The Detroit Economic Outlook for 2019–2024

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**The Current State of Detroit's Economy**

The COVID-19 pandemic hit Detroit early and hard, leading to 1,443 confirmed deaths as of late June. According to the City's COVID-19 online Dashboard, the 7-day average of new daily cases peaked April 1, at 334, as shown in Figure 1.[1] As of early July, cumulative cases totaled about 11,600. Detroit's rate of cases per 100,000 residents, at over 1,700, is still nearly double the national average a full three months after the peak. As states and localities gradually ease their restrictions on business activity and consumers regain confidence in participating in the economy, the early hotspots for virus activity seem to be holding up much better than areas largely spared in the early months. That pattern gives us hope that Detroit will not have to implement severe business restrictions again in the future and provides a reason for some optimism in an otherwise grim economic situation.

The economic fallout from the March–April spike in COVID-19 cases in Detroit, and the ensuing government and private mitigation measures, has been severe. The blue line in Figure 2 presents our seasonally adjusted version of the Bureau of Labor Statistics' (BLS') published estimate of household

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[1] https://detroitmi.gov/departments/detroit-health-department/programs-and-services/communicable-disease/coronavirus-covid-19

employment among Detroit residents.[2] The data for April, the latest available at the time this forecast was completed, show a colossal loss of resident employment, with nearly 63,000 people (or more than 27 percent) losing jobs since March.[3]

Figure 1
Number of New Confirmed Cases of COVID-19 in the City of Detroit, 7-Day Moving Average

New Cases, 7-Day MA
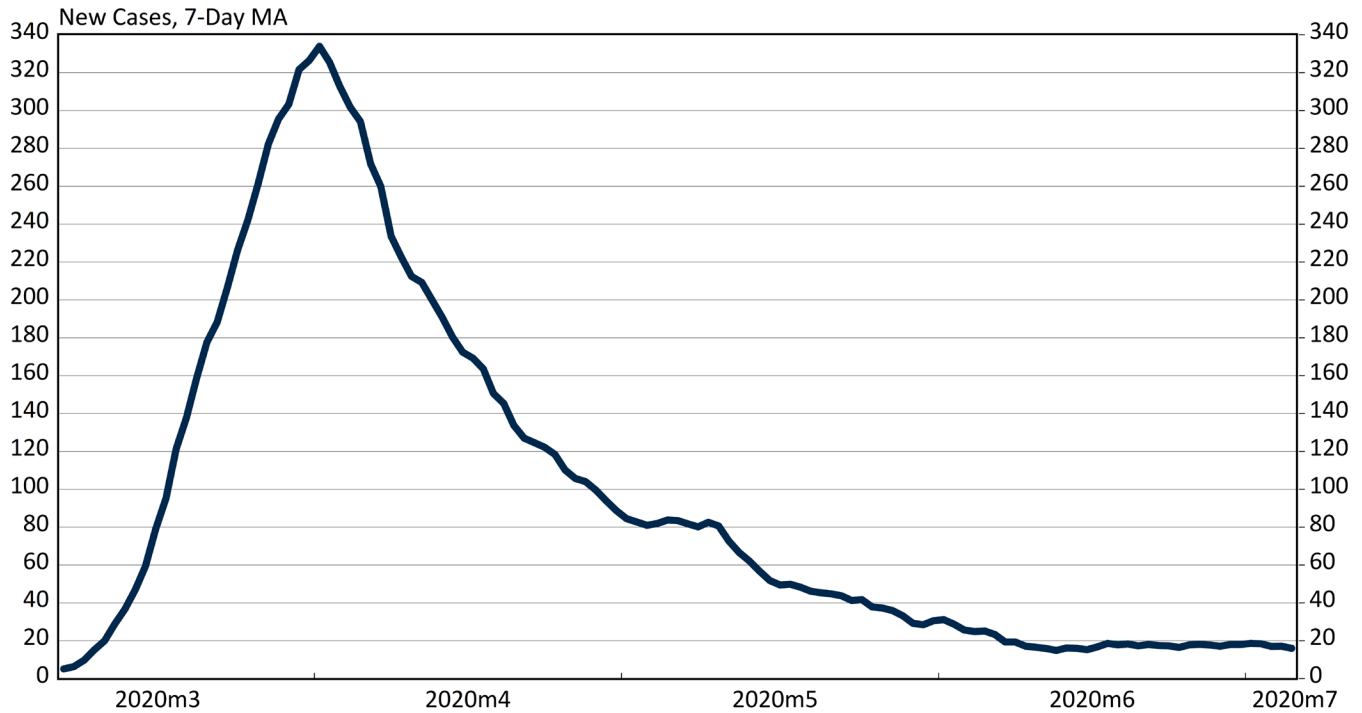
Along with smaller declines in February and March, the decline in April brought Detroit's household employment count to about 28 percent below its January peak, compared to a 27 percent fall for Michigan relative to a February peak. In May, Michigan household employment regained about one-fifth of its March-April losses, so we are hopeful that Detroit employment will rebound quickly as well. The early data for Detroit are likely very noisy. The BLS' current methodology effectively assumes that

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[2] The COVID-19 pandemic has introduced additional challenges to the seasonal adjustment process. The multiplicative seasonal effects we normally use are not appropriate in cases of large non-seasonal changes to the data. Hence, we kept the multiplicative seasonal factors for most of history, but adjusted 2020 values using additive seasonal factors, largely mirroring the BLS' COVID-19 seasonal adjustment approach.

[3] In early July, after the forecast was completed, May numbers became available, and the April numbers were slightly revised. The revised and new data are broadly consistent with our forecast, but in this document we discuss the numbers used at the time the forecast was completed unless otherwise noted.

resident employment in Detroit is a fixed share of the same measure for Wayne County. That share is estimated based on the 5-year American Community Survey (ACS) estimates through 2018, and it is highly unlikely that the share stayed constant during the COVID-19 pandemic. Once the 2020 ACS estimates are available late in 2021, we will likely know more about the true declines in employment among City residents.

Figure 2
Employment Count, City of Detroit, 2010–2020
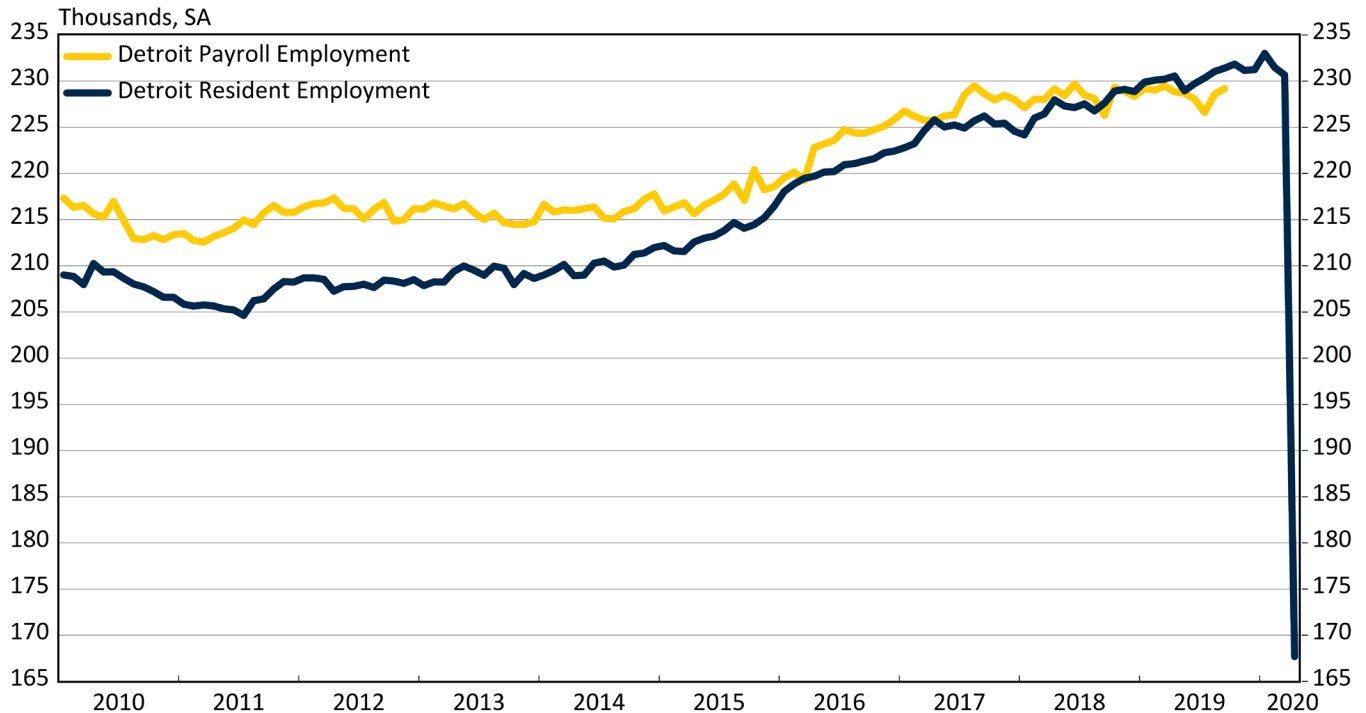
We are excited to introduce a second measure of Detroit employment, available starting with this forecast, produced in cooperation with the Michigan Department of Technology, Management and Budget's (DTMB's) Bureau of Labor Market Information and Strategic Initiatives (LMISI). It is displayed in the yellow line on Figure 2. The new employment measure covers the vast majority of payroll jobs that are located in the city, and it also provides detail by major industry.[4] The data set also includes information

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[4] In other words, this new data measures jobs at Detroit establishments regardless of where employees live, unlike the BLS measure discussed above, which measures employment among city residents, no matter where their jobs are located.

on wages and salaries paid at the included jobs. This new measure will provide a much more detailed picture of Detroit's economy going forward than has been available in the past. The data is only available with a lag, but it will allow us to assess the pandemic's initial aggregate and sectoral impacts by early 2021. The employment forecast section below provides more detail on this series' construction.

While the economic fate of Detroit is ultimately tied to the broader Michigan economy, recent federal policy actions have the potential to give Detroit a bigger boost, given the relatively low income levels of Detroit residents. The massive expansion of eligibility for unemployment insurance contained in the Pandemic Unemployment Assistance (PUA) program and the temporary $600-per-week boost in benefits in the Federal Pandemic Unemployment Compensation (FPUC) program are likely to replace more than 100 percent of many unemployed Detroiters' previous incomes, hopefully supporting the local economic recovery. However, the $600-per-week boost in unemployment benefits is currently scheduled to expire at the end of July. We are watching anxiously for an extension of federal support, even at a reduced level.

Estimating COVID-19's short-run impact on the city's economy precisely is challenging. Like the BLS resident employment estimate, the data for Detroit's unemployment rolls are also imputed from the estimates for Wayne County's using 5-year ACS averages. That procedure currently assigns roughly 54 percent of Wayne County's total unemployed residents to Detroit. Figure 3 presents the latest reading of this count, which has risen by 88,000 residents between February and April. The city's unemployment rate for April registered a whopping 38.8 percent using our seasonally adjusted data. It is not clear whether the approximation in the BLS' current procedure should lead to over- or under-estimates of employment and unemployment in Detroit. An independent survey of Detroit residents, conducted by the University of Michigan Detroit Metro Area Communities Study, suggested a 48 percent unemployment rate in early May, with an improvement to 46 percent by early June.[5] Hence, it is possible that the BLS measures are understating the severity of the pandemic's economic damage.

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[5] https://detroitsurvey.umich.edu/covid-19-survey-and-resources/

Figure 3
Monthly Unemployment, City of Detroit, 2010–2020
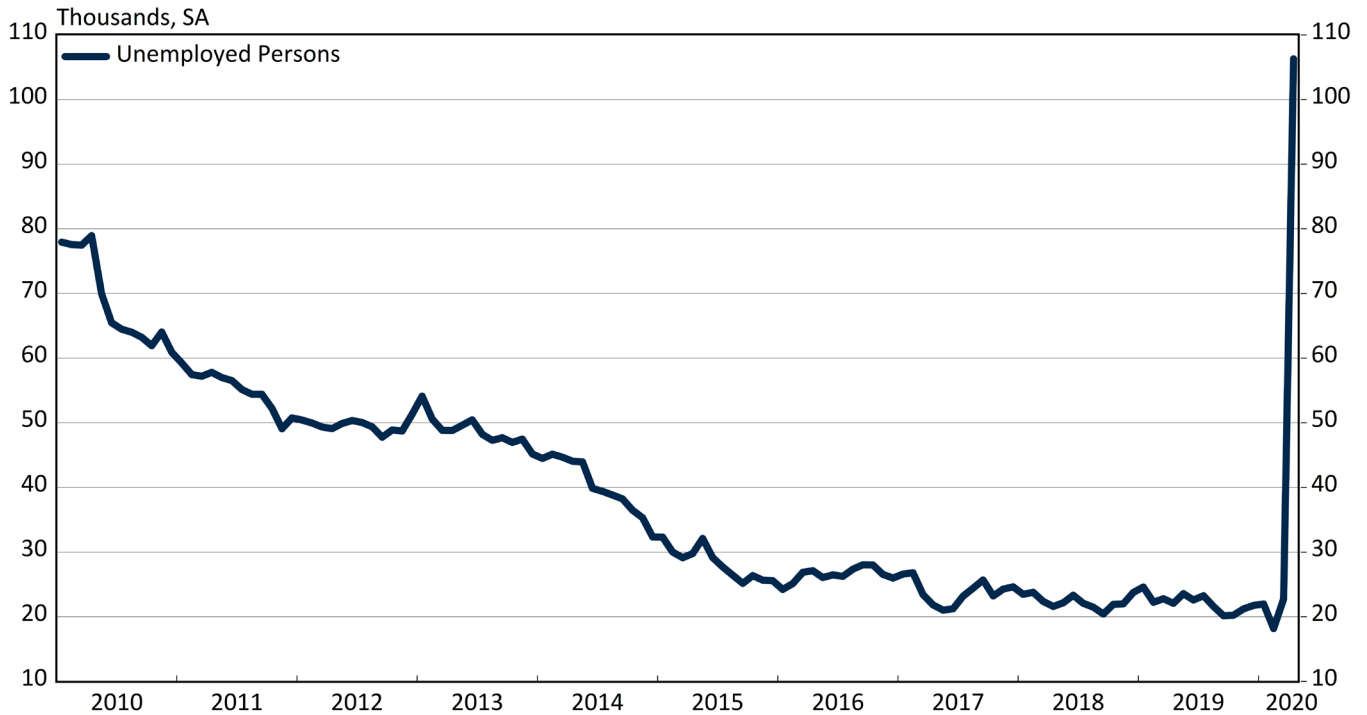
These numbers imply that Detroit faces incredibly difficult times ahead, even if there is a strong near-term rebound from some businesses reopening.

In the sections that follow, we will discuss our projections for payroll employment and wage income at Detroit employers, followed by household incomes of Detroit residents and the city's unemployment rate. The projections in this forecast are based on what we consider the most likely assumptions regarding the future course of the COVID-19 pandemic, the federal economic response, and private individuals' responses to the new environment. However, the range of realistic economic and epidemiological scenarios going forward remains very wide.

The Outlook for Payroll Employment

This section discusses our forecast of payroll employment in the city of Detroit through 2024. Payroll employment data has not historically been available at the sub-county or city levels.[6] To solve this problem, we collaborated with the state LMISI. The team at LMISI constructed a novel dataset of historical quarterly wage and employment data at the sector level for zip codes that are in the city of Detroit. The underlying micro-data comes from employer filings to the state's unemployment insurance system. The same source data is used to construct the BLS' Quarterly Census of Employment and Wages (QCEW) data, which is not published at the city level.

Figure 4 depicts calendar-year historical data and our forecast of total payroll employment for the city of Detroit as well as the state of Michigan. Historical data for Michigan is available through 2020q1, but it is available only through 2019q3 for Detroit.

The total payroll job count in the city of Detroit averaged 216,000 in 2013. From then until 2019, the city gained about 13,000 additional jobs, including our estimate for the fourth quarter of 2019. The top-performing sectors over that period, accounting for over 10,000 of those job gains, were manufacturing; leisure and hospitality; and management of companies and enterprises. The worst-performing sectors over that period were professional, scientific, and technical services; public administration; and information services. Those sectors lost a combined 4,600 jobs from 2013 to 2019.

We expect the COVID-19 pandemic to reduce payroll jobs by approximately 11 percent on an annual average basis this year both in Detroit and in the state of Michigan. We anticipate a stronger recovery in Detroit than in Michigan over the next two years, which allows Detroit's overall payroll jobs count to recover to its estimated 2019q4 level by the third quarter of 2022; we do not forecast Michigan's payroll job count to reach its level from 2019q4 until the third quarter of 2024.

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[6] Previously, the finest level of geographic detail covering payroll employment data in the city of Detroit was for the Detroit-Dearborn-Livonia Metropolitan Division, which comprises Wayne County.

Figure 4
Quarterly Average Payroll Employment, City of Detroit and Michigan, 2007–2024
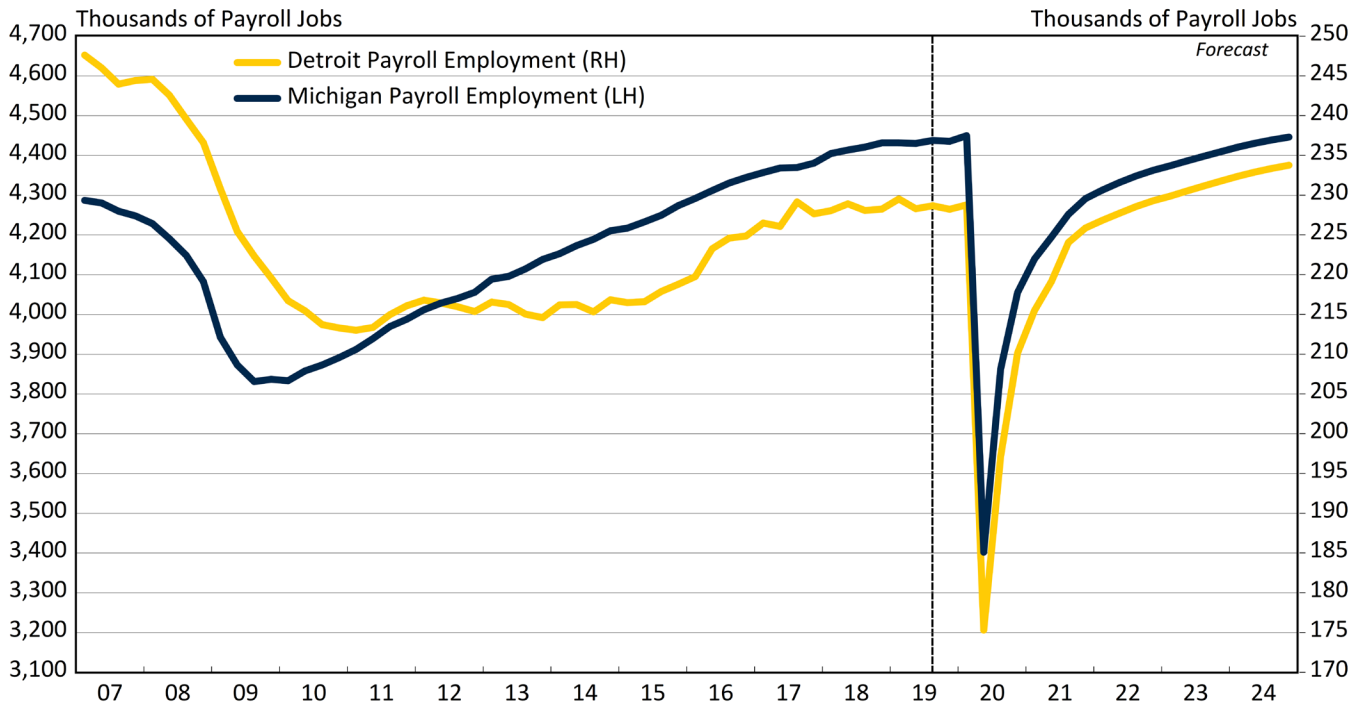
The 11.3 percent loss of payroll jobs in Detroit we are forecasting for the calendar year translates to almost 26,000 job losses between 2019 and 2020. We expect almost every sector to contract this year. The three largest industries, which account for roughly half of all employment in Detroit, are education and health care services, leisure and hospitality services, and manufacturing. Unfortunately, these sectors were also the most severely affected by shutdowns and demand drop-offs associated with the pandemic. Job losses in the education and health care services sector account for about 30 percent of the payroll job losses we are projecting for calendar 2020, commensurate with the sector's share of the total job count. On the other hand, leisure and hospitality services combined with manufacturing make up approximately 20 percent of payroll employment in the city, but they account for nearly 40 percent of the job losses we are projecting in Detroit for 2020.

Details of our forecasts for employment in the major 2-digit NAICS sectors are presented in Tables 5 and 6, for calendar years and fiscal years, respectively, at the end of the report. We discuss the major sectors below.

As noted, **educational and health care services** account for 30 percent of payroll employment in the city of Detroit, making it by far the largest single sector in the city. The payroll employment data provided by LMISI includes both private and government education and health care services in this category.[7] We expect 7,800 job losses in these industries in 2020, as schools and hospitals lay off workers due to the pandemic. Although several Detroit hospitals were overwhelmed with COVID-19 patients, the cancellation of elective medical procedures exacted a heavy financial toll on hospitals and health care services. We are forecasting a slow recovery in this sector, which we project to have approximately 2,000 fewer jobs by the end of our forecast period in 2024 than it did in 2019.

The **leisure and hospitality** sectors, which together form Detroit's second-largest payroll employment grouping that we forecast, has also been hit especially hard by the pandemic. Jobs in this supersector accounted for about 12 percent of employment in Detroit in 2019. We expect a disproportionate share of job losses to come from leisure and hospitality in 2020, due to the widespread and ongoing effects of the pandemic and mitigation policies. We forecast 23 percent of the city's job losses in 2020 to occur in leisure and hospitality. As people resume eating at restaurants and visiting bars, and business and personal travel pick up, we expect employment in these industries to begin to recover. We are forecasting a loss of approximately 6,000 jobs in 2020, of which 4,800 are regained in 2021 and 2022. Our forecast takes Detroit's jobs count in leisure and hospitality in 2024 to be 220 jobs higher than its 2019 level.

Job growth in the **construction** sector is expected to fall by almost 15 percent (940 jobs) in 2020, with most of the job losses front loaded in 2020q2. We are forecasting over 1,000 total job gains between 2019 and 2024, as previously announced construction projects proceed. These projects include the construction of the Gordie Howe International Bridge, the conversion of FCA's Mack Avenue Engine Complex to produce new Jeep models, the retooling of FCA's Jefferson North Assembly Plant, and the

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[7] This is in contrast to the data we use in our forecast for the state of Michigan economy, which comes from the BLS' Current Employment Statistics (CES). In the CES data, public sector jobs in both education and health services are included in the government sector tallies.

redevelopment of the Hudson's site as well as other brownfield redevelopment projects in the city. These projects all help Detroit's construction sector recover from the pandemic. After 2020's job losses, we forecast the construction sector to gain 1,300 jobs combined in 2021–22 and another 620 jobs in 2023–24.

Manufacturing activities accounted for approximately 9 percent of payroll employment in Detroit in 2019, making it the city's third-largest sector by employment. We expect 4,100 job losses in 2020 as COVID-19-related factory closures and the global recession severely affect manufacturing employment in 2020. We expect this sector to rebound as plants resume more normal shift schedules and as FCA's Mack Ave Engine Complex and Jefferson North Assembly Plant and GM's retooled Hamtramck plant come online. By the end of the forecast period in 2024, we expect the city to gain nearly 3,500 new manufacturing jobs relative to 2019.

We expect the pandemic to have a relatively mild effect on employment growth in the **financial activities** sector because a large fraction of these jobs can be done remotely. Employment falls by barely 100 jobs (1.1 percent) in 2020 and then rises by 190 jobs in 2021. We expect Detroit to gain 120 new jobs in the financial activities sector jobs per year on average over the 2022–24 period.

Employment in the **information** sector—which includes print and video media industries, as well as cable and telecommunication industries—has been trending down since 2007. We anticipate almost 11 percent (350) of the sector's jobs will be lost in 2020, of which 50 jobs will be recovered in 2021. We expect the trend of declining jobs in this sector to continue over our forecast horizon, with a further 290 cumulative job losses by 2024.

The **professional and business services** supersector contains three major subcategories: professional, scientific, and technical services; management of companies; and administrative and support and waste and remediation services. In Michigan, professional and business services are tied closely to the manufacturing sector, as they include many white-collar jobs in the automotive industry in engineering, design, and computing services. We expect payroll employment to fall by between 6 and 7 percent in all three of the subcategories in 2020. Because workers in these industries are often able to

work from home, the drop is not as severe as other sectors. We forecast the administrative support and management subcategories to rebound strongly in 2021 and for growth to continue through 2024 as the economy comes back to life. These two subcategories add a combined 2,100 new jobs from 2019 to 2024. The professional, scientific, and technical services subcategory, however, has been on a downward trend in the city of Detroit since 2017. Although we expect a small rebound of 0.9 percent in 2021 and 0.2 percent in 2022, we do not expect the underlying trend in this sector to turn the corner during the forecast period. In total, we project 850 job losses in professional, scientific, and technical services from 2019 to 2024.

The **trade, transportation, and utilities** supersector comprises retail trade as well as wholesale trade, transportation, warehousing, and utilities (WTU). Nationally, traditional retailers have had difficulty competing against online retailers and big box stores, which are less labor intensive, contributing to a longstanding downward trend for the retail trade side. The WTU subcategory has seen the opposite trend statewide, as online sales and big box stores create additional jobs in trucking and warehousing. In Detroit, however, both subcategories have seen growth in the past decade as the city's overall economy has improved. We expect the COVID-19 pandemic to hit both sectors hard, though, with payroll job losses of 10 to 11 percent this year for each sector in the city. We expect WTU to bounce back quickly in 2021–22, followed by more moderate growth in 2023–24, for an overall gain of 820 jobs from 2019–24. Although we forecast retail trade to gain back roughly 75 percent of the COVID-related job losses in 2021, growth for this sector is much more muted in 2021–24. In 2024, we project employment retail trade to remain 150 jobs below its 2019 level.

The **public administration** sector does not include public-sector jobs in the education and health care sectors in this data, but it does include employment related to most other government services. We forecast a decline of 140 jobs in 2020, followed by an essentially flat 2021, due to budget restrictions arising from the COVID-19 pandemic. Growth begins to pick up, albeit moderately, in 2022–24, for a net gain of 170 jobs from 2019–24. It is important to note that our forecast assumes that the federal government will provide substantial fiscal relief to state and local governments over the next few years.

Without that aid, we would expect employment in the public administration sector to be substantially weaker than we have forecast.

The **other services** sector covers a wide variety of industries: repair services (including auto repair), personal services (such as hair styling and laundry services), membership organizations, and private household workers. These services have been hit hard by the pandemic; we forecast payroll employment in other services to plummet by 16.4 percent, or 1,100 jobs, in 2020. Although we expect a rebound of 720 job gains in 2021, growth tapers off after that, and employment in other services remains 380 jobs below its 2019 level in 2024.

We conclude this section with **natural resources and mining** and payroll jobs that are **unallocated** to one of the defined sectors. Together, these sectors combined for 840 jobs in 2019. We are not forecasting either of these sectors to be hit hard by the pandemic. By 2024, we forecast the mining sector to add 50 jobs relative to 2019, while unallocated jobs grow by another 50.

The Outlook for Wages and Salaries

In this section, we present our forecast for wage and salary income earned at establishments located in the city of Detroit. Most of our discussion of wages focuses on annual wages per worker. The data for Michigan comes from the Bureau of Economic Analysis' (BEA's) State Personal Income release. Wage data for the city of Detroit was again constructed by LMISI from employer reports to Michigan's unemployment insurance system through the partnership discussed above.[8]

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[8] There are some definitional differences between the Michigan and the Detroit average wage series we consider in our forecast. Although the QCEW is the primary source for the BEA data, the BEA makes several adjustments, particularly for industries that are not fully covered by Unemployment Insurance programs and where QCEW data is under-reported. (For more information on these and other adjustments, see https://www.bea.gov/sites/default/files/methodologies/spi2017.pdf). These differences imply that comparisons in wage and salary income between the City and the State may not always be apples-to-apples, particularly at the sector level. Still, we believe that these comparisons can be informative at the aggregate level and can be used to identify underlying trends.

Figure 5 depicts the average annual nominal wage and salary income for the city of Detroit and the state of Michigan from 2007 to 2024. The most striking feature of the figure is the difference in the levels of average annual wages earned by workers in the state of Michigan and in Detroit. The average annual wage for 2019 at Detroit establishments was 21 percent higher than it was across Michigan overall. Although there are some technical differences between the two series, we believe that gap stems primarily from the differing distributions of jobs in the city vs the state. For example, over the past five years, under 25 percent of jobs in Detroit were in lower-education service industries that tend to employ a larger fraction of workers in lower-paying jobs compared with over 30 percent in the state.[9] Conversely, we estimate that just over 5 percent of payroll jobs in Detroit were in the highly paid management of companies and enterprise sector in 2019, versus 1.6 percent in Michigan.

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[9] To calculate the fraction of lower-education service sector employment, we include industries that tend to hire a larger fraction of workers with lower educational attainment and lower wages. These include retail trade, leisure and hospitality, administrative and business support industries, and the catchall other services sector that includes repair and personal care services.

Figure 5
Annual Wage and Salary Income per Worker, City of Detroit and Michigan, 2007–2024
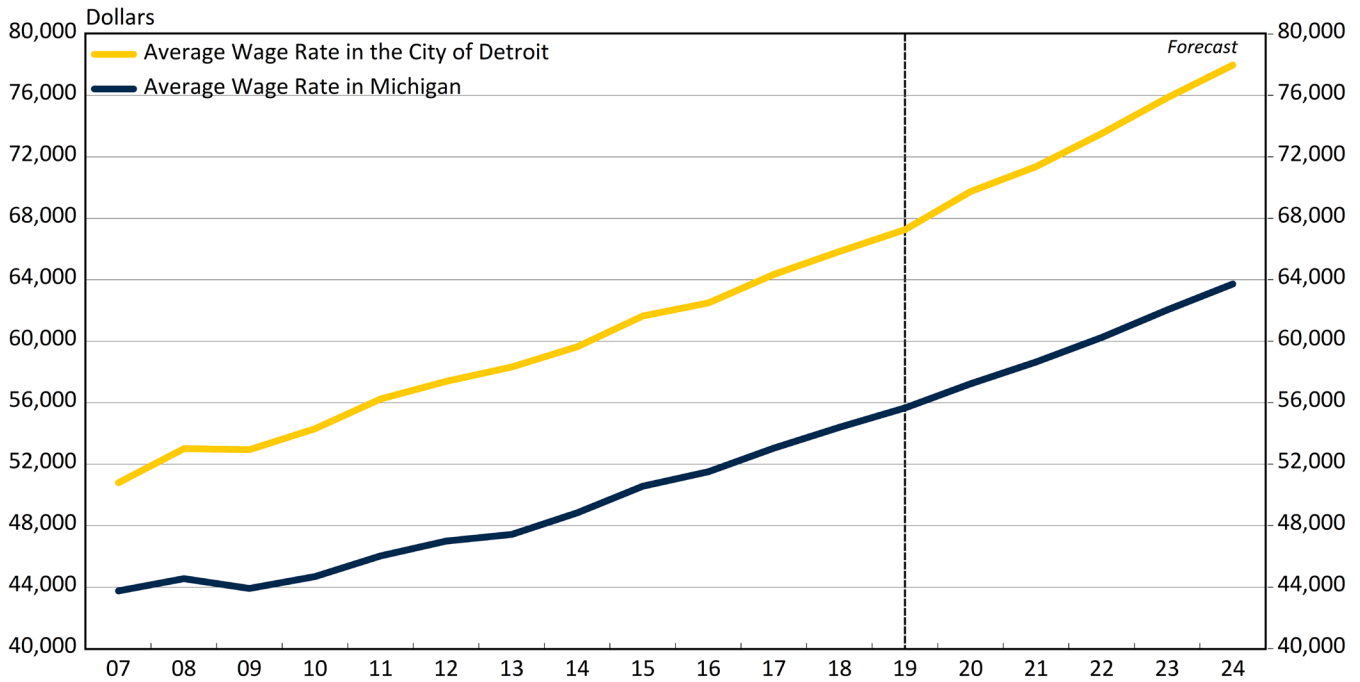
Average wage and salary income per payroll job in Detroit establishments increased from $61,700 in 2015 to $67,300 in 2019. As is evident from the figure, per-job growth in wage and salary income was very similar in Detroit and Michigan over the past 10 years; each grew by 2.4 percent per year on average. In Detroit's post-bankruptcy era, between 2015 and 2019, annual wages per worker grew by 2.2 percent per year, on average, slightly below the 2.4 percent growth in Michigan. We do not expect a slowdown in the average wage growth as a result of the pandemic, largely reflecting a disproportionate hit to lower-wage employment. We expect wages to grow slightly faster in Detroit (an average of 2.8 percent) compared with Michigan overall (average of 2.7 percent) between 2020 and 2024. In dollars, this translates to an increase of $8,200 in the average annual wage of jobs located in the city—from $69,700 in 2020 to just shy of $78,000 in 2024.

Figure 6 illustrates average annual wage and salary income in Detroit in three broad categories: the goods-producing category, which includes the construction, manufacturing, and mining sectors; the higher-education service category, including education and healthcare, finance, information, and public administration, which tends to employ a large fraction of workers with higher educational attainment; and

the lower-education service category, which tends to hire a larger fraction of workers with lower educational attainment and includes retail trade, leisure and hospitality, administrative and business support services, and the catchall "other services" sector.

Figure 6
Average Annual Wage and Salary Income in City of Detroit, 2007–2024,
Goods-Producing, Higher-Education Service, and Lower-Education Service Industries
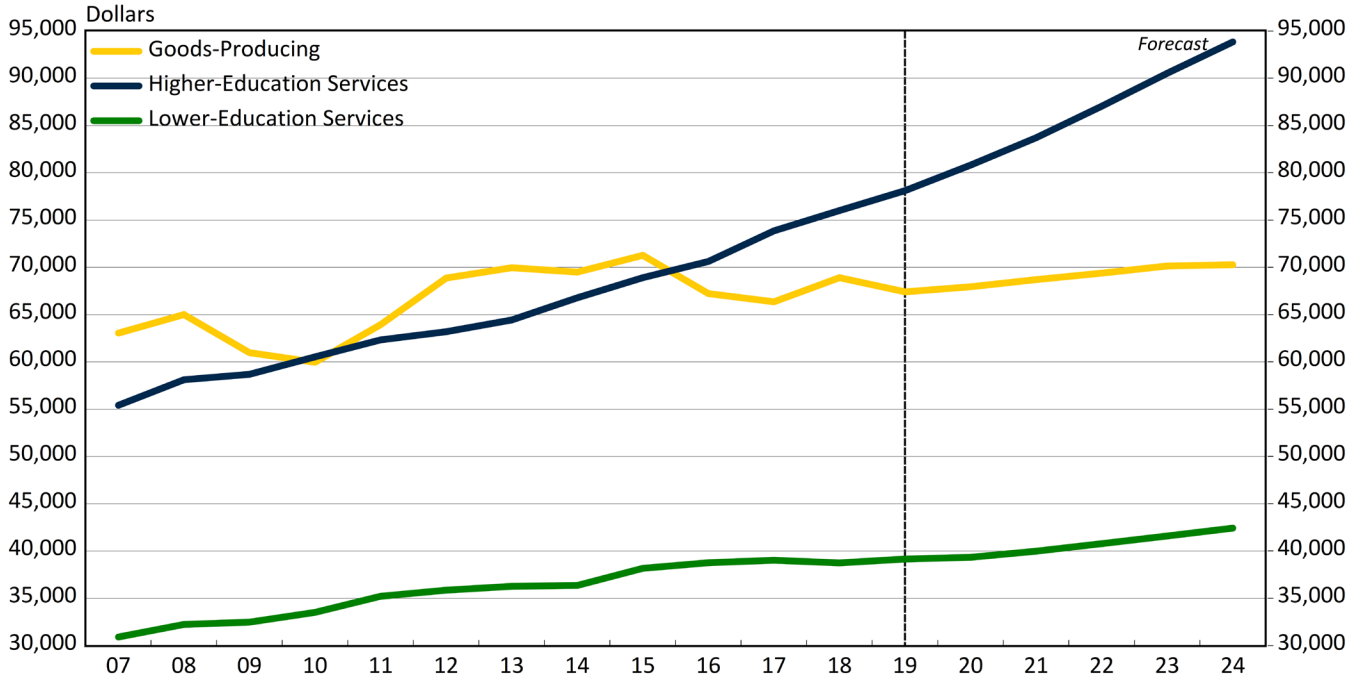
Average annual wage and salary income in the goods-producing category ($71,300) and in the higher-education services category ($68,900) were roughly level in 2015. They have since diverged, however, as city average wages fell by 1.4 percent in the goods-producing category between 2015 and 2019. During the same period, incomes in the higher-education service sectors grew by 3.2 percent. In 2019, annual wage and salary income in the goods-producing industries, at $67,400, had fallen to almost $11,000 below income in higher-education services. We expect this divergence to continue in the forecast period, as wage growth in the higher-education services category accelerates to an average annual rate of 3.8 percent from 2020–24, while wages in the goods-producing sectors increase by only 0.8 percent per year on average. Those growth paths lead the wage gap to expand to $23,600 by 2024, as average

wages in the higher-education services category reach nearly $94,000 and goods-producing wages extend to $70,300.

The difference is even starker for the lower-education services sector category, which has markedly lower average annual wages than the other two groups. Average wages in the lower-education services sectors rose from $38,200 in 2015 to $39,200 in 2019, a mere 0.6 percent per year on average. We forecast wage and salary income growth in this sector to pick up a bit with inflation, to 1.9 percent per year, with the average annual wage reaching $42,400 in 2024. This growth still pales in comparison with the higher-education service sectors, leading the wage gap between the two categories to increase from $39,000 in 2019 to $51,400 in 2024.

Detroit Household Incomes

Figure 7 depicts our forecast of nominal household income growth for residents of the city of Detroit, along with our forecast of nominal personal income growth for the state of Michigan. Due to differences in the two series' definitions of income, there is not an exact one-to-one correspondence between these two measures.[10] It is also important to note that forecasted growth in Detroit household income is not the same as growth in Detroit income tax revenues due to differences between the tax base and the household income measurements. The final year of historical data for the city of Detroit series is 2018, while the historical data for the state series incorporated in this forecast extends through the end of 2019.

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[10] Our measure of household income for the city uses data from the ACS, whereas our measure of Michigan Personal Income comes from the BEA.

Figure 7
Annual Income Growth, City of Detroit and Michigan, 2011–2024
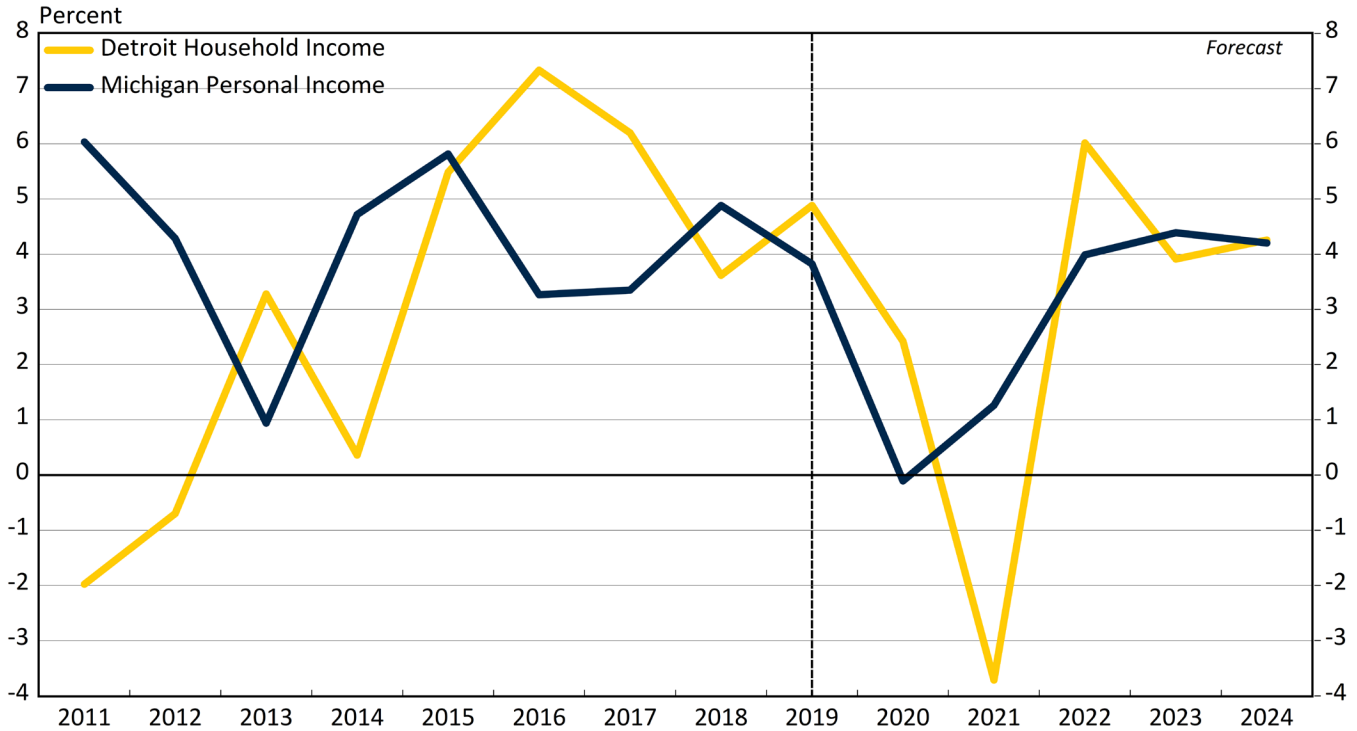
Table 3 contains our corresponding forecast of nominal resident income in Detroit on a calendar-year basis.[11] Between 2015 and 2018, household income in the city of Detroit grew by an average of 5.7 percent per year. We estimate that household income in Detroit grew by 4.9 percent in 2019, slightly less than its average pace over the previous four years. Wage and salary income, which counts for approximately 70 percent of overall household income in Detroit, grew by 7.8 percent per year on average between 2015 and 2018. We estimate that wage and salary income growth decelerated to 4.7 percent in 2019.

As context for our forecast of resident income in the city of Detroit, it is important to keep in mind that although the Southeast Michigan region enjoyed a robust and generally widely shared recovery from the Great Recession, as of 2018, there remained substantial gaps in the region's prosperity. In a new report for the Southeast Michigan Council of Governments (SEMCOG), we found that those gaps were

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[11] Table 4 shows income on a fiscal year basis.

especially pronounced among the region's Black residents. We calculated inflation-adjusted, three-person equivalent household incomes in 2012 and 2018 using a procedure described in detail in our report for SEMCOG that adjusts for household size and local costs of living. We then calculated average values for every Public Use Microdata Area (PUMA) in the nation, focusing on the 33 PUMAs in the SEMCOG region. In our analysis, the city of Detroit contains five PUMA regions as defined by the Census Bureau: Northwest Detroit City, North Central Detroit City, Northeast Detroit City, South Central & Southeast Detroit City, and Southwest Detroit City.[12] Real three-person equivalent household income grew by 21.7 percent in the city of Detroit between 2012 and 2018, substantially faster than in the SEMCOG region (16.8 percent) or the nation (14.8 percent)

Despite Southeast Michigan's recent economic growth, the city of Detroit remained relatively poor as of 2018, with an average adjusted income for a three-person equivalent household of $52,459, compared to $99,357 in the SEMCOG region and $96,459 in the nation as a whole. The city's five PUMA regions had the five lowest average adjusted household incomes by our measure in the SEMCOG region. The lowest-income PUMA region in the SEMCOG region by our measure was Southwest Detroit, which had an average three-person equivalent adjusted household income of $39,512 in 2018. By that measure, Southwest Detroit was the second poorest PUMA region in the country in 2018; only the Bronx Community District 5 was poorer. For contrast, the SEMCOG region's most prosperous PUMA region by our measure, Birmingham-Bloomfield in Oakland County, had an average three-person equivalent adjusted household income of $170,254, which ranked 41st among the nation's 2,351 PUMA areas. The most prosperous PUMA region in the city of Detroit, South Central & Southeast Detroit, had an average three-person equivalent adjusted income of $66,283, which was about two-thirds of the SEMCOG region's average adjusted household income. Although those numbers are discouraging, both the South Central & Southeast Detroit and the North Central Detroit PUMAs saw brisk adjusted real household

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[12] Those five PUMA regions are not exactly coterminous with the city's boundaries, but we believe any discrepancies introduced by differences in those boundaries will be small.

income growth from 2012 to 2018, cumulating to 52.1 percent and 31.0 percent, respectively, versus 16.8 percent for the SEMCOG region and 14.8 percent for the United States as a whole. The adjusted real household income growth in South Central & Southeast Detroit was the 11th-fastest in the nation from 2012 to 2018.

Arguably a bigger problem than average income levels, both in Southeast Michigan and nationally, was that that there remained substantial racial gaps in prosperity levels even at the tail end of the recent expansion. In 2018, 34.0 percent of the population residing in the SEMCOG region lived in what we classified as lower-income households, 50.8 percent lived in middle-income households, and 15.1 percent lived in high-income households. We estimate that among the SEMCOG region's non-Hispanic white population, 26.6 percent lived in lower-income households, 55.1 percent in middle-income households and 18.4 percent lived in high-income households. In contrast, 57.3 percent of the region's Black population lived in lower-income households, 38.0 percent in middle-income households, and only 4.7 percent of the region's Black population resided in high-income households. Furthermore, among the area's Hispanic residents, 45.1 percent lived in lower-income households, 45.4 percent in middle-income households, and 9.4 percent lived in high-income households.

Among residents of the city of Detroit, 66.0 percent lived in lower-income households, while only 30.1 percent lived in middle-income and 3.9 percent in high-income households in 2018. The small sample size restricts our ability to reliably estimate these values for non-Hispanic white and Hispanic residents of the city of Detroit, but about two-thirds of the Black population in the city lived in lower-income households, and only about one-third of the Black population lived in middle-income or higher-income households. That wide disparity in income distribution by race and geography in Southeast Michigan formed the backdrop to the Covid-19 recession, which will present a severe challenge to the Detroit economy.

The COVID-19 pandemic had a profound effect on the global economy in the first half of 2020, which will restrain income growth substantially in the near term. However, we do not expect the pandemic's near-term impact on Detroit residents' incomes to be as dramatic as its impact on other

economic indicators such as employment rates. In fact, we expect that with the support of policies in the CARES act, the income of city residents will increase by $295 million, or 2.4 percent, in 2020.

Figure 8 shows that we are forecasting Detroit residents' wage and salary income to decline by 10.4 percent, or $870 million, in 2020. We expect that decline to be more than offset by an increase in non-wage income of $1,165 million, though. These income gains are due to the FPUC and PUA provisions as well as the Economic Impact Payments contained in the CARES Act and are shown in the "other household income category" in Table 3.[13] We are forecasting that Detroit residents' wage income will increase by $497 million (6.6 percent) in 2021, as employment conditions improve, but that the non-wage income of city residents will decline by $960 million without the support contained in the CARES Act. Thus, we forecast the total income of city residents to decline by $463 million (3.7 percent) in 2021. That decline would bring Detroit's total household income in 2021 below its 2019 level.

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[13] Note that it is unclear whether ACS respondents will report their economic impact payments in any of the ACS income categories. We have nonetheless included the payments in the tables to reflect the underlying economic reality as closely as possible.

Figure 8
Detroit Annual Wage and Non-Wage Income Growth, 2011–2024
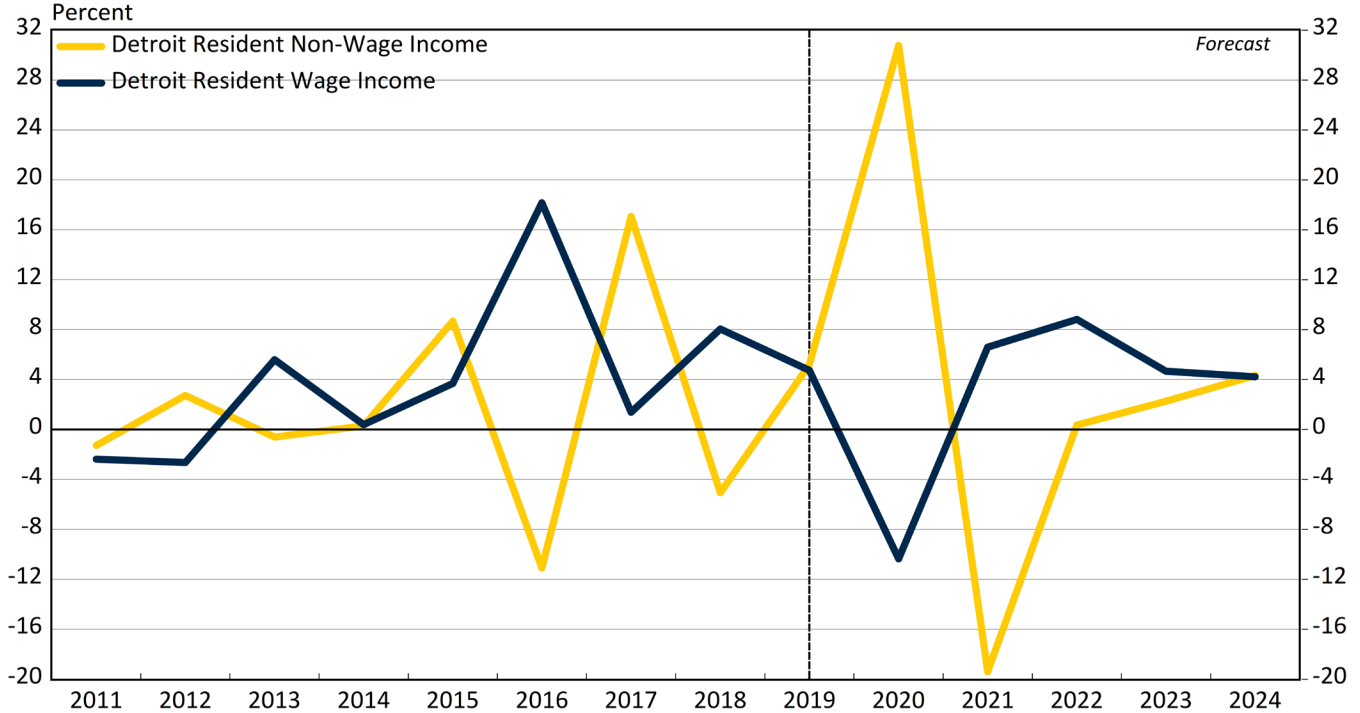
Income growth returns to a more usual path in 2022. Wage and salary income growth will accelerate to show an 8.8 percent gain ($708 million). Unemployment insurance payments and public assistance will continue to shrink, but at a much slower pace than in 2021, while other sources of non-wage income will increase, resulting in a net increase of $14 million of non-wage income. Total income in 2022 is thus forecast to grow by $723 million (6.0 percent).

City residents' total income growth then slips to a rate of 3.9 percent in 2023 and 4.3 percent in 2024 as employment gains moderate.

Detroit Unemployment Rate

In 2010, in the midst of the Great Recession, the unemployment rate in the city of Detroit reached 24.8 percent, slightly less than twice as high as in Michigan overall (12.6 percent). As shown in Figure 9, the unemployment rate in the city fell to 11.7 percent in 2015, slightly more than twice the state unemployment rate that year (5.4 percent).

Figure 9
Annual Unemployment Rate, City of Detroit and Michigan, 2010–2024

Percent

Forecast

— Detroit Unemployment Rate
— Michigan Unemployment Rate
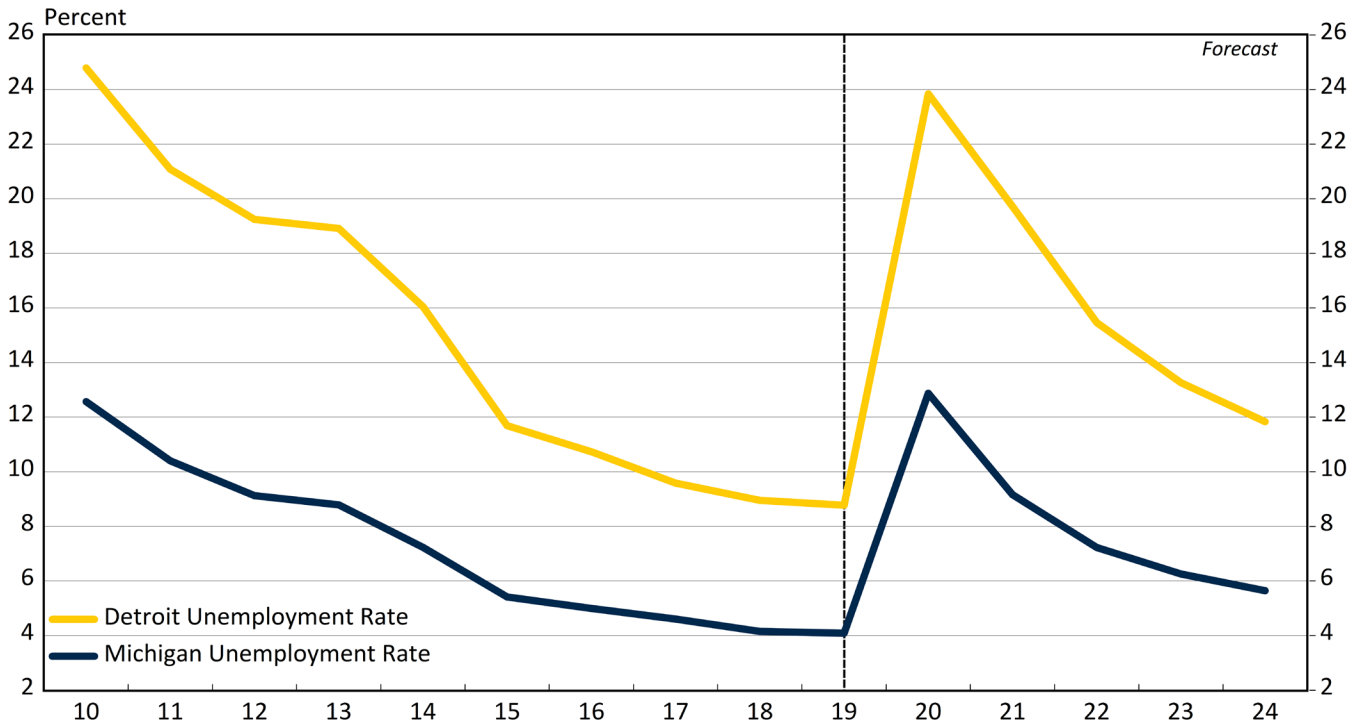
We expect that history to come close to repeating itself in the first few years of the new decade. We are forecasting that the unemployment rate in the city of Detroit will jump to an average of 23.8 percent in 2020, slightly less than twice the rate in the state overall (12.9 percent).[14] It then begins to decline, reaching almost exactly the same level in 2024 (11.8 percent) as it averaged in 2015 (11.7 percent). Once again, the city's unemployment rate is forecast to be slightly more than twice the level in the state (5.6 percent) in the terminal year of our forecast. We do expect the decline in the city's unemployment rate to be a bit faster in the recovery from the COVID-19 pandemic than it was from the Great Recession. Our forecast is for the unemployment rate to fall below 12 percent in four years, one year fewer than it took the city's economy to reach that milestone in the recovery from the Great Recession.

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[14] The city's unemployment rate will be much higher in its peak months than the annual average.

Conclusion

There is no question that Detroit's economy is facing a very difficult road ahead. The COVID-19 pandemic has already resulted in broad-based job loss among Detroit residents, adding an economic crisis to a public health crisis. In the short run, federal assistance should protect the incomes of most, but not all, affected workers from the full brunt of the crisis. Many of those protections, however, are set to expire in the coming months. Likewise, the City and State are both facing acute budget shortfalls that have the potential to lead to significant job cuts, which would slow the economic recovery from the crisis. Our sincere and urgent hope is that a more vigorous federal policy response will lead to a faster recovery and less hardship along the way for city residents.

The other necessary condition for a vigorous economic recovery in Detroit is that the nation and region both make adequate progress in controlling the COVID-19 pandemic. Our forecast assumes that K-12 schools will largely reopen for in-person instruction in the fall and that workers and consumers will feel safe gradually returning to their normal patterns of economic activity. If the course of the pandemic is significantly more severe than we have assumed, the economic recovery in Detroit will be slower and weaker than we have forecast.

Table 1 - August 2020 Update
Employment Among City of Detroit Residents
Number of Jobs
Calendar Years

	Actual			Forecast					
	2016	2017	2018	2019	2020	2021	2022	2023	2024
Total Employment, ACS	239,033	234,102	249,478	244,063	208,190	226,310	238,222	243,050	247,084
Agricultural and Mining	937	625	1,069	940	810	981	1,002	1,023	1,045
Construction	8,424	8,491	9,448	9,900	8,097	9,361	10,421	11,069	11,317
Manufacturing	35,962	37,262	42,449	39,300	31,513	34,217	37,253	38,681	39,955
Transportation and Utilities	13,735	14,296	18,378	18,700	16,216	17,658	19,065	19,615	20,721
Retail Trade	23,178	22,849	22,327	22,300	18,972	21,088	21,503	21,349	21,181
Wholesale Trade	5,068	3,775	4,800	4,300	3,746	4,039	4,193	4,248	4,243
Information	4,389	3,693	2,944	3,400	2,909	2,873	2,978	2,973	2,965
Financial Activities	12,016	13,336	10,559	12,200	11,419	11,645	12,234	12,462	12,661
Professional and Business Services	25,312	24,666	27,941	26,600	23,902	25,428	26,271	27,005	27,711
Education and Health Services	58,197	53,471	57,987	55,400	50,278	53,871	55,279	55,754	56,177
Leisure and Hospitality	29,877	31,637	29,963	30,723	22,502	25,591	28,208	28,995	29,192
Other Services	13,533	11,440	11,149	11,100	8,907	10,703	10,922	10,932	10,915
Public Administration	8,405	8,561	10,464	9,200	8,919	8,854	8,893	8,944	9,001

Table 2 - August 2020 Update
Employment Among City of Detroit Residents
Number of Jobs
Interpolated Fiscal Years (July 1–June 30)

	Actual			Forecast					
	2016	2017	2018	2019	2020	2021	2022	2023	2024
Total Employment, ACS	229,939	236,752	241,820	249,974	224,655	214,263	233,097	241,128	245,166
Agricultural and Mining	954	753	836	1,040	856	886	1,001	1,012	1,034
Construction	7,466	8,501	8,945	9,846	8,948	8,550	9,929	10,795	11,243
Manufacturing	33,171	36,604	40,134	41,685	35,041	32,188	35,815	38,077	39,337
Transportation and Utilities	14,119	13,739	16,352	18,949	17,388	16,694	18,417	19,359	20,098
Retail Trade	23,696	22,968	22,569	22,489	20,502	19,796	21,437	21,462	21,267
Wholesale Trade	4,394	4,447	4,238	4,649	3,974	3,849	4,131	4,231	4,253
Information	3,611	4,180	3,247	3,156	3,185	2,854	2,924	2,983	2,969
Financial Activities	11,874	12,874	11,927	11,255	11,898	11,446	11,939	12,373	12,565
Professional and Business Services	26,343	24,681	26,347	27,644	25,072	24,444	25,899	26,646	27,361
Education and Health Services	55,703	55,917	55,595	57,296	52,453	51,666	54,769	55,578	55,972
Leisure and Hospitality	27,695	31,093	30,862	30,752	26,467	23,369	27,044	28,753	29,167
Other Services	11,833	12,713	11,167	11,243	9,888	9,654	10,924	10,942	10,927
Public Administration	9,081	8,282	9,601	9,968	8,985	8,867	8,867	8,918	8,972

Table 3 - August 2020 Update
City of Detroit Resident Income
Millions of Nominal Dollars (Annual Percent Changes in Parentheses)
Calendar Years

	Actual			Forecast					
	2016	2017	2018	2019	2020	2021	2022	2023	2024
Total Resident Income	10,555	11,209	11,615	12,182	12,477	12,014	12,737	13,235	13,799
	(7.3)	(6.2)	(3.6)	(4.9)	(2.4)	(-3.7)	(6.0)	(3.9)	(4.3)
Wage and Salary	7,317	7,418	8,016	8,396	7,526	8,023	8,731	9,139	9,525
	(18.2)	(1.4)	(8.1)	(4.7)	(-10.4)	(6.6)	(8.8)	(4.7)	(4.2)
Other Household	226	249	250	264	1,427	488	380	341	359
	(-7.2)	(10.3)	(0.4)	(5.7)	(439.8)	(-65.8)	(-22.0)	(-10.3)	(5.3)
Self-employed	275	389	289	307	265	299	329	344	360
	(16.3)	(41.5)	(-25.6)	(6.3)	(-13.7)	(12.9)	(10.0)	(4.6)	(4.6)
Dividends, Interest, and Rental	176	222	232	246	167	106	136	183	246
	(-44.4)	(26.0)	(4.7)	(5.7)	(-31.8)	(-36.8)	(28.8)	(33.9)	(34.7)
Retirement	881	1,128	1,059	1,101	1,097	1,088	1,110	1,130	1,149
	(-20.7)	(28.1)	(-6.2)	(4.0)	(-0.3)	(-0.8)	(2.0)	(1.8)	(1.7)
Public Assistance	35	18	25	25	86	63	46	42	40
	(3.8)	(-49.5)	(40.1)	(1.3)	(242.9)	(-27.2)	(-27.2)	(-7.8)	(-5.3)
Social Security Transfers	1,266	1,431	1,422	1,500	1,541	1,587	1,640	1,689	1,749
	(-6.7)	(13.1)	(-0.7)	(5.5)	(2.8)	(2.9)	(3.3)	(3.0)	(3.6)
Supplemental Security	380	354	322	344	367	361	364	367	370
	(10.5)	(-6.9)	(-8.9)	(6.7)	(6.7)	(-1.7)	(1.0)	(0.9)	(0.8)
ADDENDA:									
Total Resident Income in 2019$	11,182	11,634	11,775	12,182	12,421	11,805	12,313	12,560	12,803
	(5.7)	(4.0)	(1.2)	(3.5)	(2.0)	(-5.0)	(4.3)	(2.0)	(1.9)
CPI, Detroit (1982–84=100)*	222.24	226.86	232.26	235.46	236.53	239.64	243.57	248.11	253.77
	(1.6)	(2.1)	(2.4)	(1.4)	(0.5)	(1.3)	(1.6)	(1.9)	(2.3)

*Actual data through 2019

Table 4 - August 2020 Update
City of Detroit Resident Income
Millions of Nominal Dollars (Fiscal Year Percent Changes in Parentheses)
Interpolated Fiscal Years (July 1–June 30)

	Actual			Forecast					
	2016	2017	2018	2019	2020	2021	2022	2023	2024
Total Resident Income	10,185	10,902	11,417	11,905	12,394	12,219	12,315	12,996	13,509
	(6.8)	(7.0)	(4.7)	(4.3)	(4.1)	(-1.4)	(0.8)	(5.5)	(3.9)
Wage and Salary	6,762	7,400	7,700	8,297	7,953	7,676	8,382	8,955	9,334
	(12.5)	(9.4)	(4.0)	(7.8)	(-4.1)	(-3.5)	(9.2)	(6.8)	(4.2)
Other Household	232	236	250	185	905	1,037	378	353	343
	(-6.4)	(1.7)	(5.9)	(-26.2)	(390.4)	(14.5)	(-63.6)	(-6.6)	(-2.8)
Self-employed	254	340	345	295	285	278	316	338	352
	(42.5)	(33.7)	(1.4)	(-14.6)	(-3.2)	(-2.6)	(13.6)	(7.0)	(4.3)
Dividends, Interest, and Rental	252	190	229	245	211	130	114	157	212
	(-3.6)	(-24.7)	(20.9)	(6.7)	(-13.6)	(-38.5)	(-11.9)	(37.6)	(34.8)
Retirement	987	994	1,106	1,076	1,102	1,091	1,097	1,120	1,140
	(-8.1)	(0.8)	(11.2)	(-2.8)	(2.5)	(-1.0)	(0.5)	(2.1)	(1.8)
Public Assistance	35	26	20	22	57	79	53	43	41
	(8.9)	(-26.6)	(-22.6)	(7.1)	(164.6)	(38.8)	(-33.2)	(-18.9)	(-5.0)
Social Security Transfers	1,301	1,344	1,432	1,457	1,523	1,563	1,613	1,664	1,717
	(-5.2)	(3.3)	(6.6)	(1.8)	(4.5)	(2.7)	(3.2)	(3.1)	(3.2)
Supplemental Security	362	371	335	330	357	365	362	366	369
	(1.4)	(2.5)	(-9.7)	(-1.6)	(8.4)	(2.2)	(-0.9)	(1.1)	(0.8)
ADDENDA:									
Total Resident Income in 2019$	10,897	11,437	11,707	11,972	12,365	12,096	12,005	12,453$	12,682
	(6.9)	(5.0)	(2.4)	(2.3)	(3.3)	(-2.2)	(-0.8)	(3.7)	(1.8)
CPI, Detroit (1982–84=100)*	220.17	224.71	229.80	233.22	237.24	237.34	241.67	245.65	250.86
	(0.2)	(2.1)	(2.3)	(1.5)	(1.7)	(0.0)	(1.8)	(1.6)	(2.1)

*Actual data through fiscal 2019

Table 5 - August 2020 Update
Employment in the City of Detroit
Number of Jobs
Calendar Years

	Actual				Forecast				
	2016	2017	2018	2019	2020	2021	2022	2023	2024
TOTAL JOBS* (Number of jobs)	223,125	227,346	228,323	228,680	202,850	221,149	228,111	230,846	233,111
(Annual percentage change)	*(2.6)*	*(1.9)*	*(0.4)*	*(0.2)*	*(-11.3)*	*(9.0)*	*(3.1)*	*(1.2)*	*(1.0)*
GOODS-PRODUCING	26,008	28,451	28,842	27,801	22,723	27,334	30,055	31,273	32,351
Natural resources, and mining	552	563	578	608	606	627	638	648	658
Construction	6,274	6,844	6,897	6,322	5,377	6,065	6,720	7,068	7,342
Manufacturing	19,181	21,043	21,367	20,871	16,740	20,643	22,697	23,558	24,352
SERVICE-PROVIDING	197,117	198,895	199,481	200,880	180,127	193,815	198,056	199,573	200,760
Trade, transportation, and utilities	29,096	29,890	29,972	30,753	27,573	29,948	30,813	31,153	31,427
Retail trade	12,691	12,701	12,602	12,745	11,531	12,463	12,586	12,596	12,597
Trade, transportation, warehousing, and utilities	16,405	17,189	17,370	18,009	16,042	17,485	18,227	18,557	18,830
Information	4,274	3,939	3,586	3,234	2,885	2,934	2,868	2,757	2,645
Financial activities	6,221	6,130	6,468	8,862	8,763	8,949	9,103	9,214	9,307
Professional and business services	33,689	33,587	34,157	34,271	32,157	33,837	34,703	35,156	35,477
Professional, scientific, and technical	15,454	13,701	13,488	12,867	12,084	12,197	12,217	12,138	12,015
Management of companies and enterprises	9,769	10,860	11,260	11,596	10,905	11,547	11,913	12,155	12,368
Administrative support and waste management	8,466	9,026	9,410	9,809	9,169	10,093	10,573	10,863	11,094
Education and health services	71,584	71,825	71,174	70,438	62,655	67,923	68,761	68,650	68,523
Leisure and hospitality	25,759	26,814	27,391	26,556	20,586	23,974	25,369	26,107	26,775
Other services	7,186	7,352	7,347	6,870	5,745	6,462	6,552	6,537	6,492
Public Administration	18,981	19,117	19,166	19,667	19,524	19,530	19,621	19,728	19,840
Unallocated services	326	241	221	227	239	256	266	271	274
ADDENDA:									
Household Employment (BLS)	220,506	224,915	227,321	230,541	203,832	222,877	230,896	234,618	237,863
(Annual percentage change)		*(2.0)*	*(1.1)*	*(1.4)*	*(-11.6)*	*(9.3)*	*(3.6)*	*(1.6)*	*(1.4)*
Unemployment Rate**	10.7	9.6	9.0	8.8	23.8	19.7	15.5	13.3	11.8

*Actual data through calendar 2019q3

**Actual data through calendar 2020q1

Table 6 - August 2020 Update
Employment in the City of Detroit
Number of Jobs
Fiscal Years (July 1–June 30)

	Actual				Forecast				
	2016	2017	2018	2019	2020	2021	2022	2023	2024
TOTAL JOBS* (Number of jobs)	219,931	225,513	228,444	228,538	215,243	210,496	226,125	229,573	232,070
(Annual percentage change)	(1.7)	(2.5)	(1.3)	(0.0)	(-5.8)	(-2.2)	(7.4)	(1.5)	(1.1)
GOODS-PRODUCING	24,654	27,866	28,391	28,485	24,748	24,662	29,284	30,696	31,855
Natural resources, and mining	556	556	569	589	610	617	633	643	653
Construction	5,862	6,747	6,864	6,601	5,847	5,531	6,512	6,908	7,207
Manufacturing	18,237	20,563	20,959	21,294	18,291	18,514	22,140	23,145	23,996
SERVICE-PROVIDING	195,277	197,647	200,053	200,053	190,495	185,834	196,841	198,876	200,214
Trade, transportation, and utilities	28,994	29,469	29,879	30,297	29,116	28,768	30,517	31,001	31,303
Retail trade	12,623	12,698	12,617	12,652	12,214	11,938	12,558	12,592	12,600
Trade, transportation, warehousing, and utilities	16,371	16,771	17,262	17,645	16,902	16,830	17,959	18,409	18,703
Information	4,160	4,087	3,891	3,262	3,107	2,883	2,917	2,813	2,701
Financial activities	6,094	6,066	6,390	7,633	8,804	8,888	9,032	9,162	9,262
Professional and business services	32,991	33,748	33,853	34,322	32,888	33,196	34,323	34,952	35,335
Professional, scientific, and technical	15,419	14,625	13,522	13,290	12,329	12,178	12,215	12,186	12,082
Management of companies and enterprises	9,166	10,428	11,061	11,454	11,057	11,398	11,751	12,039	12,266
Administrative support and waste management	8,406	8,695	9,270	9,577	9,501	9,619	10,357	10,726	10,988
Education and health services	71,274	71,620	71,773	70,775	66,739	64,575	68,784	68,706	68,588
Leisure and hospitality	25,258	26,055	27,414	27,088	23,644	21,724	24,916	25,752	26,451
Other services	7,317	7,185	7,487	7,042	6,220	6,145	6,531	6,550	6,517
Public Administration	18,876	19,136	19,132	19,414	19,745	19,405	19,559	19,673	19,784
Unallocated services	312	281	235	221	232	249	262	269	273
ADDENDA:									
Household Employment (BLS)**	217,092	223,033	225,938	229,022	217,266	211,538	228,402	232,853	236,332
(Annual percentage change)	(2.6)	(2.7)	(1.3)	(1.4)	(-5.1)	(-2.6)	(8.0)	(1.9)	(1.5)
Unemployment Rate**	10.7	10.2	9.4	8.9	15.1	23.7	17.1	14.2	12.5

*Actual data through calendar 2019q3
**Actual data through calendar 2020q1

Table 7 - August 2020 Update
Average Wage by Industry in the City of Detroit
Dollars
Calendar Years

	Actual				Forecast				
	2016	2017	2018	2019	2020	2021	2022	2023	2024
Average Wage* (Dollars)	62,503	64,353	65,845	67,270	69,746	71,373	73,527	75,860	77,986
(Annual percentage change)	(1.4)	(3.0)	(2.3)	(2.2)	(3.7)	(2.3)	(3.0)	(3.2)	(2.8)
GOODS-PRODUCING	67,630	66,656	69,223	67,689	68,328	69,076	69,748	70,485	70,583
Natural resources, and mining	72,570	76,042	79,198	83,392	85,900	89,337	92,906	96,619	100,480
Construction	74,574	80,497	80,594	82,293	81,609	82,768	84,028	85,463	86,769
Manufacturing	65,216	61,903	65,284	62,808	63,426	64,438	64,869	65,273	64,896
SERVICE-PROVIDING	61,827	64,023	65,356	67,212	69,925	71,697	74,100	76,702	79,178
Trade, transportation, and utilities	51,194	53,085	54,811	55,136	55,852	57,008	58,590	60,123	61,695
Retail trade	27,499	27,887	28,439	28,804	29,094	29,514	29,975	30,493	30,996
Trade, transportation, warehousing, and utilities	69,525	71,705	73,942	73,771	75,086	76,606	78,347	80,235	82,233
Information	78,486	82,590	85,268	85,671	89,939	92,994	96,687	100,927	104,522
Financial activities	79,152	78,285	84,804	82,386	86,225	89,478	93,500	97,518	101,136
Professional and business services	95,616	104,596	104,703	111,534	115,583	118,980	124,543	131,479	137,511
Professional, scientific, and technical	94,083	95,625	99,909	100,824	101,957	103,497	105,928	108,676	111,108
Management of companies and enterprises	136,166	159,028	153,176	171,682	181,610	189,650	201,770	216,712	228,977
Administrative support and waste management	51,621	52,719	53,573	54,478	55,010	56,840	59,037	61,587	64,135
Education and health services	55,986	57,469	59,589	60,907	61,721	64,988	67,334	69,471	71,743
Leisure and hospitality	39,722	39,417	37,850	37,300	37,009	37,309	37,503	37,618	37,766
Other services	40,180	40,037	40,802	43,628	43,291	43,864	44,765	45,691	46,779
Public Administration	69,389	70,219	72,015	70,577	73,646	76,266	78,371	79,942	81,674
Unallocated services	36,031	31,575	27,573	34,407	32,839	29,313	29,643	31,608	34,387

*Actual data through calendar 2019q3

Table 8 - August 2020 Update
Average Wage by Industry in the City of Detroit
Dollars
Fiscal Years (July 1–June 30)

	Actual				Forecast				
	2016	2017	2018	2019	2020	2021	2022	2023	2024
Average Wage* (Dollars)	61,546	64,262	64,989	66,169	68,640	70,633	72,388	74,576	77,058
(Annual percentage change)	(1.8)	(4.4)	(1.1)	(1.8)	(3.7)	(2.9)	(2.5)	(3.0)	(3.3)
GOODS-PRODUCING	69,886	67,361	68,070	68,213	68,365	68,553	69,406	69,978	70,709
Natural resources, and mining	74,476	74,112	76,611	82,966	83,842	87,608	91,103	94,744	98,530
Construction	74,763	78,405	79,758	82,733	80,992	82,215	83,337	84,672	86,212
Manufacturing	68,178	63,555	64,011	63,303	63,813	63,837	64,689	64,904	65,296
SERVICE-PROVIDING	60,493	63,825	64,552	65,878	68,675	70,909	72,832	75,285	78,068
Trade, transportation, and utilities	51,126	52,873	53,762	54,851	55,378	56,506	57,813	59,323	60,939
Retail trade	27,323	27,703	28,383	28,415	28,921	29,311	29,726	30,216	30,771
Trade, transportation, warehousing, and utilities	69,480	71,931	72,314	73,806	74,497	75,796	77,454	79,231	81,262
Information	76,146	81,386	84,161	84,728	87,971	91,544	94,567	98,524	103,196
Financial activities	76,738	81,425	82,728	82,205	84,063	87,408	91,563	95,285	99,583
Professional and business services	92,460	100,319	105,530	106,779	114,282	117,441	121,518	127,507	134,955
Professional, scientific, and technical	92,702	95,035	97,761	100,670	101,148	102,560	104,662	107,177	110,021
Management of companies and enterprises	131,028	147,628	158,139	157,867	180,563	185,268	195,128	208,040	224,042
Administrative support and waste management	49,960	52,473	54,094	54,154	54,190	55,910	57,883	60,213	62,922
Education and health services	54,592	57,999	58,177	60,172	61,198	63,266	66,207	68,372	70,659
Leisure and hospitality	39,615	40,257	38,360	38,039	36,704	37,197	37,370	37,571	37,733
Other services	39,621	40,635	39,723	42,667	43,426	43,565	44,253	45,239	46,256
Public Administration	69,043	70,038	70,446	69,697	74,294	74,396	77,540	79,151	80,776
Unallocated services	35,190	34,373	27,761	27,521	38,164	30,332	29,189	30,488	32,925

*Actual data through calendar 2019q3