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**The Detroit Labor Market:  
Recent Trends, Current Realities**

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## EXECUTIVE SUMMARY

Persistent racial segregation, population exodus, the decline of the auto industry, and a significant economic downturn – these characteristics of Detroit in the recent past have brought tremendous change to the city of Detroit’s labor market and continue to create challenges. At the same time, local efforts at economic development combined with the national recovery have attracted business activity and increased jobs. To understand the current reality of Detroit’s labor market we provide updated evidence on economic trends and look at barriers facing those left out of the economic recovery. We draw the following conclusions:

- Detroit’s population is bifurcating, with the overall population getting older while the number of young, college-educated, and white residents also increases modestly.
- Labor force participation is stubbornly low, with high-school non-completion, disability, and criminal records likely reducing labor force activity for many residents.
- For those who are employed, wages are concentrated in the lower-to-middle range (\$10-20/hour), as fewer Detroiters earn very low (less than \$10/hour) wages or mid-level and higher wages (\$20/hour or more) than in the past.
- Good-paying jobs in professional services and health care are often filled by suburban in-commuters with a college degree, as a growing number of jobs in the city for those without college degrees shift to the low-wage service sector.
- We estimate that up to 140,000 working-age Detroit residents are not in the labor force, with many facing multiple barriers to work such as lack of a high school diploma, having no car, reporting a disability, and having been out of work in the past year.

These conclusions suggest that policymakers should redouble efforts to increase wages and assist residents facing multiple barriers to employment. Evidence suggests this can be done by bolstering the earned income tax credit to increase the return to work, expanding workforce training while helping residents access suburban employment, and subsidizing jobs for those whose current challenges make unsubsidized employment prohibitive. While previous studies have made a case for expanding workforce training and the earned income tax credit, little has been written on subsidized employment strategies for cities in Michigan. In response, our companion brief, *Toward a Comprehensive, Inclusive, and Equitable Subsidized Employment Initiative in Detroit*, provides details on how to implement a city-wide subsidized employment initiative and reviews the evidence supporting this strategy as a means of addressing chronic unemployment and reducing economic/racial disparities.

## Introduction

The economic and social trends shaping present-day labor market conditions in the city of Detroit have been evident for decades. It is a city in one of the most racially segregated metropolitan areas in the country<sup>i</sup>, where good-paying manufacturing jobs have been disappearing<sup>ii</sup>, and where low educational attainment and the location of many non-college jobs in the suburbs make it difficult for city residents to find and maintain employment.<sup>iii</sup>

But the past decade has brought some significant changes to Detroit whose ultimate consequences remain unclear. On the one hand, the Great Recession accelerated the exodus of manufacturing jobs and people from the city; and the labor force there shrank in response to these and other economic and demographic shifts. On the other hand, a more recent return of young college-educated people to the downtown area<sup>iv</sup> has sparked some economic renewal, albeit on a modest scale, while Detroit also enjoys the recovery of the nation's overall labor market.

What are these changes, and what effects have they had on Detroit's labor market? More specifically:

- What have been the major trends in both the supply (population and labor force) and demand (employer and job) sides of that market?
- To the extent that the labor force is declining, how much is driven by demographic changes – like the aging of the local population – as opposed to other factors?
- What seem to be the most substantial barriers to raising labor force participation in the city, and how amenable are they to policy efforts such as subsidized jobs?
- How do broad industry and employer trends affect these changes?

We try to provide answers to these questions below. We use publicly available microdata on residents of Detroit from the U.S Census's American Community Survey (ACS) covering the years 2006-2007, 2010-2011, and 2016-2017. Using data from the ACS, we measure changes in population demographics and labor force outcomes at two cyclical peaks over the previous decade as well as the trough in between, caused by the Great Recession.

We examine several personal barriers to work and measure their association with employment and labor force participation. We also explore industry and wage trends more closely, using other Census data that give us a closer look at the locations of jobs and industries in Detroit city as compared to the Detroit metropolitan area and how these locations continue to evolve. We briefly review what we know from the previous literature and widely available summary data before presenting our new results and the policy conclusions we draw from them.

## What We Know: The Extant Research and Data

Certain trends in Detroit's demography and industry have been playing out for decades. What we knew as of the 1990s was that Detroit had high levels of racial segregation and poverty, and experienced declining employment in the automobile and related industries in the city, while employment grew in size and concentration in the suburbs.<sup>vi</sup> A recent set of reports updates our knowledge of Detroit's present conditions.

In the past decade, Detroit's population and labor market have stabilized after years of decline. The State of Michigan report on Detroit City by Murembya and Guthrie (2015)<sup>vii</sup> and the Detroit WIN report on the labor market (2018)<sup>viii</sup> show declining population and labor force activity over recent decades, as well as falling unemployment during the most recent years. The latter also considers job vacancy postings by occupation and educational requirements. But detailed breakdowns of employment outcomes within major demographic groups are not presented there.

Yet disparities in educational attainment prevent Detroiters from taking advantage of higher-wage jobs produced in the recovery. A report by the Corporation for a Skill Workforce (2016) shows growing employment in many industries in the Detroit region, such as health care and other service industries while manufacturing declines.<sup>ix</sup> The report considers the implications of these data for more significant skill needs among Detroit residents. It also discusses a range of barriers that prevent Detroit residents from filling these jobs, including lack of transportation and disabilities, though no quantitative measures of these barriers are provided.

As Detroit's population changed, so did the distribution of earnings and other sources of income that residents rely on. Census data indicate a rapid decline in the city's population, especially between 2000 and 2010, though the decline has recently slowed due to an influx of younger and more-educated residents. ACS summary table data show declining earnings among Detroit residents, especially a rise in households with no earnings; and rising dependence on some income transfer programs like Social Security Old Age Survivors and Disability Insurance (OAS and DI), Supplemental Security Income (SSI) and food stamps (though declining dependence on certain cash transfers like welfare).<sup>x</sup>

And data on locations of residences and employment from the Longitudinal Employer and Household Dynamics (LEHD) show rising fractions of jobs located in Detroit being filled by commuters, as opposed to local residents, while large majorities of employed Detroit residents continue to commute out to the suburbs for work.<sup>xi</sup> These results are consistent with the notion of declining labor force activity among city residents and perhaps rising skill needs in city jobs that can be filled primarily by suburban commuters rather than nearby residents.

We build on these findings in our own data analysis below.

## Our Data

As noted earlier, we use microdata from the ACS to measure employment outcomes for Detroit residents in 2006-07, 2010-11, and 2016-17. In each case, we combine data over two years to ensure a sufficient sample size when we limit our analysis to Detroit city residents, and particularly to various demographic or employment subsets of this group in each of these points in time.<sup>xii</sup> The first and last of these data points represent periods very close to cyclical peaks in the economy and labor market, while the middle represents a point close to the trough of the Great Recession.

We consider the following characteristics of individuals in the ACS data:

- 1) Demographics: such as age, educational attainment, gender, and race;
- 2) Employment: such as whether the respondent was employed, unemployed, or out of the labor force during the survey week;<sup>xiii</sup>
- 3) Disability and Disability Insurance: a range of reported disabilities, such as difficulty with cognitive, ambulatory, independent living, self-care, vision, or hearing difficulties, as well as whether or not the respondent received DI during that time;
- 4) Barriers to Work: other barriers which may leave the respondent unable to work, such as the presence of a child under the age of 5 (without adequate childcare), lack a car, lack of a high school diploma, or lack of employment in the preceding year;<sup>xiv</sup>
- 5) Wages: converted into inflation-adjusted measures in 2017 dollars;<sup>xv</sup> and
- 6) Industry: the industry in which the respondent has been employed.

Using LEHD data, we can present the industry data for residents of Detroit city versus the Detroit metropolitan area, and for jobs located in each area. Data on other important barriers to work – such as whether the person had been incarcerated – are drawn from other summary sources.

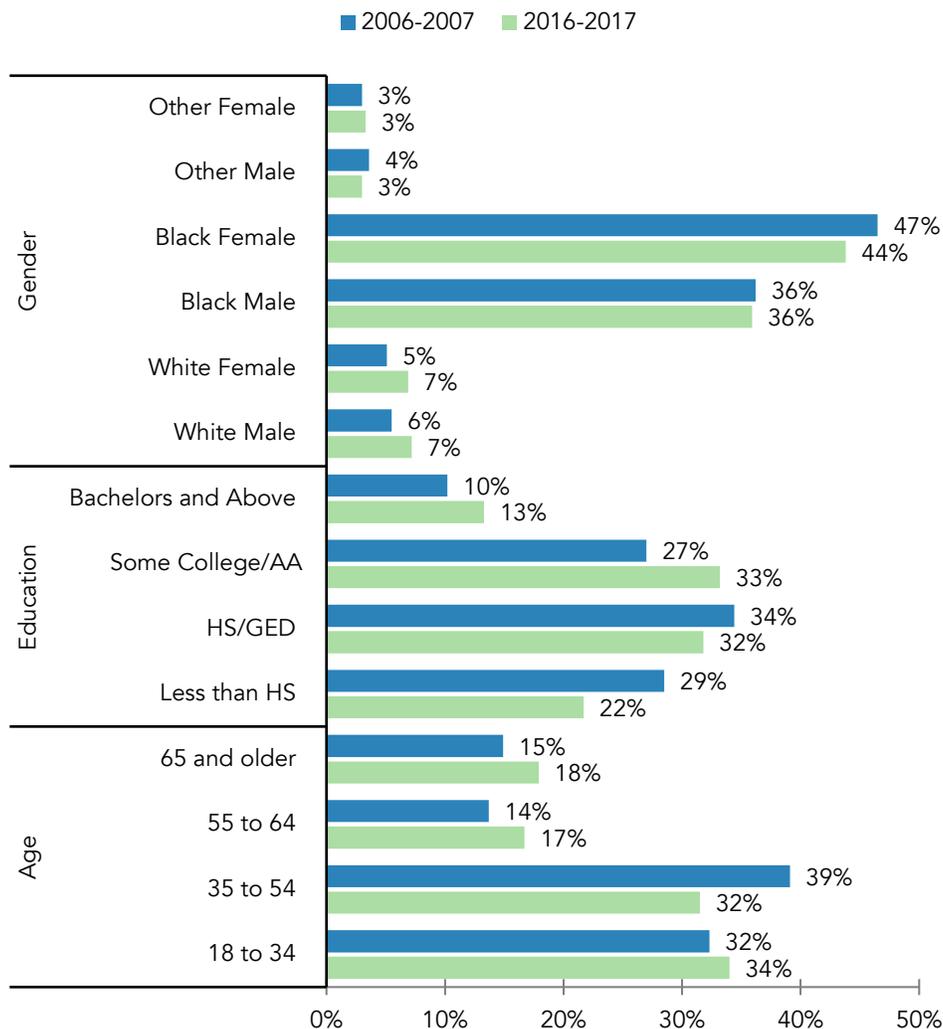
## Results

### 1) Demographic Trends

We begin by exploring demographic shifts in Detroit that have taken place over the past decade. To the extent that demographics are shifting between groups in directions that might reduce labor force activity – if, for instance, the population is aging – then it is important to also observe employment *within* demographic groups to look for any effects of changing labor markets on employment.

Figure 1 shows changes in the demographic makeup of Detroit residents between 2006/07 and 2016/17; the demographic characteristics considered include age, education, and race/gender.

Figure 1 - Age, Race/Gender, and Educational Attainment of Detroit Residents: 2006-07 and 2016-17; Ages 16 and over



The results show a number of important trends:

- Both the youngest and oldest shares of the population are rising. The share of residents age 55 to 64 (14 to 17 percent) and 65 and older (15 to 18 percent) increased. Meanwhile, the share of adults ages 18 to 34 increased from 32 to 34 percent.
- The populations of whites and other races are growing relative to those of African Americans. The population of black men remained constant (36 percent), while the share of Black women decreased from 47 to 44 percent.
- The measured share of black men in the population substantially lags behind that of black women. There is an eight percentage-point gap between the shares of black men (36 percent) and black women (44 percent) in the population. With an overall adult population of about a half-million, the data suggest that about 40,000 adult black males are “missing” relative to the numbers of females, some of whom could also be “missing” (if incarcerated or institutionalized).
- The shares of the population with at least some college or college degrees are rising as well. The share of adults with some college (27 to 33 percent) and a bachelor’s degree (10 to 13 percent) or more have risen.

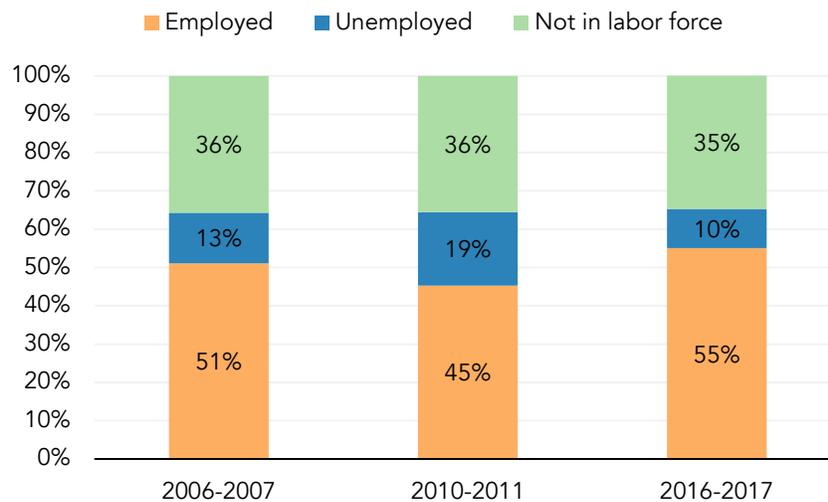
These data suggest a bifurcation is occurring in the Detroit population: the overall resident population is aging while there is an influx of young, white college graduates at the same time, fueling the downtown “renaissance” that has been widely noted. Indeed, data in Appendix Figure 1 show that the increase in the presence of college graduates is mostly concentrated in the white population, while those with some college but no degree are growing among blacks. The aging population likely reduces overall employment and labor force participation rates, while the influx of young and more-educated workers will offset those reductions to some extent.

A rise in educational attainment could also reflect higher mortality rates among older, less-educated groups. The absence of black men relative to black women could reflect higher mortality among the men as well as current or previous incarceration, since current incarceration directly pulls individuals from the civilian non-institutional population and formerly incarcerated men (among minority and low-income men more generally) tend to be undercounted in population surveys (Kahn-Lang, 2018).

## 2) Labor Market Trends

Figure 2 presents the shares of the Detroit population who are employed, unemployed, or out of the labor force at the two recent cyclical peaks (2006-07 and 2016-17) as well as the trough (2010-11) of the Great Recession. We limit the results here to the working-age population, defined broadly as ages 18-64, to eliminate the clear effects of a rise in the retirement-age population (65 and above) on these results.

FIGURE 2 – Employment Outcomes among Residents: 2006-07, 2010-11, 2016-17; Ages 18-64



The results indicate very sharp declines in employment in Detroit as well as rising unemployment during the recession, as is well known. During the current economic recovery, unemployment among city residents declined substantially while employment has risen. But the data also indicate stable labor force participation and a high rate of nonparticipation – at 35 percent - across the two peaks.

Stable labor force activity while the presence of young college graduates is growing could represent demographic shifts, like aging within the population below 65, or it could represent long-term adverse effects of the recession, which economists call *hysteresis*, as well as other changes in the local economy.<sup>xvi</sup> To sort out such effects, we must consider employment outcomes and their changes within more narrowly defined population groups by age, education and race/gender. These results appear in Table 1 for the peak cyclical years. We limit the sample here to those age 18 and above but below 65, and also to those who are not enrolled in school and have only a high school diploma or less.

Overall, the percentages of the population in the labor force have mostly been declining over time, especially in older (ages 55-64) and less-educated groups. Similar trends have been observed in the US population overall (Krueger, 2017; Abraham and Kearney, 2018; Binder and Bound, 2019; Duggan et al, 2019).

We also note low participation rates in Detroit within particular demographic groups. For instance:

- Over 55 percent of high school dropouts are out of the workforce, as are nearly 40 percent of high school graduates below age 65;
- Almost a third of those in their prime-earnings years – ages 35-54 – are out of the labor force, as are nearly 60 percent of those aged 55-64; and
- Black women have quite similar rates of participation to men, even though so many men with weak employment prospects do not even appear in the data.

Table 1 – Employment Outcomes of Detroit Residents for Detailed Demographic Groups: 2006-07, 2010-11, 2016-17; Ages 18-64

Characteristics	Employed (row %)			Unemployed (row %)			Not in labor force (row %)		
	2006- 2007	2010- 2011	2016- 2017	2006- 2007	2010- 2011	2016- 2017	2006- 2007	2010- 2011	2016- 2017
Age									
18 to 34	49.9	42.6	58.8	18.2	25.6	14.2	31.9	31.8	27
35 to 54	56.3	52.5	60.8	11.9	18.7	9	31.9	28.9	30.2
55 to 64	38.8	34.5	36.7	5.5	8.1	4.1	55.7	57.4	59.2
Education									
Less than HS	31.1	27.4	31.9	16.7	21.4	11.5	52.2	51.2	56.6
HS/GED	48.5	41.4	50.1	14.7	22.3	11.3	36.8	36.3	38.6
Some College & AD	61	50.7	63.2	11.9	18.2	10.6	27.2	31.1	26.2
Bachelors and Above	73.5	72	77.5	4.8	9.8	4.3	21.6	18.2	18.1
Gender & race									
White Male	56.3	54.3	65.3	10	14.3	8.8	33.7	31.4	25.9
White Female	46.1	44.5	54.8	10.8	13.3	4.2	43.1	42.2	41
Black Male	47.5	38.2	51.9	15.5	23.6	12.8	36.9	38.2	35.3
Black Female	53.6	49.8	56	11.7	17.1	9.6	34.7	33.1	34.4
Other Male	57.1	62.3	72	19.8	18.8	5.3	23	18.9	22.7
Other Female	45.2	33	40.7	9.7	15.9	8.5	45.1	51.1	50.8
Total	51.1	45.3	55.1	13.2	19.2	10.2	35.7	35.5	34.8

\*Rows each year sum to 100 percent by year and employment outcome. e.g., Employed + Unemployed + Not in labor force sum to 1 for any particular group and year.

The level of labor force activity in Detroit lags well behind that of the overall US population and lags even in comparison to similar cities. This can be seen in the Appendix Table 1, where we compare employment and labor force activity in Detroit to those in several other large cities that could be considered comparison sites to Detroit in many ways – such as Baltimore, Cleveland, Milwaukee, Philadelphia, Pittsburgh, and St. Louis. Indeed, none of these other cities have nonparticipation rates over 30 percent; even among their black populations, nonparticipation rises to barely over 30 percent in just one case (Cleveland), well below the roughly 35 percent we observe among Detroit’s black residents.

The meager participation rates among prime-age workers, including those with at least a high school diploma, are striking – even in a relatively tight labor market with quite low unemployment. Furthermore, though there might have been some modest improvement in these participation rates in Detroit during 2018 and 2019, as we have seen nationwide (Breitwieser et al., 2018), such improvements are likely too small to change the fundamental story that the data tell.

### 3) Who are the Nonparticipants and Why Don't They Work?

In this section, we explore the makeup of nonparticipants in the non-enrolled, non-college working-age population, and what barriers they may face that drive them out of work. We focus on this population because their attachment to the labor force has worsened in the past ten years, in a trend that mirrors what is occurring with low education workers nationally.<sup>xvii</sup> This population also makes up the largest share of the out of work in Detroit making them the population of interest for potential interventions to improve labor market conditions in the city.

In Table 2 we analyze the incidence of a number of potential explanations for non-work (or barriers to work) in the Detroit nonelderly and less-educated population (and that we can measure using the ACS); and then we present cross-tabulations of our three primary employment outcomes (employed, unemployed, out of the labor force) with these factors.

The factors include:

- Reporting a disability and/or receiving disability insurance (from DI or SSI);
- Having no high school diploma;
- Having no car;
- Having a child under the age of 5 (with inadequate access to childcare); and
- Having been out of work (as reflected by no earnings) in the previous year.

In 2016-2017, there were 189,240 non-enrolled and non-college Detroit residents. Of this group, more than one out of 10 are unemployed (11 percent), and 45 percent are not in the labor force.

Non-participants in the labor market experience high rates of disability, do not have a vehicle at home and have mostly not worked in the previous year. The last column of Table 2 presents the incidence of each factor within the less-educated working-age population.

We note that:

- About a fourth of this population reports a disability (24 percent);<sup>xviii</sup>
- Over a third report no high school diploma (35 percent);
- Nearly a fourth report no car (24 percent);
- Half have not worked in the previous year (50 percent); and
- Only a small group (14 percent) report custody of a small child.

The other columns of Table 2 present cross-tabulations of each such potential barrier to work with our three employment outcomes. The cross-tabulations appear two ways – they report the extent of employment activity within each group defined by the absence or presence of a particular barrier (with rates in the three employment categories summing to 100 percent across columns 2-4 within each group), as well as the extent to which each group accounts for

employed, unemployed and non-participants in the labor force respectively (where the pairs of rows in columns 6-8 corresponding to absence and presence of a barrier sum to 100 percent for each employment outcome).

We find that:

- 80 percent of those reporting a disability are out of the labor force, while those with disabilities account for a bit under half (43 percent) of those out of the workforce;
- Employment rates are low, and nonparticipation is high among high school dropouts (as we noted above), and nearly 45 percent of those not working are dropouts;
- Not having a car is associated with low chances of employment, and about a third of those out of the workforce have no car;
- The vast majority of those with no work in the previous year (85 percent) are out of the workforce, and they account for 95 percent of those not working; and
- Only small percentages of those not working (about 12 percent) have a small child

It is important to remember that these cross-tabulations measure *correlates* of low work activity and not necessarily *causes*. Still, disability seems to play an important role in labor force nonparticipation in Detroit, and is more likely a causal factor than others like having no car or no work in the previous year (which could as easily be effects of non-work rather than causes).<sup>xix</sup>

TABLE 2 – Barriers to Work in Population – Ages 18-64, Non-enrolled and Non-College Populations: 2016-17

Characteristics	Frequency	Employed row %	Unemployed row %	Not in Labor force row %	Total row %	Employed col %	Unemployed col %	Not in Labor force col %	Total col %
Disability									
<i>No disability</i>	143,865	53.4	13.1	33.5	100	91.6	90.1	57.1	76
<i>Has a reported disability</i>	45,376	15.5	4.5	80	100	8.4	9.9	42.9	24
High school drop out									
<i>HS or more</i>	123,579	50.5	11.1	38.4	100	74.5	65.4	56.2	65.3
<i>Less than HS</i>	65,662	32.6	11	56.4	100	25.5	34.6	43.8	34.7
No Car									
<i>Yes, has a vehicle</i>	143,477	49.8	10.7	39.5	100	85.3	73.3	67.1	75.8
<i>No, does not have a vehicle</i>	45,763	27	12.2	60.8	100	14.7	26.7	32.9	24.2
Small child at home									
<i>Does not have a child under 5 in household</i>	162,844	43.9	10.4	45.7	100	85.2	81	88.1	86.1
<i>Yes - Has a child under 5 in household</i>	26,396	46.9	15.1	38	100	14.8	19	11.9	13.9
No wages in prior year									
<i>Yes - wage/salary income in the previous year</i>	94,121	85.5	10.4	4.1	100	96.1	46.5	4.6	49.7
<i>No - wage/salary income in the previous year</i>	95,120	3.5	11.8	84.8	100	3.9	53.5	95.4	50.3
Total	189,240	44.3	11.1	44.7	100	100	100	100	100

col % - columns sum up to 100 percent. row % - rows sum up to 100 percent.

The outsized role that appears to be played by disability in reducing work, relative to other potential factors, raises a few more questions: Are some forms of disability more associated with non-work than others – implying that some are potentially more remediable with the right interventions, such as subsidized jobs? Table 3 presents tabulations of employment outcomes by specific kinds of reported disabilities. These results indicate that:

- The highest rates of labor force non-participation are among Detroiters with self-care (91 percent), independent living (88 percent), ambulatory (83 percent), and cognitive difficulties (92 percent). Meanwhile, about a quarter of those with vision and hearing difficulties are in the labor force.
- Inversely, the highest rates of employment among those with a reported disability are from those who report a hearing (20 percent) or vision (24 percent) difficulty, which mirrors national trends.<sup>xx</sup>

TABLE 3a - Specific Disabilities and Employment Outcomes: 2016 Ages 18-64, Non-enrolled and Non-College Population

Disability	Employed	Unemployed	Not in Labor force
Cognitive difficulty			
no	48.2	11.9	40
yes	12.6	4.6	82.8
Ambulatory difficulty			
no	49.6	12.2	38.1
yes	12.5	4.2	83.4
Independent living difficulty			
no	48.4	11.9	39.7
yes	8.3	3.8	88
Vision difficulty			
no	45.2	11.5	43.2
yes	23.7	0.7	75.6
Hearing difficulty			
no	45.2	11.3	43.4
yes	20.3	4.4	75.3
Self-care difficulty			
no	46.8	11.7	41.5
yes	6.8	2	91.2
Total	44.3	11.1	44.7

\* rows sum up to 100 percent.

Among the forms of disability reported in the ACS, hearing and vision are more correlated with labor force participation than others. This suggests that policymakers should pay attention to disability type when assessing Detroit’s employment trends since there is wide variation in

labor market outcomes depending upon the difficulty reported. As Detroit and the nation’s population ages, it is likely that the share of the population reporting a disability will increase.<sup>xxi</sup> Does the number of barriers workers face affect the odds of work, as Danziger et al. have suggested in the past? We find that facing more than one barrier is correlated with reduced labor force activity and that a majority of Detroit’s non-enrolled and non-college residents who are not participating in the labor force face more than one barrier to work. We limit our focus here to four barriers to work: reported a disability, no vehicle access at home, presence of a small child, and whether the respondent is a high school dropout.

As shown in Table 3b, there are an estimated 189,240 people between ages 18 and 64 who are non-enrolled and non-college Detroit residents. More than 60 percent of this population (121,144) face one or more than one barrier to work. These results also indicate that:

- Around 25 percent of those with no reported barriers are not in the labor force.
- Reporting one barrier is associated with a sharp rise in non-participations as 46 percent of this population is not in the labor force. Among those with two barriers, 65 percent are not in the labor force. That figure rises to more than 80 percent non-participation for those with three or more barriers.

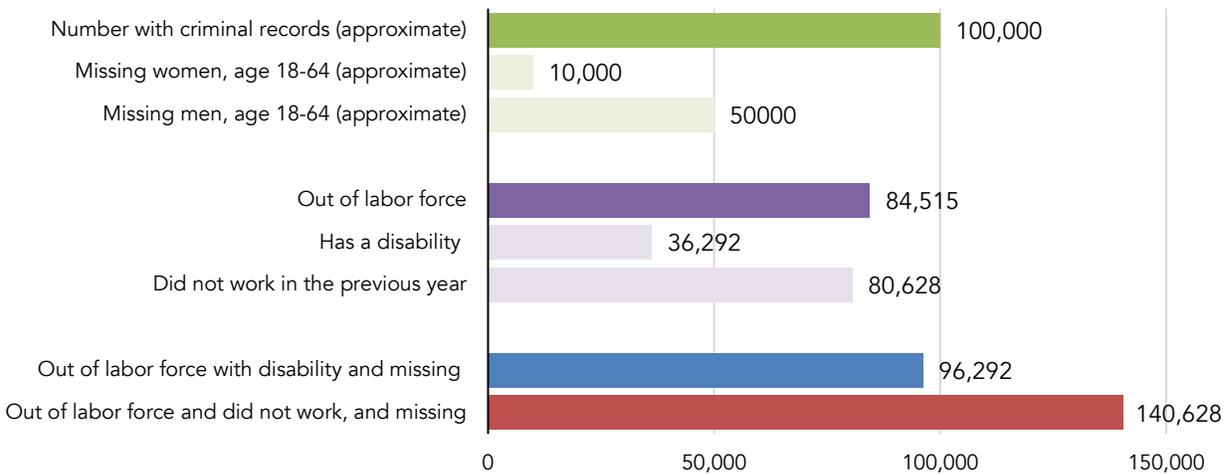
TABLE 3b - Barriers to Work: 2016-17 Ages 18-64, Non-enrolled and Non-College Population

	Frequency	Employed (row %)	Unemployed (row %)	Not in labor force (row %)
No barriers	68,097	62.8	11.9	25.3
One barrier	70,034	42.4	11.4	46.3
Two barriers	40,459	26.3	9.1	64.7
Three barriers or more	10,651	6.9	11.1	82
<b>Total</b>	<b>189,240</b>	<b>44.3</b>	<b>11.1</b>	<b>44.7</b>

Finally, what role does incarceration play in the non-work we observe? Incarceration in the U.S is known to contribute to the problem of “missing” men. “Missing” men refers to the gap between the number of men and women in a given population. While there are nearly 99 white men for every 100 white women, there are only 83 black men for every 100 black women in the U.S. This large gap in the number of African American men, particularly between the ages of 25 and 54, is mostly attributable to the tolls of incarceration and early death.

How significant could this problem be in Detroit? The ACS presents no data on current or previous incarceration – since the former are by definition excluded from the survey population, while the latter are underrepresented and would likely not give believable answers.<sup>xxii</sup> Still, we make a few inferences from other sources of summary data – both about the incidence of criminal records in the population and their likely negative effects on work activity.

Figure 3 - Previous Incarceration, Missing People, and Lack of Work: Those Not-Enrolled and Not-College



Results in Figure 3 show other estimates (like that from the ACLU) suggesting there are approximately 100,000 residents of Detroit with felony criminal records, about half of whom do not work in most subsequent years after release (Looney and Turner, 2018). If we allow for the possibility that 10,000 women might also be missing from population estimates (due to incarceration or homelessness, for example) in addition to the 50,000 black men missing (40,000 more than women), we might add as many as 60,000 to the number of Detroit residents not working in our data – implying that up to half of the formerly incarcerated might also not appear in official population estimates.

Accordingly, Figure 3 suggests that the numbers without any work in the previous year (when including missing residents) could be as high as 140,000, while those without work and with a disability could add up to about 96,000. The number of Detroit residents who might need additional assistance to enter the labor market could, therefore, be quite substantial.

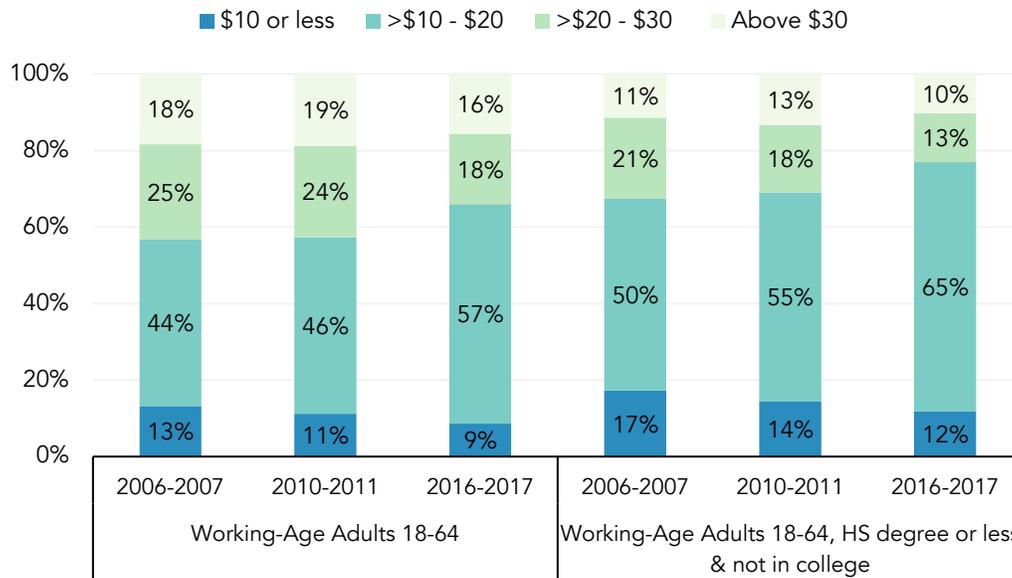
#### 4) Trends in Wages and Industries

For those who are working in Detroit, it is also important to note the wages they earn, and the industries in which they are employed, to gain a fuller picture of the Detroit labor market. These data will give us more insight into the *demand* side of the Detroit labor market – i.e., the employers and jobs that Detroit residents face – in addition to the *supply* (worker) characteristics that we have analyzed above.

In Figure 4, we present the percentages of Detroit city workers in a number of hourly wage categories, during each of the three periods that we study. We do so for both the entire sample of workers aged 18-64 as well as the part of that sample including only those who are also not enrolled in college and without past college credentials or activity.

FIGURE 4 – Wages Earned by Detroit Workers: All 18-64 v. Those Not-Enrolled and Not-College: 2006-07 and 2016-17

(Note: Wages in 2017 dollars using Chain-weighted Gross Domestic Product: Implicit Price Deflator Index 2012=100)



The data indicate a notable decline in the numbers of workers at the bottom of the wage range over time, earning less than \$10 an hour. However, we also note declines in the numbers of workers in the middle to top of our range, where workers earn \$20-30 an hour or more than \$30, respectively. The declines in the former category are particularly large. Instead, many more workers – about 10 percentage points of each of our samples – now earn relatively low wages, at \$10-20 per hour.

What kinds of jobs - as measured by industry - are growing more frequent among Detroit workers, which could account for the wage trends noted above? In Table 4, we present distributions of workers across industries during each of our three periods, using data derived from the LEHD.<sup>xxiii</sup> We present them separately for four groups of workers: those living in Detroit city, those working in the city, and those living or working in the entire metropolitan area respectively (though we do not now sort them by demographic characteristics of workers or exclude those at higher ages or education levels).<sup>xxiv</sup>

These data sort out where jobs are located – in Detroit city or in the entire metro area – where the latter is mostly suburban jobs that are likely less accessible to Detroit residents (especially those without cars). They also sort out the jobs held by residents of both locations, with some jobs in either place being less accessible to city than suburban residents– because of differences in the education/skills, work experience, or other characteristics between the two sets of residents.

The data in Table 4 indicate that employment in construction and manufacturing in the Detroit metro area dipped quite substantially during the Great Recession, and has rebounded modestly since. Though they dipped in both locations, and for both sets of residents, it is also notable that there are fewer such jobs in the city of Detroit and for Detroit residents than in the overall metro area and the suburbanites represented in those data.

Instead, we find more (relative to the entire metro area) and rising numbers of Detroit residents in accommodations and food services in the city, as well as in health care and administrative services. Employment in these sectors appears to also be rising or stable in the suburbs, though the concentrations of workers in these industries remain lower there than in the city.

We also find employment rising in professional and technical services in both the city and overall metro area, but has not yet rebounded for city residents (who presumably have lower levels of the college attainment that is usually needed to gain such employment). And the well-paying jobs in the growing health care sector will also not be accessible to those who lack even the sub-BA credentials needed for technical jobs in that sector.

Employment for Detroit city residents is, therefore, less concentrated in sectors that have traditionally paid less-educated workers – especially males – relatively well, while it is growing in sectors where less-educated workers generally receive lower pay. City residents may not find jobs accessible in the suburbs, due to lack of auto transportation or information and contacts, while most also cannot access the well-paying professional and technical jobs that might be available in either location due to a lack of college attainment. The relatively low pay available in retail jobs, or those in food and accommodations, might also make labor force activity less appealing for many residents, thereby perhaps contributing to the low rates of labor force activity observed among less-educated groups in the city.

TABLE 4 – Industry of Workers, 2007, 2011, 2017

Jobs by NAICS Industry Sector	Working in											
	Living in Detroit			Detroit			Living in Detroit Metro			Working in Detroit Metro		
	2007	2011	2017	2007	2011	2017	2007	2011	2017	2007	2011	2017
Agriculture, Forestry, Fishing and Hunting	0.1	0.1	0.1	0.0	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1
Mining, Quarrying, and Oil and Gas Extraction	0.0	0.0	0.0	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Utilities	0.2	0.5	0.6	0.6	1.9	2.4	0.3	0.5	0.5	0.3	0.5	0.4
Construction	1.9	1.6	1.8	2.0	1.6	2.7	3.5	2.9	3.6	3.7	3.1	3.8
Manufacturing	10.9	7.9	11.6	11.1	7.9	10.4	14.0	11.9	13.3	14.5	12.5	13.8
Wholesale Trade	3.2	2.7	2.7	3.5	3.4	2.8	4.8	4.7	4.6	4.9	4.9	4.7
Retail Trade	10.1	9.6	9.2	5.5	5.1	5.4	11.4	11.4	10.6	11.5	11.9	10.9
Transportation and Warehousing	2.7	2.7	3.7	2.4	2.0	2.5	2.9	2.8	3.1	3.1	2.9	3.2
Information	2.5	1.7	1.5	4.0	1.9	1.7	2.1	1.8	1.7	2.0	1.7	1.6
Finance and Insurance	3.9	3.0	3.2	3.1	3.8	2.2	4.3	4.0	4.1	4.3	4.0	4.2
Real Estate and Rental and Leasing	1.6	1.4	1.5	0.9	0.7	0.8	1.5	1.6	1.6	1.6	1.7	1.7
Professional, Scientific, and Technical Services	6.5	4.6	5.7	6.7	6.0	6.8	8.7	8.4	10.1	9.1	8.8	10.9
Management of Companies and Enterprises	2.2	1.5	3.4	3.3	3.0	10.1	2.2	1.9	3.0	2.5	2.0	3.2
Administration & Support, Waste Management and Remediation	8.5	11.4	12.0	4.7	5.5	3.9	7.0	7.6	7.2	7.2	7.6	6.7
Educational Services	8.5	6.9	5.0	10.6	9.0	8.2	8.3	8.1	6.8	7.4	7.1	5.9
Health Care and Social Assistance	17.8	23.9	18.6	18.9	24.4	18.7	13.4	16.3	14.3	12.5	15.1	13.4
Arts, Entertainment, and Recreation	2.4	1.0	1.0	4.4	1.4	1.7	1.5	1.1	1.1	1.5	1.1	1.1
Accommodation and Food Services	8.6	10.2	12.1	5.8	8.6	9.7	7.5	8.1	8.5	7.4	8.1	8.6
Other Services (excluding Public Administration)	3.3	2.9	2.9	3.4	3.1	3.0	3.0	3.2	3.0	3.0	3.2	3.0
Public Administration	5.1	6.2	3.4	8.9	10.4	6.8	3.5	3.7	2.8	3.3	3.6	2.7

\*Detroit Metro refers to the Detroit-Warren-Dearborn, MI from Metropolitan/Micropolitan Areas (CBSA), which includes Wayne, Oakland, Livingston, St. Clair, Lapeer, and Macomb County

\*columns sums up to 100 percent.

## Conclusion

Our analysis of the labor market in the city of Detroit over the past decade, and especially now, leads us to the following conclusions:

- As its population declines, the demographic makeup of Detroit residents is shifting – part of its population is aging, even as the percentages of young and college-educated workers rise modestly as well;
- Even within specific age and education groups, labor force participation has been stable or declining in Detroit; indeed, even in a period with a tight national and local job market, a third of its working age (18-64) residents are not in the labor force, as are nearly 40 percent of those with high school diplomas or 30 percent in their prime-age working years (35-54);
- Several barriers to employment keep many workers out of the labor force, with high school non-completion, disability, and criminal records apparently being the most important; in fact, many workers face two or more barriers to work, and the likelihood of labor force participation declines with each additional barrier to work experienced by potential workers;
- While fewer Detroit residents now earn very low wages (at or below \$10 per hour) than in previous years, fewer also earn higher wages – above \$20 per hour – while those earning relatively low to middle-level pay (between \$10 and \$20 per hour) are growing;
- Jobs in the city of Detroit are becoming more bifurcated, with growing numbers in the low-wage service sector and many others requiring postsecondary education (and increasingly filled by those commuting in from the suburbs); and
- Employment for Detroit residents and in the city has been declining in construction and professional services while growing in sectors like food/accommodations and health care and administrative services – even more than in the suburbs - and wages in these sectors are usually lower for those without college degrees than in construction and manufacturing.

In short, Detroit residents face a wide range of growing problems in the labor market. As construction and manufacturing jobs have diminished in the past decade, most Detroit residents have too few postsecondary skills to obtain the good-paying professional and technical jobs there, especially in the growing health sector. There are too few good-paying jobs in the city that do not require such skills (as more of them appear in the suburbs), and too many face work barriers created by disabilities and criminal records (as well as a lack of high school diplomas) that drive so many out of the labor force.

While some or most large cities and metro areas in the (formerly) industrial Northeast and Midwest experience some of the same problems, the scale of non-employment in Detroit is above what we observe in other cities in terms of labor force non-activity, even when we limit our attention to African Americans in each location. By our calculation, as many as 140,000

Detroit residents of working-age are out of the labor force, and many would need to overcome multiple challenges and barriers to return to work.

In light of these challenges, what should be done in Detroit (by municipal, state and federal governments as well as the private sector) to encourage more participation? We broadly envision a strategy (though we are certainly not the first to do so) with the following components:

- 1) Improving access to existing private-sector jobs by improving both worker skills and their access to suburban employment;
- 2) Expanding the earned income tax credit to raise the appeal of low-wage service jobs; and
- 3) Subsidizing jobs in the private sector for those facing moderate barriers.

Expanding access to existing private-sector jobs should be a top priority while the labor market remains so tight. This means engaging intermediaries to work with local training providers and employers in high-demand industries like health care to generate training for jobs in those sectors (Maguire, 2010; Conway and Giloth, 2014) and work-based learning opportunities, including apprenticeships.

Intermediaries can also improve worker access to suburban employers, who have difficulty filling vacant jobs right now, and help workers develop appropriate transportation options to reach those jobs. Even workers with criminal records are likely more employable while the labor market remains tight, with intermediaries helping employers to identify workers with good and stable employment prospects despite those records.

Expanding the earned income tax credit (EITC) would make low-wage jobs more appealing to prospective workers, especially for childless adults who currently receive few tax credits. For low-income men who are in arrears on child support and may also have criminal records, combining tax credits with other supports and services to help them meet child support obligations would be helpful (Miller et al., 2018).

Policymaking efforts to implement these two recommendations can build upon existing efforts by State and local officials. In recent months, the Whitmer administration has proposed doubling the State's EITC<sup>xxv</sup> and the prior administration expanded demand-driven employer-sponsored training opportunities.<sup>xxvi</sup> The City of Detroit has trained thousands of Detroiters through the Detroit at Work initiative and attracted a \$4.5 billion expansion of a Fiat Chrysler's manufacturing plant, following a trend of rising business activity in the city.<sup>xxvii</sup>

Establishing an extensive subsidized jobs program for those out of the workforce now would be useful too. Unlike the approaches outlined above, a subsidized jobs program could start smaller now, while the labor market remains strong and grow during the next recession. The subsidized jobs should be targeted towards those with moderate disabilities and other barriers that preclude work now but do not render those who have them completely unemployable. In our companion brief, *Toward a Comprehensive, Inclusive, and Equitable Subsidized*

*Employment Initiative in Detroit*, our colleagues examine how this approach can address Detroit's protracted labor force participation challenges and make progress toward reducing racial disparities in employment.

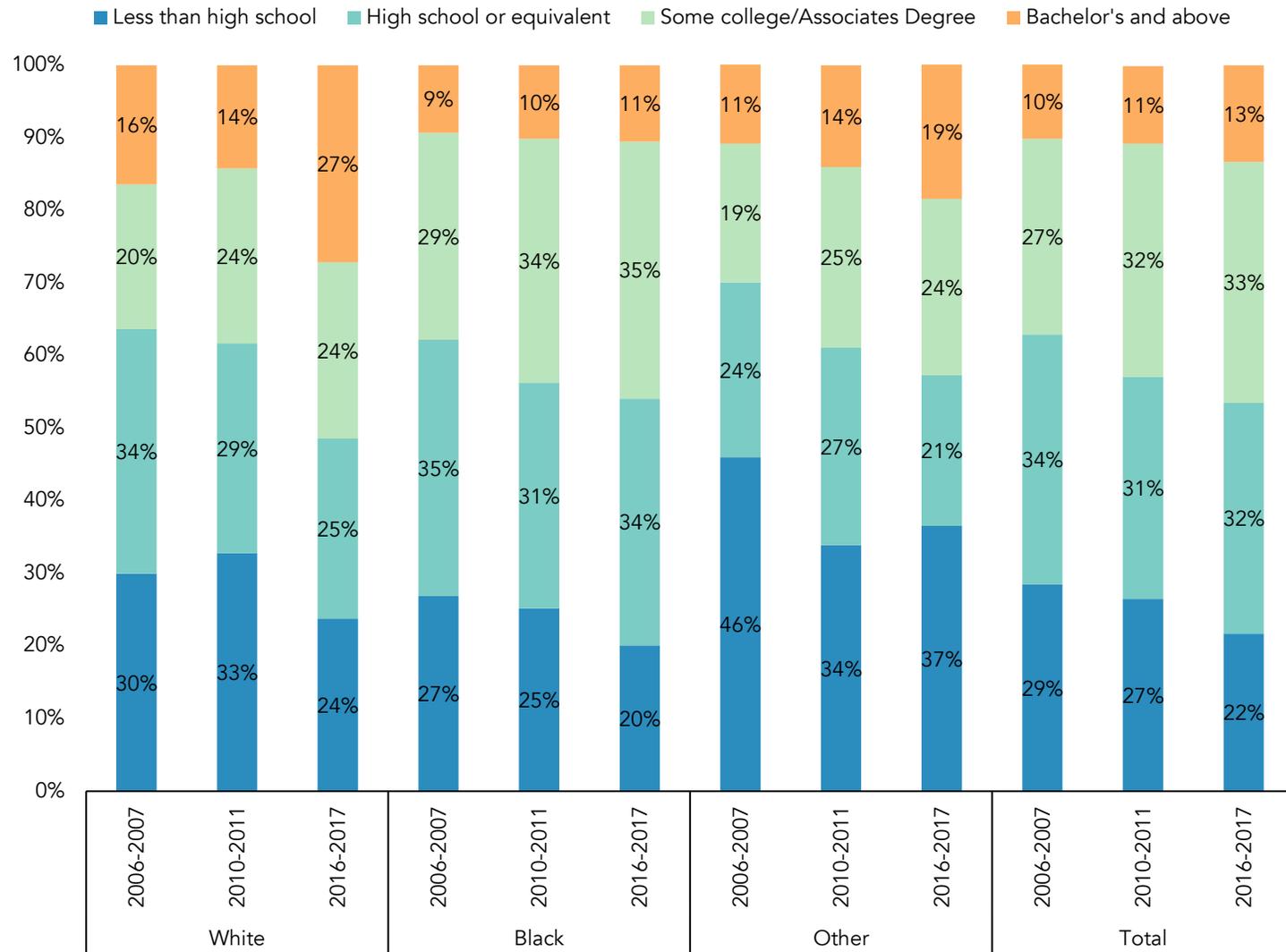
## APPENDIX

Appendix Table 1 – Employment outcomes in peer cities: Ages 18-64, 2006-07 and 2016-17

Place	Characteristic	Employed (row )		Unemployed (row )		Not in Labor force (row )	
		2006- 2007	2016- 2017	2006- 2007	2016- 2017	2006- 2007	2016- 2017
Baltimore, MD	<i>White</i>	71.6	79.2	4.1	3	24.3	17.8
	<i>Black</i>	62.5	62.8	9	8.4	28.5	28.9
	<i>Other</i>	68	72	7.8	2.9	24.2	25
	<u>Total</u>	<u>65.7</u>	<u>68.8</u>	<u>7.3</u>	<u>6.2</u>	<u>26.9</u>	<u>25</u>
Cleveland, OH	<i>White</i>	67.7	67.9	7.8	6	24.5	26.1
	<i>Black</i>	57	56.5	14.1	12.5	28.9	31.1
	<i>Other</i>	66.2	66.3	7.4	4.3	26.4	29.3
	<u>Total</u>	<u>62.2</u>	<u>62.4</u>	<u>11</u>	<u>8.9</u>	<u>26.9</u>	<u>28.8</u>
Detroit, MI	<i>White</i>	51.6	60.2	10.3	6.6	38	33.2
	<i>Black</i>	50.9	54.1	13.4	11.1	35.7	34.8
	<i>Other</i>	51.8	55.2	15.2	7	33	37.8
	<u>Total</u>	<u>51.1</u>	<u>55.1</u>	<u>13.2</u>	<u>10.2</u>	<u>35.7</u>	<u>34.8</u>
Milwaukee, WI	<i>White</i>	78.5	77.5	4.1	2.7	17.4	19.8
	<i>Black</i>	59.8	62.6	12.2	7.5	28	29.9
	<i>Other</i>	68.9	68.6	7.2	6.7	23.9	24.7
	<u>Total</u>	<u>70</u>	<u>70</u>	<u>7.7</u>	<u>5.3</u>	<u>22.4</u>	<u>24.7</u>
Philadelphia, PA	<i>White</i>	70.4	69.3	5.2	4.4	24.4	26.4
	<i>Black</i>	58.5	61.5	10.8	7.2	30.7	31.4
	<i>Other</i>	58.8	61.3	6.6	7	34.7	31.7
	<u>Total</u>	<u>63.8</u>	<u>64.7</u>	<u>7.8</u>	<u>6</u>	<u>28.5</u>	<u>29.3</u>
Pittsburgh, PA	<i>White</i>	72.8	79.9	3.7	3.3	23.4	16.8
	<i>Black</i>	60.8	64.8	7.9	9.3	31.4	25.9
	<i>Other</i>	65.1	64.5	4.2	3.3	30.6	32.1
	<u>Total</u>	<u>69.6</u>	<u>75.3</u>	<u>4.7</u>	<u>4.5</u>	<u>25.7</u>	<u>20.2</u>
Saint Louis, MO	<i>White</i>	76.1	81.6	5	2.8	19	15.6
	<i>Black</i>	58.3	63.3	12.8	9.3	28.9	27.4
	<i>Other</i>	66.9	69.1	6.5	5.1	26.6	25.8
	<u>Total</u>	<u>67.5</u>	<u>72.8</u>	<u>8.6</u>	<u>5.8</u>	<u>23.8</u>	<u>21.4</u>

\*Rows each year sum to 100 percent by year and employment outcome.

Appendix Figure 1 - Educational attainment by race of Detroit residents: Ages 16 and over



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<sup>ii</sup> Gallagher, J. (2019). Retrieved 30 October 2019, from <https://www.freep.com/story/money/business/john-gallagher/2018/02/22/michigan-recession-economy-jobs/308236002/>

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<sup>v</sup> For a longer history of Detroit that covers labor market, residential and racial trends see Sugrue (2005).

<sup>vi</sup> Farley, Reynolds, Sheldon H. Danziger, and Harry J. Holzer. 2000. *Detroit Divided*. New York: Russell Sage.

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<sup>x</sup> The Census produces summary tables from the American Community Survey that were analyzed to look at trends in earnings and federal program participation from 2006 to 2017. These summary tables are available at [data.census.gov](https://data.census.gov).

<sup>xi</sup> The LEHD data at the US Census Bureau track both workers and firms over time at detailed locations. Summary LEHD data appear at <https://onthemap.ces.census.gov/>.

<sup>xii</sup> Custom two-year estimates provide more reliable estimates for subgroups than 1-year ACS data. These estimates are comparable to Census custom estimates but are not the same. These estimates provide the average value of a given time-period, but should not be used to estimate what is going on in any particular year in that period. For a discussion of how to create custom multi-year files see: Ramsey, N. A. (2016). *Creating Multiyear ACS Pums Estimates Using Single-Year Files. Creating Multiyear ACS PUMS Estimates Using Single-Year Files*. U.S Department of Education.

<sup>xiii</sup> An individual who is not working at any point in time is considered in the labor force but unemployed if he/she has done anything to seek employment within the past four weeks or is on temporary layoff from a job; otherwise this individual is considered out of the labor force.

<sup>xiv</sup> See Danziger et al. (2000) and Bloom et al. (2011) for lists of factors that constitute barriers to employment among low-income individuals, including those presented here. For evidence that long-term unemployment reduces current and future employability see Acs (2013) and Krueger (2014). Of course, a lack of employment in the previous year might well be a consequence of labor force nonparticipation, as well as a cause.

<sup>xv</sup> We adopt the method of converting worker's annual wages to hourly wages as found in Welsh-Loveman, Jeremy, et al. "Data and Methods for Estimating the Impact of Proposed Local Minimum Wage Laws." *Center on Wage and Employment Dynamics*, 2014, [irle.berkeley.edu](http://irle.berkeley.edu).

<sup>xvi</sup> Hysteresis occurs when lengthy spells out of work during a serious recession make it very difficult for workers to become reemployed when the economy recovers. For evidence of hysteresis effects after the Great Recession, see Yagan (2018). Alternatively, employers might choose to change production methods and hiring standards when consumer demand and employment are weak, which would generate similar longer-term effects (Hershbein and Kahn, 2018).

<sup>xvii</sup> Bauer, Lauren, and Jay Shambaugh. "Workers with Low Levels of Education Still Haven't Recovered from the Great Recession." *Brookings*, Brookings, 6 Sept. 2018, [www.brookings.edu/blog/up-front/2018/09/06/workers-with-low-levels-of-education-still-havent-recovered-from-the-great-recession/](http://www.brookings.edu/blog/up-front/2018/09/06/workers-with-low-levels-of-education-still-havent-recovered-from-the-great-recession/).

<sup>xviii</sup> We define disability as either reporting a physical disability or receiving DI or SSI income. Only about ten percent of those whom we designate as having a disability did not report one but did receive DI or SSI as income.

<sup>xix</sup> Of course, since we have defined "disability" as reporting a physical condition or receipt of SSDI or SSI funds, either of these could be driving any causal effect of disability on employment outcomes. But the fraction of individuals whom we count as "disabled" who receive funding but do not report a condition in our data is very low.

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<sup>xxii</sup> Questions on whether individuals have criminal records from the past are not asked, since underreporting of any criminal behavior occurs frequently – see Hindelang et al.

<sup>xxiii</sup> The most recent year for which such data are available to us is 2017.

<sup>xxiv</sup> The LEHD data did not enable us to separate out jobs and workers in suburban-only locations.

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