Economic Development in Philadelphia & Brewerytown

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Introduction

For the purpose of this report, we will be using an aggregate of four census tracts; 137, 138, 149, and 151.02, as the study area. These tracts comprise most of the Brewerytown neighborhood which is the focus of this study. The possibility of using the zip code that Brewerytown falls within (19121) was too large for our study as it encompasses multiple neighborhoods in North Philadelphia West, which would skew the data and not accurately represent Brewerytown's economy. For a deeper analysis and a better understanding of recent trends, we will be using employment data from 2010 and 2019. Furthermore, we decided to use data from 2019 rather than 2020 for two reasons. First, it is the most recent employment data available from the Bureau of Labor Statistics' Quarterly Census of Employment and Wages. And secondly, it was the best option for us to understand more accurately the recent trends given that the pandemic started the following year and significantly skewed employment data.

Philadelphia in Context

As the sixth largest major city in the US, Philadelphia has a diverse economy with employment across several sectors. Between 2010 and 2019, the city added approximately 75,000 jobs, and as of 2019, there were 595,571 total jobs. Despite the growth in total jobs, many Philadelphians face unemployment

and barriers to

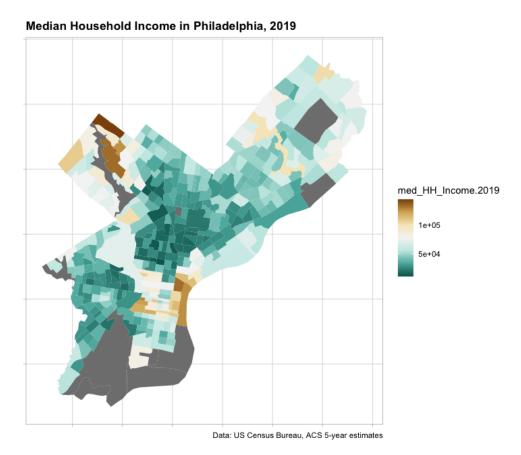


Figure 1: Median household income for Philadelphia neighborhoods in 2019.

economic mobility. In 2010, Philadelphia's unemployment rate was approximately 7.5%, and in

2019 it dropped slightly to approximately 5.6%. These unemployment rates include individuals who are actively seeking employment however do not reflect those who may have stopped looking for work. As of 2010, the median household income was \$36,251, which is approximately \$42,500 when adjusted for 2019 inflation. In 2019, the median household income was \$45,927. Despite this 8% increase, the median income remained low in comparison to other US cities. As of 2019, Baltimore City County had a median household income of \$63,109, and Cook County (Chicago) had a median income of \$64,660. Philadelphia's median income levels suggest that there is a significant need for higher-paying jobs in the city.

As shown in Figure 2 below, this report compares private employment across NAICS sectors and utilizes location quotients to assess local competitiveness of specific industries. Location quotients are indicators that are used to identify high concentrations of a particular amenity, good, or industry in a smaller area relative to a larger reference area. Location quotients greater than 1 suggest that the smaller area has a comparative advantage. Figure 2 shows that Philadelphia's main comparative advantages lay in educational services and healthcare and social assistance. The city also has slight comparative advantages in professional, scientific, and technical services; arts, entertainment, and recreation; management of companies and enterprises, and finance and insurance.

Sector	2010 LQ Philadelphia County vs. USA	2019 LQ Philadelphia County vs. USA
Educational services	4.75	4.22
Health care and social assistance	1.72	1.77
Professional, scientific, and technical services	1.14	1.24
Arts, entertainment, and recreation	1.05	1.19
Management of companies and enterprises	1.40	1.06'
Finance and Insurance	1.23	1.04

Figure 2: Philadelphia industry sectors with comparative advantage based on Location Quotients between 2010 and 2019.

Sectors that have seen increasing comparative advantage in Philadelphia could be suitable targets for economic development initiatives. These industries include health care and social assistance; professional, scientific, and technical services; and arts, entertainment, and recreation. Based on the <u>NAICS description</u>, professional, scientific, and technical services encompass a wide range of jobs that generally require a high level of education and training.

Brewerytown in Context

To determine which industries in Brewerytown have a comparative advantage, we calculated the Location Quotients (LQ) for each industry sector (NAICS-Based). In this case, the reference geography for Brewerytown is Philadelphia. In 2019, there were a total of six industry sectors with a comparative advantage because their LQs were greater than 1. Of the six, real estate and rental and leasing, management of companies and enterprises, and health care and social assistance industry job sectors had LQs over 1.5 which indicates that in Brewerytown, these industries specialize in exporting their goods and services (See Figure 2.1). The remaining two sectors include retail trade and other services (except public administration, which was not calculated in any of the employment data) whose LQs were between 1 and 1.5, indicating that Brewerytown is self-sufficient in these industries.

Industry Sector	2019 LQ: Brewerytown vs. Philadelphia County
Real estate and rental and leasing	4.24
Management of companies and enterprises	3.26
Health care and social assistance	1.57

Figure 2.1: Industry sectors in Brewerytown with Location Quotients over 1.5 in 2019.

Furthermore, when looking at comparative advantage over time, some significant changes have occurred in different sectors. For example, in 2010 transportation and warehousing had a comparative advantage in Brewerytown with an LQ of 1.48, but in 2019 that comparative advantage no longer exists as the LQ dropped down to zero. A similar trend can be seen with accommodation and food services, from an LQ of 3.94 in 2010 to less than one by 2019. However, at the same time, we can see a major increase in the management of companies and enterprises industry from 2010 to 2019. The rise of comparative advantage for this industry sector relates to the trend of young, white professionals who moved into Brewerytown during this time period, which was referenced in our housing exercise assignment. Therefore, we can

assume that with a new demographic moving into the neighborhood, the displacement of longtime residents resulted in the decline of comparative advantage for blue-collar job sectors that previously had comparative advantage in Brewerytown like transportation and warehousing.

Industry Sector	2010 LQ: Brewerytown vs. Philadelphia County	2019 LQ: Brewerytown vs. Philadelphia County
Transportation and warehousing	1.48	0.00
Management of companies and enterprises	0.13	3.26
Accommodation and food services	3.94	0.96

Figure 2.2: Industries with the most significant changes in comparative advantage between 2010 and 2019.

Qualitative Analysis

Brewerytown's location quotients provide a striking picture of the local economy. We know Brewerytown's population is increasing and becoming increasingly attractive to young professionals, which undoubtedly explains why the real estate, rental, and leasing sector remained the highest location quotient for both time periods under review. Additionally notable was the increase in management companies and enterprises between 2010 and 2019. Indeed, this also lends itself to correlate with the increase of Brewerytown's young professionals.

Walking down Brewerytown's main commercial corridor of Girard Avenue, there is no shortage of local and independently owned businesses. In 2015, the City of Philadelphia published an economic opportunity plan for Brewerytown. This economic opportunity plan outlines that, "The City of Philadelphia strongly encourages the use of certified Minority ("MBE"), Women ("WBE"), Disabled ("DSBE") and Disadvantaged ("DBEs") Business Enterprises (collectively, "M/W/DSBEs") and minority and female workers in all aspects of Brewerytown Master Plan..." (EO Plan p.2). There is a wide variety of different businesses from general "corner" stores and restaurants to hardware stores and daycares, it appears that Brewerytown is a booming center of M/W/DSBEs. Philadelphia's registered directory of certified M/W/DSBEs, however, indicates otherwise. In fact, none of the businesses along Brewerytown's main commercial corridor are registered.

Human Capital/Labor Analysis

In this section, we will conduct a human capital and labor analysis. We will continue to use 2010 vs. 2019 ACS data to analyze specific statistics within two different study areas in Brewerytown, hereafter referred to as the study area, and Philadelphia in terms of both employment type and labor force composition. From there, we will identify the strengths and issues facing the study area.

Overall, the industry employment rate (not the employed rate) in Philadelphia is 41.26% in 2010, while there is a small increase showing 44.46% in 2019. In this case, our study area includes four census tracts: 137, 138, 149, and 151.02. And the following bar charts show the industry employment rate of our study area.

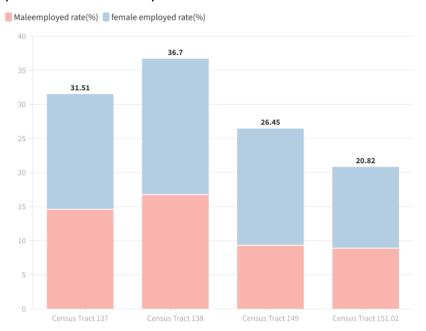


Figure 3.1: Industry employment rate by gender and the total industry employment rate of each tracts in our study area in 2010.

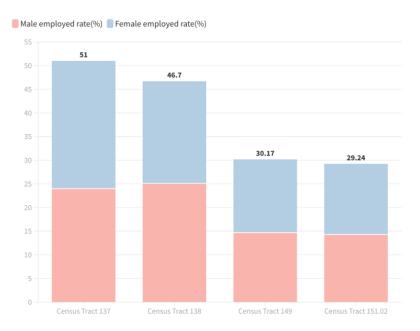


Figure 3.2: Industry employment rate by gender and the total industry employment rate of each tracts in our study area in 2019.

Industry Employment Analysis

For local employment, jobs are concentrated in the service occupations sector at 32.07% and in sales and office occupation at 33.71%. The total comes to 65.78%, nearly two-thirds of the total. This is followed by management, professional, and related occupations (16.51%) and Production, transportation and manufacturing occupation (12.13%). The two sectors together account for 28.64%, with construction accounting for the smallest share, at 5.51%. The most important industry with an advantage over Philadelphia's overall employment situation is the service sector, which is closely tied to the gentrification that Brewerytown has experienced in recent years. The new high-spending population is driving the growth of the surrounding service sector.



Figure 4.1: Industry by class of worker for the civilian employed population in our study area, 2010.



Figure 4.2: Industry by class of worker for the civilian employed population in our study area, 2019.

Labor Force Composition

When referring to specific Labor Force composition data, we focus on three areas: educational attainment, gender and age. Using the 2010 and 2019 census surveys, we can look at the changes in the composition of the labor force in the study area and in Philadelphia.

The first is the change in education status data, where there are three types of education status, i.e., less than high school education, high school education, and college and higher education. Each education status is divided into labor force (ILF) and not in labor force (NILF). The total number of items is six. From the comparison of the study area in 2010 and 2019. The education level of the overall labor force has increased significantly over time. As the level of education continues to increase, the labor force continues to increase. The higher percentage of the labor force population with not in the labor force below a high school degree in the study area compared to the overall data for Philadelphia implies that the issue of educational attainment is more prominent in the study area.

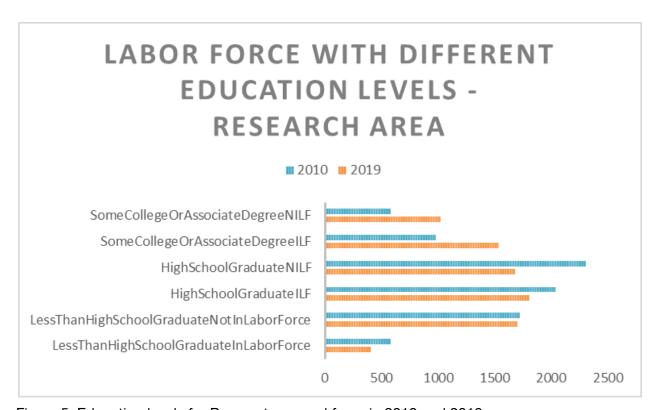


Figure 5: Education levels for Brewerytown workforce in 2010 and 2019.

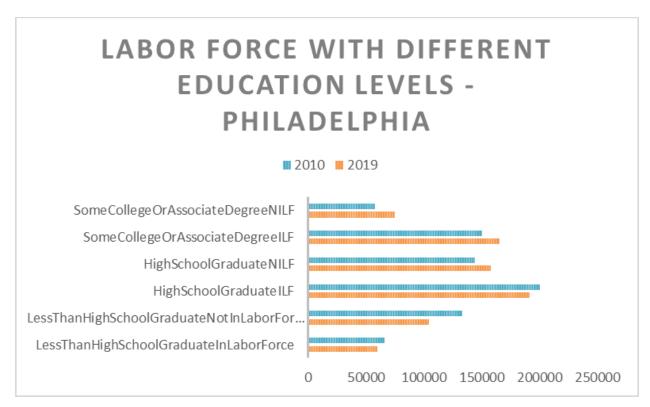


Figure 5.1: Education levels for Philadelphia workforce between 2010 and 2019.

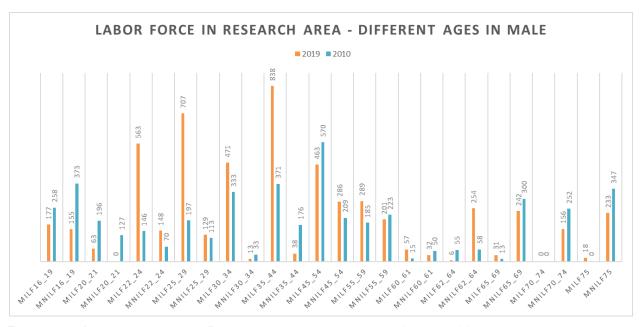


Figure 5.2: Ages of men in the Brewerytown workforce in 2010 and 2019.

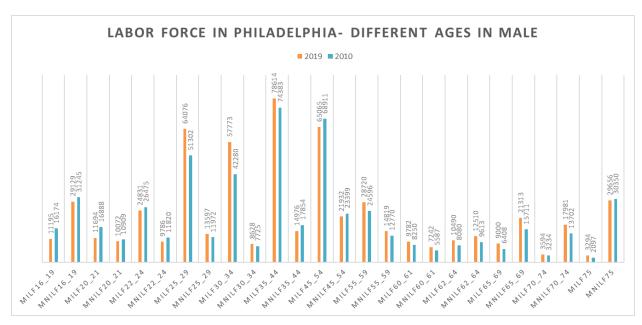


Figure 5.3: Ages of men in the Philadelphia workforce in 2010 and 2019.

The second is a comparison of the labor force and not in labor force 2010 and 2019 for each age group by gender. This comparison is still done within the study area and within the city of Philadelphia. The age groups are divided into 13 segments according to the census data. From the graphs, we can find the following interesting information. For the male labor force, there is a significant increase in the 25-44-year-old labor force in the 10-year comparison. There is a downward trend in the relatively young labor force (16-24 years old), which is consistent with an increase in time in education.

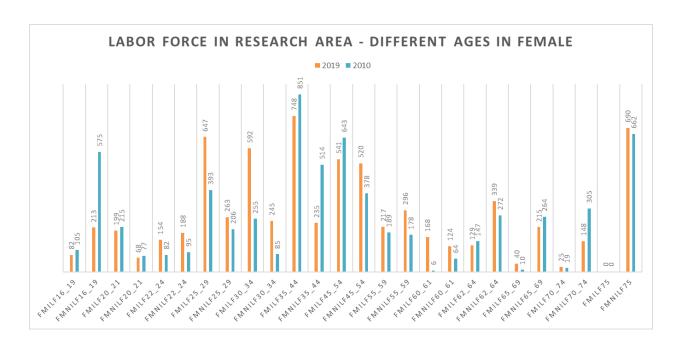


Figure 5.4: Ages of women in the Brewerytown workforce in 2010 and 2019.

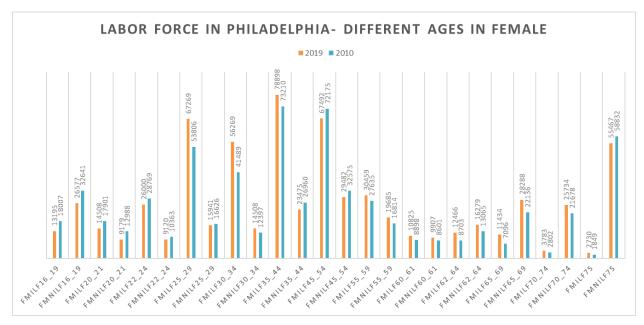


Figure 5.5: Ages of women in the Philadelphia workforce in 2010 and 2019.

Similar to the age distribution of the labor force population for males, the female labor force between the ages of 25-34 has seen considerable growth over the past decade. The youth labor force (25-34) has seen a higher percentage of growth compared to Philadelphia's overall employment, however, the female labor force population between the ages of 35-44 has trended downward. In general, from an industry perspective, the service sector and retail trade are items of strength in the study area compared to Philadelphia. How to leverage the existing strengths to enhance employment levels and enrich career choices is a key consideration. In terms of workforce composition, the study area has seen an influx of young workers over the past decade, so the employment of young workers should be one of our priorities. Secondly, a higher percentage of the female population is not in the labor force than the male population. How to make the employment environment more equitable for women is also a key consideration.

Economic Development Recommendation

Inspired by the Frankford CDC's model for workforce development, we would recommend that the Brewerytown Sharswood Civic Association (BSCA) partner with Philadelphia Works and the Philadelphia Office of Economic Opportunity (OEO) to create a robust workforce development

program. BSCA is an already known source for information and community resources in the neighborhood and has the capacity to include workforce development opportunities as a community resource. We decided to use Frankford CDC as a model because Frankford, a neighborhood in Northeast Philadelphia, has similar economic dynamics and demographics as Brewerytown. In Brewerytown, the initial target industry would be Accommodation and Food Services in large part because this sector has lost comparative advantage between 2010 and 2019. Jobs in this sector may also be more accessible, given that there are fewer barriers to entry such as higher education requirements. It would be feasible to create a workforce development program that supports training in hospitality and certification in food handling. Furthermore, to strengthen long-term wealth building for Brewerytown residents, there could also be a component of the workforce development program that supports small business owners and aspiring small business owners.

As mentioned earlier in this report, Philadelphia's OEO has a goal in place to fulfill 35% of its contracts through minority, woman, or disabled-owned enterprises (businesses that have at least 51% ownership by a minority, woman, or person with a disability). To facilitate this, there is an online application and certification process where an external agency verifies that a business is a M/W/DBSE. Once approved, businesses become members of the official M/W/DBSE registry for the City of Philadelphia. Once business owners register, they can access contract opportunities. Given the prevalence of small businesses in Brewerytown, this initiative could help address some of the equity issues that exist between different genders of the labor force and provide more employment opportunities for women. To support more equitable economic development in Brewerytown, it is important that small business owners are aware of and able to access the registration process. The Brewerytown Sharswood Civic Association could serve a key role in sharing this information. We would recommend the organization of a quarterly community outreach day, in partnership with community-based organizations and the Department of Recreation, to support small business owners through the registration process.

Works Cited

- Frankford Neighborhood in Philadelphia, Pennsylvania (PA), 19124, 19137 Detailed Profile.

 Frankford neighborhood in Philadelphia, Pennsylvania (PA), 19124, 19137 subdivision profile real estate, apartments, condos, homes, community, population, jobs, income, streets. (n.d.). Retrieved from https://www.city-data.com/neighborhood/Frankford-Philadelphia-PA.html
- M/W/DSBE Inclusion Works Compliance Reporting System. Office of Economic Opportunity: MWDSBE Inclusion Works Compliance Reporting System. (n.d.). Retrieved from https://phila.mwdsbe.com/
- Office of Economic Opportunity, & Dowd-Burton, A., City of Philadelphia: Economic Opportunity Plan, Brewerytown Master Plan (2015). Philadelphia, PA; City of Philadelphia.
- OnTheMap. (n.d.). Retrieved from https://onthemap.ces.census.gov/
- U.S. Bureau of Labor Statistics. (n.d.). QCEW data files. U.S. Bureau of Labor Statistics. Retrieved from https://www.bls.gov/cew/downloadable-data-files.htm
- U.S. Bureau of Labor Statistics. (2022, March 31). Sector 54 professional, scientific, and technical services May 2021 OEWS industry-specific occupational employment and wage estimates. U.S. Bureau of Labor Statistics. Retrieved November 28, 2022, from https://www.bls.gov/oes/current/naics2_54.htm
- U.S. Census Bureau (2010). ACS 5-Year Estimates Data Profiles. Retrieved from https://data.census.gov/table?g=0500000US42101&y=2010&d=ACS+5-Year+Estimates+Data+Profiles&tid=ACSDP5Y2010.DP05
- U.S. Census Bureau (2019). ACS 5-Year Estimates Data Profiles. Retrieved from https://data.census.gov/table?g=0500000US42101&y=2019&d=ACS+5-Year+Estimates+Data+Profiles&tid=ACSDP5Y2019.DP05
- Workforce development. Frankford CDC. (n.d.). Retrieved from https://frankfordcdc.org/workforce-development/