Community Profile of Census Tract 4031

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Introduction

In this report, most of the data come from the U.S Census Bureau, American Community Survey 5-year estimates in 2010 and 2019. We also used LEHD data from the U.S Census Bureau and Social Explorer website for business characteristics analysis purposes.

In general, Census Tract 4031 possesses several interesting yet unique characteristics that distinguish it from the rest of the city. Such features will be further explained in the following report.

Key Findings

- The majority of populations are young adults and middle-aged working group, with higher educational level, which is a result of better high education and work opportunities
- There was a lot of population inflow from 2010 to 2019, with a larger proportion of male
- The Tract experienced a lot faster growth from 2010 to 2019 than city average income, which could be attributed to occupations in the field of high tech, education, and finance
- The area has a notably higher ratio of renter-occupied units even with a more expensive median rent, but the median income is also proportionally greater than the rest of the city
- Overall, since more buildings are built in recent years compared to the rest of Oakland, the area is undergoing a period of rapid development as well as high personnel mobility

People and Households

Number of People

Census Tract 4031 had a population size of 2101 with a margin of error ± 256 in 2019. Compared to the size in 2010, which was 1184 with a margin of error ± 253, the tract almost doubled its population size. One thing to notice is that the difference in the percentage of males and females increases from about 15% to about 30% during the time from 2010 to 2019. Though we have a relatively large margin of error which prevents us from drawing absolutely confident conclusions, we may say that more males move to the area in these 10 years.

Age Structure of the Population

Figure 1: Age Distribution of the Population in 2019
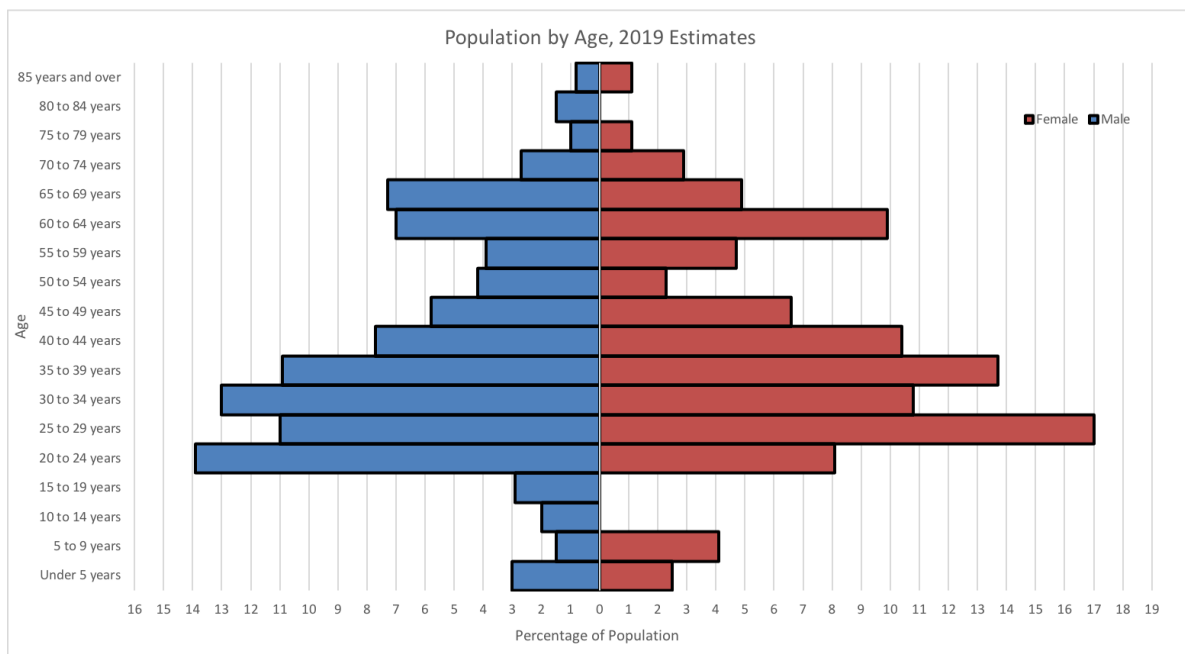
Source: U.S. Census Bureau; American Community Survey, 2019, Table S0101.

According to Figure 1, Census Tract 4031 had a very interesting population age structure. Male and female have similar age distributions. One interesting thing is that there are few people under 19 years old. It may suggest that the tract does not have good educational resources for young children. But we have many people who are 20 to 24 years old, which suggests that the area may have some good higher education institutes. It is pretty surprising that there is no female between 10 and 19 years old. It may suggest that the area is pretty dangerous that young girls choose to move to other places. Most of the population are in the range of 20 to 50 years old. This could suggest that the Tract is suitable for people who are still working or in college, but not that suitable for young children and those who are already retired.

Number of Households

From Figure 2, we can see that tract 4031 had 898 (± 67) households in 2019 while only 539 (± 76) households in 2010. The increase in the number of households could be explained by the increase in the population size. The two metrics are closely related. More people moved to the area during the time between 2010 and 2019.

Community Profile: Census Tract 4031

Figure 2: Comparison of 2010 and 2019's Count of Total Households
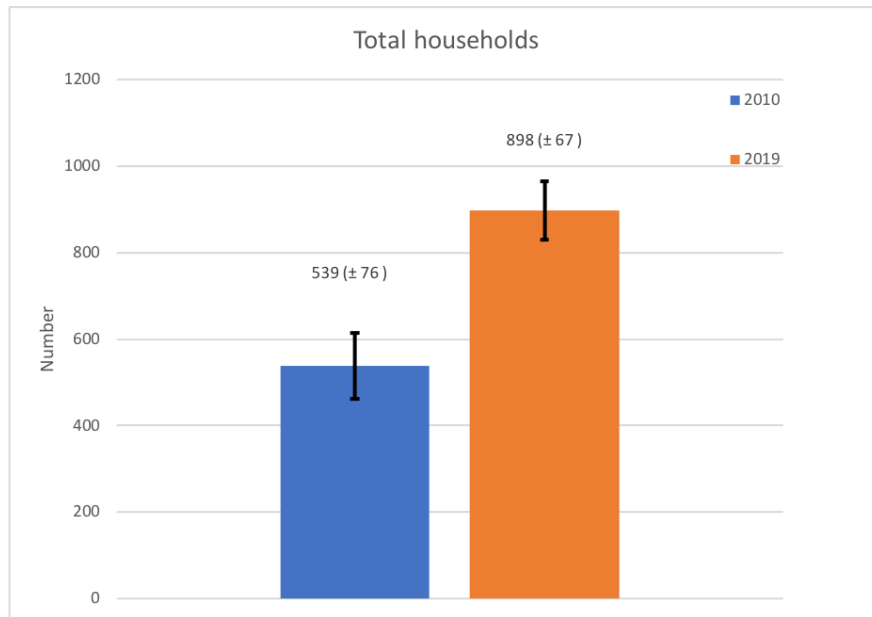
Source: U.S. Census Bureau; American Community Survey, 2010, 2019, Table S1101.

Households Type

In 2019, about 11.8% of households had one or more people under 18 years. By contrast, there were about 27.1% of households with one or more people 60 years and over. This corresponds to the age distribution of the people in Tract 4031. About 37.1% of households were classified as householders living alone, which is significant. However, only 4.2% of households were classified as one 65 years and over person living alone. The contrast shows that many people who lived in the area were singles who were still working or receiving higher education.

Figure 3: Table of Selected Households by Type:

Selected Households by Type	Percentage	Margin of Error
Households with one or more people under 18 years	11.8%	±5.2
Households with one or more people 60 years and over	27.1%	±7.8
Householder living alone	37.1%	±7.6
65 years and over	4.2%	±2.9

Source: U.S. Census Bureau; American Community Survey, 2019, Table S1101.

Community Profile: Census Tract 4031

Racial and Ethnic Composition

From Figure 4, we could see that Tract 4031 had a majority of Asians, which is in contrast to most areas in Oakland where Asians are minorities. But we need to be careful here as the margin of error is ± 6.1 for Asians and ± 5.7 for White people. It is still possible that there are more White people than Asians in the area, but it is highly likely that Asians are the majority. It is certain that tract 4031 also has many people of other races. The racial decomposition is diverse in the area. It is pretty difficult to estimate the aggregated amount of American Indian and Alaska Native and Native Hawaiian and Other Pacific Islander. The aggregated group has a percentage of 0.9%, but a margin of error sqrt (0.5**2 + 0.9**2) = 1.03. Such a relatively large margin of error (compared to the estimated percent) makes it very hard to know if there are still American Indians and Alaska Native and Native Hawaiian and Other Pacific Islanders living in the area.

Figure 4: Racial Composition in Downtown Oakland in 2019
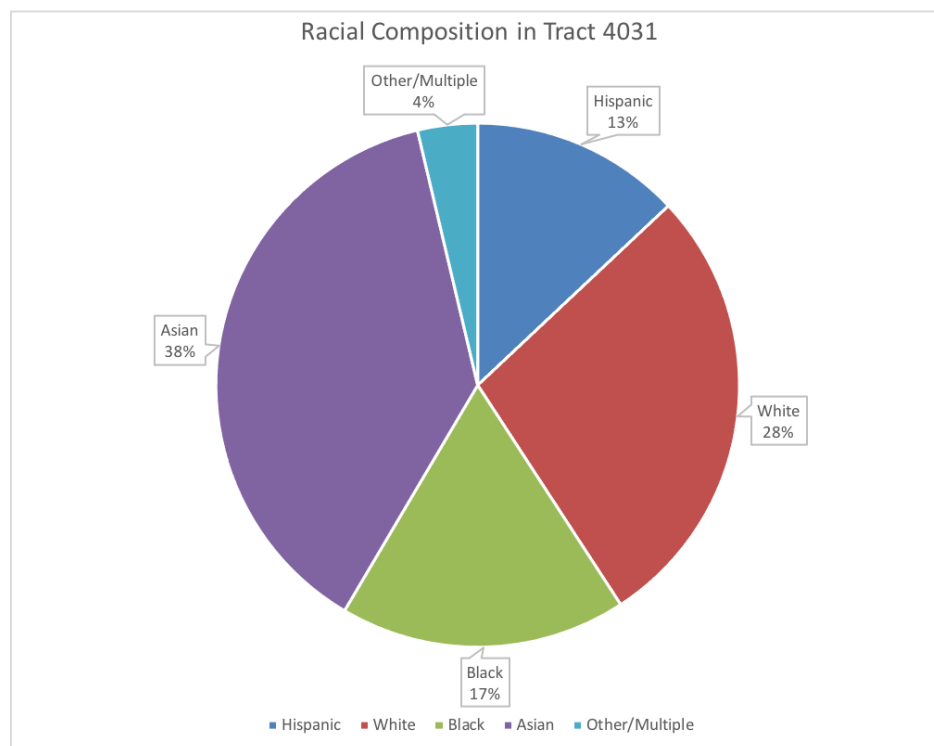
Source: U.S. Census Bureau; American Community Survey, 2019, Table DP05.

Income and Poverty Level

In 2010, Tract 4031 was significantly less wealthy than its encapsulating city. The median household income in the tract was around $32,000, with Oakland hovering around $50,000. However, by 2019, while the median income in Oakland ballooned to $73,000, the median income in the tract had an even more significant increase from $32,000 to about $95,000. This huge increase shows how the Tract is not only benefitting from the rest of Oakland's growth but also taking the lead in the growth.

From the estimate, it turns out 42% of the households were below the federal poverty line of $22,113 for a family of four in 2010. In 2019, this number became only 26%. From the former analysis on the racial composition of this tract, we could see that tract 4031 has a majority of Asians and Non-Hispanic Whites, which is in contrast to most areas in Oakland where Asians are minorities. However, due to the lack of median income by race, it is not possible to make conclusive statements about the significant increase in income in Tract 4031.

Figure 5: Median Household Income in Tract 4031 and Oakland in 2010 and 2019

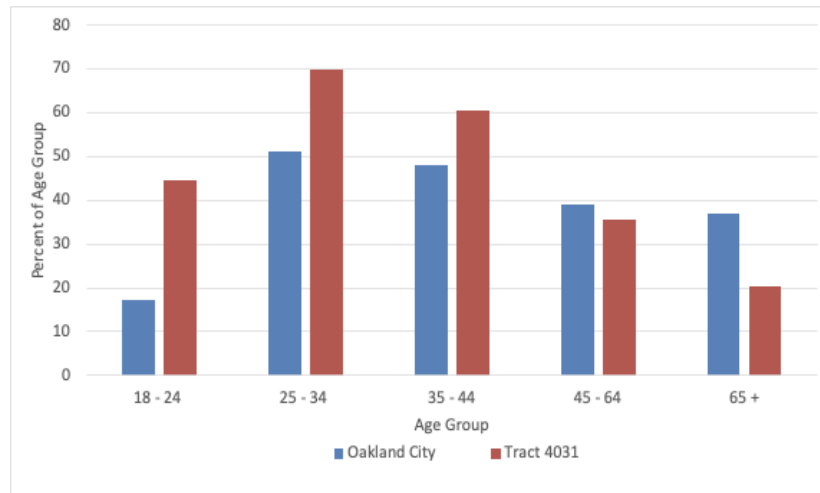|	Census Tract 4031	
	Estimate	Margin of Error
Median household income in 2010 (dollars)	31,719	±17,055
Median household income in 2019 (dollars)	94,688	±9,953
	Oakland City, California	
	Estimate	Margin of Error
Median household income in 2010 (dollars)	49721	±1025
Median household income in 2019 (dollars)	73,692	±1555

Source: U.S. Census Bureau; American Community Survey, 2019, Table S2503.

Educational Attainment

When we compare the percentage of higher education in the age group between the tract 4031 and Oakland city, we see that there is a significantly larger percentage of the 18-to-24 age group in this Tract than in Oakland city. This is understandable, as UC Berkeley students might prefer to live closer to campus. It only takes about 10 minutes from downtown Oakland to the campus by car. There are also many colleges and universities near this tract such as the Lincoln University, which is another potential reason for the larger higher education received rate. From

the former research on household income, we see this tract would be expected, given the high median income of the tract, that the income-earners in these households would hold a comparable or even higher degree of educational attainment to the remainder of Oakland.

Figure 6: Percentage of Higher Education in All Age in Tract 4031 and Oakland in 2019

Source: U.S. Census Bureau; American Community Survey, 2019, Table S1501.

Labor Force Characteristics

Census Tract 4031 and the city of Oakland consist of mostly professionals in the labor force, seemingly due to the high educational attainment. The census tract consisted of mostly professional workers throughout the years from 2010 to 2019. The top industry for tract 4031 residents in 2010 was "educational services, health care, and social assistance", according to the 2010 5-year American Survey. In 2019, the distribution of jobs among tract residents stayed about the same over that period. The top three industries for tract 4201 also included engineering, education, and business occupations. Another point worth noting is the top industry became "Professional, scientific, and management, and administrative and waste management services". This trend might be caused by the growth of tech firms these years. At the same time, the decline of manufacturing workers is also a trend that parallels the entire United States. Interestingly, those occupation categories aligned with Oakland's top three in 2019. The only difference is the city still has almost 22% of the residents be employed in manual labor or service jobs.
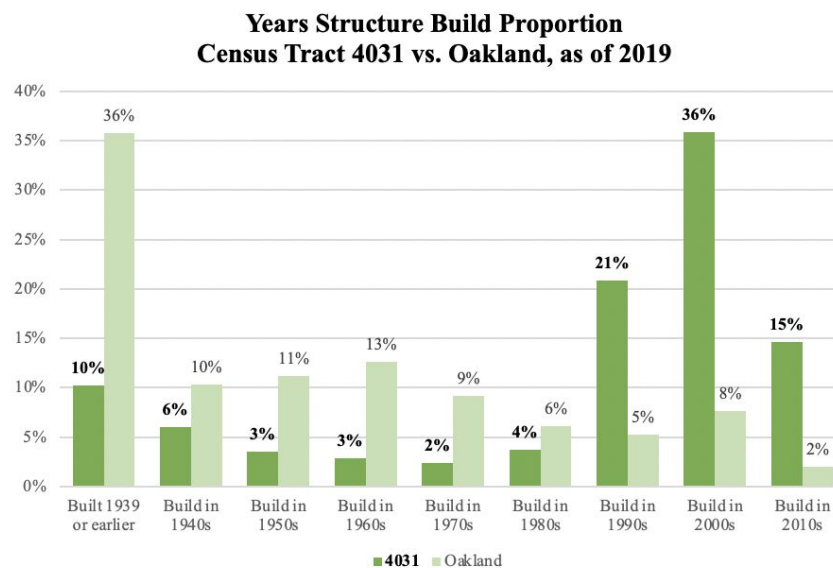
Community Profile: Census Tract 4031

Housing Stock - Composition and Physical Characteristics

From 2010 to 2019, the total housing unit increased from 629 to 945, with an increasing rate of 50.2%. Compared to the city, Census Tract 4031 has a much higher housing unit increasing rate. During this period, the city of Oakland witnessed an increasing rate of only 5.7%. This resonates with the fact that the population increase in this area is much greater than the population increase in Oakland, as stated earlier. Therefore, more housing units were needed.

It is to note that the number of housing units differs from the number of households discussed above -- there are slightly more housing units available in the area than the number of households in both 2010 and 2019, the difference between which is the number of vacant units. Interestingly, despite there being more available housing units in 2019 compared to 2010, the number of vacant units in Census Tract 4031 decreased from 90 to 47, with a 47.8% drop, greater than the city's overall 32.4% drop. This fact further demonstrates that there is a larger demand for housing in Census Tract 4031 compared to the city average.

The greater housing demand is further underlined by the fact that housing units were more likely to be recently constructed compared to the city overall. Figure 7 can be translated into that rapid development is happening in Census Tract 4031 in recent years, while large-scale constructions may happen in other parts of the city in previous decades.
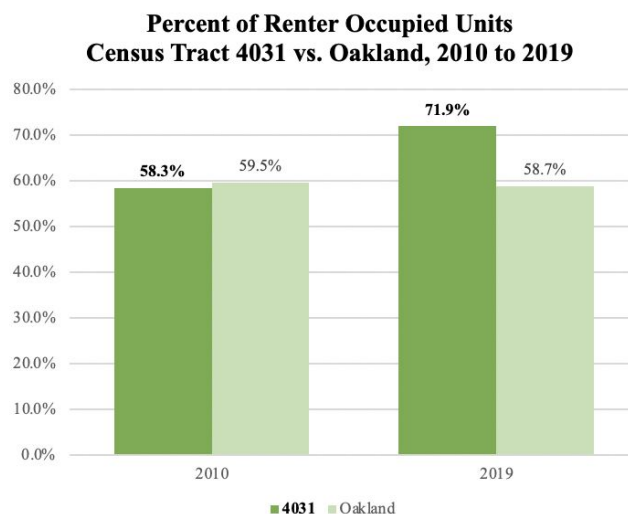
Figure 7: Years Structure were Built as Total Proportion Comparison

Source: U.S. Census Bureau; American Community Survey, 2019, Table DP04.

Community Profile: Census Tract 4031

Owner vs. Renter Situation Explained

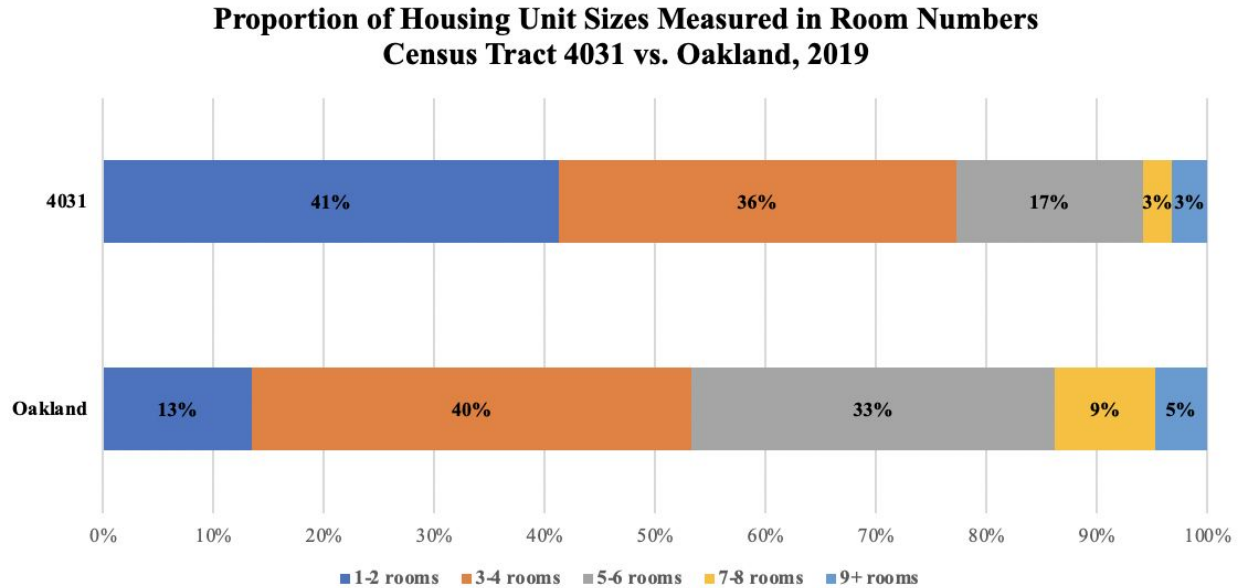Figure 8: Percent of Renter Occupied Units Comparison

Source: U.S. Census Bureau; American Community Survey, 2010, 2019, Table DP04.

According to Figure 8, in 2010, there was not much difference between the percentage of renter-occupied units in Census Tract 4031 and the city of Oakland. However, in 2019, the percentage of renter-occupied units increased significantly to 71.9% in Census Tract 4031 while in the city of Oakland, the percentage of renter remained relatively stable. It shows that the proportion of renter increased was, in fact, a regional trend rather than an overall pattern in the city.

Ostensibly, the high percentage of renter-occupied units is counterintuitive. From 2010 to 2019, the median income of the area changed from notably lower to remarkably higher than the city average, as discussed earlier, while the median housing price stayed lower in the Census Tract compared to the city overall. So why do people from an area with high income and low housing prices tend to rent instead of buying the homes?

Looking closely at some of the housing characteristics in 2019, homes in Census Tract 4031 tend to be smaller than homes in the city of Oakland overall. The proportion of homes with only 1-2 rooms is greater in Tract 4031 than in Oakland, 41% compared to 13%. In fact, the median room number in Census Tract 4031 is 2.9 while for Oakland is 4.3. This explains why the median home value is cheaper in 4031 than in Oakland overall.
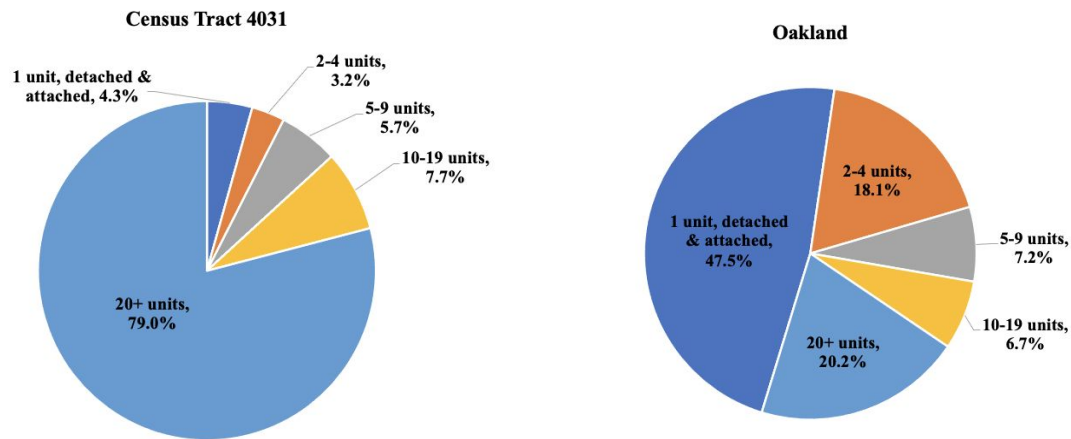
Community Profile: Census Tract 4031

Figure 9: Proportion of Housing Unit Sizes in Room Numbers Comparison

**Proportion of Housing Unit Sizes Measured in Room Numbers
Census Tract 4031 vs. Oakland, 2019**

	1-2 rooms	3-4 rooms	5-6 rooms	7-8 rooms	9+ rooms
4031	41%	36%	17%	3%	3%
Oakland	13%	40%	33%	9%	5%

Source: U.S. Census Bureau; American Community Survey, 2019, Table DP04.

Also, as shown in pie charts, the highest proportion in the total number of buildings in Census Tract 4031 is 20+ units structures, whereas the highest proportion is 1 unit structures in the city of Oakland overall. It shows that buildings are larger and denser in this Census Tract.

Figure 10: Number of Units in Each Structure Comparison

Census Tract 4031

1 unit, detached & attached, 4.3%
2-4 units, 3.2%
5-9 units, 5.7%
10-19 units, 7.7%
20+ units, 79.0%

Oakland

1 unit, detached & attached, 47.5%
2-4 units, 18.1%
5-9 units, 7.2%
10-19 units, 6.7%
20+ units, 20.2%

Source: U.S. Census Bureau; American Community Survey, 2019, Table DP04.

Moreover, the higher percentage of the renter-occupied units is not a result of the lower renting price. In fact, the distribution of rent in Census Tract 4031 shows a polarized pattern: the distribution on both ends of the spectrum tends to be high in the middle ranges it drops. Contrastingly, the rent for the city shows a relatively normal, bell-shaped distribution. The

median rent for Census Tract 4031 is $2,405 while the median rent for the city is $1,600. In other words, renters generally face a higher rent in Census Tract 4031.

Figure 11: Renter-occupied Unit Rent Range Distribution Comparison
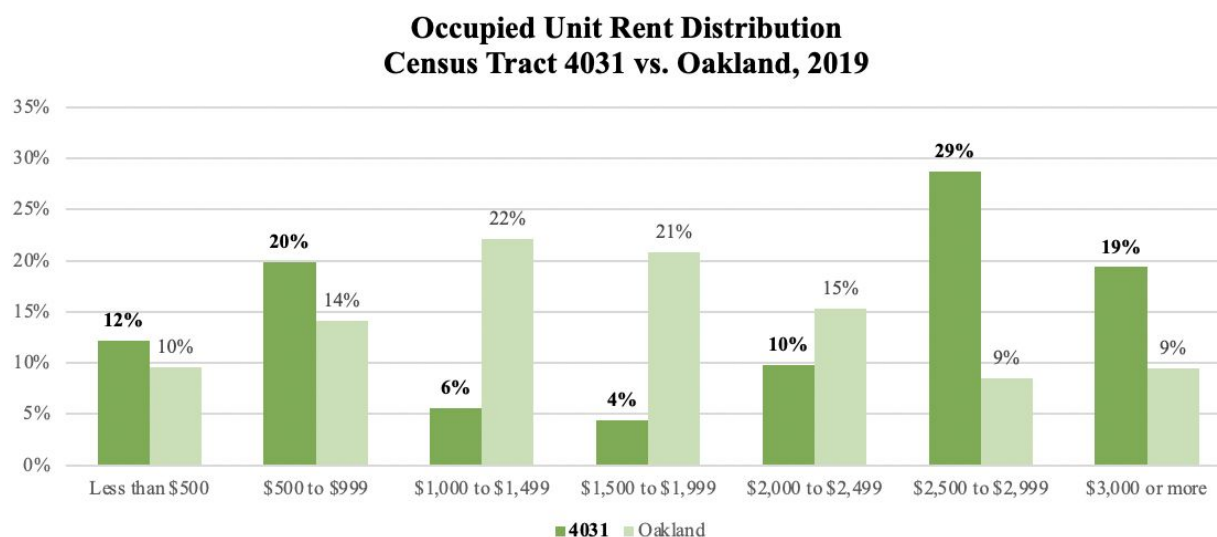
Source: U.S. Census Bureau; American Community Survey, 2019, Table DP04.

However, in terms of rent as a percentage of household income, the Tract does not have a distinguishing difference compared to the city, because household income in Census Tract 4031 is generally greater than household income in the city.

Figure 12: Gross Rent as a Percentage of Household Income Comparison

Source: U.S. Census Bureau; American Community Survey, 2019, Table DP04.
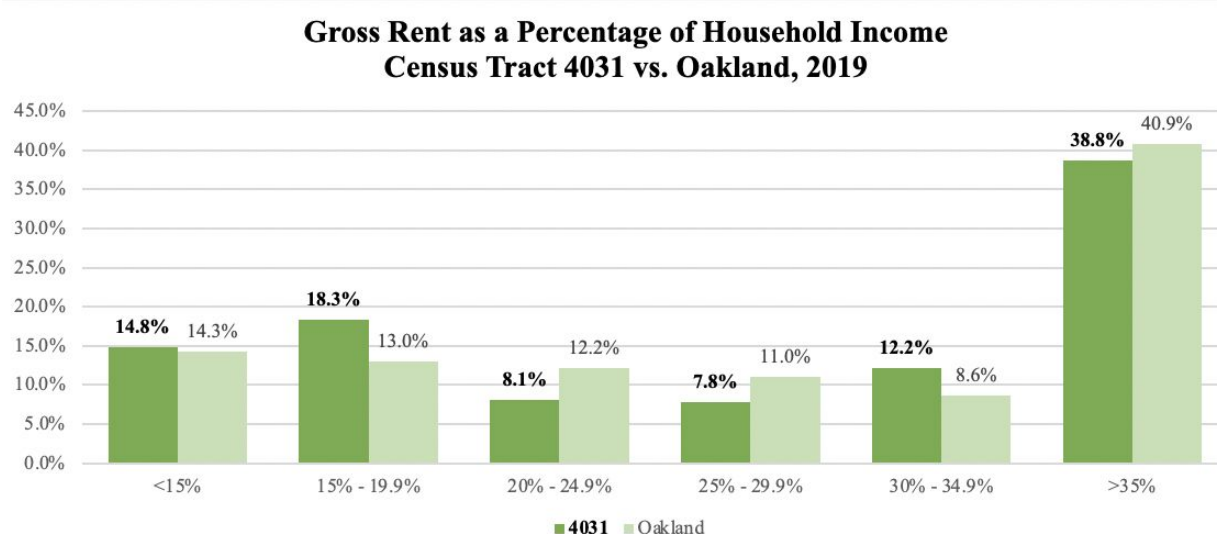
Community Profile: Census Tract 4031

Another reason behind the higher renter-occupied proportion might be the smaller appreciation rate of houses in Census Tract 4031 compared to the city overall. From 2010 to 2019, the median home price appreciated by 88.6% in the city of Oakland, from $428,200 to $807,600, while the median home price appreciated by 40.4% in the Census Tract 4031, from $433,200 to $608,200. From an investment perspective, it might be more attractive to purchase homes from other parts of the city compared to this Census Tract, as other regions appreciate much faster, resulting in a low proportion of owner-occupied units.

## Journey-to-work Travel Characteristics and Vehicle Availability

Figure 13: Vehicle Availability Proportion Change from 2010 to 2019
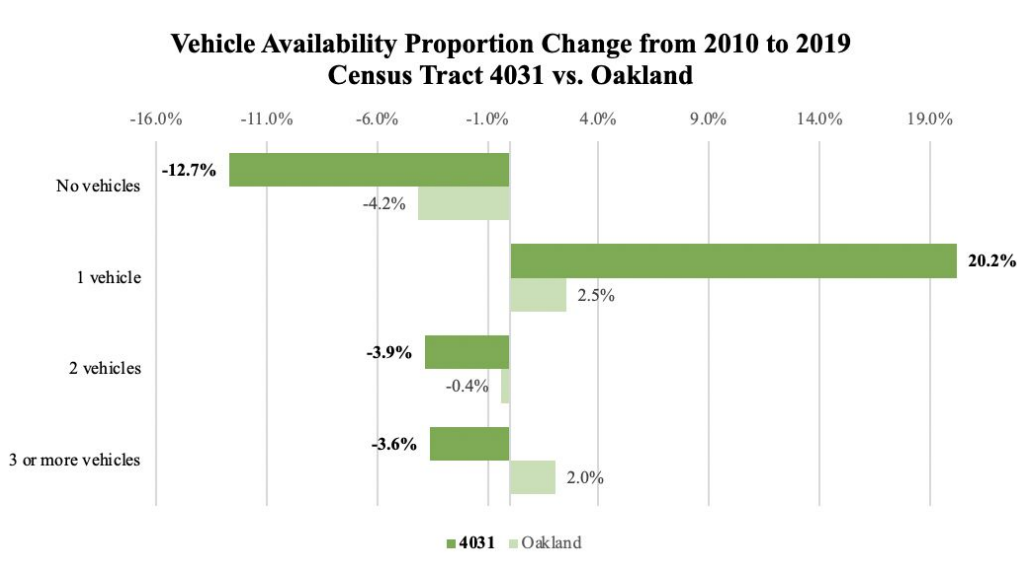
Source: U.S. Census Bureau; American Community Survey, 2019, Table DP04.

Figure13 is the proportion change of household vehicle availability from 2010 to 2019. Owning only one vehicle per household seems to become a more popular choice in 2019 than nine years ago in Census Tract 4031, as the proportion of this category increased by 20% while all other categories had negative changes. This could either because of the smaller family sizes, adjacent to working places, or inconvenient parking facilities in the city.

Figure 14: Journey-to-work Travel Characteristics Proportion
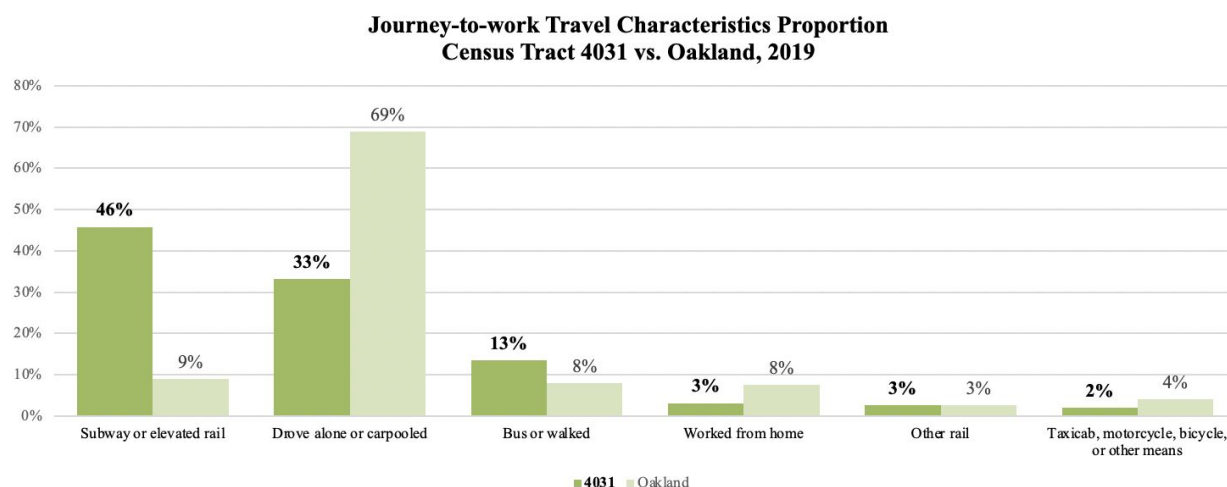
Source: U.S. Census Bureau; American Community Survey, 2019, Table B08406.

In terms of traveling characteristics, Census Tract 4031 prefers more using public transportation means such as subway or bus to driving, while Oakland city overall shows a preference for using cars. This is in fact the case as the proportion of families owning more than one car is higher in Oakland than in Census Tract 4031.

Business Characteristics in the Zip Code

Figure 15: Zip Code Area of Census Tract 4031 and Surrounding Areas
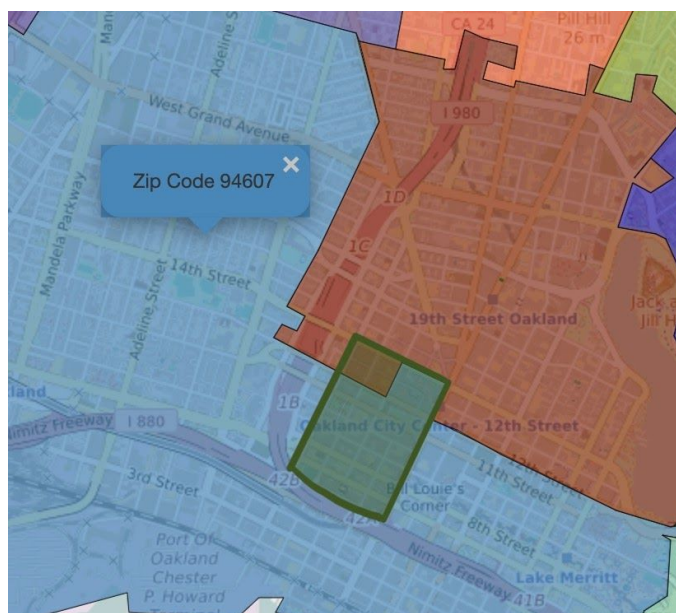
Source: "Map of Zip Codes in Oakland, California" ZipDataMaps.com, 2021
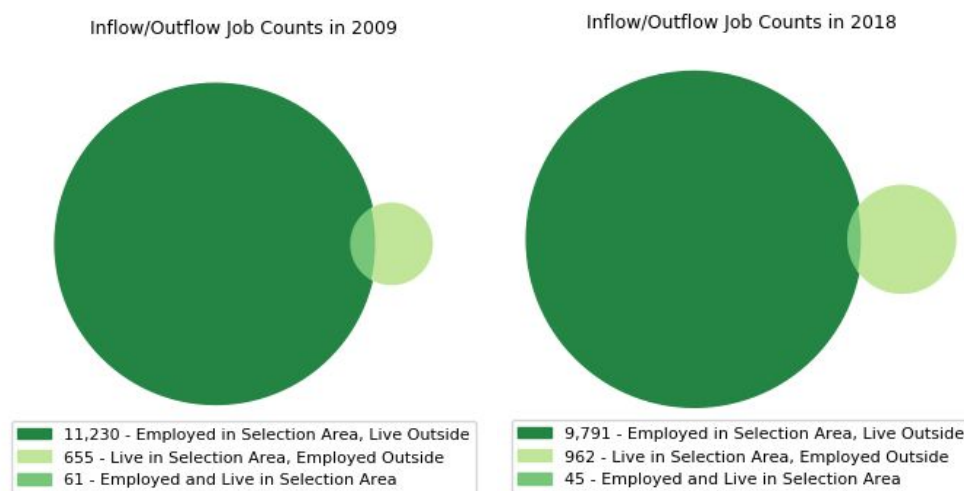
Community Profile: Census Tract 4031

In Figure 15, Census Tract 4031 is delineated and highlighted in green. Zip Code 94607 best represents most of the Tract, which is highlighted in blue. A small section of the Tract belongs to Zip Code 94612, which is highlighted in red. The 94607 Zip Code will be used as the geographic scale in this and the following section.

In 2018, there were 40,508 establishments in Alameda County, which was an increase of 2,607 than 2014's 37,901. The largest sector in the Zip Code area was Professional, Scientific, and Technical Services in 2010, and the same sector was still the largest in 2019, with an increasing rate of 11%. This reflects the same story as professions in this area tend to be high income and require a relatively high educational background.

Commuting Flows

Here we discuss the inflows and outflows of people that live and work in this area. In 2009, 91.5% percent of those people that lived in 94607 were employed outside the ZIP code area. In 2018 (the latest year with published data), 95.5 percent of residents of the ZIP code traveled outside the area for work. It is a constant pattern for people of 94706 to be employed outside the area they live and the ratio is still in growth.

Figure 16: Inflow/Outflow for 94607 Zip Code in 2009 and 2018

Inflow/Outflow Job Counts in 2009

11,230 - Employed in Selection Area, Live Outside
655 - Live in Selection Area, Employed Outside
61 - Employed and Live in Selection Area

Inflow/Outflow Job Counts in 2018

9,791 - Employed in Selection Area, Live Outside
962 - Live in Selection Area, Employed Outside
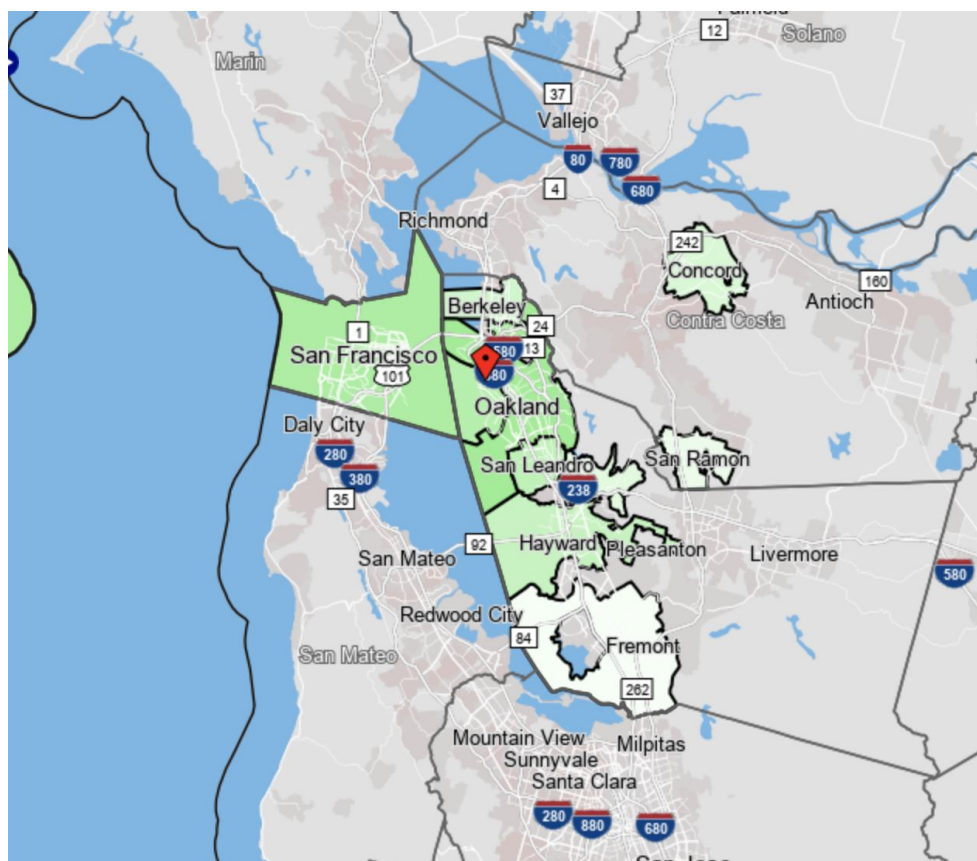45 - Employed and Live in Selection Area

Source: U.S. Census Bureau. 2020. LEHD Origin-Destination Employment Statistics Data (2002-2019). Washington, DC: U.S. Census Bureau, Longitudinal Employer-Household Dynamics Program, accessed on Feb 19, 2021, https://onthemap.ces.census.gov/.

In 2009, close to 23% of workers in Tract 4031 stayed within Oakland, and another 10% commuted to San Francisco. Nearly 47% of workers work outside of both Alameda or San Francisco counties. These patterns mirror those of Oakland. Nearly half of residents live within 25 minutes of their work.

In 2018, only about 15% of workers stay within Oakland and another 11% commute to San Francisco. The number of workers who work outside of both Alameda and San Francisco counties has increased 8% since 2009.

Although a common indicator of gentrification is an increasing spatial mismatch between jobs and residences and this phenomenon is growing in this area. In this tract, jobs are staying close to home.

Figure 17: Work Destination Counts by Places (Cities, CDPs, etc.) Where Workers are Employed

Source: U.S. Census Bureau. 2020. LEHD Origin-Destination Employment Statistics Data (2002-2019). Washington, DC: U.S. Census Bureau, Longitudinal Employer-Household Dynamics Program, accessed on Feb 19, 2021, https://onthemap.ces.census.gov/.

Conclusion

In this report, we analyzed the neighborhood in the Census Tract 4031 from 2010 to 2019 in comparison with the city of Oakland overall. The area experienced fast growth during the time from 2010 to 2019. Not only population size almost doubled, but the average income also became much higher. Through the analysis of population age distribution and comparison between income/rent level of the Tract and the city, we found that the area is occupied mostly by young adults and middle-aged working groups, with higher educational levels. Also, the majority of the population is male. It suggests that the Tract is heavily impacted by the high tech, higher education, and finance industry. In addition, the analysis of new buildings suggests that the area is undergoing a period of rapid development as well as high personnel mobility.

It is important for the city of Oakland to recognize the importance of this area with regard to providing high-skilled workers and highly educated new generations for the city, in general, to utilize in the future by creating more attractive policies for maintaining its fastly developing status.

Citation

U.S. Census Bureau; American Community Survey, 2010.

U.S. Census Bureau; American Community Survey, 2019.

"Map of Zip Codes in Oakland, California" ZipDataMaps.com, 2021.

U.S. Census Bureau. 2020. LEHD Origin-Destination Employment Statistics Data (2002-2019). Washington, DC: U.S. Census Bureau, Longitudinal Employer Household Dynamics Program, accessed on Feb 19, 2021, https://onthemap.ces.census.gov/.