FORWARD CITIES

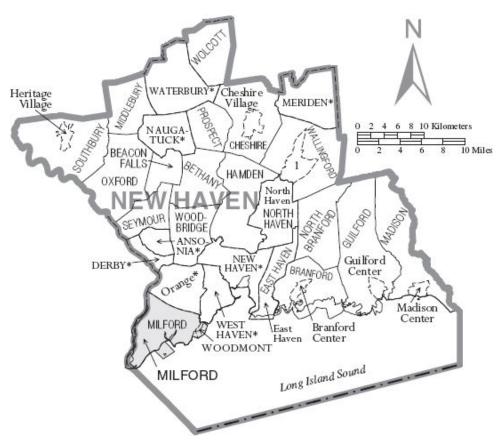


Economic Inclusion Indicator Brief

NEW HAVEN, CONNECTICUT

Overview

- Population Characteristics
- Employment, Business Characteristics
- Indicator Overview
- Part 1: Economic Landscape Indicators
- Part 2: Inequality Indicators
- Part 3: Entrepreneurship Indicators
- Sources





County



Population Size; Change since 2010

11% \$86,424

Percent in Poverty; **Median Family Income**

> **US - 13%** \$60,336





Black 13.5%

Comparable to National Statistics

91%

34%

Percent HS, higher; Percent BA, higher

> **US - 88%** 32%

White 73.5% 12%

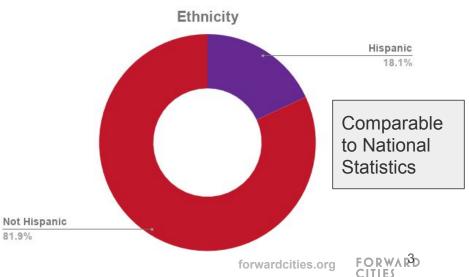
Residents that are Foreign-born

US - 14%

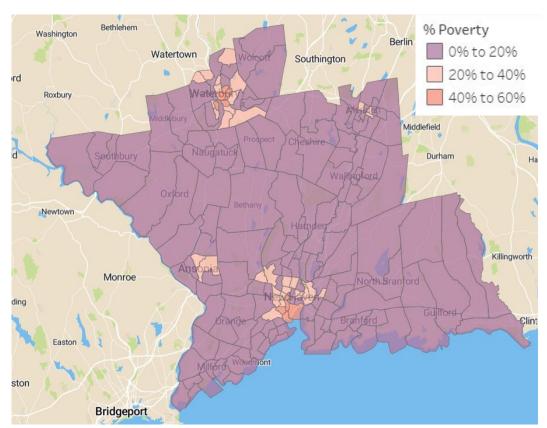
22%

Speak Language Other Than **English at Home**

US - 22%



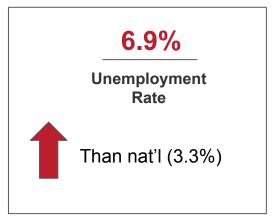
Poverty Rates



Poverty rates are not evenly distributed in the New Haven area, with much higher rates seen in downtown New Haven and Waterbury.

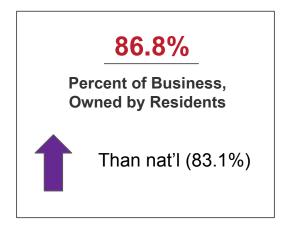
County

Employment & Business Characteristics



64.9%

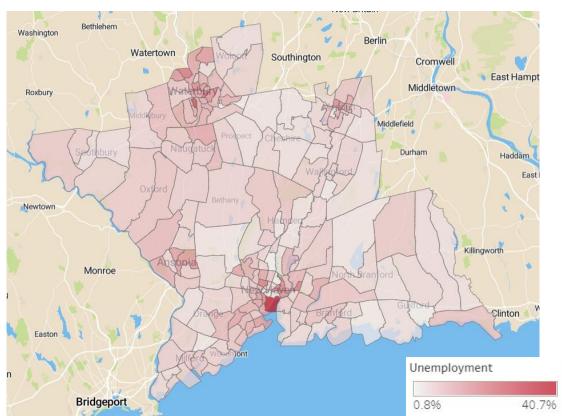
Percent of jobs in the city, held by workers living in the city



60.2%

Percent of workers in the city, who work in the city

Unemployment Rates



Unemployment rates are not spread evenly throughout the New Haven area. Distinct pockets of high unemployment are visible, centered around certain towns and cities: New Haven, Waterbury and Meriden.

FORWARD CITIES

Indicator Overview Local, State and National Data

Part 1. Economic Landscape Indicators

Health Care and Social Assistance + Construction + Wholesale Trade (53% of total growth)

Growth Industries

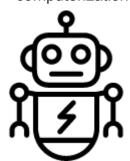
Industry sectors that account for half of all employment growth in the County in the last 5 years



64,599 (22% of total) N. Haven 22% of total (State) 25% of total (National)

Jobs at Risk of Automation by 2030

Estimated number of current jobs in the MSA whose tasks are judged highly susceptible to computerization



3,689 (1.3% of total) Same percentages for State and Nation

> Workers in Alternative Work Arrangements

Estimated share of workers in the City who were in alternative work arrangements





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Part 2. Inequality Indicators

-9%p : New Haven -9%p : Buffalo -7%p : Pittsburgh

Opportunity Gap

Average income percentile rank gap between children born to families at 25th vs 50th percentile of income distribution



\$1: \$.85: \$.71: \$.68: \$.60: \$.54 New Haven White (non-Hispanic) ♂: White (non-Hispanic) ♀: Black ♂: Black

♀: Hispanic ♂ : Hispanic ♀

\$1 (WM): \$0.78 (WF): \$0.71 (BM): \$0.63 (BF) Buffalo \$1 (WM): \$0.81 (WF): \$0.69 (BM): \$0.65 (BF) Pittsburgh

Earnings Gap

Dollar amount that full-time workers make for every \$1 a White (non-Hispanic) male makes



38%p New Haven 40%p Buffalo 30%p Pittsburgh

Wealth Gap

Difference in homeownership rates between. White (non-Hispanic) and African-American/ Black households



Part 3. Entrepreneurship Indicators

30,529 (8% of total) N. Haven 36,656 (7% of total) Buffalo 14,527,648 (10% of total) Pittsburgh

Self-Employment

Number and percent of self-employed New Haven County residents



9,855 +31

Very Small Business Density and Dynamism

Number of businesses with 1-4 employees, change over last 5 years 4,897 (7%)

Business Density

Number and percent of businesses that have been in business less than 2 years

2 per 1k people N. Haven 10 per 1k people Buffalo 8 per 1k people Pittsburgh

Entrepreneur Density

Number of State businesses open less than 2 years per 1,000 residents ages 16-64 1 per 1k female N. Haven 4 per 1k female Buffalo 3 per 1k female Plttsburgh 0.3 per 1k Black/ AA N. Haven 1 per 1k Black/AA Buffalo 1 per 1 k Black/AA Pittsburgh 1 per 1k Hispanic N. Haven

Entrepreneurial Diversity

Number of businesses open <2 years per 1,000 residents ages 16-64



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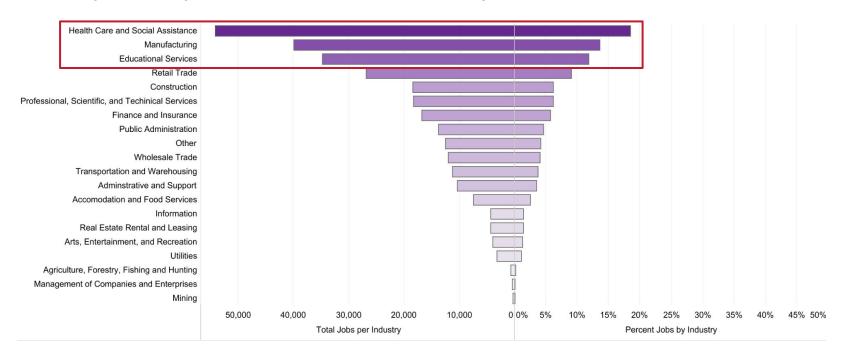
FORWARD CITIES 10

FORWARD CITIES

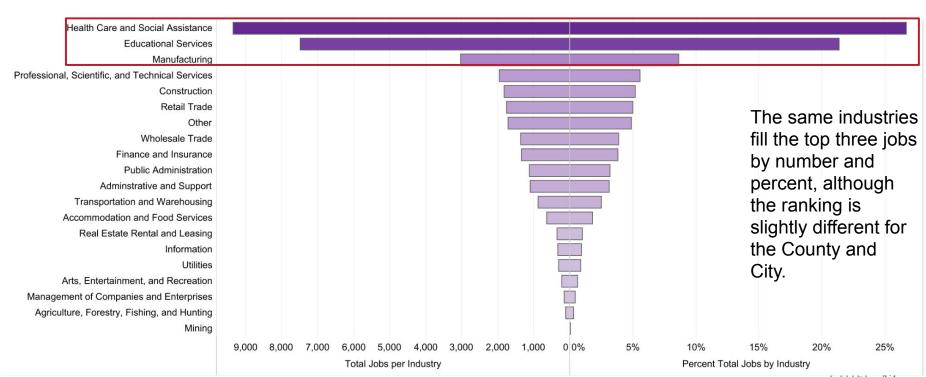
Economic Landscape

Growth Industries, Alternative Work Arrangements, Automation

Jobs by industry (number and percent total jobs), 2017

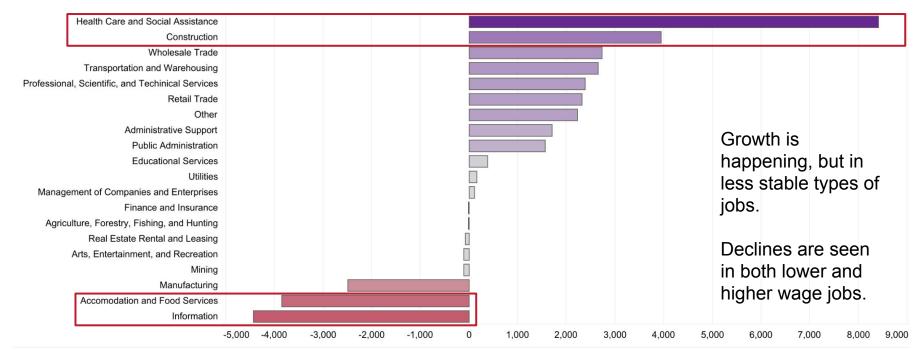


Jobs by industry (number and percent total jobs), 2017



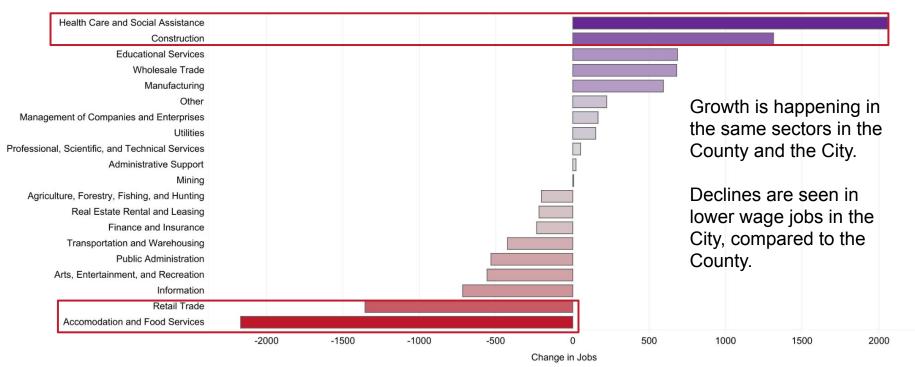
Growth Industries

Change in jobs by industry between 2012 and 2017



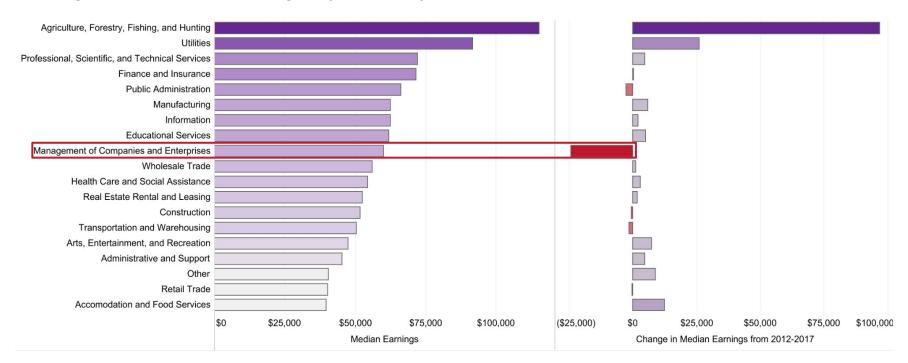
Growth Industries

Change in jobs by industry between 2012 and 2017



Growth Industries

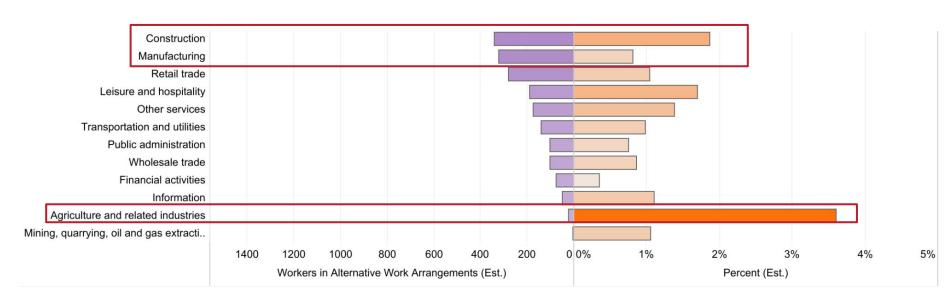
Change in median earnings by industry between 2012 and 2017



City

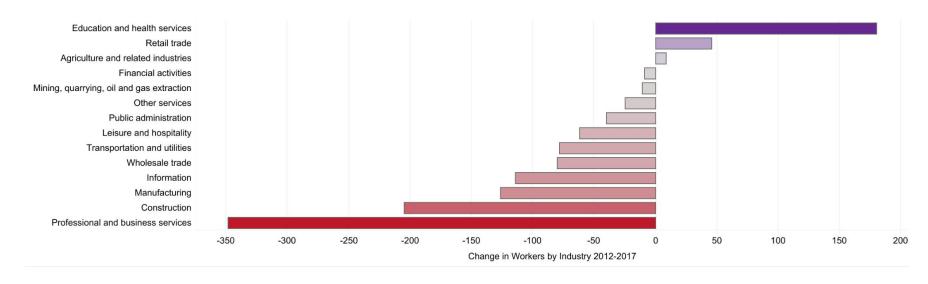
Workers in Alternative Work Arrangements

Estimated number and percent of workers in alt. work arrangements in 2017, by industry



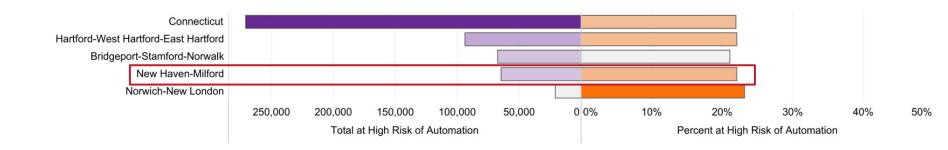
Workers in Alternative Work Arrangements

Estimated difference of workers in alt. work arrangements, 2005 to 2017, by industry



Jobs At Risk of Automation by 2030

Number and percent of jobs at risk of automation across MSAs in CT, 2017



Indicators: New Haven, Connecticut, United States

Growth Industries	Jobs at Risk of Automation
Health and Social Assistance (29%), Construction (14%), plus Wholesale Trade (10%) Total=53% (15,100 of 28,635 additional jobs) Healthcare and Social Assistance (28%), Construction (18%), Transportation and Warehousing (15%) Total = 61% (39,929 of 64,912 additional jobs) Construction (17%), Health and Social Assistance (14%), Professional, Scientific, and Technical Services (13%), Transportation and Warehousing (9%) Total= 53% (5,775,700 of 11,117,743 additional jobs)	114,830 (17% of total) 1,458,400 (17% of total) 23,883,490 (17% of total)
Workers in Alternative Work Arrangements 1.2% (3689 of 292,635) 1.2%% (15,093 of 1,232,355) 1.2% (1,380,551 of 109,307,428)	

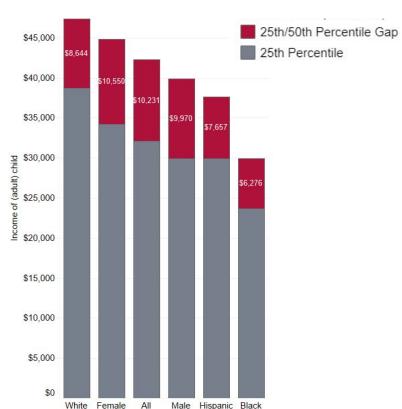
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Economic Inequality

Opportunity Gap, Earnings Gap, Wealth Gap

Opportunity Gap

Opportunity gap according to parental income, by gender and race

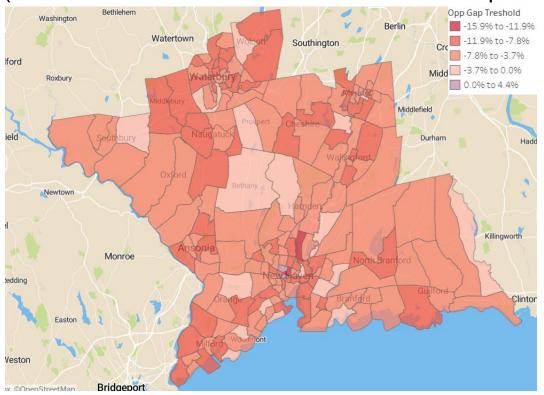


The gap is least for Black/African-American families, but these families also start and stay lower than all other subgroups

The largest gap is for females of all races at over \$10,500

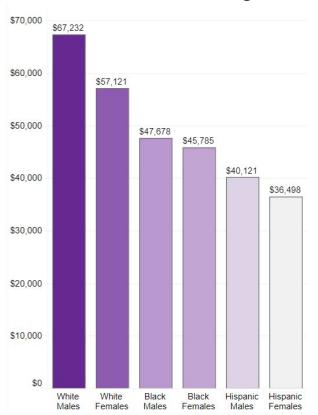
Opportunity Gap

Opportunity gap according to parental income (Parental households with income in the 25th percentile vs 50th percentile)



All the gaps are negative, meaning children in the 25th percentile have not caught up to their peers in the 50th across the city, but it appears to be unevenly distributed across the city.

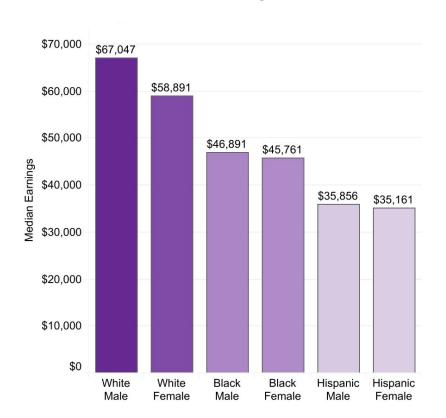
Median annual earnings for *full time workers* in 2017, by population subgroup



Median is the middle number of all the earnings amounts for New Haven. Median is used because it is less likely to be skewed by very high and very low numbers.

The cost of living in New Haven is 23% higher than the national average.

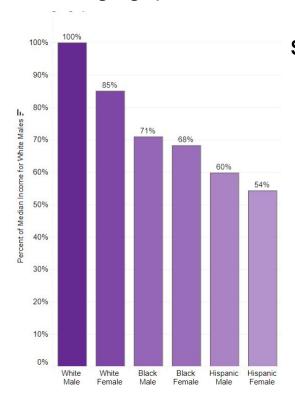
Median annual earnings for full time workers in 2017, by population subgroup



Median earnings for the City are slightly lower than the County, for all subgroups.

The cost of living in New Haven is 23% higher than the national average.

Earnings gap for full time workers, 2017



\$1 (WM): \$.85 (WF): \$.71 (BM): \$.68 (BF): \$.60 (HM): \$.54 (HF)

For every dollar a White male makes in New Haven County:

A Hispanic female makes **54 cents**

A Hispanic male makes 60 cents

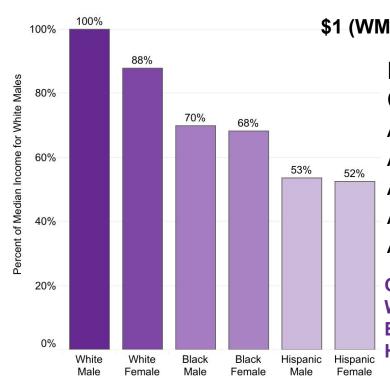
A Black/African-American female makes 68 cents

A Black/African-American male makes **71 cents**

A White female makes 85 cents

These numbers are several cents higher than the state average, and several cents higher than the national average for all but Hispanic males (\$.63).

Earnings gap for full time workers, 2017



\$1 (WM): \$.88 (WF): \$.70 (BM): \$.68 (BF): \$.53 (HM): \$.52 (HF)

For every dollar a White male makes in New Haven City:

A Hispanic female makes 52 cents

A Hispanic male makes 53 cents

A Black/African-American female makes 68 cents

A Black/African-American male makes **70 cents**

A White female makes 88 cents

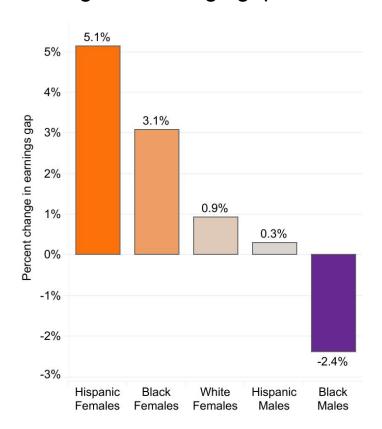
Compared to New Haven County:

Women make more

Black/African-American males make less

Hispanic males and females make less

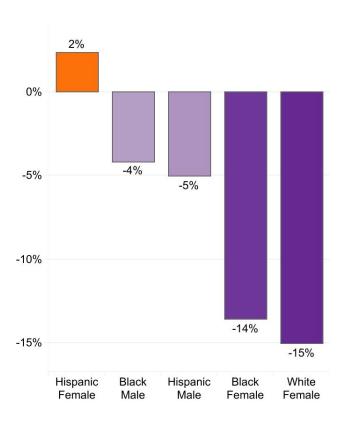
Change in earnings gap for full time workers between 2012 and 2017



In this case, a negative is a positive and a positive is a negative! The -2.4% means that the earnings gap for Black/African-American males shrank between 2012 and 2017.

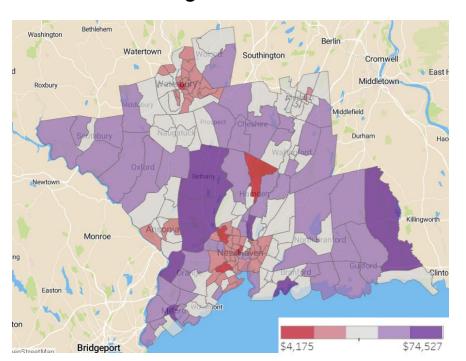
The gap grew for Hispanic females by twice that amount in the same time frame.

Change in earnings gap for full time workers between 2012 and 2017

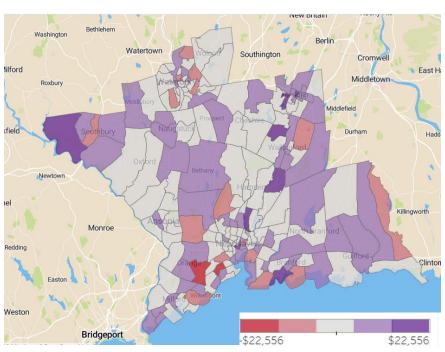


The earnings gap trends for the City of New Haven are different from those in the County. Black/African-American and White females saw their earnings gaps decrease, while only Hispanic females saw their earnings gaps increase over the same time frame.

Median earnings for all workers 2017



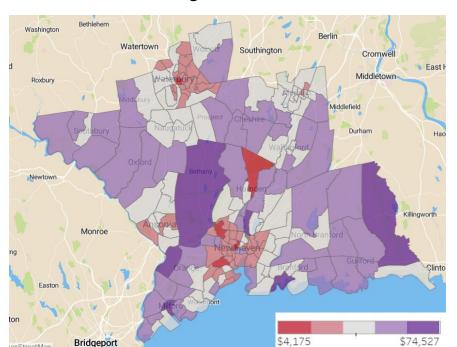
Change from 2012 - 2017



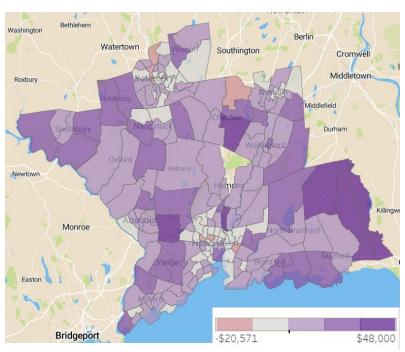
Census Tract

Earnings Gap

Median earnings for all workers 2017



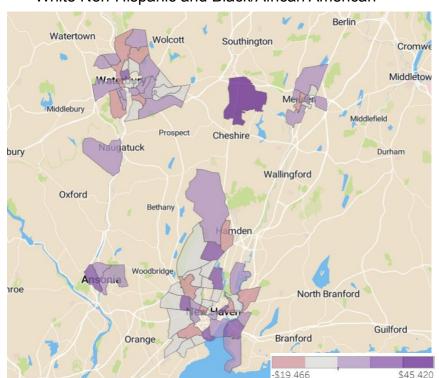
Earnings gap for *all workers* in 2017 Male and Female



^{**}The data is filtered to include only subgroup populations for this gap with more than 10% presence in a census tract Each change in color represents an equal amount of change given the range of values

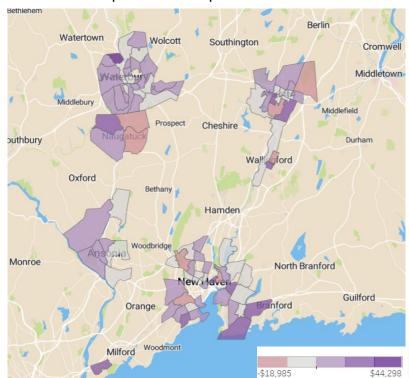
Earnings gap for *all workers* in 2017

White Non-Hispanic and Black/African American



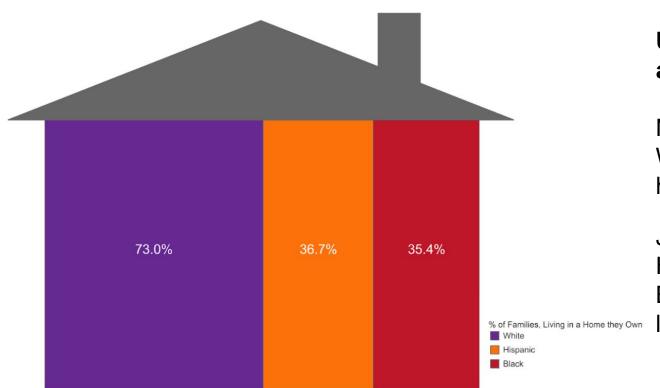
Earnings gap for all workers in 2017

White Non-Hispanic and Hispanic



^{**}The data is filtered to include only subgroup populations for this gap with more than 10% presence in a census tract Each change in color represents an equal amount of change given the range of values

Percent of households living in a home they own in 2017, by population subgroup



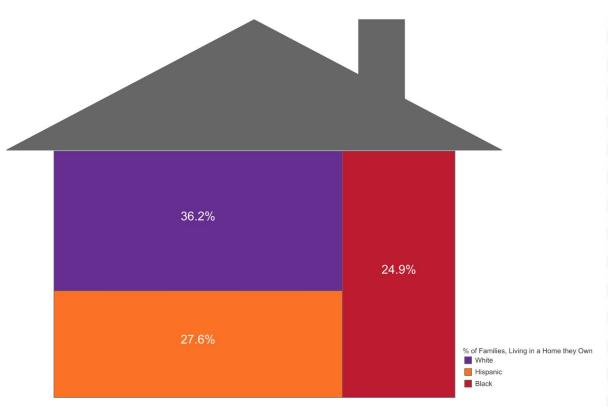
Using homeownership as a proxy for wealth:

Nearly three in four White families live in a home they own.

Just over three in 10 Hispanic and Black/African-Americans live in a home they own.

Wealth Gap

Percent of households living in a home they own in 2017, by population subgroup



Using homeownership as a proxy for wealth:

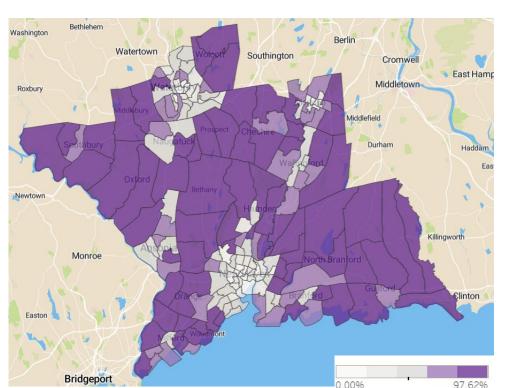
Population subgroups are more equitable in terms of homeownership rates, however Black/African-American families still lag behind White and Hispanic families.

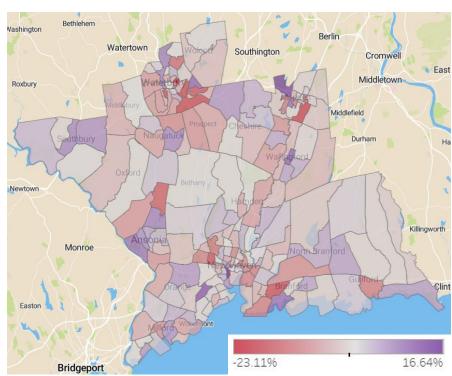
Wealth Gap

Census Tract

Homeownership in 2017

Change in Homeownership from 2012-2017

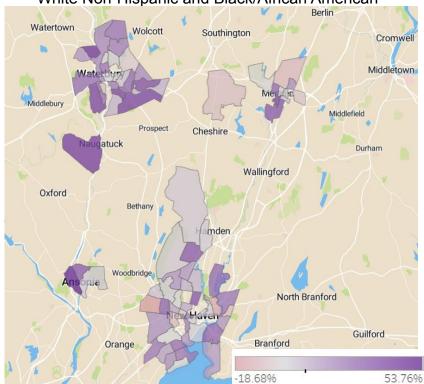




Wealth Gap

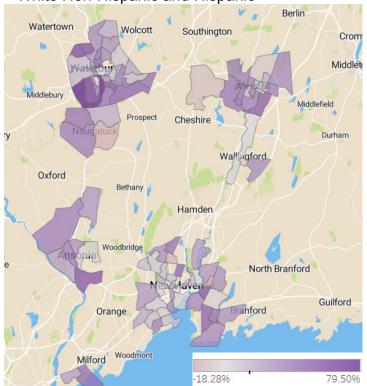
Wealth gap in 2017

White Non-Hispanic and Black/African American



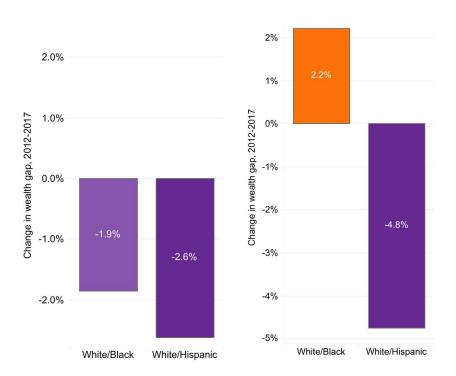
Wealth gap in 2017

White Non-Hispanic and Hispanic



Wealth Gap

Change in wealth gaps, 2012-2017

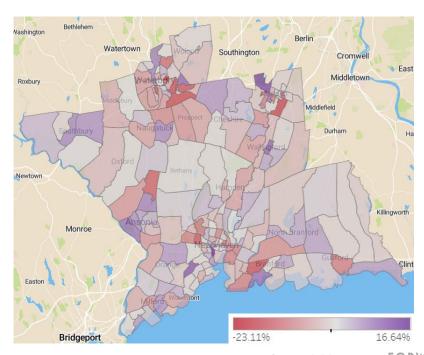


New Haven County 1

New Haven City

While the gaps are shrinking, they are doing so slowly and unevenly.

Change in homeownership 2012-2017



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Earnings Gap	Wealth Gap
\$1 (WM): \$0.85 (WF): \$0.71 (BM): \$0.68 (BF): \$0.60 (HM): \$0.54(HF)	38% p - W/B 36%p - W/H
\$1 (WM): \$0.81 (WF): \$0.63 (BM): \$0.59 (BF): \$0.58 (HM): \$0.50 (HF) \$1 (WM): \$0.81 (WF): \$0.63 (BM): \$0.59 (BF): \$0.58 (HM): \$0.50 (HF)	36% p - W/B 42%p W/H
	30% p - W/B 25% - W/H

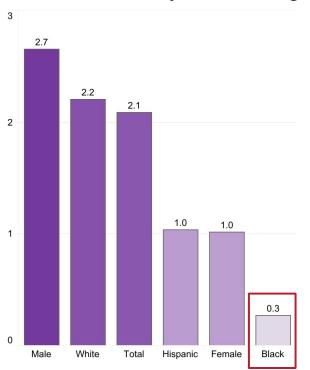
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Entrepreneurship

Self-Employment, Very Small Business Density and Dynamism, Entrepreneurial Density and Dynamism, & Entrepreneurial Diversity

Entrepreneur Diversity

Number of new businesses (<2 years) per 1000 adults (16-64) in the labor force in 2016, by race and gender

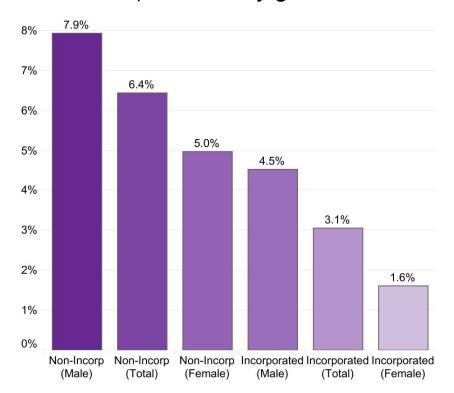


Just one in about 3,000 Black/African-American Connecticut residents start a small business One in 1,000 - Buffalo One in 1,000 - Columbus, OH

A little over **two in 1,000 White** Connecticut residents start a small business 11 in 1,000 - Buffalo 8 in 1,000 - Columbus, OH

Just one in 1,000 Hispanic or female Connecticut residents start a small business. Four in 1,000 - Buffalo forwardcities.org Three in 1,000 - Columbus

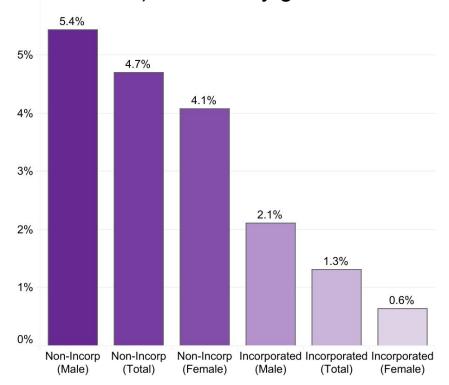
Percent of workers who are self employed (incorporated and non-incorporated businesses) in 2017, by gender



Men report higher levels of self-employment, for either incorporated or not incorporated businesses in New Haven County.

There are more not incorporated businesses among the self-employed, opening that population to more risk

Percent of workers who are self employed (incorporated and non-incorporated businesses) in 2017, by gender

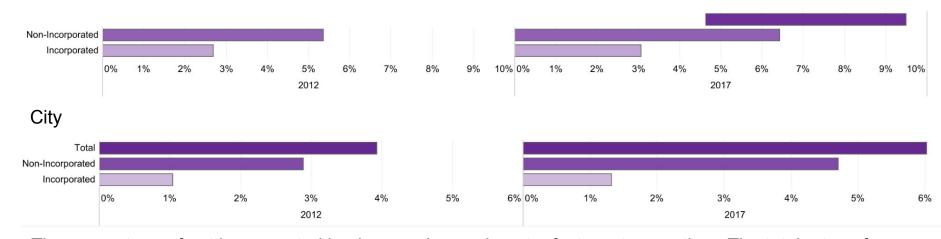


There are lower rates of self-employment in the City of New Haven than in the County.

There are more not incorporated businesses among the self-employed, opening that population to more risk.

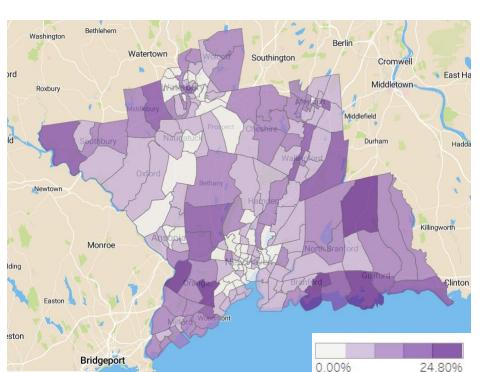
Difference in the percent of employed who are self-employed (incorporated and non-incorporated businesses) between 2012 and 2017

County

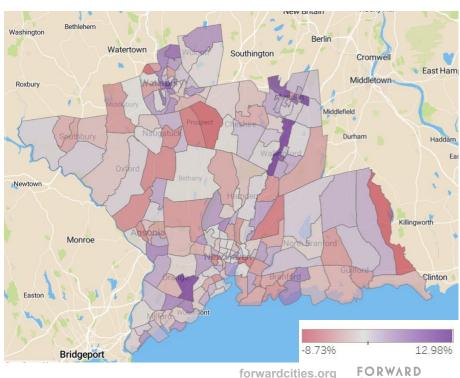


The percentage of not incorporated businesses is growing at a faster rate over time. The total rates of self-employment are growing at a slower rate in the City than the County over time.

Percent of employed who are self-employed in 2017

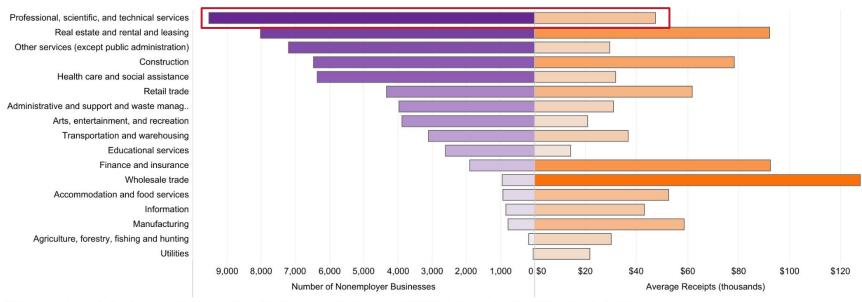


Change in percent of employed who are self-employed, 2012 to 2017



Nonemployer Density

Number of nonemployer businesses and average receipts in 2017, by industry*



^{*}Mining, quarrying, and oil and gas extraction is an outlier, with 6 Nonemployer Businesses and \$211,000 in Average Receipts. It is not incuded in this graph.

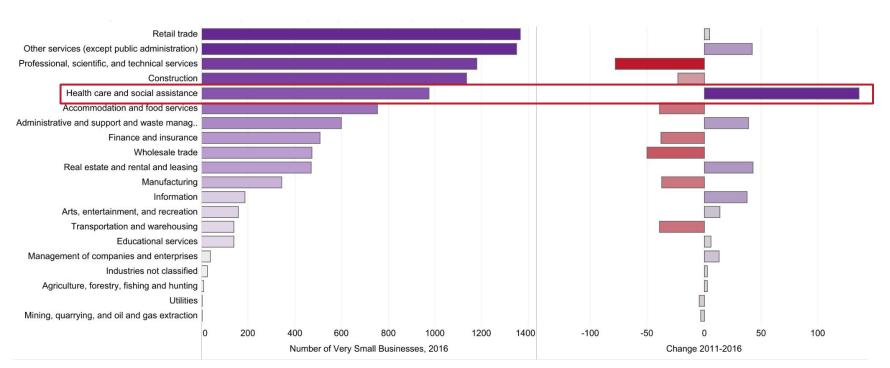
Large number of establishments bringing in lower amounts of money.

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County

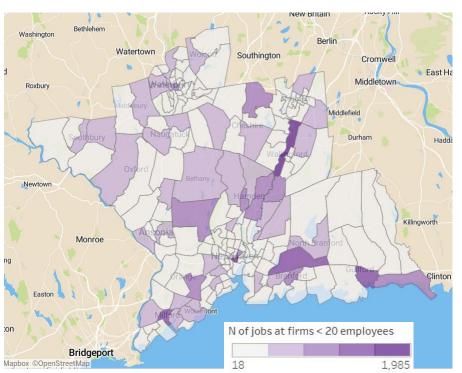
Very Small Business Density and Dynamism

Number and Change in number of very small businesses (1-4 empl.) 2011-2016, by industry



Small Business Job Density

Number of Jobs at Businesses with < 20 Employees, 2015



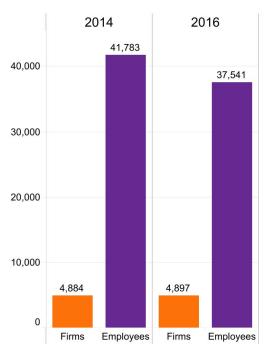
Fairly even distribution of small businesses hubs throughout New Haven, with a few notable exceptions.

New Business Dynamism

Firms

Employees

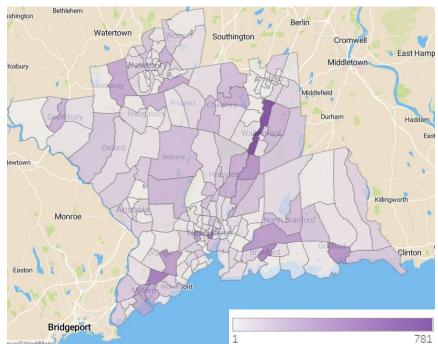
Number of new businesses >2 years and people employed, 2014 and 2016



The number of new firms have remained relatively the same, with a small downturn in number of employees of those firms over a two year period.

These jobs seem to be relatively well distributed throughout New Haven.

Number of Jobs at Businesses less than 3 years old in 2015



Self-Employment		Very small business density and dynamism	Entrepreneurial (Business) Density
40,581 (10% of total)		9,855 +31	N/A for New Haven
184,032 (10% of total)		46,139 -398	4897 (7%)
14,256,831 (10% of total)		4,216,973 +179,363	517,380 (9%)
Sm. Business Entrepreneur Density Total	Sm. Business Entrepreneur Diversity Female	Sm. Business Entrepreneur Diversity Black/African American	Sm. Business Entrepreneur Diversity Hispanic
N/A for New Haven	N/A for New Haven	N/A for New Haven	N/A for New Haven
2.1 per 1,000	1 per 1,000	0.3 per 1,000	1 per 1,000
2.5 per 1,000	1.2 per 1,000	0.7 per 1,000	1.3 per 1,000

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Earnings Gap	Wealth Gap	Growth Industries	
\$1 (WM): \$0.85 (WF): \$0.71 (BM): \$0.68 (BF): \$0.60 (HM): \$0.54(HF) \$1 (WM): \$0.81 (WF): \$0.63 (BM): \$0.59 (BF): \$0.58 (HM): \$0.50 (HF) \$1 (WM): \$0.81 (WF): \$0.63 (BM): \$0.59 (BF): \$0.58 (HM): \$0.50 (HF)	38% p - W/B 36%p - W/H 36% p - W/B 42%p W/H 30% p - W/B 25% - W/H	Health and Social Assistance (29%), Construction (14%), plus Wholesale Trade (10%) Total=53% (15,100 of 28,635 additional jobs)	
Jobs at Risk of Automation	Workers in Alternative Work Arrangements	Healthcare and Social Assistance (28%), Construction (18%), Transportation and Warehousing (15%) Total = 61% (39,929 of 64,912 additional jobs) Construction (17%), Health and Social Assistance (14%), Professional, Scientific, and Technical Services (13%), Transportation and Warehousing (9%) Total= 53% (5,775,700 of 11,117,743 additional jobs)	
114,830 (17% of total) 1,458,400 (17% of total) 23,883,490 (17% of total)	1.2% (3689 of 292,635) 1.2%% (15,093 of 1,232,355) 1.2% (1,380,551 of 109,307,428)		

Self-Employment		Very small business density and dynamism	Entrepreneurial (Business) Density
40,581 (10% of total)		9855, +31	N/A for New Haven
184,032 (10% of total)		46139, -398	4897 (7%)
14,256,831 (10% of total)		4,216,973 +179,363	517,380 (9%)
Sm. Business Entrepreneur Density Total	Sm. Business Entrepreneur Diversity Female	Sm. Business Entrepreneur Diversity Black/African American	Sm. Business Entrepreneur Diversity Hispanic
N/A for New Haven	N/A for New Haven	N/A for New Haven	N/A for New Haven 1 per 1,000 1.3 per 1,000
2.1 per 1,000	1 per 1,000	0.3 per 1,000	
2.5 per 1,000	1.2 per 1,000	0.7 per 1,000	

Indicator Choice and Sources (I)

	Indicator Rationale	Sources for Indicator
Opportunity Gap	This indicator provides a one-of-a-kind lense into how a neighborhood in which children grow up shape their earnings trajectory into mid-age adulthood. The data allows to control for parental income, gender and race of the child, facilitating more instructive comparisons that establish a causal link between neighborhoods, human capital development and social mobility.	2016 The Opportunities Atlas, Opportunity Insights
Earnings Gap	This raw comparison of earnings by gender and race provides a snapshot of the overall disparities in earnings that full-time employees take home. Rather than accounting for occupation, education and seniority differences (in spirit of "equal pay for equal work") that explain parts of these gaps, this indicator focuses on earnings in their own right as building blocks of wealth.	2016 American Community Survey (5 year estimates), United States Census Bureau 2012 American Community Survey (5 year estimates), United States Census Bureau
Wealth Gap	Wealth is hard to measure directly, so researchers interested in neighborhood-level differences have resorted to using proxies like homeownership rates. Homeownership has shown to generate wealth due to tax incentives, financial market advantages and behavioral nudges. The history of systematic discrimination in the housing market further underlines the indicator's value and perspective in work on inclusive economic development and entrepreneurship.	2016 American Community Survey (5 year estimates), United States Census Bureau 2012 American Community Survey (5 year estimates), United States Census Bureau
Growth Industries	The engine of new job growth are small businesses, which together employed 47.5% of all U.S. workers in 2018. A small number of industries concentrate most of the new jobs created. This indicator outlines the industries responsible for half of all net employment growth locally and specifies whether employment growth goes hand in hand with average salary increases or not.	2016 American Community Survey (5 year estimates), United States Census Bureau 2012 American Community Survey (5 year estimates), United States Census Bureau
Self-Employment	People reporting to be self-employed, provides the best available, big-picture marker of the number of entrepreneurs in the country. Disaggregating self-employment by gender allows to probe whether the general decline in self-employment affects all groups equally. Evidence that self-employment is more prevalent at the lower end of the income spectrum further reinforces the importance of this indicator for work on inclusivity.	2016 American Community Survey (5 year estimates), United States Census Bureau 2012 American Community Survey (5 year estimates), United States Census Bureau 2016 Nonemployer Statistics, United States Census Bureau

Indicator Choice and Sources (II)

	Indicator Rationale	Sources for Indicator
Entrepreneurial Density	Research on entrepreneurship mandates to take a close look at the number of entrepreneurs that call a given community home. The number of small businesses (<4 employees) as a share of the local population "is the statistical corollary of the number of entrepreneurs you will run into walking across the street" and a measure that is comparable across communities. We include the rate for specific population subgroups as an indicator of diversity.	2016 Business Patterns, United States Census Bureau 2019 Policy Map 2016 Survey of Entrepreneurs, United States Census Bureau
Entrepreneurial Dynamism	Static measures of representation by entrepreneurs in a community only provide us with a snapshot picture about density. Probing into changes over time as well as evolutions in salaries paid by small businesses (<4 employees) paints a increasingly dynamic picture of the local entrepreneurial ecosystem.	2016 Survey of Entrepreneurs, United States Census Bureau 2012 Survey of Entrepreneurs, United States Census Bureau 2019 Policy Map
Jobs at Risk of Automation	Predictions <u>abound</u> about widespread job displacement and the overhaul of labor markets due to increasingly sophisticated artificial intelligence. Deconstructing the critical tasks that each occupation needs to perform on the job and assessing their ease of computerization provides a bottom-up accounting of an occupation's risk to be automated. Aggregating how many of these jobs exist in a community creates profiles of exposure to automation.	2017 Bureau of Labor Statistics Frey & Osborne, 2017. The Future of Employment: How Susceptible are Jobs to Computerization? Technological Forecasting and Social Change. 114: 254-280 Brookings
Workers in Alternative Work Arrangements	The contingent and alternative workforce, defined here as temporary help-agency workers, on-call workers, contract company workers, independent contractors and freelancers, has grown in leaps. Given persistent data gaps at the local level we need to resort to national estimates, available by occupation, to approximate the scale to which local labor markets are already restructured.	2015 American Community Survey (5 year estimates), United States Census Bureau 2005 American Community Survey, United States Census Bureau Katz & Krueger, 2016. The Rise and Nature of Alternative Work Arrangements in the United States. National Bureau of Economic Research.
Entrepreneurial Diversity	Understanding the share of non-white and non-male entrepreneurs is central to the work of promoting equitable entrepreneurial ecosystems.	2014 and 2016 Annual Survey of Entrepreneurs