

Washtenaw County

Economic Outlook

2024–2026 April 2024



Gabriel M. Ehrlich, Director

George A. Fulton & Saul H. Hymans **Directors Emeriti**

University of Michigan, Ann Arbor **Department of Economics** 611 Tappan Avenue Ann Arbor, MI 48109-1120

> Isa.umich.edu/econ/rsge 734-764-2567

For Release: 4/18/2024

The Washtenaw County Economic Outlook for 2024–2026 **Executive Summary**

Jacob T. Burton, Gabriel M. Ehrlich, Donald R. Grimes, and Michael R. McWilliams University of Michigan

Over the past year, we have become increasingly encouraged about the national economic outlook, and our optimism has filtered through to our forecasts for both the state and county economies. A year ago, we saw a meaningful risk that persistent inflation and the corresponding monetary tightening from the Federal Reserve would push the national economy into a mild and brief recession. At the same time, we believed that Washtenaw County and the state of Michigan, in general, would be protected from any national downturn by strong demand in the auto sector and other local dynamics. We continue to be optimistic for Washtenaw County, but we also believe the risk of a national recession has diminished. The national economy delivered a surprisingly strong performance in the second half of 2023 and early 2024 despite high interest rates and decelerating, if stubborn, inflation. Consequently, we and many economists believe the Fed has a good chance of delivering the much heralded "soft landing."

Both the state and local economies got off to a strong start in 2023, with job growth surging in the first half of the year, but the second half was more challenging. County and state job growth turned negative during the third quarter, and the UAW's "Stand Up Strike," which began on September 15 and lasted until late October, provided another potential speedbump. Thankfully, the strike's effects on the county economy were limited—the only directly impacted facility was the Ypsilanti Processing Center, a GM parts distribution center with 177 employees who joined the strike on September 22. Furthermore,

the county and state managed to finish the year on a positive note, with a return to job growth in the final months of the year.

Looking forward, we forecast sustained payroll job growth for Washtenaw County through 2026. While growth is expected to moderate slightly from the initial years of the pandemic recovery, we anticipate faster growth in the county than the state. We project Washtenaw County to end our forecast with payroll jobs 3.7 percent above the pre-pandemic level. The statewide job count, meanwhile, is forecast to exceed pre-pandemic levels by 2.4 percent by the end of 2026.

A major reason for the county's better performance is the strength of the government sector, which we project to grow twice as quickly in Washtenaw during 2024–2026 as it does statewide. The bulk of the county's government job growth is from state government jobs, which reflects the resilience of Washtenaw's higher-education sector. Other notable growth occurs in the private health and social services sector and the accommodation and food services sector.

The continued growth of payroll jobs at establishments in the county will create more job opportunities for county residents. As a result, we project the count of employed Washtenaw County residents to grow in every quarter of our forecast period. By the end of our forecast, that growth translates to 14,000, or 7.2 percent, more working residents compared to before the pandemic. Despite ongoing growth in the local labor force, we project the county's unemployment rate to enjoy a gentle descent, falling to 2.8 percent by the end of 2026.

One challenge for Washtenaw County over the past few years has been the tepid growth of real wages. Average annual real wages spiked in 2020, due primarily to the disproportionate loss of lower-paying jobs during the pandemic. As lower-paid residents returned to work, average real wages began to fall. Elevated inflation also began to take a bite out of wages in 2021 and especially in 2022. As a result, we estimate that real wages in the county fell for three straight years between 2020 and 2023. Although we expect real wages in Washtenaw to increase in 2024, we forecast more sluggish growth in the county than statewide. Consequently, the wage gap between the county and state, which historically has run consistently between 7 to 10 percent, is expected to narrow to only 3.2 percent by 2026. The primary reason for Washtenaw's relatively poor performance is a decline in the real wages of government

workers, which are forecast to remain 2.1 percent below 2019 levels as of 2026. In contrast, real wages for blue-collar workers are forecast in 2026 to stand 2.6 percent above 2019 levels, while real wages for workers in lower-education services industries are projected to be 8.2 percent higher.

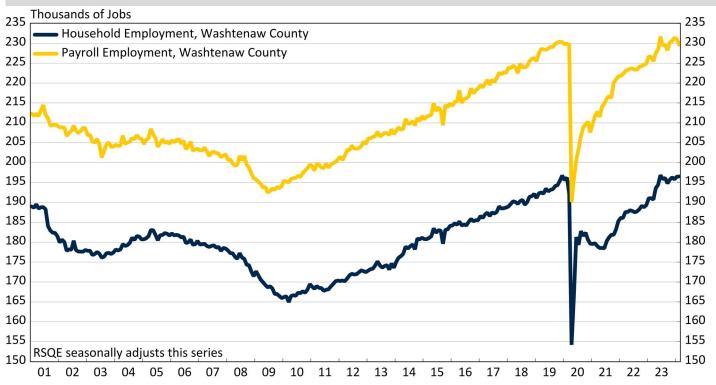
For this year's report, we also investigated entrepreneurial activity in Washtenaw County. In Michigan, self-employment increased from 16.2 percent in 2000 to 26.3 percent of private employment by 2022. Growth was even faster in Washtenaw County, where the share grew from 16.5 percent to 29 percent. Both the state and county saw sharp rises in 2020 with the onset of the pandemic, and self-employment has remained elevated since then. Entrepreneurship can lead to dynamic and innovative new industries, an attractive prospect for any region. On the other hand, self-employment tends to be associated with lower average incomes in part because a large share of self-employment is so-called "gig work". Another measure of entrepreneurial activity is business applications. They surged during the pandemic, both locally and statewide. By 2022, the pace of business applications in Washtenaw was one-third higher than the average from 2015–2019. A positive outcome of the turbulent past few years may prove to be an enduring increase in local entrepreneurship.

In summary, our outlook for Washtenaw County's economy over the next few years is decidedly healthy, with job growth that exceeds the state's, moderating inflation, and a steadily declining unemployment rate. We believe the resilience of the county's economy, fueled by innovation, entrepreneurial activity, and a knowledge-based economy, positions Washtenaw for continued progress in the years ahead.

One cautionary note in our report, though, is that Washtenaw County has not been building housing at the rate necessary to accommodate the growing demand to live in the community. The shortfall in residential construction has contributed to rising local housing costs. This trend could threaten the county's ability to support the growth we are forecasting.

Figure 1

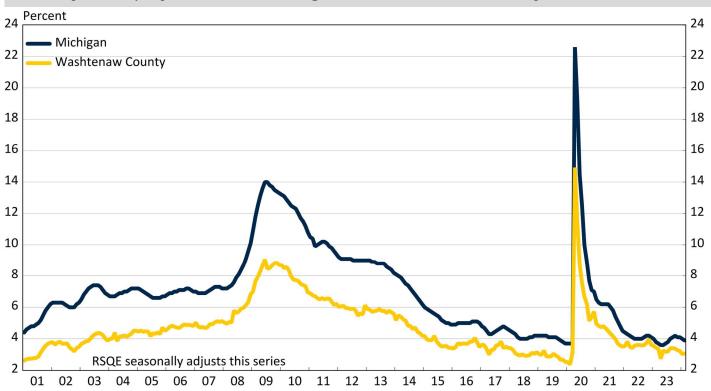
Monthly Employment in Washtenaw County



- Figure 1 shows two different measures of employment in Washtenaw County. The yellow line displays payroll employment, which is the number of jobs at business and government establishments physically located in the county. The blue line depicts household employment, which is the count of employed Washtenaw County residents, whether they work inside or outside the county.
- The payroll employment data presented in this figure come from the Bureau of Labor Statistics' Current Employment Statistics program. The data for Washtenaw County is represented by the Ann Arbor Metropolitan Area, which comprises the entire county. The household employment data presented in this figure come from the Department of Technology, Management & Budget Michigan Center for Data and Analytics.
- We have seasonally adjusted the resident employment series ourselves, but the BLS provides a seasonally adjusted payroll employment series.
- Payroll employment in the county fell by 39,800 jobs, or 20.9 percent, from February to April 2020 at the start of the COVID-19 pandemic. Employment among Washtenaw County residents fell by 42,100, or 27.3 percent, in that time.

- By December 2020, household employment in Washtenaw County had regained roughly 60 percent of its initial job losses. Payroll employment was slower to recover, recouping only 44 percent of its initial losses.
- Payroll job growth outpaced household employment growth in Washtenaw County in 2021.
 Both employment measures saw modest growth in 2022, but strong growth resumed during the first half of 2023.
- Payroll and household employment in Washtenaw County both exceeded their pre-pandemic levels in June 2023, a bit later than the state of Michigan.
- Employment retreated during the third quarter of 2023 before returning to growth in the fourth quarter of the year.
- As of February 2024, the most recent data available at the time of writing this forecast, employment levels in Washtenaw County have roughly returned to their pre-pandemic levels.

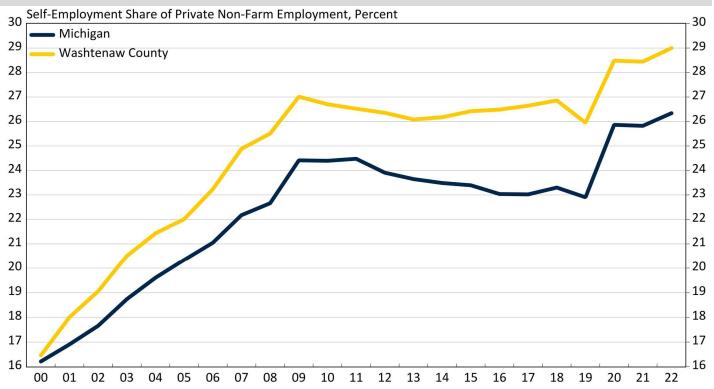
Figure 2
Monthly Unemployment Rate, Michigan and Washtenaw County



- Figure 2 shows unemployment rates for Michigan and Washtenaw County. Both series are seasonally adjusted; we have seasonally adjusted the Washtenaw unemployment series ourselves. The unemployment data for Washtenaw County comes from the same source as the household employment data illustrated in Figure 1.
- Washtenaw County's labor market has run consistently hotter than the state's over the past twenty years. The statewide unemployment rate has averaged 7.0 percent since 2001, while Washtenaw's unemployment rate has averaged 4.7 percent.
- When the pandemic struck, unemployment skyrocketed due to business closures and reduced activity. Michigan's unemployment rate increased from 3.7 percent in the beginning of the year to 22.6 percent in April 2020. Washtenaw County, on the other hand, has disproportionately more jobs than the state that can be done remotely. As a result, the local jobless rate increased from 2.5 percent in the beginning of the year to only 14.9 percent in April 2020.
- The unemployment rates in Michigan and Washtenaw County dropped quickly after the pandemic, reaching 4.5 percent statewide and 3.5 percent locally by the end of 2021.

- Progress slowed from there as Michigan and Washtenaw County approached their prepandemic unemployment rates. By the end of 2022, Washtenaw County's unemployment rate had ticked up to 3.6 percent, while Michigan's jobless rate slipped to 4.1 percent.
- Washtenaw County's unemployment rate reached a recent low point of 2.7 percent in April 2023 before edging up to 3.4 percent in October. Although the monthly data can be noisy, we believe that the county's jobless rate has started to decline again. As of February 2024, the most recent data available at the time of writing this forecast, the unemployment rate in Washtenaw County had fallen back to 3.1 percent, almost one percentage point below Michigan's jobless rate of 3.9 percent.
- Michigan and Washtenaw County both now stand near their pre-pandemic unemployment rates. The recovery from the pandemic recession was an eventful one, but we believe that Michigan and Washtenaw County now stand in relatively healthy economic positions.
- Local leaders and residents now must plan for the longer-run challenges of building the communities and economies to which they aspire. In this year's report, we examine measures of entrepreneurship and homebuilding that will help to shape Washtenaw County's future.

Figure 3 **Self-Employment in Michigan and Washtenaw County**

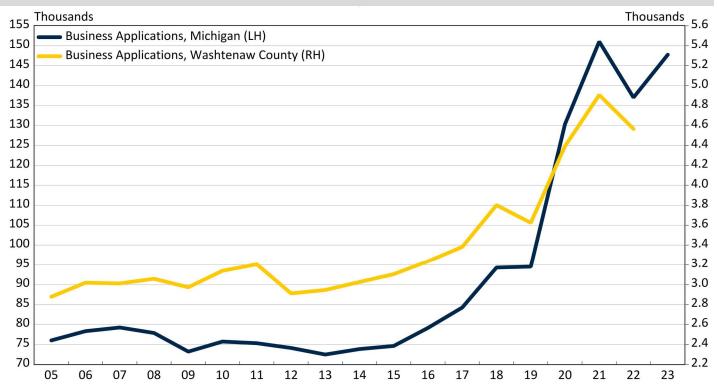


- We are frequently asked about entrepreneurial activity in Washtenaw County. It is more challenging to measure than the traditional economic indicators that we generally discuss.
- Two measures of entrepreneurial activity in Washtenaw County are the Bureau of Economic Analysis's (BEA's) estimates of proprietors' income and the count of proprietor workers.
- Proprietors, better known as self-employed workers, are people who file Schedule C federal income tax returns and general partners who are counted based upon federal government 1065 tax return forms.
- Figure 3 shows the share of total private sector non-farm jobs held by proprietors (self-employed workers) between 2000 and 2022 in Michigan and Washtenaw County.
- Proprietors' share of total private non-farm employment in Michigan increased from 16.2 percent in 2000 to 26.3 percent in 2022. The share increased even faster in Washtenaw County over that period, from 16.5 percent to 29.0 percent.
- Proprietors' increasing share of employment indicates that entrepreneurship is a growing part of the private economy in Michigan and Washtenaw

County. Perhaps surprisingly, we do not interpret this as entirely good news.

- First, the sharpest growth in proprietors' share has generally occurred during relatively bad economic times, such as 2000–2009 and 2020, when the number of wage and salary jobs was falling. For example, in 2009, when private wage and salary employment in Michigan declined by nearly 300,000, the number of proprietors increased by 10,800. Some workers responded to the loss of their wage and salary jobs by turning to self-employment.
- Unfortunately, these jobs are often not good substitutes for wage and salary jobs because they tend to pay much less. In Washtenaw County the average pay for a BEA-measured wage and salary job was \$67,209 in 2022, while the average income for a non-farm proprietor's job was only \$33,472.
- As a part-time second job, self-employment is a great option, with the potential to turn into a higherpaying primary job. They can lead to the creation of dynamic and innovative new companies, however, there is also a potential downside to adding too many of these jobs.

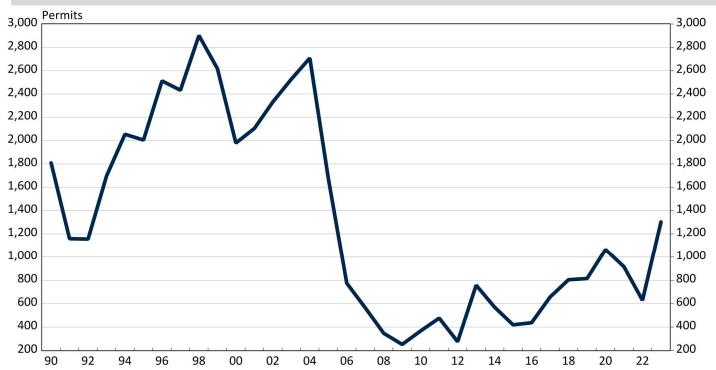
Figure 4 **Business Applications in Michigan and Washtenaw County**



- The Census Bureau publishes data on the number of applications to open new businesses as part of its <u>Business Formation Statistics</u>. Census measures business applications primarily as applications for Employer Identification Numbers with some exclusions.
- At the national level, Census publishes data on different types of business applications at several frequencies, including weekly. At the county level, the published data is limited to annual data on standard business applications.
- Figure 4 plots annual business applications in Washtenaw County in the yellow line alongside statewide business applications in the blue line.
- Business applications rose by about one-quarter both in Washtenaw County and in Michigan from 2005 to 2019.
- Business applications jumped in 2020, both statewide and in Washtenaw County. In Washtenaw, applications rose 21 percent. The statewide increase was even larger, at 38 percent.
- Applications rose another 12 percent in Washtenaw County and 16 percent in Michigan in 2021, before retreating by 7 and 9 percent, respectively, in 2022.

- Even with those declines, business applications in 2022 were one-third higher in Washtenaw County and three-fifths higher statewide than their average pace from 2015–19. Furthermore, the statewide data shows a rebound of nearly 8 percent in 2023 (county-level data was not yet available at the time this report was written).
- We believe the recent surge in business applications is good news for Washtenaw County's economic vitality. We estimate that nearly one-third of national business applications in 2023 were what the Census classifies as "High-Propensity Business Applications," meaning that they have a high propensity to become employers.
- Asturias et al. (2021) provide evidence that business applications lead several key economic indicators such as nonfarm payroll employment.
 Decker and Haltiwanger (2023) document that higher business applications are associated with greater employer business entry and measures of labor market reallocation.
- Although it may be surprising, it is possible that a
 positive outcome of the COVID-19 pandemic will
 turn out to be an increase in small business activity
 locally and nationally.

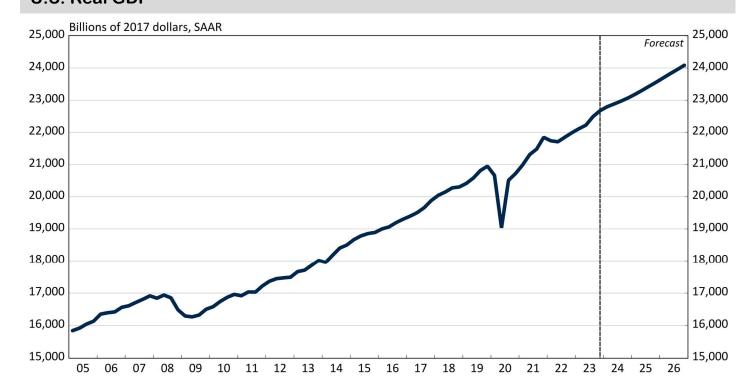
Figure 5 **Private Residential Building Permits in Washtenaw County**



- Figure 5 displays the total number of building permits issued annually for private residential structures in Washtenaw County, including multifamily buildings. The Census Bureau conducts the Building Permits Survey (BPS) to provide national, state, and local statistics on new privately-owned residential construction.
- The number of building permits issued in Washtenaw County averaged 2,105 permits per year from 1990 to 2005. Building permits declined dramatically, however, in the years preceding the Great Recession, with only 775 permits issued in Washtenaw County in 2006.
- The Great Recession ushered in an era of weak residential construction activity in Washtenaw County. Building permits in Washtenaw County bottomed out in 2009 with only 253 permits issued, roughly 90 percent fewer permits than the average from 1990 to 2005.
- Building permits rose slowly and unevenly in the aftermath of the Great Recession, reaching 815 in 2019. The number of permits issued in Washtenaw County climbed to 1,065 in 2020 amid the COVID-19 pandemic, the first year since 2005 that the number had exceeded 1,000.

- The number of permits issued slipped in each of the next two years, to only 629 in 2022. Preliminary data for 2023 suggests that Washtenaw County climbed to a new cyclical high of 1,300 building permits last year, but that would still be 40 percent lower than the average pace during the 1990s and early 2000s.
- We believe the slow pace of residential building in Washtenaw County has contributed significantly to sharply rising house prices and rents, mirroring national trends.
- A growing body of evidence documents that the fundamental principles of supply and demand apply to the housing market. Surveying the literature and the landscape, the Urban Institute recently published a report titled "Place the Blame Where It Belongs: Lack of Housing Supply Is Largely Responsible for High Home Prices and Rents" (Alexandrov and Goodman, 2024). We share that assessment.
- The City of Ann Arbor's 2023 report, "A New Approach to Economic Development" emphasizes the importance of building new housing to support economic development and housing affordability. We hope this new focus on housing supply helps to mitigate the risks that rising housing costs pose to Washtenaw County's ability to sustain its growth.

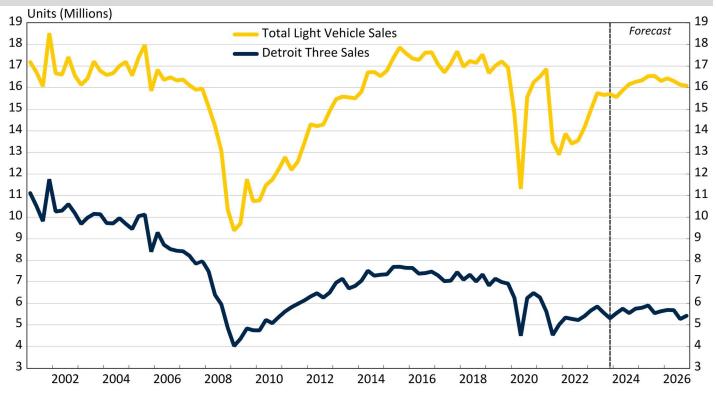
Figure 6 U.S. Real GDP



- Washtenaw County's economic future is closely tied to the overall health of the national economy.
 Figure 6 shows our February 2024 forecast for quarterly U.S. real GDP.
- Real GDP grew at an annualized pace of 3.4 percent in the fourth quarter of 2023. Although the pace of expansion cooled off from the 4.9 percent rate in the third quarter, it still surprised on the upside. Real compensation grew strongly in the second half of 2023, thanks to the robust labor market and the rapid recent disinflation, helping to fuel the ongoing strength of consumption.
- We project the quarterly pace of economic growth to moderate in the near term, decelerating to about 1.5 percent annualized in the second quarter of 2024. Growth re-accelerates thereafter, ramping back up above 2.0 percent by the second quarter of 2025.
- We forecast that the pace of real GDP will then stabilize in the 2.2–2.3 percent range during the second half of 2025 and 2026 as interest rates continue to fall, inflation stabilizes around 2.1 percent, and real income growth exceeds 2 percent.

- Our forecast assumes that the Fed is done hiking during the current cycle. Inflation has come down sharply while the labor market remains tight. We project the Fed to start cutting rates slowly by mid-2024. By that time, we expect unemployment to be on a gradual ascent with inflation running near the Fed's target. We expect the Fed to proceed slowly, cutting 25 basis points at roughly every other meeting. By the end of our forecast, we expect the target range for the federal funds rate to stand at 3–3.25 percent.
- We believe that the November 2024 elections are likely to yield divided government in one form or another. We therefore expect the status quo to persist in fiscal policy.
- The federal deficit widened from 4.4 percent of GDP in fiscal 2022 to 5.8 percent in fiscal 2023.
 With elevated interest rates and no significant revenue-raising reforms in sight, the federal deficit hovers around 6.0 percent in fiscal 2024 and 2025 before notching down to 5.4 percent in fiscal 2026.
- The ultimate fiscal policy path is likely to feature a robust increase in defense spending, with some spending restraint for discretionary non-defense spending.

Figure 7
U.S. and Detroit Three Light Vehicle Sales

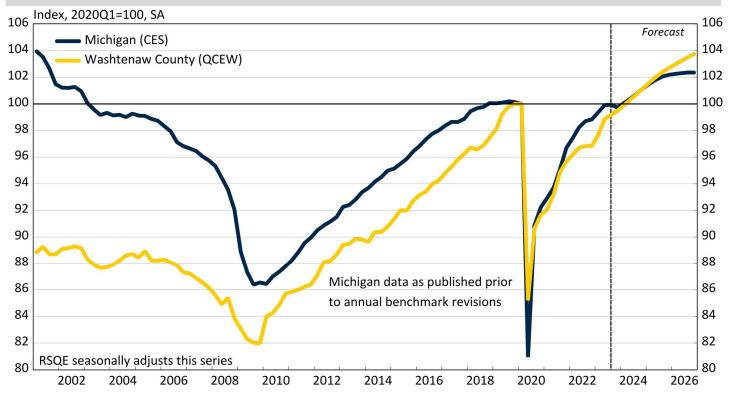


- Figure 7 shows our quarterly forecast for total U.S. and Detroit Three light vehicle sales. The annualized pace of light vehicle sales fell from 16.1 million units in December 2023 to 14.9 million units in January 2024, but it bounced back to an average sales pace of 15.6 million units in February and March. We believe that the underlying demand for vehicles remains healthy, but stubbornly high vehicle financing rates and limited inventories are generating monthly gyrations in the sales figures.
- We expect light vehicle sales to continue to increase from March's solid pace, reaching an average of 16.2 million units in the second half of 2024, as financing rates retreat and income growth outpaces vehicle prices. As interest rates continue to decline, light vehicle sales are projected to reach 16.4 million units in 2025 before slipping to 16.2 million units in 2026.
- Car sales stall out during our forecast, however, as vehicle manufacturers continue to ditch low-profitmargin models in favor of light trucks, luxury sedans, sports cars, and electric vehicles.
- The Detroit Three's share of U.S. light vehicle sales recovered from October and November's anemic 33 percent to roughly 35 percent this winter, as the impact of the auto strike moved into the rearview mirror.

- As the market stabilizes, we expect the Detroit Three's share to reach 36.2 percent in the second quarter of 2024. That would put the Detroit Three's market share roughly in line with where it was last summer before the auto strike.
- Unfortunately, we anticipate that the Detroit Three's market share will then resume its decadelong trend, declining to 34.5 percent by the end of 2025 and 33.7 percent by the end of 2026.
- When combined with our projection of increasing total light vehicle sales, our forecast for the Detroit Three's share of the market implies that Detroit Three vehicle sales will total 5.6 million units in 2024, 5.7 million units in 2025, and 5.5 million units in 2026.
- Despite forecasting a sales pace that is roughly 20 percent lower than 2019 levels, we expect the Detroit Three manufacturers' profits to remain respectable as income growth outpaces vehicle prices and the Detroit Three manufacturers broadly continue to prioritize pricing discipline and profitability over market share.

Figure 8

Quarterly Payroll Employment Indices, Michigan and Washtenaw County

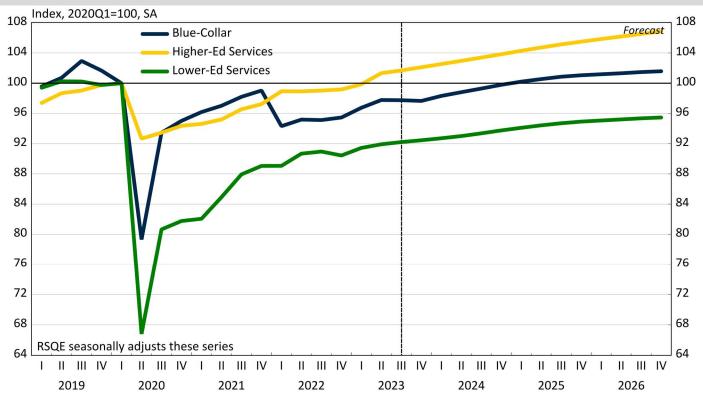


- Figure 8 displays our forecast for Michigan's and Washtenaw County's payroll employment levels, with values indexed to 100 in 2020q1. Comparing the two series requires care because they use different underlying source data.
- Washtenaw County's payroll employment and wage forecasts are based on the Bureau of Labor Statistics' Quarterly Census of Employment and Wages (QCEW) program. Using this data allows us to forecast more detailed industries than are published in the Current Employment Statistics (CES) program, which is the basis for our statewide forecast.
- Washtenaw County's economy was better shielded than Michigan's from the initial downturn of the COVID-19 pandemic, but the state put on a slightly better performance during the recovery. In the latest benchmark revision to the CES employment data, the state of Michigan recovered all the jobs it had lost during the pandemic by April 2023, whereas Washtenaw County took until June 2023.
- Washtenaw County has yet to make a complete recovery in the QCEW data that we show in the figure above, though. We expect the county to fully recover by this measure in the second quarter of 2024.

- We expect Washtenaw's recovery to catch up to the state's by the end of 2024, when we forecast that both the county and the state will exceed their pre-pandemic employment levels by 1.2 percent.
- Moving forward, we expect Washtenaw's growth to pick up steam relative to Michigan's. One reason for our optimism is that we project government employment to grow twice as quickly in Washtenaw during 2024 to 2026 as it does statewide. The bulk of the county's government job growth comes from state government, reflecting the resilience of Washtenaw County's higher-education sector, especially the University of Michigan and Michigan Medicine.
- We expect employment in Washtenaw County to exceed its pre-pandemic level by 2.7 percent by the end of 2025 and by 3.7 percent by the final quarter of 2026.
- We forecast employment in Michigan to surpass its 2020q1 employment level by 2.2 percent in the fourth quarter of 2025 and by 2.4 percent by the end of 2026.

Figure 9

Job Indices in Washtenaw County by Industry Group



- Figure 9 categorizes each of Washtenaw's industries into three groups. The graph displays our forecast for each group's total employment level, with values indexed to 100 in 2020q1.
- The blue-collar industries comprise mining; construction; manufacturing; and wholesale trade, transportation and warehousing, and utilities. These industries were disproportionately affected by an updated NAICS definition in 2022. We believe that the dip in blue-collar employment in 2022q1 reflects this change rather than a true loss of jobs in the county.
- Blue-collar employment grew slowly during the remainder of 2022, and we expect modest continued growth (0.3 percent per quarter) over the next three years. That growth brings the blue-collar industries' employment count to 1.6 percent above their pre-pandemic level by the end of our forecast. Still, they remain 30 percent below their level from the beginning of the millennium.
- The higher-educational services industries comprise information; finance; professional, scientific, and technical services; management of companies and enterprises; private education and health services; and government (which includes public education). These are industries that tend to employ highly educated workers.

- The pandemic led to relatively few job losses in Washtenaw's higher-education services industries.
 This industry group was the first to recover to its pre-pandemic employment level, which it did in 2023q2. That said, we believe that the blue-collar industries would have achieved that feat first under the 2017 NAICS definition.
- We forecast steady job growth for higher-education services industries moving forward. This industry group averages 0.4 percent growth per quarter from 2024–26, taking its employment to 6.8 percent above the pre-pandemic level by the end of our forecast.
- The **lower-education** services industries comprise retail trade; leisure and hospitality; administrative and support and waste management; and other services. These industries tend to employ less well-educated workers, and they suffered the worst of the pandemic's impact. Their employment rebound so far has been muted, and we expect employment to remain 7.6 percent below pre-pandemic levels in the final quarter of 2023. We are forecasting modest but continuous growth for these industries through 2026 (0.3 percent per quarter). That leaves these industries 4.5 percent below their prepandemic levels by the final quarter of 2026, and 1.2 percent below their level at the start of the 2000s.

Table 1

Forecast of Jobs in Washtenaw County by Major Industry Division

			Average Annual Wage			
	2022	2023	2024	mployment 2025	2026	2022 \$
Total Jobs (Number of jobs)	212,617	217,373	221,178	224,770	227,390	69,502
(Annual percentage change)	(2.9)	(2.2)	(1.8)	(1.6)	(1.2)	
Blue-Collar	27,591	28,306	28,761	29,230	29,440	80,207
Utilities	423	396	399	404	404	171,129
Transportation and warehousing	4,054	4,235	4,294	4,403	4,456	88,945
Wholesale trade	6,088	6,347	6,513	6,662	6,792	87,744
Other manufacturing Transportation equipment (Motor Vehicles	9,520	9,487	9,573	9,688	9,713	74,739
& Parts) manufacturing	2,533	2,600	2,621	2,593	2,530	73,693
Construction	4,619	4,832	4,929	5,032	5,080	72,287
Natural resources and mining	354	409	431	448	465	38,827
Higher-Ed Services	140,858	144,038	146,786	149,256	151,299	77,801
Information	4,178	3,908	3,856	3,875	3,896	129,420
Management of companies and enterprises	2,114	1,768	1,725	1,761	1,769	118,814
Professional, scientific, and technical services	18,759	18,977	19,163	19,494	19,779	106,410
Finance and insurance	3,932	3,599	3,562	3,634	3,691	97,355
Total Government	81,083	83,290	85,355	86,970	88,335	72,970
Private health and social services	25,306	26,661	27,268	27,616	27,917	63,018
Real estate and rental and leasing	2,483	2,504	2,461	2,465	2,457	59,464
Private education	3,003	3,332	3,395	3,443	3,454	42,958
Lower-Ed Services	43,623	44,454	45,037	45,678	46,034	36,069
Administrative and support and waste management	7,992	7,716	7,644	7,653	7,619	45,946
Other services	4,592	4,798	4,926	4,991	5,038	43,243
Retail trade	15,244	15,192	15,221	15,255	15,239	39,092
Arts, entertainment and recreation	2,105	2,448	2,510	2,589	2,662	27,994
Accommodation and food services	13,690	14,301	14,736	15,190	15,474	25,771
Unclassified	545	575	593	606	618	58,773
Addendum:						
Total Private	131,534	134,083	135,823	137,800	139,054	67,364

- On an annual average basis, employment in Washtenaw County declined by 7.5 percent in 2020. The number of jobs grew by only 2.3 percent in 2021 as the government sector continued to shed jobs. Job growth then accelerated in 2022 to 2.9 percent, but we expect growth to slow from here as Washtenaw County nears pre-pandemic employment levels.
- We forecast job growth in the county of only 2.2 percent in 2023, slowing to 1.8 percent in 2024 and to only 1.2 percent in 2026. Washtenaw's payroll job count in 2026 is expected to exceed its 2019 level by 8,930, or 4.1 percent.
- Roughly two-thirds of the job gains in the county between 2019 and 2026 are forecast to occur in the government sector, which includes public K-12 education as well as the University of Michigan, Michigan Medicine, Eastern Michigan University, and Washtenaw Community College. The private sector adds just under 3,000 jobs over the same period.

Avorage

 Even though we are forecasting job growth in the county to slow, we still expect Washtenaw's total payroll jobs count to climb to 16.2 percent higher in 2026 than in 2000.

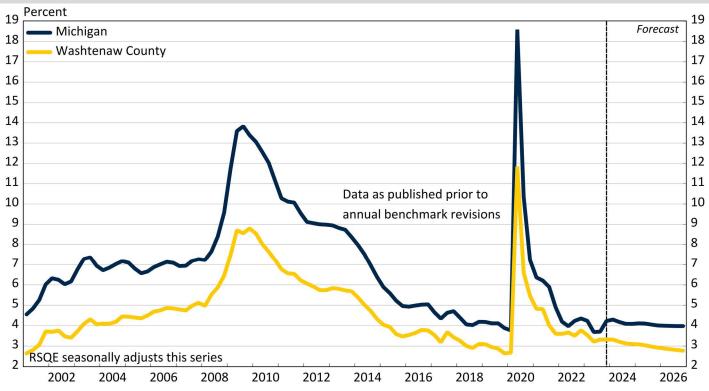
Forecast of Jobs in Washtenaw County by Major Industry Division

- In Table 1, we divide Washtenaw's major private sector industries into the three industry categories described previously. Within each category, the major industries are listed in descending order based on their annual wage in 2022. Appendix B displays a full list of roughly 80 industries that we forecast, organized by NAICS code.
- Within the blue-collar industries category, wholesale trade is expected to be the primary source of job growth over the next three years. Employment in wholesale trade is expected to grow by 440 jobs from 2024–26. Employment in transportation and warehousing is forecast to grow by 220 jobs over the same period.
- Non-automotive manufacturing steadily added jobs since 2020, but it experienced a minor setback in 2023, losing 30 jobs. By 2026, employment in nonautomotive manufacturing is expected to remain 2.1 percent (210 jobs) short of 2019 levels.
- We estimate that the construction industry added 210 jobs in 2023 despite high mortgage rates. Employment growth slows from here, adding only 250 jobs cumulatively during our forecast. Nevertheless, compared to 2019 levels, employment is up by 8.6 percent in 2026.
- The local motor vehicle manufacturing industry once employed over 15,000 people, but we expect its 2023 job count to average 2,600 once the fourth quarter data comes in. We are not forecasting any recovery over the next three years, leaving this former local powerhouse with only 2,500 employees in 2026.
- Within the higher-education attainment group, private health and social services are forecast to add 1,300 jobs over the next three years, taking employment in 2026 to roughly 3,000 jobs (12.4 percent) greater than in 2019.
- We expect employment in management of companies to tread water over the next three years, neither gaining nor losing jobs. Employment in information is floating just behind, as it only loses 12 jobs over the forecast.
- Employment in professional, scientific, and technical services is expected to gain an average of 270 jobs per year during our forecast. In 2026, employment in professional services is expected to

- be 2,100 jobs (12.1 percent) greater than it was in 2019. Most of the gains will be in scientific research and development services.
- Employment in finance and insurance ekes out 90
 jobs gains over the next three years, as the industry
 struggles to recoup the 330 jobs it lost in 2023 due
 to high interest rates.
- Most of the lower-educational attainment service industries are expected to enjoy modest and continuous growth. The major exception is administrative and support and waste management services.
- Employment in retail trade in Washtenaw County was 19,300 in 2001, but it declined all the way to 15,800 in 2019. After recovering roughly 900 of the 1,500 jobs it lost in 2020 over the following two years, retail trade is forecast to hold steady at its 2022 job count for the duration of our forecast.
- Employment in accommodations and food services declined by 27.2 percent in 2020, or 4,240 jobs. After recovering 2,960 of those jobs in the following three years, we forecast that this sector will grow by an additional 1,170 jobs over the next three years. By 2026, that growth will take this industry to just 110 jobs shy of its 2019 level.
- The arts and recreation industry lost 36.5 percent of its jobs in 2020. We believe this industry recovered more than 90 percent of its 2020 job losses by 2023. We anticipate job growth in the arts and recreation industry to continue over the next three years, resulting in a job count that is 6.0 percent higher than the levels seen in 2019.
- We estimate that administrative and support services lost 280 jobs in 2023, marking its fourth consecutive year of job losses. We forecast that this industry will lose another 100 jobs over our forecast, which would put its job count in 2026 roughly 18 percent below 2019 levels.
- Finally, we expect employment in other services to grow moderately over the next three years but to remain 0.7 percent shy of 2019 employment levels in 2026.

Figure 10

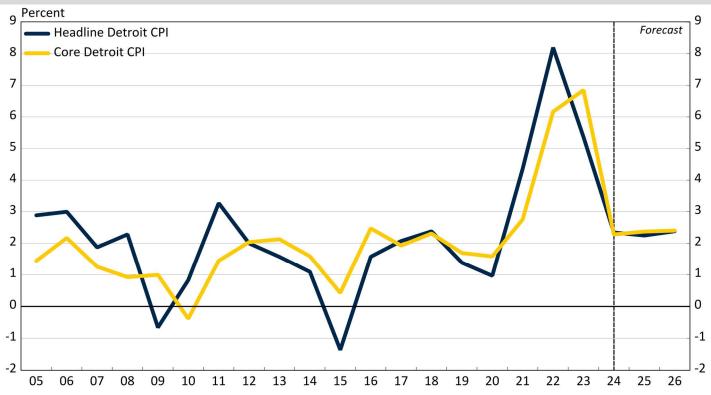
Quarterly Unemployment Rate, Michigan and Washtenaw County



- Figure 10 shows history and our forecast for the quarterly unemployment rates in Michigan and Washtenaw County. Our forecast for both Michigan and Washtenaw County was completed before the annual benchmark revision, so the data in Figure 2 differs slightly from the data in Figure 10.
- We expect Washtenaw's unemployment rate to slowly descend as the national and state economies continue to grow. The local jobless rate edges down from 3.3 percent in the fourth quarter of 2023 to 3.1 percent in the fourth quarter of 2024.
- Michigan's unemployment rate also ticks down during 2024, declining from 4.3 percent in the first quarter to 4.1 percent in the final quarter of the year.
- We forecast Washtenaw's jobless rate to continue its slow decline in 2025 and 2026. It dips to 2.9 percent by the end of 2025 and to 2.8 percent by the end of 2026. In contrast, Michigan's unemployment rate only falls one-tenth of a percentage point from the end of 2024 to the end of 2026.
- That progress would put Washtenaw county's unemployment rate at the end of our forecast onetenth of a percentage point below its 2019 annual

- average, which we judge to have been an economically healthy time for the county.
- In addition to the declining unemployment rate that we are forecasting, we expect the count of employed Washtenaw County residents to keep growing in every quarter of our forecast period. By the end of our forecast, that growth translates to 14,000, or 7.2 percent, more working residents than the County had before the pandemic.
- Despite our rosy forecast, it is important not to lose sight of the long-run demographics at play. Michigan's demographic trends indicate a less promising outlook for future economic growth. We expect that Michigan's population 65 and older will account for more than 20 percent of its total population by the end of 2026. Michigan's aging populace will eventually act as a speed limit for both the state and the county, hindering growth as more residents near the age of retirement.
- Washtenaw County's status as home to several institutions of higher learning will help to cushion it against these demographic pressures, but even Washtenaw is not immune from Michigan's expected aging trend.

Figure 11 **Detroit CPI Inflation Rate**

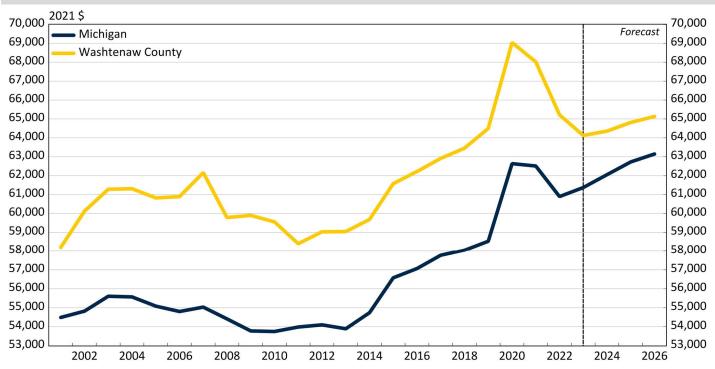


- Figure 11 shows the history since 2005 and our forecast of annual headline (all-items, in blue) and core (excluding food and energy, in yellow) Detroit CPI inflation. We measure local inflation by the growth rate of the Detroit Consumer Price Index (CPI), as county-level consumer price data are not available.
- Local headline inflation slowed from 8.2 percent in 2022 to 5.4 percent last year, with prices actually declining in the fourth quarter. We expect headline inflation to return to the positive side of the ledger in the first quarter of 2024, at an annualized pace of 3.2 percent as shelter inflation reaccelerates.
- Looking further ahead, we anticipate local inflation to stabilize around 2.2–2.4 percent annually from 2024 through 2026.
- Inflation will remain significantly higher than the pace Michiganders became accustomed to prior to the pandemic, however. Local inflation averaged 1.2 percent per year from 2015 to 2019, but we do not expect to return to that pace during our forecast period.

- Local core inflation, on the other hand, accelerated from 6.2 percent in 2022 to 6.8 percent in 2023.
 Shelter cost inflation played an important role in the ramp up of local core inflation, but it has slowed considerably since mid-2023.
- We project local core inflation to register 2.3 percent in 2024, in keeping with the broad moderation of price pressures. Local core inflation ticks up to 2.4 percent per year in 2025–26.
- Additionally, the Fed's preferred measure of inflation, the Personal Consumption Expenditures price index, averages 2.0 percent per year during 2024–26.
- When combined with the ongoing economic growth we are forecasting over the next three years, we believe that our forecast for inflation would qualify as a "soft landing" if it comes to fruition.

Figure 12

Average Annual Real Wage, Michigan and Washtenaw County

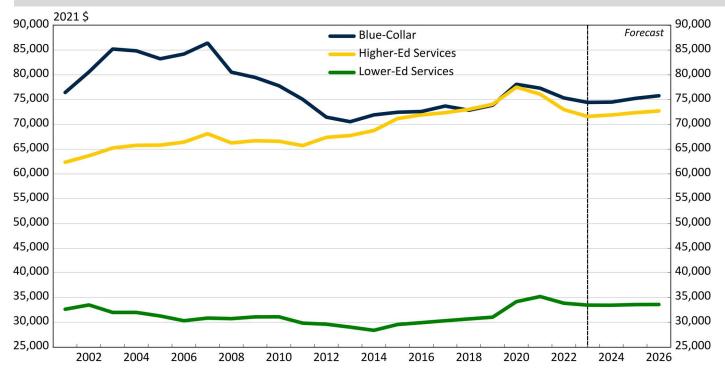


- Figure 12 shows the average annual real wages for all wage and salary workers in Washtenaw County and in Michigan from 2001 to 2026, adjusted for inflation to be expressed in 2021 dollars.
- Historically, the average real wage in Washtenaw County has consistently run about 7 to 10 percent higher than the statewide average.
- Both Washtenaw County and Michigan saw large jumps in average real wages during 2020. Real wages grew by 7.1 percent in Washtenaw County and by 7.0 percent statewide. Those were the largest single-year increases in real wages on record.
- The jump in average wages in 2020 was caused by the disproportionate loss of lower-paying jobs relative to higher-paying jobs during the COVID-19 pandemic. Few individual workers experienced wage increases of that magnitude.
- In 2021, real wages fell by 1.5 percent in Washtenaw County and by 0.2 percent in the state of Michigan. In 2022, real wages fell by an additional 4.1 percent in Washtenaw and 2.6 percent statewide, as nominal wage gains failed to keep pace with soaring inflation.

- Real wage growth in the state returned to the positive side of the ledger in 2023 eking out a gain of 0.8 percent. Real wages in Washtenaw County, however, continued to decline, falling by 1.7 percent. We estimate that as of 2023, the average real wage in Washtenaw County stood only 4.5 percent higher than in the state.
- We forecast that over the next three years, the average real wage will grow by 0.5 percent per year in Washtenaw County and 1.0 percent per year in Michigan further narrowing the gap.
- Despite the declines between 2020 and 2023, real wages are forecast to average \$65,100 in Washtenaw and \$63,100 in Michigan by 2026. Thus, Washtenaw County's average real wage in 2026 will stand 1.0 percent above 2019 levels, while average real wages statewide will stand 7.9 percent higher. Washtenaw's wage advantage will have fallen to only 3.2 percent.
- The relatively weak real wage growth in Washtenaw is primarily the result of declines in the real wages of government workers, whose paychecks did not respond contemporaneously to high inflation.

Figure 13

Average Annual Real Wage in Washtenaw County by Selected Industry Group



- Figure 13 shows the average annual real wage in Washtenaw County for the same three industry categories as in Figure 9: traditional blue-collar industries, higher-education service industries, and lower-education service industries.
- Average wages in the blue-collar and highereducation services industries are about twice as high as wages in the lower-education services industries.
- The 2020 pandemic recession caused a spike in average wages in all three-industry groups: 5.7 percent in the blue-collar industries, 4.7 percent in the higher-education services industries, and 10.1 percent in the lower-education services industries.
- The relatively large increase in wages in the lowereducation services industries reflects the fact that the lowest-paid industries within this group (arts and recreation and accommodations and food services) lost the greatest share of jobs in 2020.
- The average real wage declined in 2021 in the blue-collar industries and higher-education services industries, but it increased by 3.0 percent in the lower-education services industries even as inflation picked up.

- Inflation substantially exceeded wage growth in 2022, leading the average real wage to decline by 2.6 percent in the blue-collar industries, by 4.1 percent in the higher-education services industries, and by 3.8 percent in the lower-education services industries.
- Real wage declines continued in 2023 even as inflation subsided. Real wages in blue-collar and lower-education services industries fell by 1.2 percent, while wages in higher-education services industries fell by 1.9 percent.
- Over the next three years, the average real wage is forecast to grow by 0.6 percent per year in the blue-collar industries, 0.5 percent per year in the higher-education services industries, and by just 0.1 percent per year in the lower-education services industries.
- By 2026, real wages are expected to stand around 2.6 percent higher than their 2019 levels in the blue-collar industries and 8.2 percent higher in the lower-education services industries, but 1.8 percent lower in the higher-education services industries. This decline is mostly due to our forecast that the real wages of government workers will remain 2.1 percent below 2019 levels in 2026.

Appendix A:

Review of the Forecast

Year of Forecast	% Forecast Error for Total Jobs	Year of Forecast	% Forecast Error for Total Jobs	Year of Forecast	% Forecast Error for Total Jobs
1986	- 1.4	1999	0.0	2012	- 0.4
1987	- 0.8	2000	0.0	2013	- 0.0
1988	- 1.2	2001	+ 0.3	2014	+ 1.1
1989	- 0.6	2002	+ 0.3	2015	+ 0.2
1990	+ 0.8	2003	+ 1.0	2016	- 0.3
1991	+ 1.4	2004	+ 0.2	2017	- 0.3
1992	+ 0.5	2005	+ 0.4	2018	+ 0.4
1993	+ 1.3	2006	+ 0.7	2019	- 1.8
1994	n.a.	2007	0.0	2020	+ 1.0
1995	+ 0.2	2008	+ 0.6	2021	- 0.0
1996	+ 0.3	2009	+ 1.0	2022	+ 1.1
1997	+ 0.4	2010	- 2.3	2023	- 0.3
1998	- 0.5	2011	- 0.6		

(Positive numbers indicate that the forecast was too high; negative numbers indicate that it was too low.)

Average absolute forecast error	1986–2023:	0.6%
---------------------------------	------------	------

	Forecast 2023	Actual 2023
Unemployment rate	3.5%	3.3%
Consumer inflation rate	3.2%	5.4%

Forecast Date: March 2023

- In last year's report, we had forecast that Washtenaw County would gain 3,740 jobs in 2023, for an increase of 1.8 percent. We now estimate that the county gained 4,760 jobs last year, an increase of only 2.2 percent due to revisions to the calendar 2022 job count. Our forecast error for the 2023 employment level comes to an underprediction of 580 jobs, or 0.3 percentage points after rounding.
- That forecast error was below our average absolute error of 0.6 percentage points since 1986.
- Our topline forecast error masks partially offsetting errors for various industries. Our forecast for Washtenaw's private industries was spot on. We had forecast that private industries would gain 2,360 jobs in 2023, but we now estimate that these industries gained 2,550 jobs.

- Our largest forecast error was for Washtenaw's government employment. We had forecast that Washtenaw's government employment would gain 1,380 jobs in 2023, but we now estimate that it gained 2,210 jobs.
- We had forecast that Washtenaw's unemployment rate would tick up from 3.4 percent in 2022 to 3.5 percent in 2023. After data revisions, Washtenaw's unemployment rate actually decreased from 3.6 percent in 2022 to 3.3 percent in 2023.
- Last year, we forecast that local prices would increase by only 3.2 percent in 2023. Local prices ended up increasing by 5.4 percent last year, as inflation stuck around more than we had expected.

Appendix B: Forecast of Jobs in Washtenaw County by Detailed Industry

	Estimate	Forecast			Average Annual Wage
	2023	2024	2025	2026	2022 \$
Total Payroll Jobs (Number of jobs)	217,373	221,178	224,770	227,390	69,502
(Annual percentage change)	(2.2)	(1.8)	(1.6)	(1.2)	
Total Government	83,290	85,355	86,970	88,335	72,970
Federal Government	4,600	4,733	4,806	4,855	96,263
State Government	67,037	68,823	70,255	71,567	74,074
Local Government	11,652	11,799	11,909	11,914	57,847
Total Private	134,083	135,823	137,800	139,054	67,364
Private Goods-Producing	17,328	17,555	17,761	17,788	73,169
Natural resources and mining	409	431	448	465	38,827
Construction	4,832	4,929	5,032	5,080	72,287
Manufacturing	12,087	12,194	12,281	12,243	74,519
Printing and related support activities	1,130	1,123	1,129	1,130	52,041
Chemicals	609	618	635	649	91,564
Plastics and rubber products	663	653	672	683	97,522
Fabricated metals	1,029	1,024	1,020	996	64,610
Machinery	983	1,008	1,033	1,042	79,509
Computer and electronic products	1,375	1,410	1,422	1,413	91,380
Transportation equipment	2,600	2,621	2,593	2,530	73,693
Miscellaneous manufacturing	1,427	1,375	1,357	1,335	81,181
Manufacturing NEC	2,270	2,361	2,420	2,464	60,658
Private Service-Providing	116,755	118,268	120,039	121,267	66,501
Trade, transportation, and utilities	26,186	26,428	26,724	26,892	60,564
Wholesale trade	6,347	6,513	6,662	6,792	87,744
Merchant wholesalers, durable goods	3,888	4,005	4,109	4,203	95,282
Merchant wholesalers, nondurable goods	1,724	1,759	1,790	1,813	75,729
Wholesale electronic markets, agents, brokers	734	749	763	776	78,454
Retail trade	15,192	15,221	15,255	15,239	39,092
Motor vehicle and parts dealers	1,554	1,575	1,590	1,598	80,805
Building material and garden supply dealers	1,344	1,321	1,310	1,295	48,199
Food and beverage retailers	3,081	3,157	3,230	3,294	29,931
General merchandise retailers	3,070	3,079	3,047	3,005	31,902
Health and personal care retailers	1,127	1,152	1,180	1,205	36,913
Retail Trade NEC	5,016	4,937	4,898	4,843	34,977
Transportation and warehousing	4,235	4,294	4,403	4,456	88,945
Utilities	396	399	404	404	171,129
Information	3,908	3,856	3,875	3,896	129,420
Publishing	1,162	1,136	1,121	1,104	125,887
Telecommunications	478	456	442	429	72,717
Computing infrastructure providers	1,088	1,096	1,128	1,162	114,641
Information NEC	1,180	1,167	1,184	1,202	170,260
Financial activities	6,103	6,024	6,098	6,147	82,697
Finance and insurance	3,599	3,562	3,634	3,691	97,355
Credit intermediation and related activities	1,708	1,644	1,674	1,697	88,854
Insurance carriers and related activities	844	854	859	863	81,069
Finance and insurance NEC	1,048	1,064	1,101	1,130	126,807
Real estate and rental and leasing	2,504	2,461	2,465	2,457	59,464

Appendix B: Forecast of Jobs in Washtenaw County by Detailed Industry

	Estimate	Forecast		Average Annual Wage	
	2023	2024	2025	2026	2022 \$
Professional and business services	28,461	28,532	28,908	29,168	90,575
Professional and technical services	18,977	19,163	19,494	19,779	106,410
Legal services	981	988	993	993	95,083
Accounting and bookkeeping services	618	632	635	638	77,961
Architectural and engineering services	4,811	4,874	4,932	4,983	131,286
Specialized design services	193	191	192	193	84,047
Computer systems design and related services	3,251	3,196	3,271	3,342	119,651
Management and technical consulting services	2,053	2,010	2,012	2,013	101,310
Scientific research and development services	5,337	5,522	5,659	5,767	98,338
Advertising, PR, and related services	247	239	237	235	89,938
Other professional and technical services	1,485	1,513	1,563	1,614	61,426
Management of companies and enterprises	1,768	1,725	1,761	1,769	118,814
Administrative support and waste management	7,716	7,644	7,653	7,619	45,946
Private education and health services	29,992	30,663	31,058	31,371	60,891
Education services	3,332	3,395	3,443	3,454	42,958
Health care and social assistance	26,661	27,268	27,616	27,917	63,018
Ambulatory health care	12,593	12,817	12,991	13,181	80,958
Offices of physicians	6,268	6,436	6,575	6,735	107,392
Other Ambulatroy Health Care Services	6,325	6,381	6,416	6,446	55,418
Hospitals, nursing and residential care facilities, and social assistance	14,068	14,451	14,625	14,736	46,411
Leisure and hospitality	16,749	17,246	17,779	18,137	26,067
Arts, entertainment, and recreation	2,448	2,510	2,589	2,662	27,994
Accommodation and food services	14,301	14,736	15,190	15,474	25,771
Accommodation	1,178	1,192	1,203	1,211	32,652
Food services and drinking places	13,123	13,544	13,987	14,263	25,114
Restaurants and other eating places	11,403	11,778	12,136	12,344	24,443
Full-service restaurants	5,950	6,154	6,382	6,482	28,179
Limited-service restaurants	4,727	4,858	4,980	5,108	21,278
Other Restaurants and Other Drinking Places	726	766	774	753	16,552
Special food services	761	773	815	850	31,276
Drinking places, alcoholic beverages	959	992	1,036	1,070	26,823
Other services	4,798	4,926	4,991	5,038	40,902
Private unclassified service-providing	575	593	606	618	59,437
Addendum					
Unemployment Rate	3.3	3.2	3.0	2.8	

Appendix C:

References

- Alexandrov, A., & Goodman, L. (2024). Place the Blame Where It Belongs. Lack of Housing Supply Is Largely Responsible for High Home Prices and Rents. Urban Institute Housing Finance Policy Center Research Report.
- Asturias, J., Dinlersoz, E. M., Haltiwanger, J. C., & Hutchinson, R. (2021). Business Applications as Economic Indicators. US Census Bureau, Center for Economic Studies. Working Paper Number CES-21-09.
- Decker, R., & Haltiwanger, J. (2023). Surging Business Formation in the Pandemic: Causes and Consequences?. Brookings Papers on Economic Activity, 3-24.
- Fournier, J. (2023). A New Approach to Economic Development. The City of Ann Arbor.