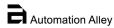




## **OAKLAND COUNTY** ECONOMIC OUTLOOK

2024-2026













# SUMMARY INTRODUCTION DAVID COULTER OAKLAND COUNTY EXECUTIVE

As Oakland County's economy continues to thrive, I am pleased to present the 39th Annual Oakland County Economic Outlook Report. I'd like to highlight some of what makes up our thriving economy.

- \$387M business investment in 2023
- 737 foreign-owned firms, from 34 countries, who call Oakland their home away from home
- 42% of the region's R&D facilities
- \$56.4M private & public investment in our downtowns
- \$9.1M Going PRO Talent Fund training grants since 2021
- 68.4% Oakland County residents with a post-secondary degree or credential

These achievements and more are why Oakland County powers Michigan's economy with 20% of the State's GDP and why we continue to be a destination for OEMs, R&D, and small businesses, both nationally and globally.

To stay at the forefront and build an economy that works for everyone, we seek to be agile, innovative, and inclusive, with thoughtful programming and partnerships that serve our 39,000 businesses and 737,000 plus workers.

Project DIAMOnD is a best-in-class example of the promise of additive manufacturing or 3D printing. With our partners at Automation Alley, we've helped small and midsize manufacturers cut costs, increase productivity, and become more competitive. Launched during the height of supply chain issues caused by the COVID-19 pandemic and leveraging federal funds, the program has helped provide additive manufacturing equipment and training to 250 companies across the county. Phase 2 is designed to bring 40% of our small and medium size manufacturers on board by 2026. We are embracing advanced manufacturing and investing for a prosperous tomorrow.

The business community, both here and abroad, recognizes that Oakland County, in addition to its great quality of life, is home to a talented workforce and invested in a mobility industry of the future that will rely on advanced manufacturing.

I'm proud that our recent trade delegation visits to Europe and Asia have resulted in increased investment by overseas firms in Oakland County and I'm encouraged by the continued success of the Oakland80 initiative which aims to help 80% of the adult population of the county attain a post-secondary or certified training by 2030.

Let's build on the strength of Oakland County's economy and ensure opportunities for long-term accessible, inclusive, and sustainable growth. Thank you for your shared commitment to realizing the full potential of Oakland County's economic future.



# OAKLAND COUNTY ECONOMIC OUTLOOK

2024-2026





Gabriel Ehrlich

**Donald Grimes** 

#### PRESENTED BY

Dr. Gabriel M. Ehrlich and Donald R. Grimes University of Michigan

**MAY 2024** 

# OVERVIEW OF CONTENTS

- Advanced Manufacturing in Oakland County
- Comparisons with Oakland's Peer Counties
- Oakland County's Economy in the Latest Data
- The U.S. Economic Outlook
- The Economic Outlook for Oakland County through 2026, including:
  - Inflation and Local Unemployment
  - Oakland Employment Growth Compared with Michigan's
  - Employment Growth by Major Industry Division
  - Average Real Wages by Industry Groups

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PLATINUM GOLD

#### **Research Seminar in Quantitative Economics (RSQE)**

The Research Seminar in Quantitative Economics (RSQE) is a modeling and forecasting unit that has been in operation at the University of Michigan since 1952. Four times per year, RSQE provides forecasts of both the U.S. economy and the Michigan economy. RSQE hosts the University of Michigan's Annual Economic Outlook Conference, the longest running such event in the U.S., in Ann Arbor each November. RSQE has twice received the prestigious Blue Chip Annual Economic Forecasting Award (AEFA) recognizing "accuracy, timeliness, and professionalism" in economic forecasting.

#### Dr. Gabriel M. Ehrlich

is the Director of the University's Research Seminar in Quantitative Economics (RSQE). He received his Ph.D. in economics from the University of Michigan. His research focuses on macroeconomics and regional economics. His work has been published widely in academic journals, and he comments frequently in the press on the economic outlook.

Prior to joining RSQE, Dr. Ehrlich worked in the Financial Analysis Division at the Congressional Budget Office (CBO). He earned his undergraduate degrees in finance and economics at the University of Maryland.

Dr. Ehrlich testifies twice per year to the state legislature on Michigan's fiscal and economic outlook. He recently coauthored *The United States Economic Outlook for 2024–2025* and *The Michigan Economic Outlook for 2024–2025*.

#### **Donald R. Grimes**

received his master's degree in economics from the University of Michigan. He is a senior research area specialist at the University's Research Seminar in Quantitative Economics (RSQE). His primary research interests are in labor economics and economic forecasting.

For over 40 years, he has been engaged in economic forecasting for state and local governments and is frequently called upon for policy advice. He has worked for many years with the Michigan departments of Transportation and Treasury and the Michigan Economic Development Corporation on policy analysis and evaluating economic strategies.

His work has been published recently in the Economic Development Quarterly, the New England Journal of Medicine, and the Journal of Health Politics, Policy and Law.

#### Dr. Michael R. McWilliams

is a senior economist at RSQE. Michael assists with forecasts of the Michigan economy and leads the development of state tax revenue projections. He also participates in RSQE's local economic forecasts for the City of Detroit, Oakland County, MI, and Washtenaw County, MI. In 2018, Michael coauthored an RSQE report on the economic impacts of the Great Lakes Restoration Initiative for the eight Great Lakes states.

Michael earned his Ph.D. in economics from the University of Michigan and received an M.Sc. in economics from the London School of Economics and Political Science. His personal research has focused on a range of topics in environmental and natural resource economics. He recently coauthored *The Michigan Economic Outlook for 2024–2025*.

#### Jacob T. Burton

is an economist at the University of Michigan's Research Seminar in Quantitative Economics (RSQE), where he contributes to the Michigan and U.S. forecasts four times per year. He received his master's degree in applied economics from Eastern Michigan University. He coauthored *The United States Economic Outlook for 2024–2025* and *The Michigan Economic Outlook for 2024–2025*. His primary fields of interests are in economic forecasting and energy economics.



This Economic Outlook Summary is available online beginning May 8, 2024 at:

AdvantageOakland.com | Isa.umich.edu/econ/rsqe



George A. Fulton & Saul H. Hymans Directors Emeriti

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

lsa.umich.edu/econ/rsqe 734-764-2567

For Release: 5/8/2024

#### The Oakland County Economic Outlook for 2024–2026 Executive Summary

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

Oakland County's economy has now recovered from the pandemic recession by most metrics. The number of employed residents in the county recovered to its pre-pandemic level in March of 2023, and exceeded pre-pandemic levels by 1.3 percent in February 2024. Meanwhile, Oakland's unemployment rate registered 2.9 percent in February, 0.5 percentage points below its average in 2019, and the county's labor force stood a bit higher than its 2019 level. Furthermore, Oakland County's real gross domestic product in 2022 came in 3.7 percent higher than in 2019. Despite these important successes, one key measure remains short of its pre-pandemic level: the count of payroll jobs located in Oakland County was still 1.8 percent shy of a full recovery in the third quarter of 2023, the most recent available data. Even so, we judge Oakland's recent economic performance to have been largely successful, and we are forecasting growth to continue.

We project the count of payroll jobs in the county to grow at an average pace of 1.1 percent, or about 8,000 jobs per year, from 2024 to 2026. The private health and social services sector is one of the major gainers, adding a total of 6,800 jobs over the next three years. Oakland's traditional blue-collar industries also add jobs at a healthy pace of about 1.4 percent per year despite limited growth in the auto and government sectors.

We expect Oakland County's unemployment rate to hold steady near 3.0 percent throughout our forecast. As such, we are counting on continued growth in the county's labor force to accommodate

ongoing job growth. By the end of our forecast, we project the county's labor force to stand 3.8 percent higher than it did before the pandemic. Although the county is not immune from the challenges associated with an aging population, we find that Oakland continues to stack up well against its peers on key metrics associated with local quality of life and economic wellbeing. We are therefore projecting that Oakland can resist the downward pull of demographic trends on its workforce over the next three years.

Our forecast is less bullish on the outlook for real wage growth. We are forecasting average real wages in Oakland County to grow by 0.5 percent per year over the next three years. Local inflation that runs significantly above its pre-pandemic norm is one reason we project relatively modest growth. Still, real wages are forecast to stand 4.0 percent above 2019 levels in 2026.

This year, we also took a look at Oakland County's advanced manufacturing industries. We identified three industry groups connected to advanced manufacturing: advanced manufacturing itself, "aspiring" advanced manufacturing, and services support for advanced manufacturing. Oakland County excels at providing services support to advanced manufacturing industries, with a concentration more than double the U.S. average. Workers in these support industries tend to be well-educated, and they are also relatively well-paid, with an average wage of \$112,639 in 2022. Still, that average wage in Oakland County trailed the national average for these industries, which was \$139,864. The county also faced a pay gap in the advanced manufacturing industries themselves, with an average wage of \$100,433 in 2022 versus a national average of \$126,735.

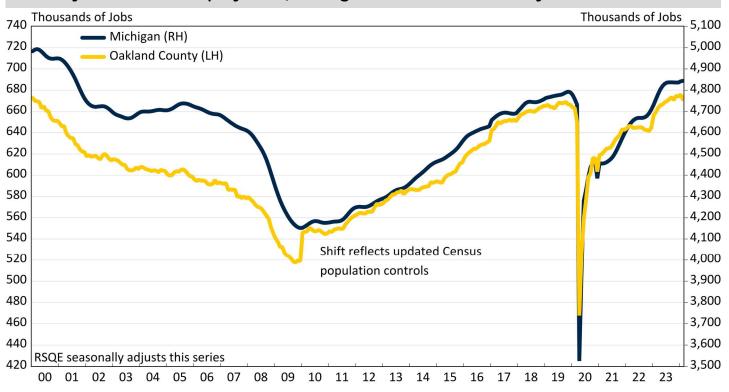
Ford Motor Company Chairman Bill Ford recently declared, "We're in a war for talent. Michigan is, our industry is, Ford is." We agree enthusiastically, and we think the war for talent stretches beyond the auto industry. If we may offer some advice, long years of statistical analysis have convinced us of what workers everywhere knew already: the most reliable way to win a war for talent is to pay more!

4

<sup>&</sup>lt;sup>1</sup> Eric Lawrence, "Bill Ford: Michigan Central Station must be more than just a restoration," Detroit Free Press, April 17, 2024.

Figure 1

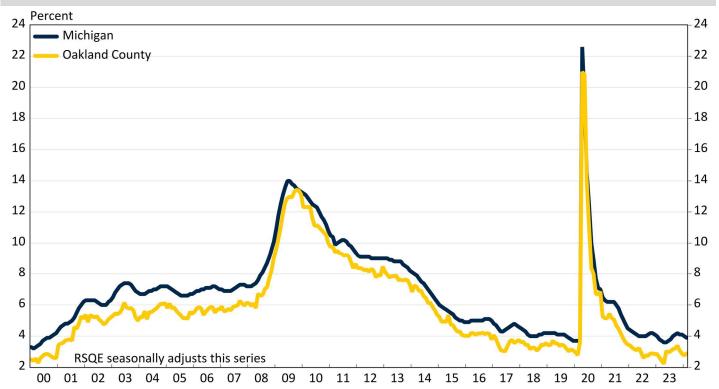
Monthly Household Employment, Michigan and Oakland County



- Figure 1 shows monthly household employment in Oakland County and in Michigan. The household employment data presented in this figure depicts the count of employed residents, regardless of whether they work in Oakland County or elsewhere.
- The Oakland County household employment data presented in this figure come from the Department of Technology, Management & Budget's Michigan Center for Data and Analytics.
- Household employment in Michigan declined by 1.2 million, or 26 percent, during the initial months of the COVID-19 pandemic. Oakland County residents were hit more severely by the initial downturn, with nearly 200,000, or roughly 30 percent of employed residents, losing their jobs.
- Both Michigan and Oakland County had regained approximately 70 percent of their pandemic-related household employment losses by the end of 2020 and nearly 90 percent by the end of 2021.
- Resident employment growth came to a standstill in both the county and the state during the latter half of 2022. In fact, employment of Oakland County residents declined in six different months during 2022.

- Strong growth resumed in Oakland County and Michigan during the first half of 2023, leading both the county and the state to recover to their prepandemic employment levels by March 2023.
- The second half of 2023 posed greater challenges, though. Employment growth among state residents turned negative in the final four months of the year due to rising interest rates and strikes in multiple industries. Oakland County fared a bit better than the state as a whole at the end of last year.
- As of February 2024, the most recent data available at the time this report was written, resident employment in Oakland County had surpassed its pre-pandemic level by 1.3 percent, while statewide resident employment had surpassed its pre-pandemic level by 1.8 percent.
- The speed with which the county regained its large pandemic job losses stands in contrast with its prolonged recovery from the downturn that began at the start of the millennium. Michigan as a whole still has not returned to its all-time peak employment level reached in early 2000.

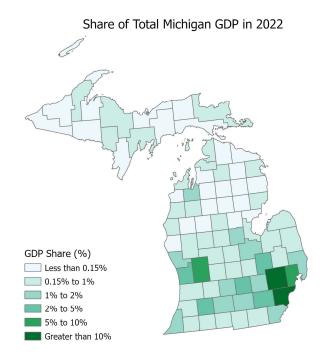
Figure 2 **Monthly Unemployment Rate, Michigan and Oakland County** 

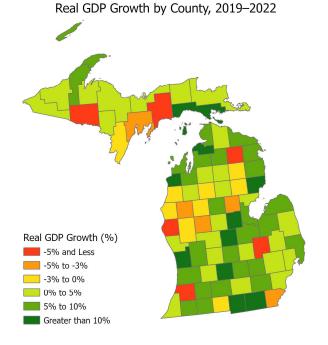


- Figure 2 shows unemployment rates for Michigan and Oakland County. Both series are seasonally adjusted; we have seasonally adjusted the Oakland unemployment rate series ourselves. The unemployment rate data for Oakland County comes from the same source as the household employment data illustrated in Figure 1.
- Oakland County's labor market has run consistently tighter than the state's over the past twenty years. Since exiting the Great Recession, Oakland County's unemployment rate has averaged 0.9 percentage points below Michigan's.
- Although the local jobless rate spiked to a peak of 21 percent in April 2020, it remained 1.6 percentage points less than the state's. The local unemployment rate declined to an average of 3.0 percent in 2022, or 0.4 percentage points below its 2019 average.
- For comparison, Michigan's unemployment rate averaged 4.1 percent in 2022, or on par with its 2019 average.
- Oakland County's unemployment rate reached a recent low point of 2.2 percent in April 2023 before edging up to 3.4 percent in October. The county's jobless rate then resumed its decline.

- As of February 2024, the unemployment rate in Oakland County had fallen back to 2.9 percent, one percentage point below Michigan's jobless rate of 3.9 percent.
- Last year, we were concerned that Oakland County's full unemployment recovery masked an incomplete labor force recovery. Since then, however, both Michigan's and Oakland County's labor force levels have come roaring back, and they both now exceed their 2019 levels.
- As of February 2024, Oakland County's labor force had climbed to 2,100 residents, or 0.3 percent, above its 2019 average. Michigan's labor force stood 1.3 percent above it 2019 level.
- We believe that Oakland County currently maintains a healthy economic position. Local leaders and residents now must plan for the longerrun challenges of building the communities and economies that they desire.
- In this year's report, we examine advanced manufacturing in Oakland County, one engine which will help to build Oakland County's future.

#### **Gross Domestic Product by County**





- The left-hand map above shows each county in Michigan's share of total statewide GDP in 2022, the most recent year for which data is available.
- At the county level, GDP is the value of all goods and services produced less the value of goods and services used in production. The Bureau of Economic Analysis currently provides data on GDP by county and metropolitan area from 2017–2022.
- Oakland County consistently has the highest GDP of all counties in Michigan, and it has maintained its top position in the state rankings every year from 2017–2022.
- Oakland County's total GDP came to \$127.3 billion in 2022. The next highest in the state was Wayne County, with total GDP of \$112.9 billion, followed by Kent County at \$53.6 billion.
- Oakland's GDP in 2022 was higher than 14 states', and it had the 30<sup>th</sup> highest nominal GDP among all counties nationally.
- As the county with the largest GDP in the state, Oakland accounted for 20.4 percent of Michigan's total GDP in 2022. Wayne County produced 18.1 percent, while Kent County produced 8.6 percent.

- The right-hand map shows the growth of real GDP by county between 2019 and 2022. This growth provides a depiction of the effects of the pandemic and initial recovery on GDP at the county level.
- Oakland's GDP grew by 3.7 percent between 2019 and 2022, which was the 44<sup>th</sup> strongest growth across the state. Nationally, Oakland's GDP growth ranked in the 57<sup>th</sup> percentile.
- There was a large variance in GDP growth across Michigan (and nationally) during this time. Counties with the largest shares of GDP tended to experience moderate growth, reflecting their relatively diverse economies.
- The strongest growth tended to occur in counties that fell in the middle of the state distribution for level GDP in 2019.
- The private sector accounted for over 95 percent of Oakland County's real GDP growth from 2019 to 2022.

Table 1

Oakland County Compared with Its Peers\*

County	State	Population 2022	Associate's Degree or More	Child Poverty	Median Family Income**	High-Income Persons Aged 65 or Older	Managerial, Professional	Sum of Rankings	Rank of Sum
Fairfax	VA	1,138,331	1	2	1	1	1	6	1
Montgomery	MD	1,052,521	3	10	2	2	2	19	2
Collin	TX	1,158,696	5	1	4	11	5	26	3
Wake	NC	1,175,021	2	6	6	12	6	32	4
Nassau	NY	1,383,726	12	3	3	3	14	35	5
Bergen	NJ	952,997	8	7	8	6	10	39	6
Travis	TX	1,326,436	7	14	5	10	4	40	7
Westchester	NY	990,427	9	12	7	4	9	41	8
Oakland	MI	1,269,431	10	9	9	16	8	52	9
Hennepin	MN	1,260,121	6	16	11	13	7	53	10
Denton	TX	977,281	14	8	13	8	12	55	11
Contra Costa	CA	1,156,966	17	11	10	7	16	61	12
Fulton	GA	1,074,634	4	27	12	15	3	61	12
Suffolk	NY	1,525,465	19	4	14	5	22	64	14
Capitol Planning Region	СТ	981,447	20	17	16	14	15	82	15
St. Louis	MO	990,414	15	21	17	19	13	85	16
Allegheny	PA	1,233,253	11	19	19	26	11	86	17
Mecklenburg	NC	1,145,392	13	18	18	20	17	86	17
Salt Lake	UT	1,186,257	27	5	15	17	24	88	19
Honolulu	HI	995,638	21	15	20	9	27	92	20
Erie	NY	950,312	18	25	21	24	21	109	21
Gwinnett	GA	975,353	24	13	23	22	29	111	22
Pinellas	FL	961,739	26	20	24	25	19	114	23
Franklin	ОН	1,321,820	22	30	22	23	18	115	24
Palm Beach	FL	1,518,477	23	22	28	18	28	119	25
Orange	FL	1,452,726	16	23	30	30	25	124	26
Hillsborough	FL	1,513,301	25	24	27	28	23	127	27
Pima	AZ	1,057,597	31	26	25	21	30	133	28
Cuyahoga	ОН	1,236,041	28	31	26	31	20	136	29
Duval	FL	1,016,536	29	28	31	29	26	143	30
Marion	IN	969,466	30	29	29	32	31	151	31
Fresno	CA	1,015,190	32	32	32	27	32	155	32
Bronx	NY	1,379,946	33	33	33	33	33	165	33

<sup>\*</sup>All counties in the United States with a population between 950,000 and 1,550,000 in 2022

Source: American Community Survey 2022. Census Bureau Population Estimates, March 2023.

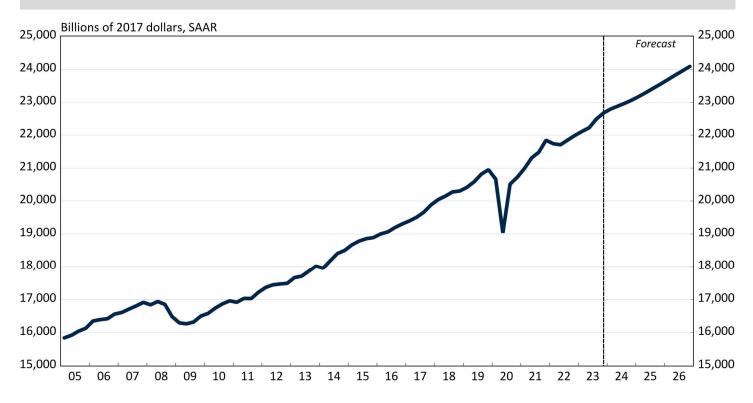
<sup>\*\*</sup>Adjusted for cost of living

#### **Oakland County Compared with Its Peers**

- Each year, we rank Oakland County among its peers on five measures that we believe provide useful insights into the county's economic wellbeing. This year, Oakland's peer group includes all counties in the United States with populations between 950,000 and 1.55 million residents in 2022. A total of 32 other counties matched this description, with Oakland's population of 1.27 million in the middle of the pack.
- Many of the nation's most economically successful counties are included in this group. Like Oakland, many are also among the select group of U.S. counties that have a AAA bond rating with multiple rating agencies.
- In Table 1, we arrange the 33 counties by the sum of their rankings across the five measures to calculate an overall rank. Oakland places 9th overall. We believe that Oakland's top-ten ranking among this group of counties reflects its solid and enduring economic fundamentals.
- The five measures we consider are: (1) educational attainment—the share of the population aged 25 to 64 with at least an associate's degree in 2022; (2) child poverty—the share of the population aged 17 and under who lived in families whose income was below the poverty level in 2022; (3) median family income adjusted for the local cost of living in 2022; (4) high-income seniors—the share of persons aged 65 and older with income at least five times the poverty level in 2022; and (5) professional occupations—the share of employed county residents working in professional and managerial occupations in 2022.
- A lower number for a rank indicates a better position among the counties: a rank of 1 is the best and 33 is the worst. Oakland County ranks between 8th and 16th across the various measures (the underlying data for Table 1 is presented in Appendix C).

- Oakland ranks within the top ten counties nationally in professional occupations (8th), child poverty (9th), median family income (9th), and educational attainment (10th). Oakland's placement in these categories has helped it to maintain its overall topten position among its peer group for quite some time. This is an impressive achievement considering that a number of these counties contain some of the top-rated local economies around the nation.
- Oakland's weakest ranking came in the share of high-income seniors, but the county's ranking of 16th on this metric still placed the county within the top half of its peer group.
- We believe Oakland County's strong overall performance in these measures suggests that it is well positioned for the future despite the current challenges facing the local and national economies. The combination of an educated populace, a high share of managerial and professional jobs, and an attractive standard of living should provide a solid foundation for economic prosperity over our forecast period and in the years to come.

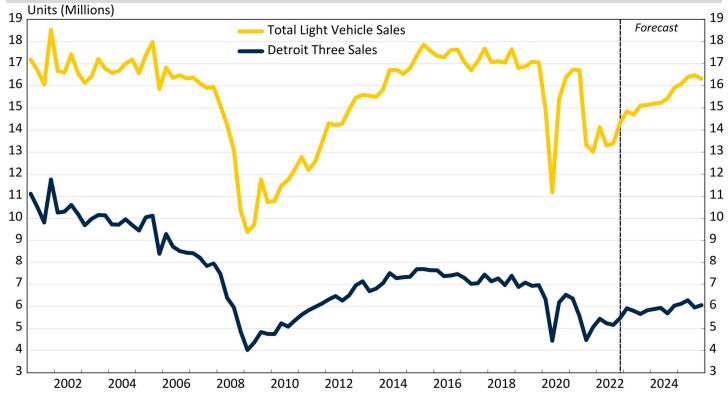
### Figure 4 U.S. Real GDP



- Oakland County's economic future is closely tied to the overall health of the national economy. Figure 4 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 welcome 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 restraint for discretionary non-defense spending.

Figure 5 **U.S. and Detroit Three Light Vehicle Sales** 

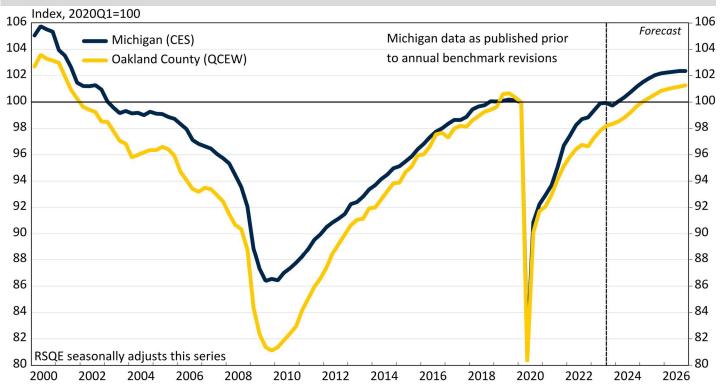


- Figure 5 shows our quarterly forecast for total U.S. and Detroit Three light vehicle sales. The annualized pace of light vehicle sales fell from 16.1 million units in December 2023 to 14.9 million units in January 2024, but it bounced back to an average sales pace of 15.6 million units in February and March. We believe that the underlying demand for vehicles remains healthy, but stubbornly high 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 6

Quarterly Payroll Employment Indices, Michigan and Oakland County

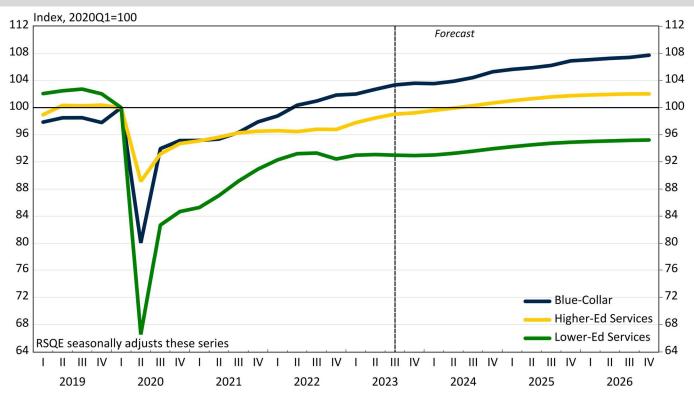


- Figure 6 displays our forecast for Michigan's and Oakland County's payroll employment levels, with values indexed to 100 in 2020q1.
- Oakland County's payroll employment and wage forecasts are based on the Bureau of Labor Statistics' Quarterly Census of Employment and Wages (QCEW) program, whereas our statewide forecast is based on the Current Employment Statistics (CES) program.
- From the end of the Great Recession (2009q3) to the beginning of the pandemic (2020q1), employment in Oakland County grew more quickly than in the state, averaging roughly 2.0 percent per year compared to the state's 1.4 percent per year.
- The COVID-19 recession led payroll employment in the state of Michigan to decline by 845,300 jobs, or 19 percent, in the second quarter of 2020. Oakland County lost 146,800 jobs, or roughly 20 percent, at the start of the pandemic.
- In the latest benchmark revision to the CES employment data, the state of Michigan had recovered all the jobs it lost at the start of the pandemic by the end of 2023, whereas we estimate that Oakland County had recovered 92 percent of its payroll job losses by that time.

- We are forecasting that growth differential to reverse course going forward, with the county's job growth (1.1 percent per year) outpacing the state's (0.9 percent per year) over the next three years.
- We expect employment in Oakland County to return to its pre-pandemic level in the first quarter of 2025 and to exceed its pre-pandemic level by 1.3 percent by the end of 2026.
- By the end of our forecast, we expect Oakland County's payroll job count to stand just 2.2 percent below its peak level reached in the second quarter of 2000, while Michigan's payroll job count remains 3.2 percent below its peak level reached that quarter.
- We are forecasting that Oakland's labor force will grow by 1.2 percent per year over the next three years. If that growth does not materialize, the county's unemployment rate will be lower than we are forecasting, its job gains will be smaller, or both.

Figure 7

Job Indices in Oakland County by Selected Industries



- On the chart above, we categorize each of Oakland'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 quarter before the COVID-19 recession.
- The blue-collar industries comprise mining; construction; manufacturing; and wholesale trade, transportation and warehousing, and utilities. The job count for these industries declined by 20 percent in the second quarter of 2020 but recovered all of those losses by the second quarter of 2022.
- Blue-collar employment gains slowed down during the remainder of 2022 and the first three quarters of 2023. We expect job growth will continue over the next three years at an average pace of 1.4 percent per year, taking the blue-collar industries to 11,800 jobs (7.7 percent) above their pre-pandemic employment level at the end of our forecast.
- The higher-education 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 Oakland's higher-education services industries. The initial recovery was relatively brisk, but job gains were modest in 2021 and flatlined in 2022. Job growth accelerated in 2023, however, so that the higher-education services industries had recovered over 90 percent of their pandemicrelated job losses by the third quarter.
- We forecast continuing job gains in the highereducational attainment services industries going forward. This industry group averages 1.3 percent growth per year over the next three years, taking its employment to 7,300 jobs, or 2.0 percent, above the pre-pandemic level by the end of 2026.
- The lower-education services industries comprise retail trade; leisure and hospitality; administrative support services 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, shrinking by one-third in 2020q2. Their recovery so far has been incomplete, with employment remaining 7.0 percent below pre-pandemic levels in 2023q3. We are forecasting modest growth for these industries through 2026 (0.8 percent per year), leaving employment 11,000 jobs, or 4.8 percent, below the pre-pandemic level by the end of 2026.

Table 2 **Forecast of Jobs in Oakland County by Major Industry Division** 

			Forecast F	mployment		A.,
	2022	2023	2024	2025	2026	_Average Annual Wage 2022 \$
Total Jobs (Number of jobs)	717,279	728,493	737,064	747,275	752,369	73,008
(Annual percentage change)	(3.0)	(1.6)	(1.2)	(1.4)	(0.7)	
Blue-Collar	153,076	156,769	158,863	161,709	163,556	90,329
Utilities	1,581	1,566	1,584	1,599	1,613	157,564
Wholesale trade	36,667	37,919	38,366	38,649	38,751	109,525
Transportation equipment (Motor Vehicles & Parts) manufacturing	21,773	22,829	22,488	23,061	24,049	105,915
Construction	29,393	30,895	32,064	32,923	33,305	85,961
Other manufacturing	47,199	47,176	47,735	48,405	48,454	79,979
Transportation and warehousing	15,348	15,284	15,501	15,912	16,190	58,934
Natural resources and mining	1,117	1,101	1,125	1,159	1,194	44,837
Higher-Ed Services	346,805	353,873	359,211	363,859	365,829	84,363
Management of companies and enterprises	17,743	17,245	17,304	17,475	17,392	128,891
Finance and insurance	41,288	40,723	41,379	41,850	42,013	106,082
Professional, scientific, and technical services	99,511	98,839	99,059	100,181	100,712	105,777
Information	13,585	14,170	14,201	14,288	14,319	103,220
Real estate and rental and leasing	17,146	19,021	19,081	19,254	19,337	72,366
Total Government	44,510	45,534	46,207	46,580	46,562	62,022
Private health and social services	101,892	106,673	110,065	112,189	113,475	60,412
Private education	11,130	11,669	11,915	12,042	12,019	45,420
Lower-Ed Services	214,304	214,744	215,782	218,435	219,647	42,420
Administrative and support and waste management	55,016	52,214	51,751	51,967	51,593	56,025
Other services	20,993	21,642	22,015	22,392	22,598	46,640
Retail trade	73,041	72,572	72,469	72,569	72,377	44,954
Arts, entertainment and recreation	10,086	10,702	10,998	11,324	11,539	31,313
Accommodation and food services	55,169	57,614	58,549	60,183	61,541	25,922
Unclassified	3,093	3,106	3,208	3,272	3,338	61,549
Addendum:						
Total Private	672,769	682,959	690,858	700,695	705,807	73,735

Note: The annual data in this table are seasonally adjusted quarterly averages and may differ slightly from annual published estimates.

- On an annual average basis, employment in Oakland County declined by 9.8 percent in 2020.
   Employment then grew by 3.4 percent in 2021 and 3.0 percent in 2022.
- We estimate job growth in the county slowed to a pace of 1.6 percent in 2023. We forecast job growth of 1.2 percent in 2024 and 1.4 percent in 2025. As the county nears full employment, job gains slow to only 0.7 percent in 2026. Over the next three years, we are forecasting that Oakland County will add a total of 23,850 jobs.
- The vast majority (22,850) of the net job gains in the county between 2023 and 2026 are forecast to occur in the private sector. The government sector, which includes Oakland University, Oakland Community College, and the K-12 public schools, as well as general government administration, adds only 1,000 jobs over that period.
- The federal government introduced an updated NAICS industry classification system in 2022, which may have created a discontinuity between 2021 and 2022 for some industries.

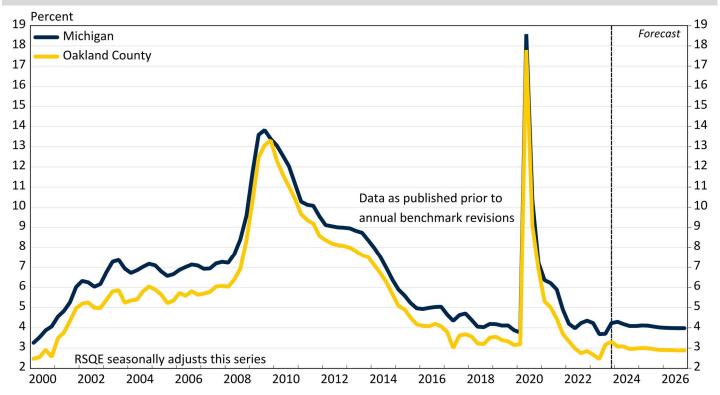
#### Forecast of Jobs in Oakland County by Major Industry Division

- In Table 2, we divide Oakland'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 average annual wage in 2022. Appendix B displays a full list of roughly 90 industries, organized by NAICS code.
- Within the blue-collar industry group, motor vehicle and parts manufacturing is forecast to lose 340 jobs in 2024 before adding a total of 1,560 jobs in 2025 and 2026 with the conversion of GM's Orion Assembly plant to electric vehicles. If our forecast is accurate, Oakland's 2026 job count in motor vehicle and parts manufacturing would be 2,340 higher than in 2019 and the highest since 2007, but it would still be only about one-half the number in 2001.
- We estimate non-automotive manufacturing lost 20 jobs in 2023, but we expect that growth will resume in 2024. By 2026, Oakland's employment in nonautomotive manufacturing is forecast to be 1,040 jobs above 2019 levels.
- We estimate that the construction industry added 1,500 jobs in 2023, leaving employment at its highest level since 2005. We expect employment gains to slow over the next three years: 1,170 in 2024, 860 in 2025, and 380 in 2026. Construction employment is forecast to average 6,080 jobs higher in 2026 (22.3 percent) than in 2019.
- Within the higher-education services industry group, the management of companies industry lost 1,190 jobs in 2022. We suspect this drop may stem largely from the reclassification of jobs in motor vehicle manufacturing. We estimate that company management also lost 500 jobs in 2023. We are forecasting that company management will only recover 150 jobs over the next three years, leaving employment in 2026 roughly 1,500 jobs below 2019 levels.
- Employment in the finance and insurance industry declined by 2,310 jobs in 2022 and is estimated to have lost an additional 570 jobs in 2023. We forecast it to recover a total of 1,290 jobs over the next three years. In 2026, employment is expected to be 2,790 higher than it was in 2019.

- Employment in professional and technical services has recovered slowly since the COVID-19 recession, adding only 90 jobs since 2020. We are forecasting that growth will accelerate over the next three years, adding about 620 jobs per year. Despite this improvement, we expect that Oakland's professional and technical services industry will remain about 3,850 jobs short of 2019 levels by 2026.
- Employment in private health and social services initially recovered slowly from the pandemic, but it has recently become a bright spot, adding 4,780 jobs in 2023. We forecast private health and social services will add 6,800 jobs over the next three years (2.1 percent per year). Nearly three-quarters of the job gains that we are forecasting will come from hospitals, home health care, nursing and residential care facilities, and social services. Our forecast leaves employment in 2026 roughly 6,340 jobs (5.9 percent) higher than in 2019.
- Among Oakland's lower-education services industry group, employment in retail trade stood at 83,100 jobs in 2001, but it slipped to 78,900 by 2019. Employment fell another 9,350 jobs in 2020, then recovered 2,280 in 2021 and 1,200 in 2022. We forecast employment gains in retail trade to stall out, resulting in the loss of 190 jobs over the next three years. Our forecast would leave retail trade employment in 2026 about 8.3 percent below 2019 levels, and 12.9 percent below 2001 levels.
- Employment in accommodations and food services declined by 25.6 percent in 2020 (15,700 jobs). Initially the recovery was slow, but the pace picked up in 2022, with 6,620 job gains (13.6 percent). Job gains slowed to 2,440 in 2023 and are forecast to average 1,310 per year over the next three years. Employment in 2026 is 420 higher than in 2019.
- The arts and recreation industry lost 39.1 percent of its jobs in 2020. It recovered about 88 percent of those losses by 2023. Over the next three years, we expect the industry will add 840 jobs (2.5 percent per year) so that employment in 2026 is 290 higher than 2019 levels,
- Administrative support and waste management services are forecast to lose 620 jobs over the next three years, leaving employment in 2026 over 10,000 less than in 2019.

Figure 8

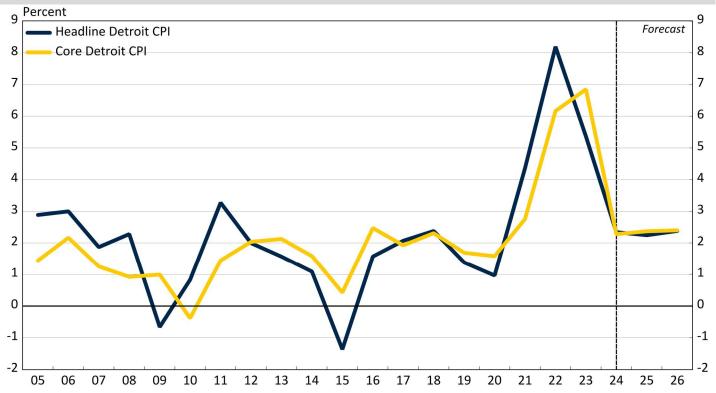
Quarterly Unemployment Rate, Michigan and Oakland County



- Figure 8 shows history and our forecast for the quarterly unemployment rates in Michigan and Oakland County. Our forecast for both Michigan and Oakland County was completed before the annual benchmark revision, so the data in Figure 2 differs slightly from the data in Figure 8.
- We expect Oakland County's jobless rate to edge down from 3.3 percent in the final quarter of 2023 to 3.0 percent in the fourth quarter of 2024, putting Oakland's unemployment rate 1.1 percentage points below the statewide unemployment rate.
- We forecast Oakland's jobless rate to dip to 2.9
  percent by the second half of 2025 before holding
  steady at that rate for the remainder of the forecast.
  Oakland County's unemployment rate remains 1.1
  percentage points lower than the statewide rate
  throughout our forecast.
- That progress would put Oakland county's unemployment rate at the end of our forecast onehalf of a percentage point below its 2019 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 Oakland County residents to keep growing in every quarter of our forecast period. By the end of our forecast, that growth translates to 27,400, or 4.2 percent, more working residents than the county had before the pandemic.
- Despite our relatively 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.
- Oakland County benefits from a well-educated population, a variety of higher education employment opportunities, and a desirable standard of living, but it is not immune from Michigan's expected aging trend.

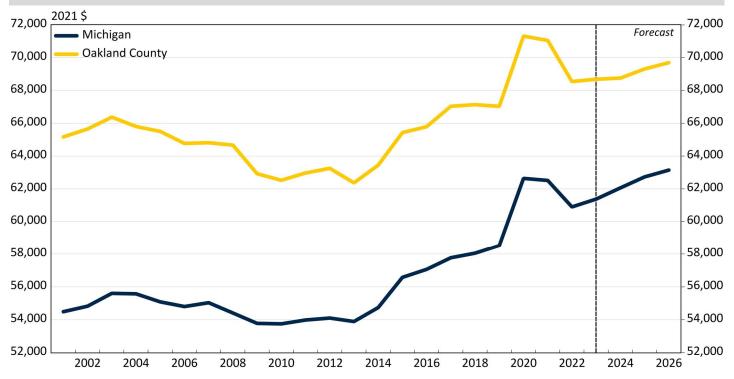
Figure 9 **Detroit CPI Inflation Rate** 



- Figure 9 shows the history since 2005 and our forecast of annual headline (all-items) and core (excluding food and energy) Detroit CPI inflation. We measure local inflation by the growth rate of the Detroit Consumer Price Index (CPI), as countylevel 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 10 **Average Annual Real Wage, Michigan and Oakland County** 

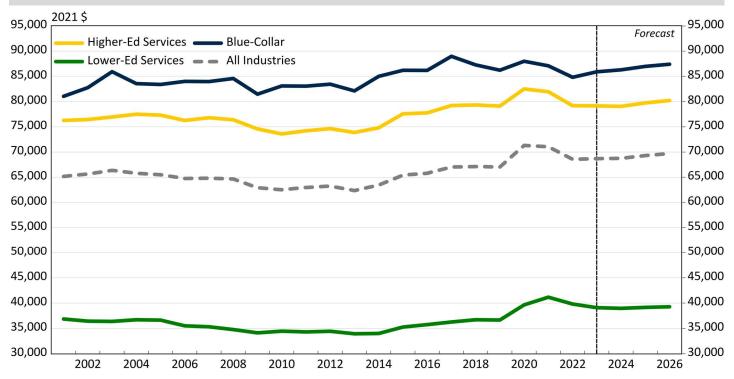


- Figure 10 shows the average annual real wages for all workers in Oakland County and in Michigan from 2001 to 2026, adjusted for inflation to be expressed in 2021 dollars.
- The average real wage in Oakland County has run consistently higher than in Michigan, but Oakland's advantage narrowed from almost 20 percent in 2002 to slightly less than 15 percent in 2019.
- Both Oakland County and Michigan saw large jumps in average real wages during 2020. Real wages grew by 6.4 percent in Oakland 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 0.4 percent in Oakland County and by 0.2 percent in Michigan. In 2022, real wages fell by an additional 3.5 percent in Oakland and 2.6 percent statewide. We estimate that real wage growth turned positive in 2023, when the average real wage in Oakland County stood 11.9 percent higher than in the state.

- We are forecasting that over the next three years, the average real wage will increase by 0.5 percent per year in Oakland County and by 1.0 percent per year in Michigan.
- In 2026, real wages are forecast to average \$69,700 in Oakland and \$63,100 in Michigan. Thus, Oakland County's average real wage in 2026 will stand 4.0 percent above 2019 levels, while average real wages statewide will stand 7.9 percent higher.
- Real wage growth in the seven years between 2019 and 2026 is expected to be slightly slower than in the prior seven-year period (2012 to 2019).
   Oakland's real wage gains are forecast to total 4.0 percent from 2019 to 2026, compared to 6.0 percent in the earlier period.
- Although our forecast for real wage may appear to be pessimistic, it is comparable to the economy's long-term average.

Figure 11

Average Annual Real Wage in Oakland County by Selected Industry Group



- Figure 11 shows the average annual real wage in Oakland County for the same three industry categories as in Figure 7: 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: 2.0 percent in the blue-collar industries, 4.3 percent in the higher-education services industries, and 8.2 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.
- In 2021, the average annual real wage declined in the blue-collar industries and higher-education services industries, but it increased by 3.8 percent in the lower-education services industries.
- Inflation substantially exceeded wage growth in 2022, leading the average real wage to decline by

- 2.6 percent in the blue-collar industries, by 3.4 percent in the higher-education services industries, and by 3.3 percent in the lower-education services industries.
- Real wage growth turned positive for the blue-collar industries in 2023 (1.3 percent), but it continued to decline for the higher-education services industries and the lower-education services industries.
- Over the next three years, the average real wage is forecast to grow by 0.6 percent per year in the blue-collar industries, by 0.5 percent per year in the higher-education services industries, and by 0.2 percent per year in the lower-education services industries.
- By 2026, real wages are expected to stand around 1.4 percent higher than their 2019 levels in both the blue-collar industries the higher-education services industries. Over the same period the average real wage is forecast to grow by 7.2 percent in Oakland's lower-education services industries.
- The increase in wages in the lower-education services industries has helped to narrow wage inequality in Oakland County. In 2019, the county's lower-education services industry workers were paid only 43 percent of the blue-collar average, and 46 percent of the higher-education services average. In 2026, they will be earning 45 percent and 49 percent of those groups' average wages.

Table 3

Advanced Manufacturing in Oakland County, 2022

	All Industries	Advanced, Aspiring, and Private Sevices Support for Advanced Mfg and Other	Advanced Manufacturing	Aspiring Advanced Manufacturing	Private Services Support for Advanced Mfg and Other
United States					
Share of Jobs, BA+	28.9%	55.6%	40.1%	23.4%	74.0%
Employment	150,025,655	10,083,683	2,479,995	2,012,164	5,591,524
Average Wage \$	69,986	125,182	126,735	82,470	139,864
Share of Total Employment		6.7%	1.7%	1.3%	3.7%
Oakland County, MI					
Employment	717,269	82,177	9,001	13,235	59,941
Average Wage \$	73,008	108,259	100,433	93,744	112,639
Share of Total Employment		11.5%	1.3%	1.8%	8.4%

- Oakland County enjoys a strong manufacturing base, but different parts of the manufacturing sector feature very different skill and technology profiles. The advanced manufacturing portion of the sector features more intensive use of technology than traditional manufacturing and is therefore arguably better positioned for future growth.
- While the term advanced manufacturing generally refers to the production process, employment data on manufacturing activity is officially organized by type of product, or industry.
- Table 3 shows our effort to organize "advanced manufacturing" on an aggregate industry basis including data on employment and wages in the United States and Oakland County in 2022.
- The industries we identify as "advanced manufacturing" include computer and electronics, aerospace, and chemical manufacturing. These industries are frequently cited as examples of advanced manufacturing, and they employ disproportionately large shares of workers with a bachelor's degree or higher. They also tend to pay very high salaries.
- The group we call "aspiring advanced manufacturing" includes machinery, medical equipment, electrical equipment, and motor vehicle assembly. These industries are generally still in the

- process of introducing advanced manufacturing technology into the production process and changing their employment mix to include more workers with at least a bachelor's degree.
- The third category we include in Table 3 comprises service-providing industries that support advanced manufacturing. It includes computer software publishing and systems design, engineering, and scientific research and development industries. Nearly three-quarters of the workers in these industries have a bachelor's or more education, and they are very well paid.
- Oakland County has a relatively high share of employment, 11.5 percent, in advanced manufacturing and related industries, versus the U.S. average of 6.7 percent. This advantage is due to the disproportionate share of activity in the service industries that support advanced manufacturing. Thus, Oakland appears to be well positioned to prosper as advanced manufacturing technology becomes more widely used.
- One concern, however, is that the average wage in the advanced manufacturing and service support industries is much lower in Oakland than nationally (\$100,433 compared to \$126,735 and \$112,639 compared to \$139,864). Unless wages in these industries rise, Oakland risks losing these jobs to other, higher-paying communities.

#### Appendix A:

#### **Review of the Forecast**

Year of Forecast	% Forecast Error for Total Private Jobs	Year of Forecast	% Forecast Error for Total Private Jobs	Year of Forecast	% Forecast Error for Total Private Jobs
1986	+ 1.4	1999	- 1.2	2012	- 2.6
1987	+ 0.7	2000	+ 0.6	2013	<b>– 1.1</b>
1988	- 1.8	2001	+ 1.9	2014	- 0.3
1989	- 1.9	2002	+ 3.2	2015	- 0.1
1990	+ 2.2	2003	+ 1.5	2016	- 0.1
1991	+ 3.9	2004	+ 2.6	2017	+ 1.1
1992	- 2.0	2005	+ 1.4	2018	+ 0.5
1993	+ 0.5	2006	+ 3.4	2019	+ 0.2
1994	- 1.3	2007	0.0	2020	+ 0.9
1995	+ 0.2	2008	+ 2.3	2021	+ 0.8
1996	- 0.5	2009	+ 5.5	2022	+ 1.1
1997	+ 0.6	2010	- 1.7	2023	- 0.2
1998	+ 1.3	2011	- 2.5		

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

Average absolute forecast error 1986–2023: 1.5%

	Forecast 2023	Actual 2023
Unemployment rate	2.8%	2.9%
Consumer inflation rate	3.2%	5.4%

Forecast Date: May 2023

- In last year's report, we had forecast that Oakland County would gain 8,700 private jobs in 2023, for an increase of 1.3 percent. We now estimate that the county gained 10,200 private jobs last year, an increase of 1.5 percent. After revisions to the calendar 2022 job count, our forecast error for the 2023 private employment level comes to an underprediction of 1,200 jobs, or 0.2 percentage points after rounding.
- That forecast error was well below our average absolute error of 1.5 percent since 1986.
- Our forecast for Oakland County's government sector was spot on. Last year, we had forecast that government employment in the county would gain 1,000 jobs in 2023, an increase of 2.3 percent. We now estimate that government employment did, in fact, gain 1,000 jobs in 2023.

- We had forecast that Oakland's unemployment rate would decrease from 3.0 percent in 2022 to 2.8 percent in 2023. Oakland's unemployment rate actually decreased to 2.9 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 proved more stubborn than we had expected.
- Even though we slightly under-estimated the strength of Oakland County's economy in 2023, the county's overall performance suggests that it is well positioned for the future as one of the most prosperous counties in both Michigan and the United States.

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

	Estimate	Forecast			Average Annual	
	2023	2024	2025	2026	Wage 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 Oakland County by Detailed Industry

	Estimate		Forecast		_ Average Annual	
	2023	2024	2025	2026	Wage 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	
<u>ddendum</u>						
nemployment Rate	3.3	3.2	3.0	2.8		

Appendix C:

#### Oakland County Compared with Its Peers Indicator Values\*

County	State	Population 2022	Associate's Degree or More	Child Poverty	Median Family Income**	High-Income Persons Aged 65 or Older	Managerial, Professional
Fairfax	VA	1,138,331	72.4%	5.6%	152,282	62.2%	63.7%
Montgomery	MD	1,052,521	66.6%	10.1%	134,509	58.0%	60.0%
Collin	TX	1,158,696	66.5%	4.1%	128,691	42.9%	57.1%
Wake	NC	1,175,021	67.5%	8.1%	125,501	40.5%	56.4%
Nassau	NY	1,383,726	60.5%	6.2%	134,145	50.6%	49.6%
Bergen	NJ	952,997	63.3%	9.0%	122,217	45.9%	53.4%
Travis	TX	1,326,436	64.3%	11.6%	127,796	43.0%	57.3%
Westchester	NY	990,427	62.6%	10.6%	123,848	48.7%	54.3%
Oakland	MI	1,269,431	62.3%	9.4%	121,601	38.2%	54.5%
Hennepin	MN	1,260,121	65.3%	12.4%	120,370	40.0%	55.1%
Denton	TX	977,281	59.5%	9.3%	118,556	45.1%	50.8%
Contra Costa	CA	1,156,966	54.1%	10.4%	120,644	45.7%	48.4%
Fulton	GA	1,074,634	66.6%	17.9%	119,951	39.5%	59.1%
Suffolk	NY	1,525,465	52.0%	6.2%	115,867	46.8%	43.8%
Capitol Planning Region	CT	981,447	51.9%	13.7%	109,136	39.9%	48.9%
St. Louis	MO	990,414	59.3%	15.0%	106,579	36.0%	50.8%
Allegheny	PA	1,233,253	60.5%	14.6%	104,639	29.2%	52.0%
Mecklenburg	NC	1,145,392	59.8%	14.2%	105,404	34.9%	47.7%
Salt Lake	UT	1,186,257	49.1%	7.7%	113,591	36.6%	43.0%
Honolulu	HI	995,638	51.2%	12.0%	100,254	44.2%	41.8%
Erie	NY	950,312	53.1%	16.3%	97,491	30.3%	45.1%
Gwinnett	GA	975,353	49.9%	11.0%	95,079	31.7%	41.3%
Pinellas	FL	961,739	49.6%	14.8%	91,922	29.9%	45.7%
Franklin	ОН	1,321,820	50.9%	21.3%	96,542	30.9%	46.3%
Palm Beach	FL	1,518,477	50.7%	15.7%	87,487	36.3%	41.6%
Orange	FL	1,452,726	54.4%	16.1%	85,337	27.8%	42.4%
Hillsborough	FL	1,513,301	49.8%	16.2%	88,133	28.3%	43.0%
Pima	ΑZ	1,057,597	45.4%	17.7%	90,586	33.4%	40.9%
Cuyahoga	ОН	1,236,041	48.6%	24.0%	89,629	27.6%	45.4%
Duval	FL	1,016,536	46.3%	20.6%	83,176	28.2%	42.1%
Marion	IN	969,466	46.0%	21.1%	87,361	24.5%	40.5%
Fresno	CA	1,015,190	33.6%	25.7%	75,451	28.5%	32.4%
Bronx	NY	1,379,946	31.0%	35.6%	50,332	17.7%	28.9%
State of Michi	gan	10,033,281	44.1%	18.2%	91,905	26.6%	40.6%
United States		333,271,411	46.5%	16.3%	92,148	31.1%	42.5%

<sup>\*</sup>All counties in the United States with a population between 950,000 and 1,550,000 in 2022.

Source: American Community Survey 2022. Census Bureau Population Estimates, March 2023. Median Family Income adjusted using BEA price parity indices for 2022 and extended to counties by relative gross rent.

<sup>\*\*</sup>Adjusted for cost of living.



# O: How does one county bring in over 20% of the state's GDP?

















# A: All ways, moving forward.

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