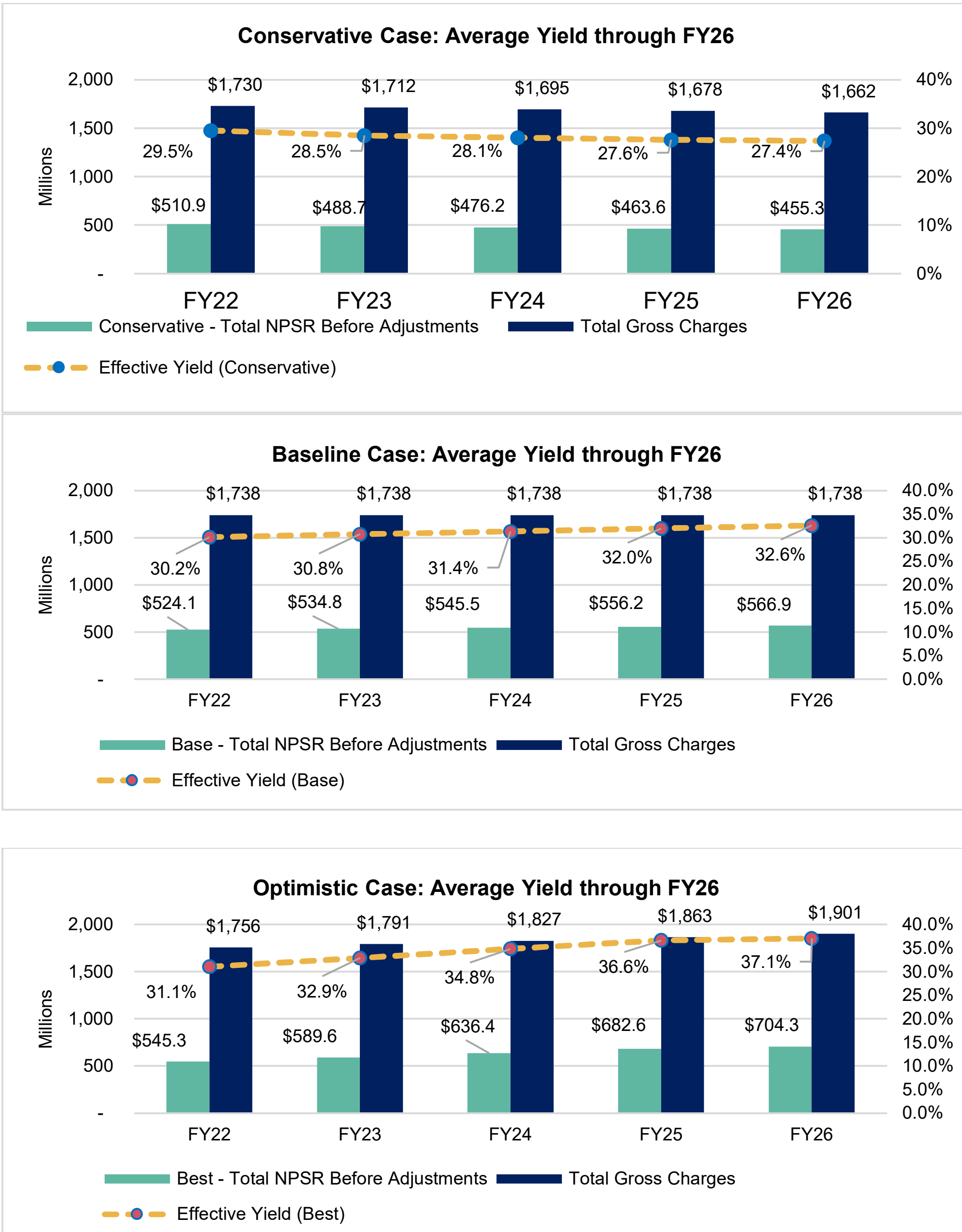
The conservative case scenario projects net NPSR to be $510.9 million in FY22. We assume a 1% decline in gross charges by payer year-over-year, assuming CCH loses volume to other providers. For the payer mix, we assume a negative 1% for Medicaid and CountyCare and a positive 2% adjustment for self-pay, assuming contraction in coverage options. For the reimbursement rate, we assume a slower positive rate increase by 1% for Medicaid and Managed Care, assuming a lower increase in our cost reports.

Next, a major part of the net NPSR calculation is considering yield represented as the total amount reimbursed across the three scenarios with an average 27-37%. This is due to the level of contractual payments from various insurers, inability of "self-pay" patients to pay the full gross charges, and coverage for uninsured, as previously detailed in the net NPSR assumptions. It should be acknowledged that using the yield to derive cash received from gross charges is likely a good approximation but will continue to be trued up in the final year-end financials.

Table 3. NPSR membership scenario assumptions

	Conservative	Baseline	Optimistic	Assumptions
Gross Charges by Payer				
Gross Charges	1% annual decrease	0%	2% annual increase	Conservative=Volume decline Baseline=Consistent volume Optimistic=Adjustment to pricing; volume increase
Average Percent Payer Mix				
Self-Pay	2% annual increase, max at total 38%	Constant	2% annual decrease, min at total 25%	Conservative=People lose coverage Baseline=People maintain current coverage Optimistic= Identifying coverage; State expansion
Medicaid	1% annual decrease	Constant	1% annual increase	Optimistic=Captures Self Pay
CountyCare	1% annual decrease	Constant	1% annual increase	Optimistic=Captures Self Pay
Average Reimbursement Rate				
Reimbursement Rate	1% increase only for Medicaid and MCO revenue	2% annual increase for Medicaid/Medicaid Managed Care	3% annual increase for Medicaid/Medicaid Managed Care	Conservative=Rates fall below inflation Baseline=Consistent with inflation Optimistic=Higher than inflation

Figure 9. Net patient service revenue projections



The CCH team is considering national healthcare trends in their forecasting. Table 4 shows the expected growth in selected specialties.

Table 4. National growth trends: 5-year compound annual growth rate

	Projected Inpatient Growth	Projected Outpatient Growth
Cardiovascular	-10.0%	10.9%
General Surgery	-4.2%	6.3%
Oncology	-3.3%	1.4%
Orthopedics	-8.3%	28.3%
Women's Services	-5.6%	8.5%
Neurosciences	5.7%	24.7%

Revenue cycle improvements

A consistent element in forecasting CCH revenues is the lag between when revenue is recognized on an accrual basis (as is required by an Enterprise Fund), and when revenue is recognized on a cash basis, as required by the County for reporting. On an accrual basis of accounting, revenues are recognized once the services are provided, while on cash basis revenues are recognized when the cash is received for the service. Within CCH there can be a significant lag between when services are provided to a patient and when the County receives the cash. There is a four to six day lag between services being rendered and the account is billed, to ensure all charges are reflected in the patient’s account. The collection process typically takes between 60 and 90 days to be completed. Two charges recognized as revenue on the same day on an accrual basis could be received as cash in two different months due to the range of lags, which makes predictions difficult.

CCH is currently improving their revenue cycle process and is monitoring improvements through KPI metrics established by their finance team. CCH is building a comprehensive revenue cycle turnaround plan created following a thorough assessment of operations. This turnaround plan initiative for FY2022 includes the onboarding of three specialized vendors to support endto-end revenue cycle operations, self-pay collections, and customer service and zero balance account collection. On average, CCH has generated $4.48 million in gross charges daily. Therefore, for each day that the accounts receivable is reduced the County stands to improve its cash position by approximately $1.1 million after factoring in the yield and current denial trends.

Table 5. RFPs for CCH revenue cycle improvement

RFP	Purpose	Financial Impact	Current Status
RFP #1: Zero balance insurance account recovery service provider	CCH is seeking a vendor to provide services to review accounts that are zero balance in attempt to collect additional missed reimbursement. In process, the ability to identify gaps in their collection process will be reviewed.	Year 1: ~$4.00M net recovery Ongoing: ~$2.90M recurring net recoveries	Signed, onboarding additional staffing starting May 2022
RFP #2: Revenue cycle end-to-end service provider	CCH is seeking a vendor to provide operational support services to improve revenue cycle KPIs and outcomes through replacing third party aged accounts.	Net expense savings ~$0.25M	Signed, onboarding additional staffing and go-live June 2022
RFP #3: Self-pay early out collections and customer service provider	CCH is seeking a vendor to provide services to review self-pay accounts with AI to determine likelihood of payment programs.	Gross Annual: ~$2.70M recovery Net Annual: ~$6.84M recovery	In review, pending signature

Chart of Accounts

In FY2022, the focus of Cook County Health collaborations will be on the chart of accounts. These changes will separate the provider side from health plan services and make it easier to understand the health system's revenue sources. The proposed chart of accounts has been developed by the OCFO in collaboration with CCH, and is being reviewed by the Comptroller, Budget, and ERP. A test environment has been established in EBS with the new revenue accounts. Through March and April, this test environment is being monitored and adjusted as needed to ensure all reports reconcile with the existing chart of accounts. The first public representation of the new account structure is targeted for the Preliminary Budget in early May, with full implementation in FY2023.

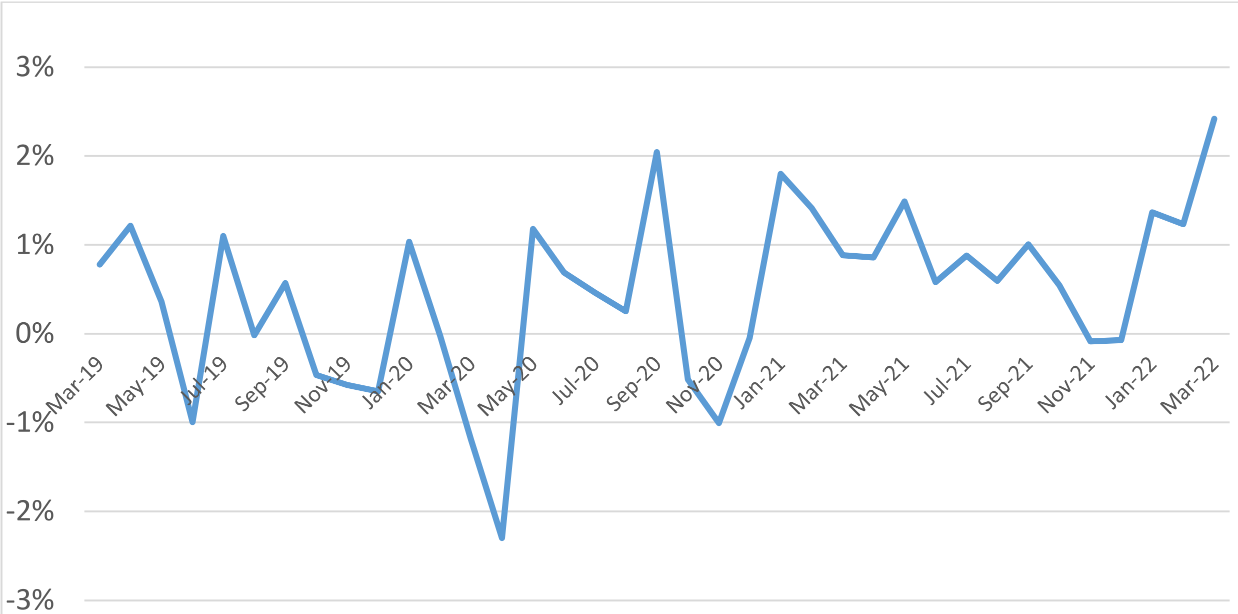
Other forecasting considerations

The County's revenues are impacted by economic conditions and policy decisions that should be considered when forecasting revenues. This section will provide an overview of several factors that may be affecting current revenues as well as future trends.

Inflation impacts

The March 2022 U.S. Bureau of Labor Statistics Consumer Price Index for all Urban Consumers was 8.5 percent higher than March 2021. Several categories particularly impacted by higher inflation, like food for home consumption and vehicle purchases, are not in the County's sales tax base. Other categories, such as motor fuel, are represented in the sales tax base. To analyze potential impacts of inflation on county sales taxes, staff created a modified version of the CPI for the Chicago region using just categories within the county's tax base. Figure 10 illustrates that inflation weighted for categories within the county's sales tax base started increasing significantly in January 2022.

Figure 10. Percent change in CPI for all urban consumers, Chicago MSA, not seasonally adjusted, weighted for categories within the county sales tax base



Inflation may impact several County revenue sources, including both revenue increases from price increases as well as reductions that could occur due to lower disposable income. Despite high inflation in January 2022, sales tax revenues generated from sales that month performed closer to the forecasted amount than in prior months, with $69.6 million in actual revenues, as compared to a $67.6 million forecast. Staff is monitoring the impacts of inflation on the following revenue sources:

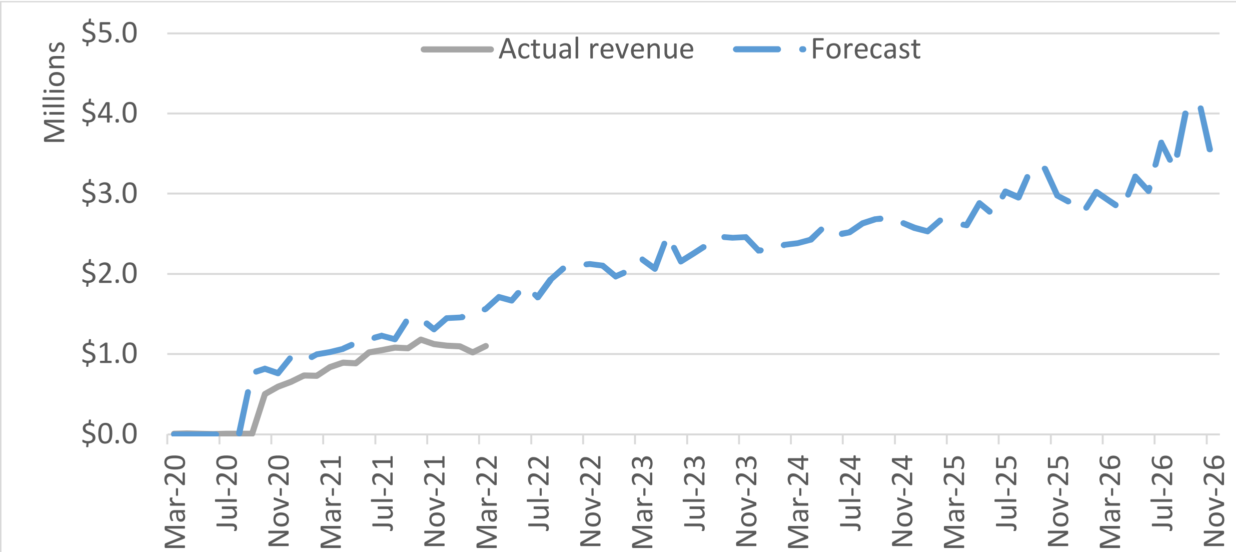
Percentage taxes
- County Sales Tax
- County Use Tax
- Amusement Tax
- Parking Lot and Garage Operation Tax
- General Sales Tax
- Hotel Accommodations Tax
- Cannabis Tax
- Sports Wagering Tax

Volume taxes
- Non-Retailer Transfer of Motor Vehicles Use Tax
- Gasoline / Diesel Tax
- Alcoholic Beverage Tax
- New Motor Vehicle Tax
- Cigarette Tax
- Other Tobacco Products

Cannabis tax update

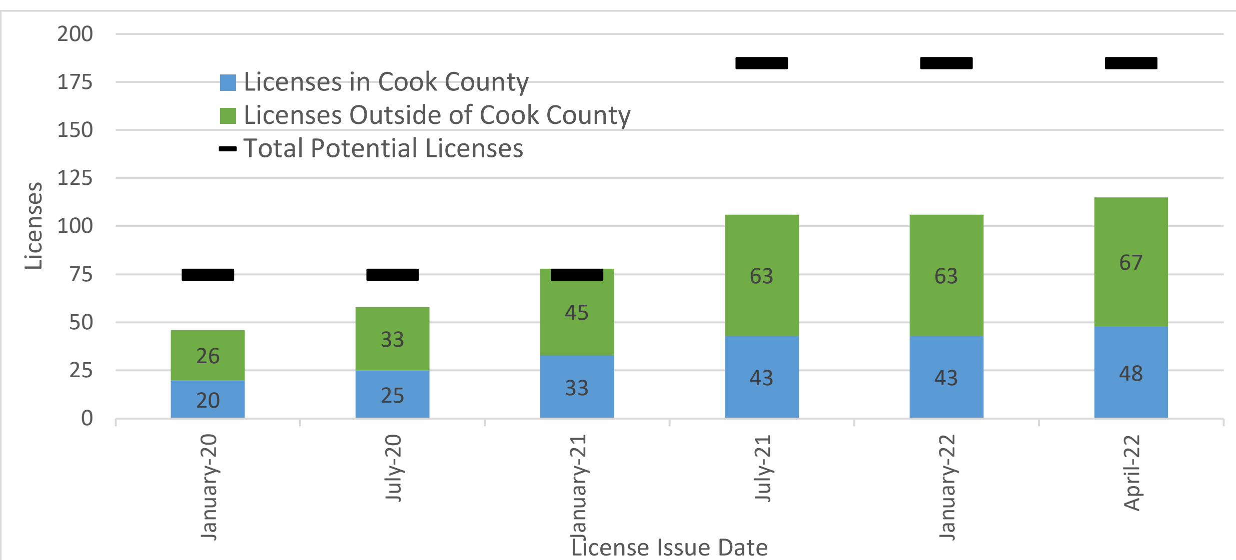
The County did not start to generate cannabis tax revenue until October 2020, and since then, revenues have not been performing at the level originally forecasted. Figure 11 illustrates the original forecast, before it was reduced based on recent results and feedback from the Department of Revenue.

Figure 11. Cannabis tax revenues, actual and forecast



One challenge in reaching previously forecasted revenue levels is that the number of dispensary licenses in the County has remained relatively flat for the past year. Figure 12 compares the number of available licenses in Illinois with the number that have been issued to dispensaries within Cook County. The state has authorization to issue 185 licenses, and 115 have been issued. If the proportion of licenses issued within the County remains consistent, we would expect around 30 of the 70 remaining licenses to be awarded within the county. State statute mandates that an additional 50 licenses be issued in 2022, however, although the state's licensing process is currently subject to pending litigation. However, we have also been looking at other elements of the industry that factor into supply. A court order was just lifted in March 2022 that will now allow the state to continue to issue craft grower licenses.

Figure 12. Cannabis dispensary licenses within and outside of Cook County



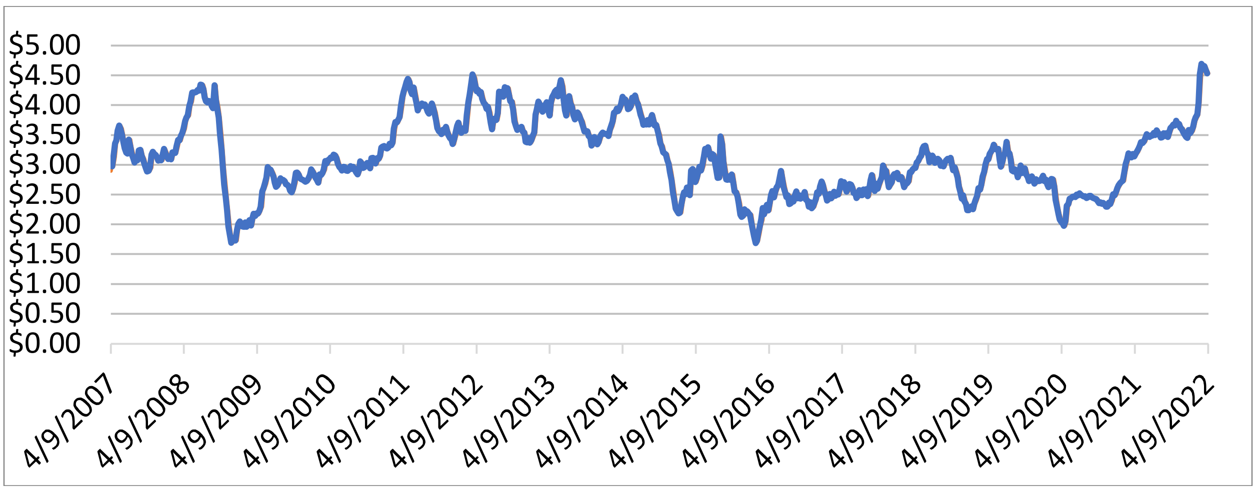
Source: Illinois Department of Financial and Professional Regulation

Gasoline taxes and prices

The State of Illinois recently amended the Motor Fuel Tax Law to shift the date of its 2022 motor fuel tax (MFT) rate increase from July 1, 2022 to January 1, 2023. The rate increase would have been based on the increase in the average 12-month CPI ending in March 2022 -- 6.2 percent, the highest since 1982. The State's action avoided a 2.4 cent state rate increase to 41.6 cents. Instead, they will use the 12-month CPI numbers ending in September 2022 for the January 1, 2023 rate increase.

Meanwhile, gas prices have increased by nearly $1.50 per gallon on average over the past year. However, Figure 13 illustrates that gas prices in Chicago have been nearly this high several times in the past 15 years. Recent price increases are significant; however, this is also not the first time motor fuel CPI has increased 20% month over month.

Figure 13. Weekly Chicago All Grades All Formulations Retail Gasoline Prices (Dollars per Gallon), April 2007-22



Source: U.S. Energy Information Administration, April 11, 2022

Considering the State of Illinois' recent legislation, as well as current gas prices, we examined the potential impacts of gas prices and the gas tax on Cook County residents.

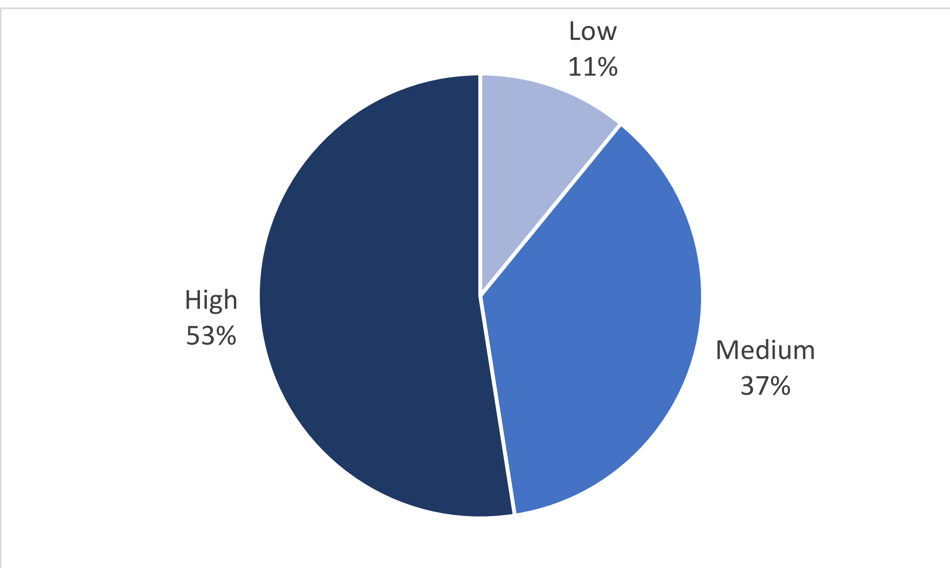
Higher prices have led to lower gas tax revenues. The County had been expecting to collect more than $90 million in FY2022 from its 6-cent gas tax, comprising 7 percent of the County's public safety budget. However, revenues may not reach those levels as gallonage has not kept up with the forecast. FY2022 revenues during the first quarter are $1.1 million lower than anticipated.

The reduction in consumption is not unexpected, although gasoline has historically been considered relatively inelastic, meaning that demand did not change significantly in response to changes in price. Elasticity of demand measures how much demand for products change in response to price changes. For example, goods like insulin are considered inelastic because demand does not change in response to price, while demand for unessential items tend to be more elastic. The estimates ranged from -.01 to -.08, which indicates that a 10 percent increase in price would generally reduce demand for gasoline by .1 to .8 percent — less than a percentage point. However, according to the Federal Reserve Bank of Dallas, recent studies estimate motor fuel elasticity the range of -.27 to -.35, which means that a 10 percent increase in price would reduce demand for gasoline by 2.7 to 3.5 percent, and theorize that consumers do reduce their discretionary driving in response to higher prices.[1] It is unclear how these findings may translate to Cook County, which features more transportation options, like transit, than other parts of the country.

The idea behind actions like the State's rate increase delay is that lower taxes may result in lower prices. However, it is not clear that a lower MFT rate is passed on to consumers at the pump, as gas prices tend to fluctuate week to week by more than any particular tax rate imposed by state or local governments. In addition, those that consume motor fuel the most are not typically those most in need of tax relief. Nationally, 73 percent of motor fuel and diesel is consumed by light duty passenger vehicles, and 27 percent is consumed for trucks, buses, and general aviation purposes.[2] These statistics mirror Illinois specific data that indicates that diesel gallons consumed, which would primarily be consumed by trucks and buses, have typically made up between 24 and 27 percent of total gallons consumed.

Among passenger vehicles, most fuel is consumed by households with higher income levels within the northeastern Illinois region. Figure 14 shows that most miles are driven by households with higher income levels, which likely translates to motor fuel usage. Households with low income drive approximately half as many miles on average as other households. A household with low income might spend $20 annually on Cook County's gas tax depending on their vehicle fuel economy. This is equivalent to 0.05 percent of income for a household earning $40,000.

Figure 14. Share of total passenger miles driven by income level of household, northeastern Illinois



Note: A household with low income is defined as a one with 60 percent or less of the Chicago MSA median income, by household size. A household with medium income is defined as one with between 60 and 140 percent of the Chicago MSA median income, by household size. A household with high income is defined as one with 140 percent or more of the Chicago MSA median income, by household size.
Source: Chicago Metropolitan Agency for Planning

[1] Lutz Kilian and Xiaoqing Zhou, Gasoline Demand More Responsive to Price Changes than Economists Once Thought, June 2020, https://www.dallasfed.org/research/economics/2020/0616.
[2] U.S. Bureau of Transportation Statistics

Update on recommendations of the IRFC deliverables

From the initial establishment of the Independent Revenue Forecasting Commission (IRFC) there have been two major underlining themes that have pervaded the discussion between the Office of the Chief Financial Officer (OCFO) and IRFC, broadening the scope of the revenues reviewed to include all major sources (including those collected by the hospital) as well as improving our capacity and ability to provide alternative revenue scenarios. Over the course of FY 2020 the near-term impacts of COVID 19 required a concerted effort to establish a means of forecasting potential future economic impacts to the County's Revenues and resulted in the initial development of alternative and base line scenarios with much success.

The majority of the recommendations from last year's IRFC discussions returned to the prevailing themes of prior discussions with a greater level of specificity and with the objective of establishing lasting processes that can be leveraged for further improvements to the breadth of revenues discussed and the logic surrounding the development of alternative scenarios.

Several longer-term action items are still ongoing. The items below are still in progress, with estimated timing included.

Table 6. Ongoing 2021 recommendations of the IRFC deliverables

Rec #	Deliverable	Description	Timing
1	PMO Meetings	We have established bi-weekly touchpoint meetings between the Office of the CFO and CCH Finance Team for additional knowledge and data transfer sessions.	Bi-Weekly meetings
2	Periodic transmission of data	As part of an ongoing process, will exchange files with CCH that provide historical average rates received by population and age cohort on monthly basis.	First week of the month on an ongoing basis
3	Pursue Changes to Chart of Accounts	In weekly meetings pursue changes to COA by leveraging discovery made in FY 2021.	Targeting FY 2023 Budget
6	Alternative scenario Methodology Document with clear and concise Procedures	The document will provide a central repository for the development of alternative scenarios in both the General and Health Fund	End of FY 2022

Alternative Scenario Methodology Document

The Alternative Scenario Methodology Document is currently being developed within the Office of the CFO. Based on feedback from the IRFC, this document will codify and explain the methods used to develop the and update the Optimistic and Conservative Scenarios we have developed over the last two years. Furthermore, the product will be a working document that can be used to develop future methodologies as well as identify and quantify risks that cut across the baseline, optimistic and conservative scenarios.

Economic update

In 2022, the Gross Metropolitan Product (GMP) for the Chicago-Naperville-Elgin metropolitan is forecasted to rise by 3.1 percent. The number of employed persons in the Chicago metropolitan area has reached pre-pandemic levels and Moody's forecasts that it will remain stable over the next five years. After reaching nearly 16 percent in the second quarter of 2020, the Chicago region's unemployment rate has dropped to below 5 percent. Moody's does not anticipate that it will reach its pre-pandemic level of 3.6 percent until around the end of 2023. Although inflation is expected to remain high in 2022, it is forecasted to return to the 2% range in 2023. Table 7 and Table 8 provide an overview of economic indicators that are considered when developing revenue forecasts.

Table 7. Actuals and forecasts of economic indicators, Chicago-Naperville-Elgin Metropolitan Area, 2021 to 2026

	2021	2022	2023	2024	2025	2026
Gross Metro Product, (Bil. Ch. 2012 USD, SAAR)	597.7	616.0	631.2	647.4	661.9	676.5
CPI, All Urban Consumers, (Index 1982-84=100, SA)	255.6	271.9	279.1	285.2	291.9	298.5
Resident Population: Total, (Ths. #)	9,411.7	9,401.4	9,398.2	9,386.2	9,368.0	9,354.4
Disposable Personal Income, (Mil. USD, SAAR)	594,626.0	599,002.5	630,102.0	659,355.6	686,803.9	713,391.6
Labor Force Participation, (%, SA)	62.5	64.9	65.2	65.7	65.9	66.0
Labor: Unemployment Rate, (%, SA)	6.3	4.1	3.7	3.9	4.1	4.5
Income: Median Household, (USD, SAAR)	76,099.1	77,531.6	80,372.2	83,259.9	86,094.9	88,969.7
Income: Per Capita, (USD, SAAR)	72,424.9	73,515.0	77146.5	80844.5	84343.0	87804.4
Labor: Number of Employed, (Ths. #, SA)	4,500.4	4,685.5	4,733.8	4,752.1	4,748.3	4,738.9
Retail Sales: Total, (Bil. USD, SAAR)	199.1	215.6	218.5	222.7	228.0	233.1

Source: Moody's Analytics, April 2022 baseline scenario

Table 8. Annualized percentage change in economic indicators from 2021 to 2026

	2021	2022	2023	2024	2025	2026
Gross Metro Product, (Bil. Ch. 2012 USD, SAAR)	4.9%	3.1%	2.5%	2.6%	2.2%	2.2%
CPI, All Urban Consumers, (Index 1982-84=100, SA)	4.6%	6.4%	2.6%	2.2%	2.3%	2.3%
Resident Population: Total, (Ths. #)	-0.1%	-0.1%	0.0%	-0.1%	-0.2%	-0.1%
Disposable Personal Income, (Mil. USD, SAAR)	5.6%	0.7%	5.2%	4.6%	4.2%	3.9%
Labor Force Participation, (%, SA)	0.1%	3.8%	0.5%	0.7%	0.3%	0.2%
Labor: Unemployment Rate, (%, SA)	-34.3%	-33.8%	-11.5%	5.7%	6.5%	7.7%
Income: Median Household, (USD, SAAR)	1.8%	1.9%	3.7%	3.6%	3.4%	3.3%
Income: Per Capita, (USD, SAAR)	7.2%	1.5%	4.9%	4.8%	4.3%	4.1%
Labor: Number of Employed, (Ths. #, SA)	2.7%	4.1%	1.0%	0.4%	-0.1%	-0.2%
Retail Sales: Total, (Bil. USD, SAAR)	16.5%	8.3%	1.3%	1.9%	2.4%	2.2%

Source: Moody's Analytics, April 2022 baseline scenario