

Income Tax Forecast

FY2022-2027



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HIGHLIGHTS OF KEY FINDINGS

- Aggregate net income tax revenues are projected to recover quickly in FY2023 from the pandemic related stagnation and decline in FY 2021 and FY 2022. However, the compound annual average growth rate from FY 2022 through FY 2027 is expected to be higher at 2.5 percent, or 0.5 percent real growth when controlling for inflation.
- When isolating near-term job growth, the City of Cincinnati is expected to enter a period of stagnation. While regional job growth is expected, much of the job growth in the Cincinnati Metropolitan Statistical Area (Cincinnati, OH-KY-IN) is expected to occur outside of the City of Cincinnati.¹
- COVID-19 related tax refund liability remains variable throughout FY 2022 through FY 2027. The Economics Center estimates that taxable earnings will continue to be at risk, especially factoring in a potential increase of earnings tax related refunds which have not yet been experienced as a widespread phenomena. Based on a comparison of past collections as well as historical significance to the City's budget, the Economics Center maintains an expected risk of 16.0 to 24.0 percent of earnings taxes being at risk due to a portion of workers in the City returning to the office but some also maintaining a hybrid work environment.

¹ Emsi

INTRODUCTION

To assist the City of Cincinnati in planning and projections, the Economics Center estimated a six-year forecast of net income tax revenues and major components for the period of fiscal year (FY) 2022 to FY 2027. In 2013 the City of Cincinnati adjusted its accounting schedule from calendar year to a July-June fiscal year. All estimates presented in this report are for a July-June fiscal year, including historical data.

To prepare the forecast, the Economics Center analyzed historical tax revenue trends for the City of Cincinnati, as well as information on tax incentive payments and additional transfers of funds. This information was combined with data on national economic trends to develop the forecast projections. The Economics Center also examined data on regional industry employment and wages for the City. This analysis identified significant industry sectors influencing the local economy and illustrates the benefits to the local economy from its relatively diverse commercial base. While the City's economy is subject to national trends affecting its most significant industries, the diverse commercial base allows declines in one sector to be offset by growth in another.

FORECAST

To forecast net income tax revenues for the six-year horizon, FY 2022 through FY 2027, the Economics Center analyzed historical patterns for total net revenues and its components.

Total net revenue estimates, along with upper- and lower-bounds constructed for 90.0 percent confidence intervals, and the forecast growth rates are presented in Table 1. Forecasted net revenues for FY2022 are estimated at \$383.2 million, a decrease of 6.44 percent from fiscal year 2021. While the actual growth rate varies annually, the expected compound annual nominal growth rate is 1.15 percent from FY 2022 to FY 2027. Inflation is expected to be 2.0 percent during this time period.²

Table 1: Forecasted Net Income Tax Revenue and Growth Rates* FY 2021 - FY 2027

Fiscal Year	Forecasted Collections (\$M)	Percent Change	General Fund, Pred. (\$M)	General Fund, Smoothed (\$M)
2021	\$409.60		\$330.86	
2022*	\$383.24	-6.44%	\$321.43	\$321.43
2023*	\$398.37	3.95%	\$343.04	\$327.04
2024*	\$400.28	0.48%	\$344.69	\$332.65
2025*	\$402.48	0.55%	\$346.58	\$338.25
2026*	\$404.29	0.45%	\$348.14	\$343.86
2027*	\$405.84	0.38%	\$349.47	\$349.47

Source: Economics Center model results and calculations.

² Federal Reserve Bank, Table 1. Economic Projections of Federal Reserve Board Members and Federal Reserve Bank Presidents Under Their Individual Assumptions of Projected Appropriate Monetary Policy, March 2021

The Economics Center also calculated a smoothed general fund amount by making increases steady throughout the years of the forecast. This artificially shows consistent “steps” in terms of increases in funding. This was done by making consistent annual increases in the fund to potentially better show longer term budget approaches.

Additionally, the Economics Center analyzed the potential impacts of refunds due to increased levels of work from home and hybrid work environments. Fiscal year 2021 was expected to be impacted at a higher rate of telework earnings tax refund than years 2022-2027. This was due to the mandated quarantine in the Spring and into the Summer of calendar year 2020. As of May 2022, (the previous report cited April 2021 and many companies are moving towards what seems to be a permanent hybrid arrangement), many companies are still operating as a hybrid environment. It is also important to note that individuals whom were able to telework likely had higher taxable earnings than occupations in such industries as food service, accommodations, or retail.

The projected risk for earnings tax collections is expected stabilize in the next few years, as shown in Table 2. Additionally, a more widespread adoption of filing for earnings tax refunds may result in a lagged increase in work-from-home impacts. The Economics Center maintains a potential risk of 16.0 to 24.0 percent for FY 2022 through FY 2027 (with 16.0 percent being more likely than 24.0 percent). However, many factors ranging from individual company policies to future waves of COVID-19 outbreaks could affect these estimates.

Table 2: Forecasted* Adjusted Collections and Growth Rates FY 2021 - FY 2027

Fiscal Year	Forecasted General Fund (\$M)	Risk Adj. Lower Bound (\$M)	Risk Adj. Upper Bound (\$M)
2021	\$330.86	\$330.86	\$330.86
2022*	\$321.43	\$304.82	\$341.27
2023*	\$343.04	\$278.37	\$422.74
2024*	\$344.69	\$277.11	\$428.75
2025*	\$346.58	\$276.15	\$434.97
2026*	\$348.14	\$275.01	\$440.70
2027*	\$349.47	\$273.80	\$446.08

Source: Economics Center model results and calculations.

ECONOMIC CONDITIONS

The City of Cincinnati (26 zip code approximation) and the Cincinnati MSA are both expected to see population growth in the near-term future. The City will slightly outpace the region overall and be on pace with national growth.

Table 3: Current Trends and Projected Growth, 2021-2027

	City of Cincinnati	Cincinnati MSA	United States
Population Change %	4.0%	3.0%	4.0%
Jobs Change %	-1.0%	3.0%	5.0%
Current Average Earnings	\$87,785	\$71,927	\$75,544
COL Index	100.7	96.8	100

Source: Emsi Burning Glass.

Regional Demographic Characteristics

Population within the City of Cincinnati (26 zip code approximation) is expected to grow at a rate of 5.7 percent from 2020-2030, a nominal increase of 24,285 net new residents, compared to 5.2 percent nationally, as shown in Table 4. Additional population growth is expected to occur in the Cincinnati MSA and will take place outside of the City of Cincinnati. The Cincinnati MSA is projected to grow by approximately 106,339 net new residents over this period, or at a rate of 4.8 percent, while the State of Ohio is estimated to remain relatively flat at 1.5 percent growth.

Table 4: Projected Population Growth, 2020 – 2030

Region	Population		Population Change	Growth Rate
	2020	2030		
City of Cincinnati	422,956	447,241	24,285	5.7%
Cincinnati MSA	2,232,421	2,339,246	106,339	4.8%
State of Ohio	11,693,217	11,867,529	174,312	1.5%
United States	329,484,123	346,460,056	16,975,933	5.2%

Source: Emsi Burning Glass

As shown in Table 5, The City of Cincinnati has a labor force participation rate of 63.0 percent, which is approximately four percentage points stronger than the national rate of 58.9 percent and the State of Ohio's rate of 58.7 percent. The rate of labor force participation in the Cincinnati MSA of 62.8 percent mirrors that of the City. Unemployment in the City of Cincinnati is at 5.0 percent, which lower than both the national rate of 5.2 percent and the State of Ohio at 5.2 percent.

Table 5: Labor Force Characteristics

Region	Labor Force Participation Rate	Unemployment Rate
City of Cincinnati	63.0%	5.0%
Cincinnati MSA	62.8%	4.7%
State of Ohio	58.7%	5.2%
United States	58.9%	5.2%

Source: Emsi Burning Glass

Regional Employment Characteristics

Employment and wage data for the City illustrate key industries which are main drivers of earnings, and thus income tax revenues, locally. National conditions for these industries are likely to affect local performance.

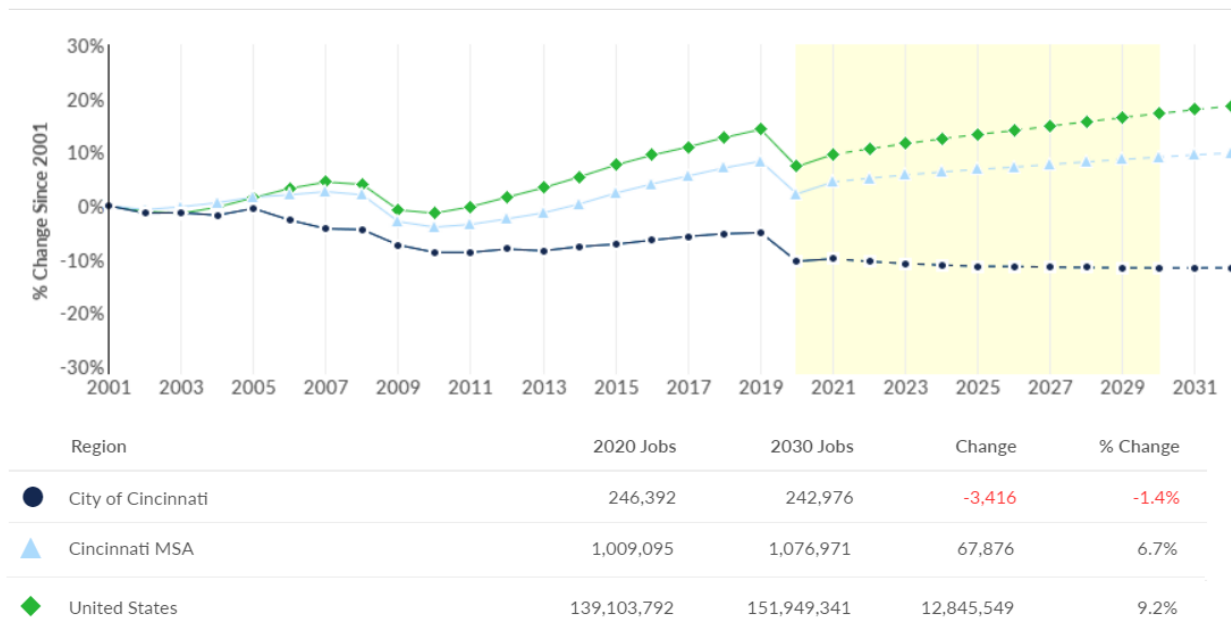
Overall, the Greater Cincinnati Area is expected to grow by approximately 68,000 jobs between 2020 and 2030.³ However, the additional net growth of jobs mask an underlying shift in the wages of the respective jobs that are both being lost as well as gained. During this ten-year period, the Cincinnati MSA will be losing approximately 15,000 jobs in retail trade, government, wholesale trade, management of companies, and utilities. These jobs have average earnings of approximately \$78,500 per year. The economy will also be adding approximately 83,000 jobs across all of the other industries, with the most gained in industries such as, but not limited to, accommodations, transportation, health care, arts and entertainment, and administrative support. These additional jobs represent averages wages of approximately \$57,000.

Figure 1 shows the job changes between 2001 and 2020 and the expected changes out through 2030. For the Greater Cincinnati region, job growth has returned from COVID-based contraction; however, the Cincinnati MSA is not expecting to reach pre-pandemic levels of employment by 2026. Between 2021 and 2030, the City of Cincinnati is expected to experience job loss of 1.4 percent, or shed 3,416 jobs over this period.

³ Emsi

Figure 1: Jobs by Region, 2020 – 2030

Regional Trends



Source: Emsi Burning Glass

The top-five highest earning industries across the Greater Cincinnati region are Management, Utilities, Information, Finance and Insurance, and Professional and Scientific analysis. Management and Utilities are expected contractions of approximately 2,100 jobs between 2020 and 2030 whereas growth is expected within Finance and Insurance, Information, and Manufacturing of approximately 5,000 jobs. For the interest of earnings tax liabilities, the expected earnings loss (assuming average wages are held constant) would be approximately \$340 million for the top-2 job losing sectors and an increase of approximately \$530 million for the three of the top-five increasing sectors. When expanding the earnings potential to all industries within the Greater Cincinnati region, earnings (again assuming average wages are used when comparing industrial growth or decline) are estimated to increase by over \$3.6 billion based on changes in employment.

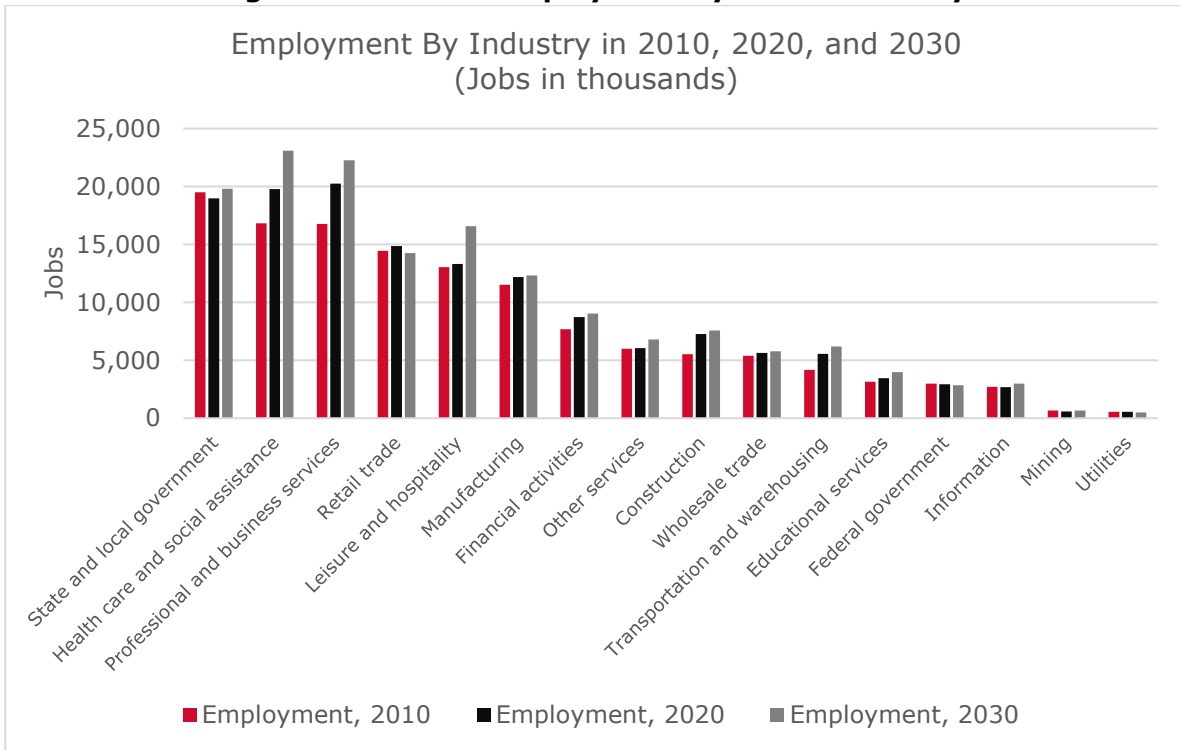
National and Regional Economic Outlook

National economic dynamics influence the performance of the local economy. National projections for the key sectors previously discussed anticipate continued slowed growth in Manufacturing and accelerated growth in Health Care, professional and business services, and leisure and hospitality. Growth in professional and business services as well as manufacturing real GDP nationally is anticipated to be strong through 2030, followed by financial activities and wholesale trade. As illustrated in Figures 2 and 3, two of the highest value producing industries nationally are associated with the largest, projected employment growth.

The groupings most significant to the local economy in terms of total employment and wages – Health Care and Social Assistance and Professional and Business Services – are expected to see greater growth in employment nationally, and also account for significant economic output as measured by real GDP. Assuming the City economy follows national trends, gains in Health Care and Social Assistance and Financial Activities sectors, along

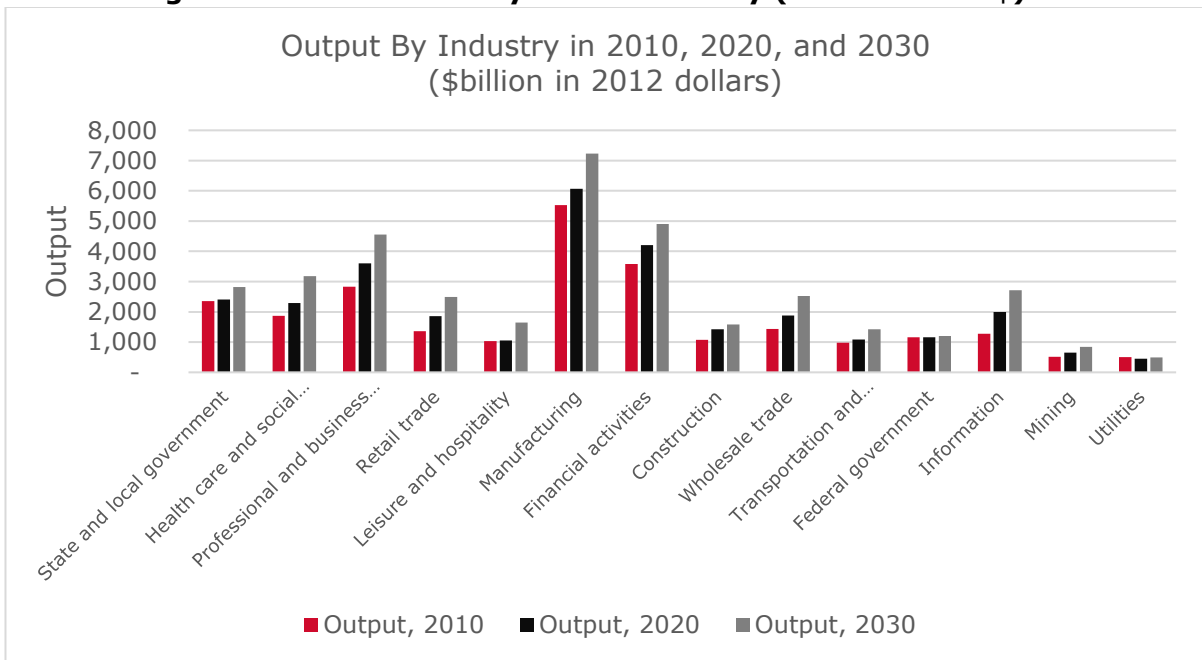
with gains to their respective output, may offset losses from declining employment elsewhere.

Figure 2: National Employment by Select Industry



Source: Bureau of Labor Statistics, Table 2.1-Employment by Major Industry Sector, 2010, 2020, and Projected 2030

Figure 3: National GDP by Select Industry (Chained 2012\$)



Source: Bureau of Labor Statistics, Table 2.2-Output by Major Industry Sector, 2010, 2020, and Projected 2030

In January of 2021, the Ohio Chamber of Commerce released its Economic Outlook, which is optimistic given the economic shock the Coronavirus Pandemic had on many industries and households. The Ohio Chamber cited significant losses in employment, production, and profits due to the pandemic as major contributing factors to the State of Ohio's worst quarter in its economic history. However, the Ohio Chamber is optimistic regarding the State's ability to rebound post-pandemic given the booming housing industry and Ohio consumers have more than \$1 trillion dollars in savings and revolving debt. Further, the 2021 Outlook noted that retail spending has rebounded and exceeded pre-pandemic spending levels. The Ohio Chamber of Commerce is expecting continued, albeit slowing economic growth.

JP Morgan's 2021 Economic Outlook is considerably optimistic and concludes that 2021 will experience strong economic growth and expects Real GDP to exceed pre-pandemic levels by September 2021.⁴ Employment is likely to make small job gains during the first two quarters of 2021 and then accelerate as a result of vaccination which is likely to drive demand for social activities including vacation travel, family gatherings, and live sporting events. Further, JP Morgan expects employment to fully recover in the third quarter of 2022.

⁴ [The pandemic and the recovery | J.P. Morgan Asset Management](#)

