QUARTERLY UPDATE OF THE LONG-TERM REVENUE FORECAST

Statutory Report to the Cook County Board of Commissioners

October 27, 2022

COOK COUNTY
GOVERNMENT
Bureau of Finance

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 report provides an update between the Long-term Financial plan provided to the IRFC and posted on the County's Website in July 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 FY2023 project plans and an update on recent regional and relevant economic activity.

Long-term forecast

Cook County prepares a long-term financial forecast to support responsible long-term planning. This section provides an overview of updates to the long-term General Fund and Health Fund forecasts.

General Fund

The General Fund accounts for approximately a quarter of the County's overall budget. It is comprised of the Corporate Fund and Public Safety Fund and supports the County's general operations.

Changes in forecasts since June 2022

Table 1 shows the nominal variance between the current forecast and what was presented at the last quarterly IRFC meeting. The FY2023 General Fund forecast decreased by $118.7 million, which also resulted in a decrease in the long-term forecast. The long-term forecast for each revenue source was revised upward or downward based on revenues recommended for the FY2023 budget. The decrease in the updated forecasts is driven by the transfer of several revenue sources from the General Fund – namely Cannabis Tax to the Equity Fund and transportation home rule taxes allocated to the County's new Transportation Home Rule Tax Special Purpose Fund. Several revenue sources are forecasted higher, which offset these transfers. The increase in the property tax allocation to the General Fund is driven by forecasted increases in Personal Property Replacement Tax disbursements available to fulfill statutory pension contributions. The sales tax revenue forecast also increased to reflect higher prices for most goods. Clerk of the Circuit Court fees are anticipated to decline due to a slowdown in court activities due to the elimination of cash bail as required by the Pretrial Fairness Act, effective January 1, 2023. The forecast for taxes on casino gaming were increased to reflect the opening of new casinos over the next three years.

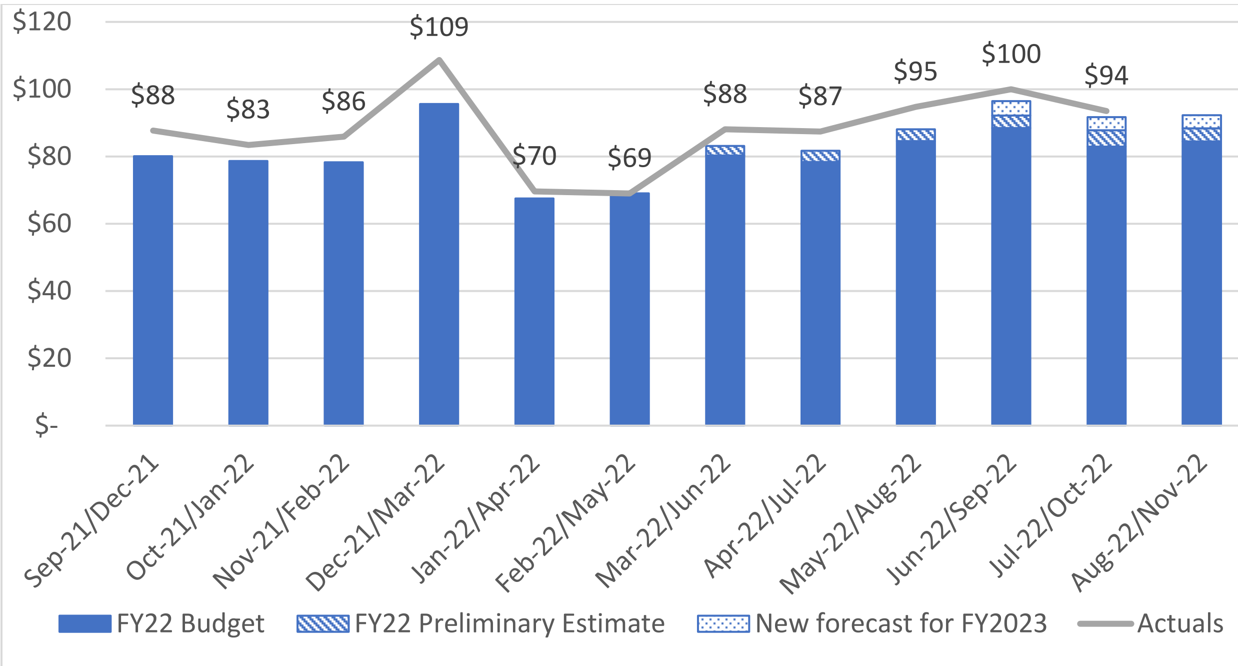
Table 1. Significant nominal variances between 4/27/2022 and 6/30/2022 forecast, in millions

	FY2023 % change in forecast	FY2023	FY2024	FY2025	FY2026	FY2027
400010-Property Taxes	34.1%	$68.2	$92.4	$100.1	$104.7	$96.6
401150-County Sales Tax	3.0%	$31.9	$18.4	$18.1	$19.4	$20.0
401250-Wheel Tax	-100.0%	($4.0)	($4.0)	($4.0)	($4.0)	($4.0)
401330-Il Gaming Des Plaines Casino	12.0%	$1.5	$3.5	$5.5	$5.5	$5.6
401350-Amusement Tax	4.9%	$1.8	$1.8	$1.8	$1.9	$1.9
401390-State Income Tax	6.4%	$1.2	-	-	-	-
401550-Hotel Accommodations Tax	7.5%	$2.0	($5.9)	($6.1)	($6.3)	($6.4)
402548-Clerk of the Circuit Court Fees	-9.4%	($6.9)	($7.0)	($7.4)	($7.8)	($8.2)
402150-County Clerk	-6.2%	($3.7)	$2.2	$0.3	($1.6)	($3.7)
403015-Sheriff Municipal Division	-11.2%	($1.5)	($3.5)	($3.0)	($2.5)	($2.0)
406008-Indirect Cost	9.3%	$1.1	$1.2	$1.2	$1.2	$1.2
407010-Miscellaneous Revenue	17.5%	$5.7	$5.8	$5.9	$6.0	$6.1
407080-Other	130.2%	$6.4	$6.6	$6.7	$6.8	$6.9
411495-Other Financing Sources	--	$30.0	-	-	-	-
Subtotal major changes	**1.9%**	**$103.7**	**$111.5**	**$119.2**	**$123.5**	**$114.1**
Other changes	5.5%	$29.6	$4.8	$12.5	$17.5	$22.2
Transfers to other funds						
Transportation taxes	-100.0%	($237.0)	($239.6)	($242.5)	($245.4)	($248.5)
Cannabis Tax	-100.0%	($15.0)	($24.0)	($27.4)	($31.3)	($35.9)
Total	**-5.7%**	**($118.7)**	**($147.4)**	**($138.1)**	**($135.8)**	**($148.1)**

Sales tax estimate

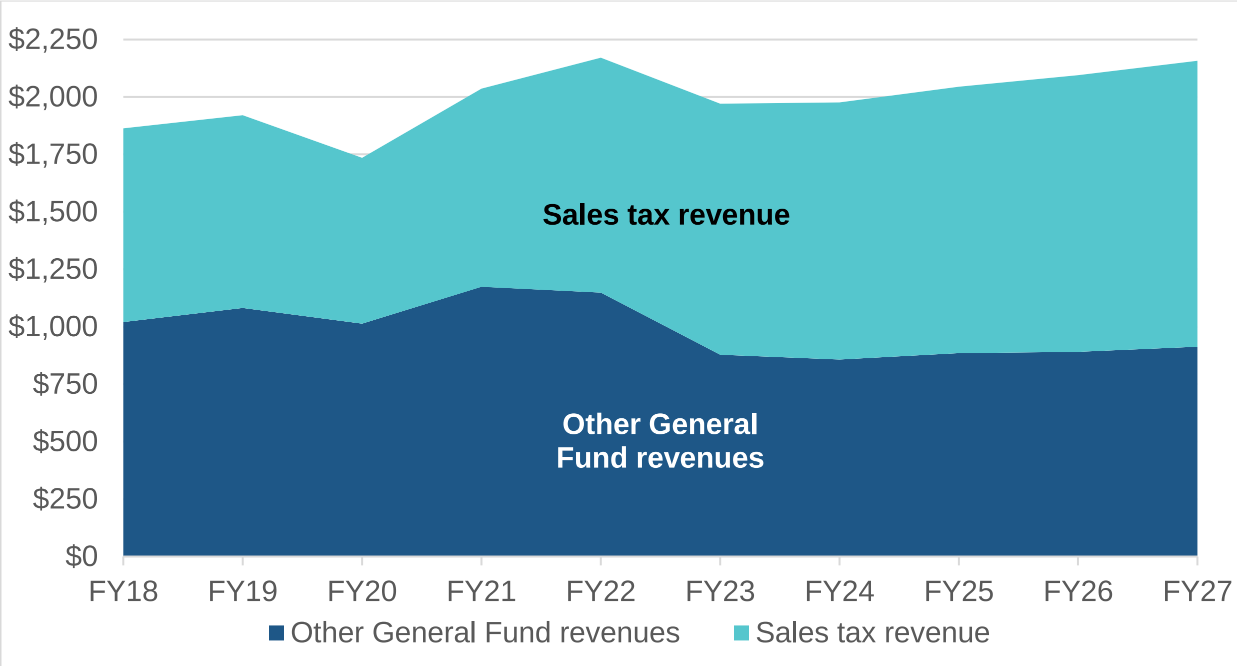
Year to date, FY2022 sales tax revenues are 9.5 percent higher than the original forecast and 2.1 percent higher than the June preliminary forecast. In addition, results from September and October 2022 are higher than the new forecast developed as part of the FY2023 budget. These positive results may be driven by a combination of pent-up demand, remote sales, and inflationary impacts, particularly increases in the price of gasoline. Figure 1 compares actual sales tax revenue with forecasts over the past year.

Figure 1. Sales tax revenue, actual and forecasted



The sales tax forecast is anticipated to increase at a compound annual growth rate (CAGR) of 3.3 percent from FY2023 through FY2027. At the same time, the General Fund is forecast to grow at a 2.3 percent CAGR during the same period. As a result, more than half of the growth in the long-term General Fund revenue forecast comes from sales tax growth. The potential for volatility and the reliance on the tax is a source of financial risk to the General Fund, due to its economic sensitivity. Figure 2 illustrates growth in sales tax revenue as compared to growth in other General Fund revenues. Note that the drop in other revenues in FY2023 is attributable to transportation home rule taxes and Cannabis Tax being transferred out of the General Fund into special purpose funds.

Figure 2. General Fund revenue, actual and forecasted, FY2018-FY2027



Long term fiscal plan

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 may not keep pace. Several critical revenue sources are declining over time or growing at rates below general inflation.

Revenues are expected to largely keep pace with expenses without large deficits in the long term. Between FY2023 and FY2027, total expenses for the General Funds are expected to increase at a Compound Annual Growth rate (CAGR) of 2.0%, while revenues are estimated to increase by a CAGR of 2.3%. This growth can be mostly attributed to sales tax, which is expected to grow at an average annual rate of 3.3%. Amusement tax is anticipated to increase as it continues to recover from drops experienced during the height of the COVID-19 pandemic. Revenues associated with gambling are also projected to experience strong growth as additional casinos open in the County during FY2023, FY2024, and FY2025. However, many of Cook County's revenue streams are either failing to keep pace with inflation or declining, including the cigarette tax and many of the fee revenues imposed to support county operations.

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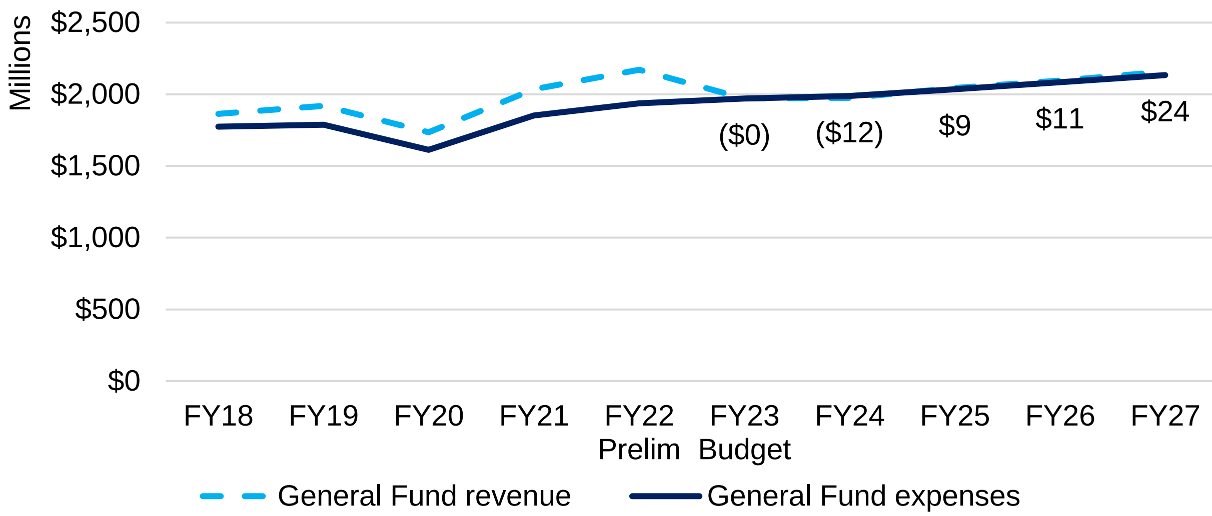
Figure 3. General Fund net surplus/(deficit) projections

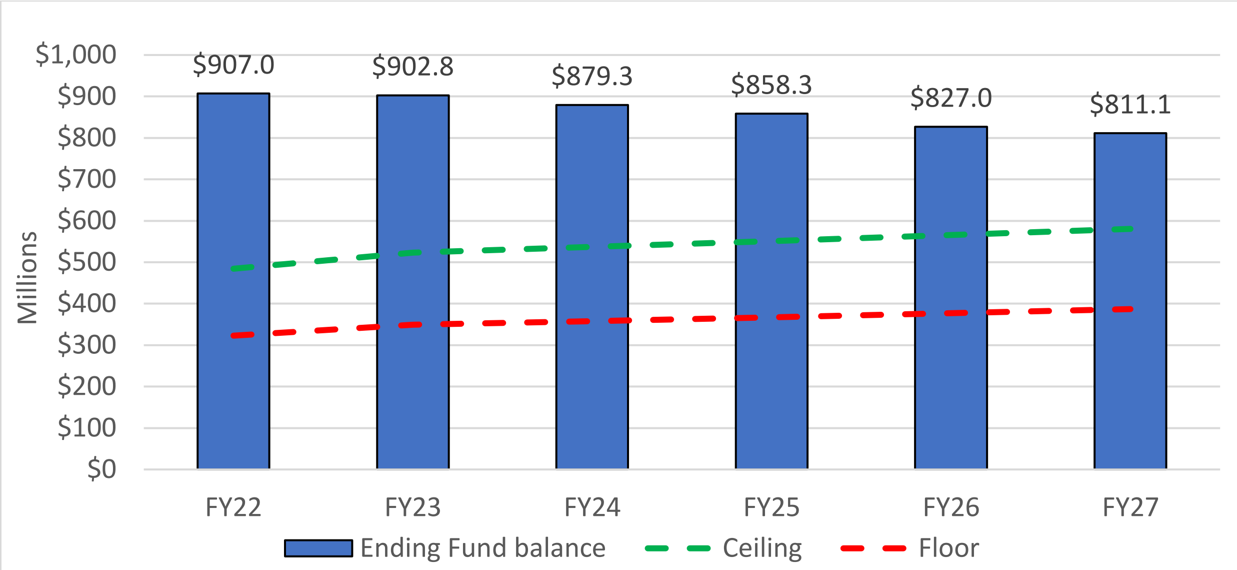


Fund balance projection

In FY2022, the County's beginning unassigned fund balance within the General Fund was $703.6 million. Based on current estimates for FY2022, the fund balance is anticipated to increase by $233.4 million by the end of FY2022. The unassigned fund balance is expected to remain above the target for FY2023, so an assignment of $231.8 million will be made to other funds. In addition, $30.0 million will be appropriated in FY2023 to the County's new Infrastructure Fund. The unassigned fund balance projection also reflects transfers in FY2023 of $44.3 million and $29.3 million from the General Fund to the Self Insurance Fund and the Equity Fund, respectively. As a result, by the end of FY2023, the fund balance is expected to total $571.7 million. This amount accounts for approximately 26% of the County's FY2023 annual budgeted expenditures from the General Fund and the Transportation Fund. According to the long-term revenue and expense forecasts for FY2023 to FY2027, the long-term projected ending fund balance is estimated to increase, reaching $603.9 million by FY2027.

Figure 4 illustrates that the projected ending fund balances are anticipated to slowly decline based on the long-term revenue and expense forecasts for FY2022 to FY2027. The Green dotted line (Ceiling) represents 3 months of projected General Fund and Transportation Related Home Rule Taxes Fund expenses, and the Red dotted line (Floor) represents 2 months' worth of projected annual General Fund and Transportation Related Home Rule Taxes 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, FY 22 to FY27



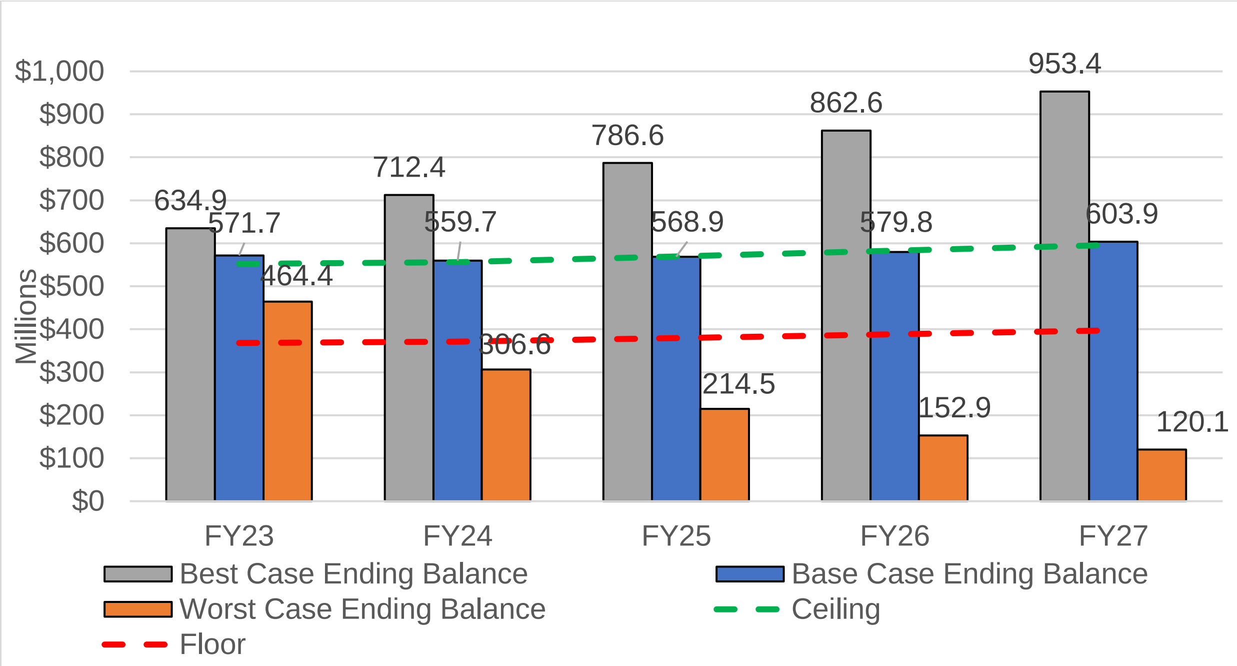
Alternative fund balance scenarios

To understand the impact of different economic scenarios on General Fund revenues and the resulting fund balance, the OCFO forecasts economically sensitive revenues based on different economic indicators using Moody's baseline, S1, and S3 scenarios, which represent the 50th, 10th, and 90th percentile forecasts of potential economic conditions. Indicators such as gross metropolitan project, unemployment rate, and CPI are used for different revenue sources.

Each revenue scenario is compared to the expenditure forecast, along with the fund balance floor and ceiling – the floor represents two months of projected annual expenses and ceiling represents three months of projected annual expenses. The revenue scenarios, as well as the floor and ceiling, incorporate both General Fund and Transportation Fund revenues and expenses in order to fully capture the potential economic impacts on revenues used by the County for operating expenses.

Figure 5 represents the baseline scenario alongside the worst- and best-case scenarios. In the baseline scenario, the fund balance remains near the fund balance ceiling through FY2027. The best case scenario, where there is a 10% probability that the economy will perform better and a 90% probability that it will perform worse, assumes a stronger economy that returns to full employment in the 4th quarter of 2022, as well as decelerating inflation. The worst-case scenario, where there is a 90 percent chance of the economy performing better and a 10 percent change it will perform worse, assumes several economic challenges, including a recession starting in the 4th quarter of 2022, and that full employment does not return until 2027. This results in a drop in the fund balance such that, without further action, the General Fund does not meet the fund balance floor by FY2024.

Figure 5. Unassigned ending fund balance scenarios, FY2023-2027



Health Fund

The Health Fund accounts for nearly half of the County's overall budget. The Health Fund receives revenue from and is used to support health system operations and CountyCare.

Long term fiscal plan

By FY2027, CCH revenues are expected to increase by $243.6 million over the FY2023 budget a CAGR of 1.5%. Expenditures within the Health Enterprise Fund are expected to increase by $282.6 million from FY2023 to FY2027, a CAGR of 1.7 percent. Overall, revenues are anticipated to keep up with projected expenses. Figure 6 shows forecasted revenues and expenses for the Health Fund through FY2027, along with projected surpluses and deficits.

Figure 6. Health Fund net surplus/(deficit) projections

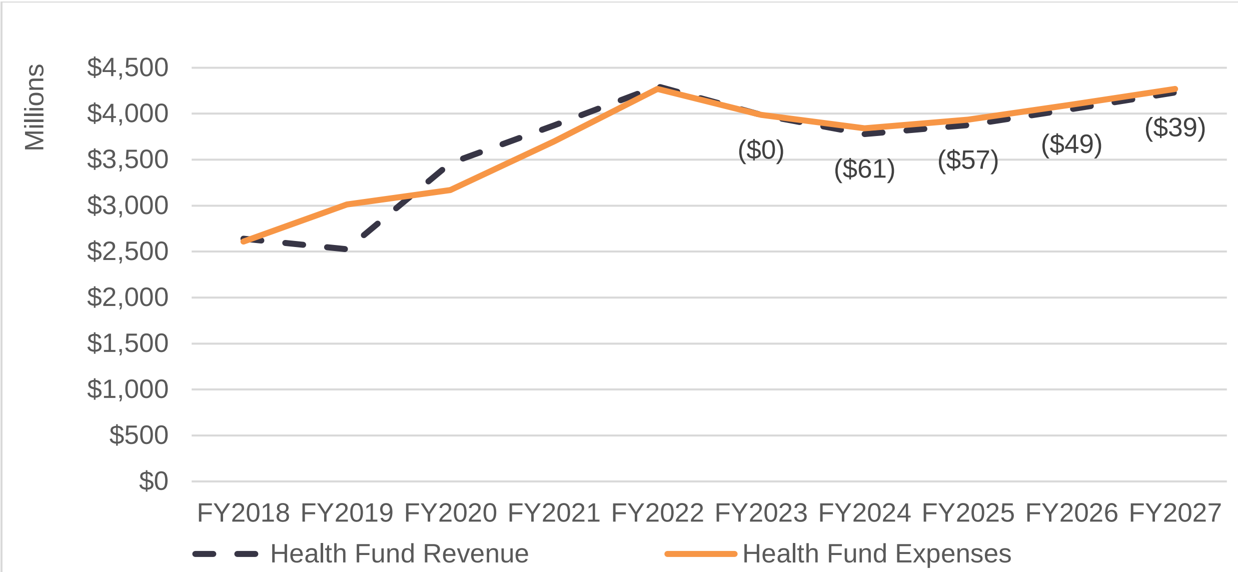
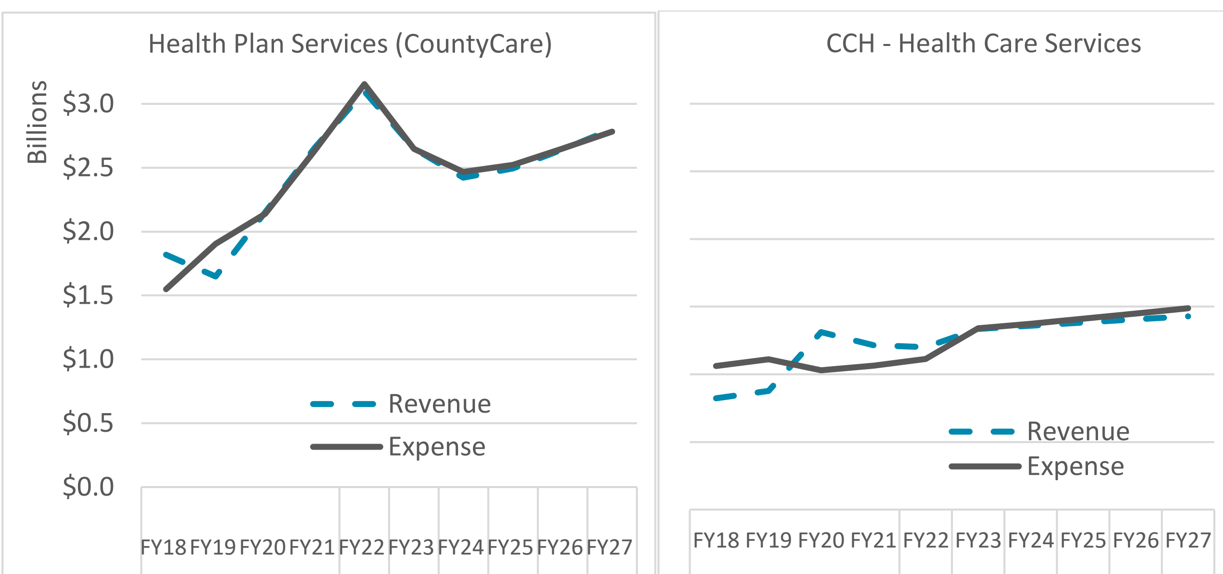


Figure 7 illustrates that after an initial decline in FY2023 and FY2024, long-term growth in the Health Fund is driven by Health Plan Services. Declines in revenues and expenses in FY2023 and FY2024 can be attributed to the reinstatement of redeterminations at Health Plan Services and return to auto assignment levels. Increases in revenue after FY2024 are driven by expected increases in per member per month revenue for Health Plan Services. Revenues from health care services provided by the hospital system are expected to growth an average of 1.7 percent annually, slower than expenses, which are forecast to grow 2.7 percent on average.

Figure 7. Health Plan Services and Health Care Services net surplus/(deficit) projections



HPS membership and revenue scenarios

HPS revenue is a function of the number of CountyCare members and the per member per month revenue generated by those members. Both factors are driven by state policy changes that impact membership levels and PMPM rates. The OCFO and CCH staff analyzed three different scenarios focused on several factors, particularly the timing of the end of the Public Health Emergency (PHE). It is anticipated that when the federal government does not renew the PHE, redetermination for Medicaid eligibility will resume and the proportion of the autoenrollment pool assigned to CountyCare will drop. These changes will impact membership attrition and enrollments. Table 2 summarizes the assumptions used in these scenarios. Note that as of the publication of this report, the PHE has been renewed, making redeterminations and auto-enrollment changes most likely to occur based on the Optimistic scenario, rather than the baseline scenario.

Table 2. HPS scenario assumptions

CountyCare scenario	Redeterminations Resume and Attrition	Next Month Choice Add Projection	Next Month No Reason Given Term Projection	No Reason Given Attrition	Future Month Auto-Enrollment	Auto-Enrollment Pool	PMPM rates
Conservative	Q4 2022; 2.5%	Historical Average: 0.7K	Daily Adj. Projection: 2.6K	COVID Attrition: 11.2%	35%, Q4 2022	Historical average	25% decrease to base trends
Base	Q1 2023; 2.5%	Historical Average: 0.7K	Daily Adj. Projection: 2.6K	COVID Attrition: 11.2%	35%, Q1 2023	EVH adjusted	Growth rates based on trends
Optimistic	Q2 2023; 2.2%	Daily 834 Adj. Projection: 1.0K	Historical Adj. Projection: 2.3K	Historical Attrition: 10.2%	35%, Q2 2023	EVH adjusted	25% increase to base trends

Figure 8 shows projected revenues for CountyCare in each scenario. Revenues in the conservative and baseline scenarios are anticipated to drop in FY2023 and FY2024, and then grow at an average annual rate of 3.8 percent and 5.0 percent respectively between FY2024 and FY2027. In the optimistic scenario, after an initial reduction in FY2023, revenues start growing again in FY2024, and grow 6.8 percent on average between FY2024 and FY2027.

Figure 8. CountyCare projected revenues, FY2023 through FY2027

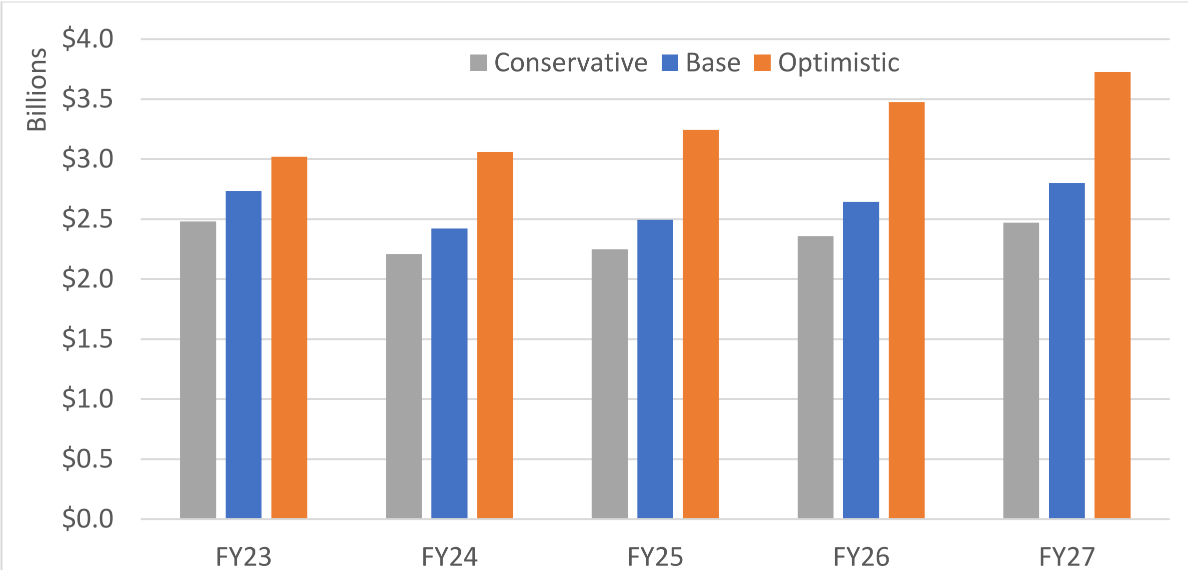
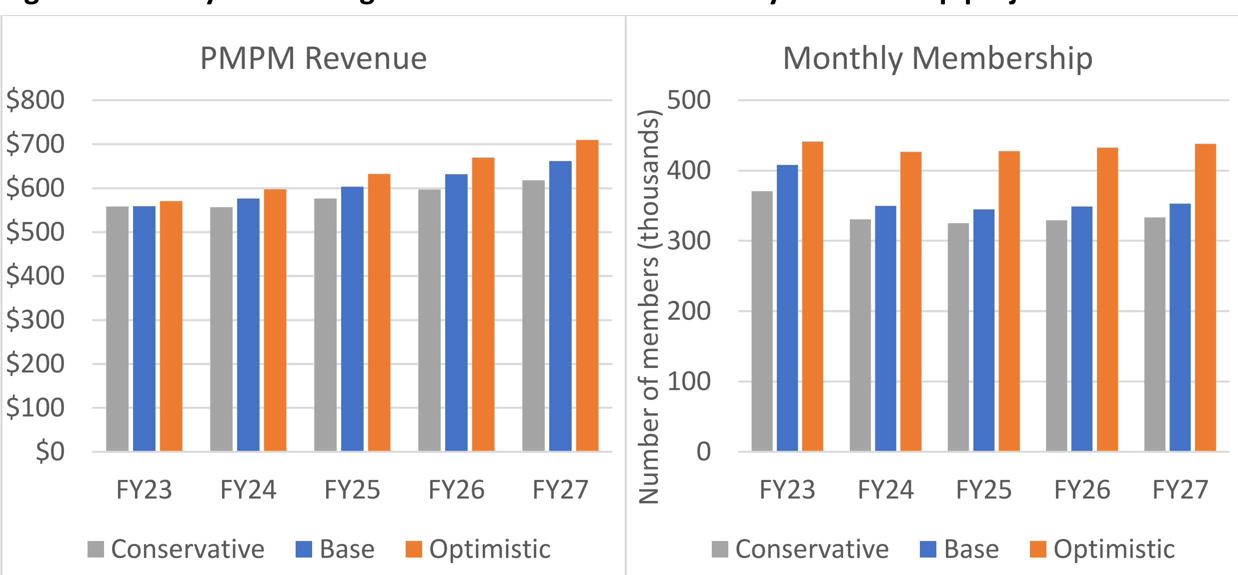


Figure 9 compares growth in monthly membership with growth in average PMPM revenue. In all scenarios, overall revenue growth was driven by growth in PMPM rates. The baseline scenario assumes an average annual growth of 4.3 percent in PMPM rates based on past trends, while the conservative and optimistic scenarios assume a 2.6 percent and 5.6 percent growth, respectively.

Membership is anticipated to drop in all scenarios in FY2024 and then again in the conservative and baseline scenarios in FY2025. The differences in these reductions across scenarios are driven by the timing and impact of redetermination resuming and the timing of the reduction in the autoenrollment pool being assigned to CountyCare. After these initial drops, membership increases just slightly in each scenario.

Figure 9. CountyCare average PMPM revenue and monthly membership projections



Net patient service revenue projections

To understand the impact of changes in volume in the hospital system, reimbursement rates, and whether and how patients are insured, OCFO works with CCH to develop assumptions around three revenue forecasting scenarios. Table 3 provides an overview of the assumptions used to forecast net patient service revenue in each scenario.

In the baseline scenario used in the long-term forecast, the forecast assumes that volume will be consistent, patients will maintain their current insurance coverage, and reimbursements rates will be consistent with inflation. To understand the impact of changes that would result in lower revenue growth, the conservative scenario assumes a decline in volume and associated gross charges, that fewer people will have Medicaid coverage, and reimbursement rates will fall below inflation. Conversely, the optimistic scenario assumes that volume and associated gross charges will increase, that more charges associated with self-pay will be covered by Medicaid, and that reimbursement rates will be higher than inflation.

Table 3. Annual change in NPSR assumptions, by scenario

		Conservative	Base	Optimistic
Gross charges		1% decrease	0%	2% increase
Payor mix	**Self-Pay proportion**	2 percentage point increase, maximum at total 38%	Constant	2 percentage point decrease, minimum at total 25%
Payor mix	**Medicaid proportion**	1 percentage point decrease	Constant	1 percentage point increase each year
Payor mix	**CountyCare proportion**	1 percentage point decrease	Constant	1 percentage point increase each year
Reimbursement rate		1 percentage point increase for Medicaid and Medicaid Managed Care	2 percentage point increase for Medicaid and Medicaid Managed Care	3 percentage point increase for Medicaid and Medicaid Managed Care

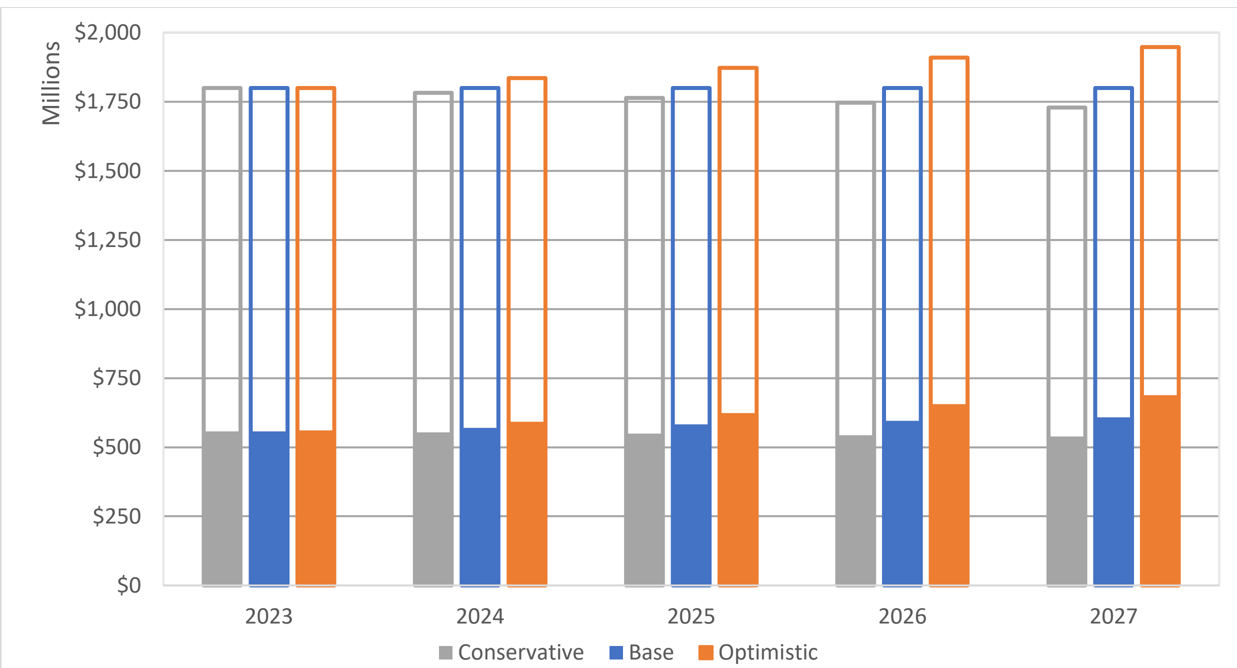
Net patient service revenue (NPSR) projections for the baseline scenario, the optimistic scenario, and the conservative scenario for FY2023 to FY2027 are illustrated in Figure 10. The baseline scenario projects NPSR to be $557.6 million in FY2023, reaching $607.9 million in FY2027. This scenario assumes no growth in gross charges and consistency in payer mix but assumes that the reimbursement rate increases 2% for Medicaid and Managed Care year-over-year after FY2022. 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 will reach $685.2 million in FY2027. The scenario assumes 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. In this scenario's payer mix, it is assumed the state will expand Medicaid coverage, resulting in Medicaid and CountyCare increasing by 1 percentage point annually while self-pay declines by 2 percentage points annually until it reaches 25 percent of gross charges. Because this threshold has already been reached, the payor mix does not change in the optimistic scenario. For the reimbursement rate, the scenario assumes a positive rate increase of 3% for Medicaid and Managed Care, at the higher end of inflation, assuming CCH costs in its annual cost report will drive this higher.

The conservative case scenario projects net NPSR to drop to $538.5 million by FY2027. This scenario assumes a 1% decline in gross charges by payer year-over-year, assuming CCH loses volume to other providers. The conversative scenario's payer mix assumes Medicaid and CountyCare will drop by one percentage point annually, while self-pay increases by two percentage points annually, assuming contraction in coverage options. For the reimbursement rate, the scenario assumes a slower positive rate increase by 1% for Medicaid and Managed Care, assuming a lower increase in cost reports.

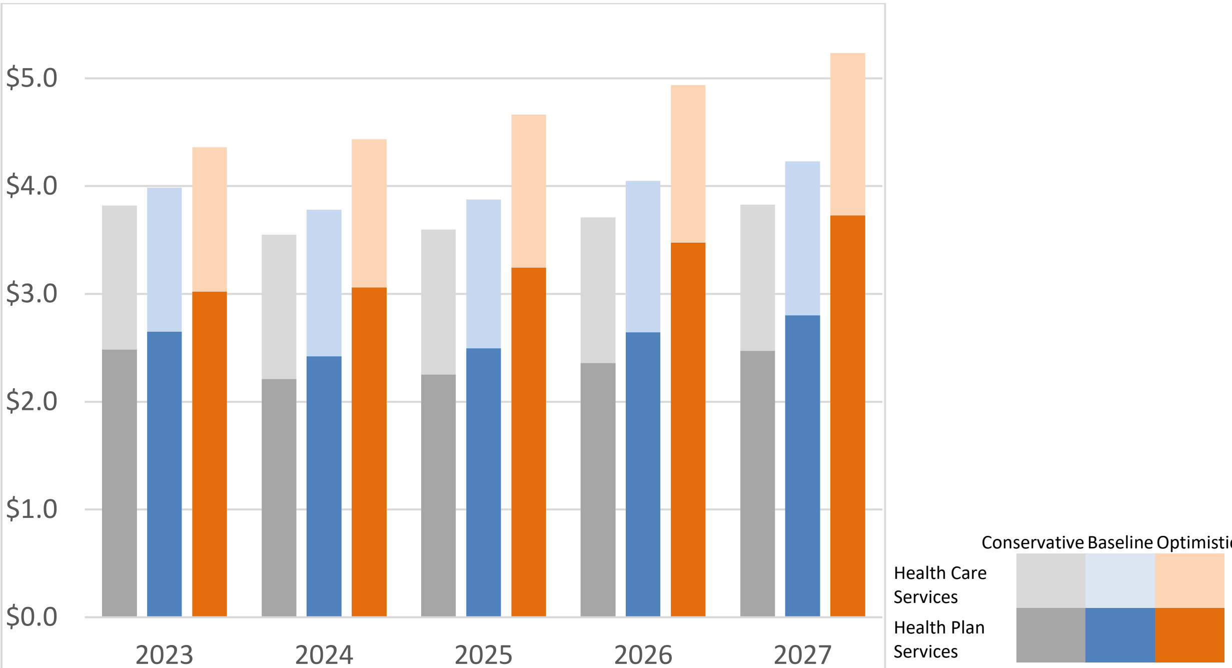
In each of these scenarios, the yield, which is the percent of gross charges collected as NPSR, is driven by the level of contractual payments from various insurers and inability of self-pay patients to pay the full gross charges. The yield varies depending on the assumptions the extent that patients are self-pay versus covered by Medicaid, and changes in reimbursement rates. Average yield across payors starts at 31 percent in FY2023 and grows to nearly 34 percent in the baseline. The optimistic only reaches 35 percent because as described above, the payor mix does not change. Yields remain at 31 percent in the conservative scenario.

Figure 10. Net patient service revenues compared to gross charges, 2023-27



Overall, differentials in revenues across the scenarios are driven by CountyCare assumptions, while NPSR and other CCH revenues remain relatively level across scenarios. Figure 11 provides a summary of the impact of the different scenario assumptions to the Health Fund long-term forecast.

Figure 11. Health Fund, revenue scenario results, FY2023-27



Update on recommendations of the IRFC

The IRFC's recommendations were provided on August 31, 2022 and included six new recommendations that build on those approved in FY2021. The reflect the need to document and monitor the implementation of previous recommendations. Several previous action items, outlined in Table 4, are still being pursued, while several new recommendations are already in progress.

Table 4. Progress on recommendations of the IRFC

	Deliverable	Progress
FY2022		
	Project management meetings	Biweekly touchpoint meetings between the Office of the CFO and CCH Finance Team are continuing
	Periodic transmission of data	Continuing to receive monthly data on gross charges from CCH
	Pursue changes to Chart of Accounts	New Chart of Accounts was integrated into FY2023 Executive Recommendation

	Alternative scenario methodology	Alternative scenario methodology draft was completed
FY2023 initial deliverables		
	Create a calendar of economic data releases	Calendar of economic data releases has been created. More items will be added to the calendar and the calendar will be integrated into the forecasting schedule after 2023 dates are available.
	Ensure forecasting assumptions properly apply inflation growth	Completed revenue and expenditure estimates according to recommendation
	Provide an analysis of the potential impact of providing funding support to ARPA initiatives	Scoped ARPA program sustainability strategy

Economic update

In their October 2022 forecast, Moody's Analytics forecasted that the Gross Metropolitan Product (GMP) for the Chicago-Naperville-Elgin metropolitan would rise by 3.0 percent in 2022. However, the forecast assumes that real GMP will grow less than a percent in 2023 because of expected responses to monetary policy changes. 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 is no longer anticipating that it will reach its pre-pandemic level of 3.6 percent in the next five years, but it is forecasting that it will remain below 5 percent. Although inflation is expected to remain high in 2022, it is forecasted to drop to the 4% range in 2023. Table 5 provides an overview of economic indicators that are considered when developing revenue forecasts.

Table 5. Actuals and forecasts of economic indicators, Chicago-Naperville-Elgin Metropolitan Area, 2021 to 2027

	2021	2022	2023	2024	2025	2026	2027
Gross Metro Product, (% change, Ch. 2012, SAAR)	6.2%	3.0%	0.0%	2.1%	2.7%	2.8%	2.5%
CPI, All Urban Consumers, (% change, SA)	4.6%	8.1%	4.1%	2.3%	2.2%	2.1%	2.1%
Resident Population: Total, (Ths. #)	9,411.7	9,401.8	9,400.7	9,390.9	9,372.8	9,357.9	9,342.0
Disposable Personal Income, (% change, SAAR)	5.6%	-0.1%	5.4%	4.8%	4.1%	4.1%	3.9%
Labor Force Participation, (%, SA)	63.9%	65.7%	66.0%	66.4%	66.7%	66.8%	67.0%
Labor: Unemployment Rate, (%, SA)	6.3%	4.4%	4.2%	4.3%	4.1%	4.4%	4.5%
Income: Median Household, (SAAR)	$81,444	$83,456	$86,296	$89,437	$92,499	$95,766	$99,027
Income: Per Capita, (SAAR)	$73,036	$74,667	$77,773	$81,391	$84,883	$88,635	$92,313
Labor: Number of Employed, (Ths. #, SA)	4,500.4	4,707.9	4,742.1	4,768.3	4,785.0	4,778.5	4,775.9
Retail Sales: Total, (% change, SAAR)	18.1%	8.2%	1.7%	2.6%	2.8%	2.3%	2.3%

Source: Moody's Analytics, October 2022 baseline scenario