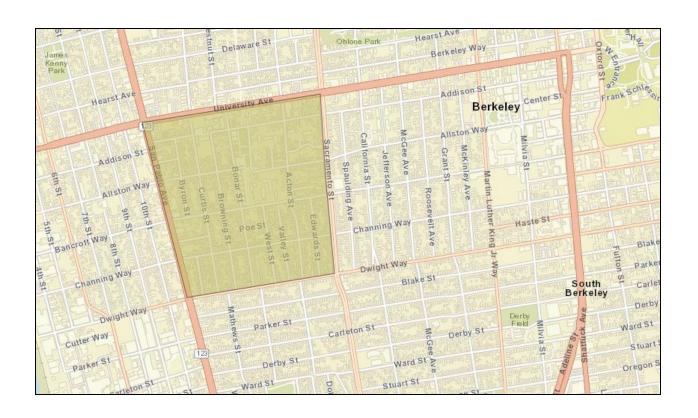
Community Profile of Census Tract 4231



CP101 Assignment 1

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I. Introduction

This community profile describes the population and household characteristics of census tract 4231 in the City of Berkeley. A mostly residential neighborhood in Southwest Berkeley, the tract is bounded by University Avenue and Dwight Way to the north and south, and by San Pablo Avenue and Sacramento Street to the west and east.

About the data

This report is based primarily on census data from 2009 and 2017. Step-down projections are based on ACS data from 2017 provide more recent figures and tables for income, educational attainment, and household composition

Summary of Key findings

Census tract 4231 bounds a neighborhood noted on Google Maps as "Poet's Corner", and also contains a large recreational area, Strawberry Creek Park. Our findings identify a number of features that distinguish this census tract from Berkeley as a whole, as well as changes in the community which have occurred between 2009 and 2017, which we have summarized below.

Demographic shifts from 2009 to 2017	Notable differences from Berkeley as a whole
 Family household size increased Increase in Asian residents Higher levels of educational attainment Increase in residents below the poverty level as well as high above it Increased use of biking and public transit as a means of transport to work 	 Higher percentage of family households Greater percentage of Black or African American residents Younger dominant age cohort Faster growth of educational attainment Greater increase in renter-occupied units Larger increases in per capita income

II. Population and Households

In the 2017 census, the total number of people in the tract was 4319 and the total number of households was 1966. The tract contained 3.6% of the total population of the city of Berkeley and 4.3% of the households in the city of Berkeley. (See Appendix Section I)

Increasing Household Size

Between 2009 and 2017 census counts, the number of people in the tract increased by 18.2%, and the number of households in the tract increased by 16.5% in the same time period. This is likely related to the increase in one-and two-person households, discussed in the section on Household Type and Composition.

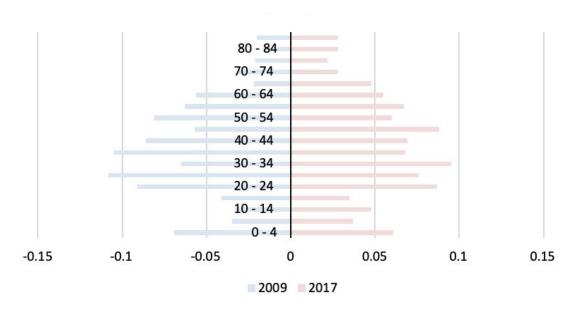
III. Age Structure of the Population

Figure 1 shows age information in 5-year age groups for 2009 and 2017. In 2017, the largest age group was 30-to-34-year-olds, comprising 9.5% of the total population of the tract. In 2009 however, the largest age group was 25-to-29-year-olds, who comprised 10.8% of the total population of the tract. The largest age groups in this census tract appear to have shifted to a slightly older range, but it is important to note that this shift could be the effect of people from 2009 still living in this census tract in 2017.

Younger residents in tract 4231

Despite fluctuations in age-group distributions, residents of census tract 4231 tend to be younger than Berkeley as a whole, where the largest age group is 20-24. (See Appendix Section II)

Figure 1. 2009 and 2017 Age Pyramid Tract 4231



Sources: U.S. Census Bureau, 2005-2009 and 2013-2017 American Community Survey 5-Year EstimatesS0101: Age and Sex

IV. Household Type and Composition

Increasing household sizes

Figure 2 shows that from 2009 to 2017, However, five-person households decreased by 91%, yet one of the most notable shifts in household composition is the 147% increase in 4 person households. Overall, family household size also increased by 53% between 2009 and 2017.

Figure 2. Family-Household Size in Census Tract 4231 between 2009 - 2017

Household Size	2009	2017	Percent Change, 2009-2017
2-person	240	392	63%
3-person	186	316	70%
4-person	70	173	147%
5-person	101	9	-91%
6+ person	0	23	0%

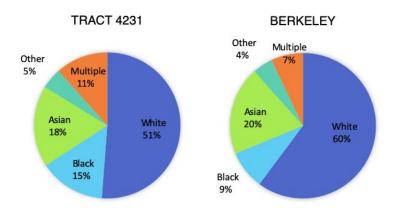
Sources: U.S. Census Bureau, 2005-2009 and 2013-2017 American Community Survey, Table B11016 - HOUSEHOLD TYPE BY HOUSEHOLD SIZE

A higher proportion of family households

The Census Tract 4231 has a very similar household type distribution compared to the city of Berkeley in 2017. The percentage of family households with children in tract 4231 is slightly larger than the city. With a location quotient of 1.13, family households with children are slightly overrepresented compared to the rest of the city. (See Appendix Section III.)

V. Racial and Ethnic Composition

Figure 3. racial and ethnic composition of tract 4231 and the city



Sources: U.S. Census Bureau, 2005-2009 and 2013-2017 American Community Survey, Table B02001: RACE - Universe: Total population

Increase in Asian and Multiple Racial/Ethnic Residents

A noticeable shift occurred in the racial and ethnic composition of the tract between 2009 and 2017. Specifically, both Asian residents and multiple racial/ethnic residents increased by 61% and 72% respectively from 2009 to 2017.

Higher proportion of black and African American Residents

Figure 4 compares the racial and ethnic composition of the census tract and the city. Compared to the city of Berkeley, census tract 4321 contains a higher proportion of black and African American residents, with a location quotient of 1.75. Meanwhile, the tract has lower than average representation of American Indian and other racial and ethnic, with location quotients of 0 and 0.34 respectively. (See Appendix Section IV)

Figure 4. Percent of African American Residents by Block



Source: Total Population: Black or African American Alone, 2020. Social Explorer, https://www.socialexplorer.com/66e626d847/edit (based on data from US Census Bureau ACS 2017 5-year survey; date accessed).

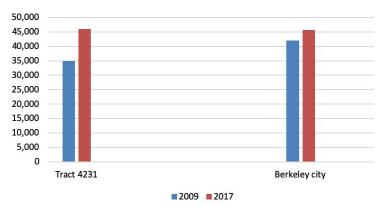
VI. Income and Poverty

Increasing per-capita income

The per capita income of tract 4231 increased by 31% between 2009 and 2017, a phenomenon which tracks the city-level increase of 9%. Notably, tract 4231 has a faster growth on Per capita income in tract 4231 has increased at a faster rate than Berkeley as a whole and surpasses city-wide growth by \$229. (See Appendix Section V.)

^{*} See Appendix Section IV Margin of Error and Confidence Intervals

Figure 5. Poverty Levels and Income Inequality



Sources: U.S. Census Bureau, 2005-2009 and 2013-2017 American Community Survey, Table B19301: PER CAPITA INCOME IN THE PAST 12 MONTHS

Since 2009, the number of residents below the poverty level has increased 4%, with approximately 12% of the total population in tract 4231 below the poverty level in 2009, compared to 16% in 2017.

Notably, the percentage of at or above 150 percent of the poverty level in 2017 also increased, approximately 6% higher than the percentage in 2009. The percentage of 100 to 149 percent of the poverty level dramatically decreased from 12% in 2009 to 2% in 2017. This suggests an increasing level of income inequality, as residents are either moving below the poverty level or far above the poverty level while moving away from the middle range of incomes.

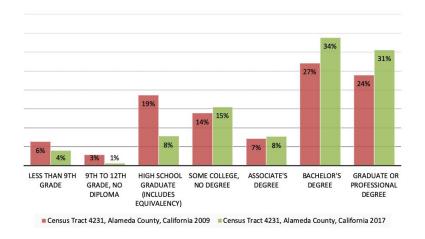
*See Appendix Section V for Margin of Error and Confidence Intervals

VII. Educational Attainment

Higher levels of educational attainment

From 2009 to 2017, there was a significant increase in educational attainment specifically for levels of higher education, with the biggest increases occurring in residents with Bachelor's degrees or Graduate and Professional degrees (see Appendix Section VI). The percentage of the population with a bachelor's degree rose from 27 percent in 2009 to 34 percent in 2017. Likewise, the percentage of the population with graduate or professional degree rose from 24 to 31 percent over the same time period.

Figure 6. Educational Attainment in Tract 4231



Sources: U.S. Census Bureau, 2013-2017 American Community Survey, Table S1501: Educational Attainment

Faster Growth of Educational Attainment

As overall education levels rise, the number of residents in the tract with an attainment level has similar growth to the city as a whole. However, the percent change of the tract's residents with a Bachelor's degree is 7%, while the percent change of the city-wide residents with a Bachelor's degree is only 3%. This suggests that educational attainment at higher education levels in census tract 4321 is increasing slightly more than Berkeley as a whole. (See Appendix Section VI.)

VIII. Labor Force Characteristics

Similar Labor Force Characteristics

In 2017, the most common occupations for both residents of census tract 4231 and residents of Berkeley as a whole were occupations related to management, business, science, and arts, (approximately 66% of Berkeley residents and 64% of census tract residents. There are slightly more residents involved with transportation and material moving occupations in the census tract than the city of Berkeley (5% and 3.6% respectively). However, the occupations of both the census tract and the city generally seem to resemble one another.

IX. Composition of Housing stock

Shifting demographics

The total housing units in the census tract 4231 has increased 285 by 14%, and the total housing units in the city of Berkeley has increased by 11%. This suggests that housing development in census tract 4231 is increasing at a faster rate than city-wide levels. (See Appendix Section VIII)

Margin of Error and Confidence Intervals

		Census Tract 4231, Alameda County, California							Berkeley city, California			
	2009			2017			2009			2017		
	Margin of 90% CI 90% CI		90% CI	Margin of	90% CI	90% CI	Margin of	90% CI	90% CI	Margin of	90% CI	90% CI
	Error	Lower	Upper	Error	Lower	Upper	Error	Lower	Upper	Error	Lower	Upper
Value	58	1,735	1,851	56	2,022	2,134	1,387	42,249	45,023	938	48,199	50,075

Sources: U.S. Census Bureau, 2005-2009 and 2013-2017 American Community Survey, Table B25001: HOUSING UNITS - Universe Housing units

Greater increases in Renter-occupied units

From 2009 to 2017, the percentage of owner-occupied housing in census tract 4231 has increased by 69 which is slightly less than that of Berkeley as a whole, which has increased by 8%. However, the percent increase of renter-occupied units in census tract 4231 is significantly higher than the city as a whole; fron 2009 to 2017, the number of renter-occupied units census tract 4231 increased by 29%, compared to 18 in Berkeley.

Figure 7.Median Home Value by Census Tract Group in Berkeley CA, ACS 2017



Source: Median Home Value for all Owner-Occupied Units, 2020. https://www.socialexplorer.com (based on data from US Census Bureau ACS 2017 5-year survey).

From 2009 to 2017, median home value in census tract 4321 has increased by approximately 18%. This is also slightly less than the city of Berkeley as a whole, where median home value has increased approximately 16% from 2009 to 2017 (see appendix section VIII).

X. Physical characteristics of the housing stock

Similar Housing Stock

The housing units in the census tract tend to be newer than those in Berkeley as a whole. 49 percent of housing units in the city were built before 1939, whereas in the tract, only 44 percent of housing units were built before 1939. However, as of the 2017 census, no new housing unit was built 2014 or later. (see Appendix IX table). As illustrated in Figure 8 (see appendix IX, both the tract and the city as a whole have a similar housing unit distribution. In both the city and the census tract, most housing units are primarily detached single-unit homes.

XI. Journey to Work

Means of Transport to Work from 2009 to 2017, Census Tract 4231

	Census Tract 4231(2009)	Census Tract 4231(2017)	percent change
total:	1,694	2,337	
Car, truck, or van:	846	992	17%
Drove alone	782	962	23%
Carpooled:	64	30	-53%
Public transportation (excluding taxicab):	259	600	132%
Bicycle	65	285	338%
Walked	305	240	-21%
Other means	7	27	286%
Worked at home	184	174	-5%

Sources: U.S. Census Bureau, 2005-2009 and 2013-2017 American Community Survey, Table B08301: MEANS OF TRANSPORTATION

Shift Towards Public Transit and Biking

Journey to work travel times in census tract 4231 remained largely the same from 2009 to 2017, with slight increases in 20-39 minute commutes (see Appendix section X). The most notable shifts in commuting patterns for residents of census tract 4231 occurred with respect to means of transport, with a 132% increase in the use of public transit, and a 338% increase in bike use (see Appendix Section X).

Significant shifts in bike use could be the result of new bike-share programs implemented in Berkeley after 2009. Additionally, the West Street Pathway, a now-popular bicycle boulevard and pedestrian walkway, was

completed in 2012 and runs through a significant portion of the census tract (https://patch.com/california/berkeley/berkeleys-west-street-pathway-mired-in-debate).

XII. Business characteristics in the zip code 94702

In census tract 4231, establishments with 50 to 99 employees comprise the greatest proportion, which is 17% of the total employees in the zip code 94702 area. There are no establishments with 250 employees or more in this area (see appendix section XI). In zip code 94702, the most common type of establishments are retail trade establishments, comprising 17% of the share of establishments (see appendix section XI).

** It is important to note that of the total resident population of zip code 94702, census tract 4321 residents comprise only 24.18% of the population. While 100% of the residents of the census tract are included in the zip code 97042, the data presented for business characteristics may not necessarily be representative of the census tract as a whole.

XIII. Commuting Flows

As of 2017, only 2% of residents census tract 4321 were employed inside of the census tract, a slight decrease from 2009, where 3.4% of residents were employed within the tract. This is significantly less for the city of berkeley as a whole, where 23.1% of residents were employed within the Berkeley city limits. However, the differences in these figures may be a consequence of the larger geographic area encapsulated by the boundaries of the Berkeley City Limits.

Figure 10. Job Inflow and outflow Analysis



Souces: U.S. Bureau of the Census, Longitudinal Employer-Household Dynamics Origin-Destination Employment Statistics, 2017.

Conclusion

The individual characteristics and shifts that can be observed from 2009 and 2017 for census tract 4231 might lead to any number of assessments or policy directions. The planning department may consider increasing use of public transit and bicycles as reason to consider addressing transit infrastructure. However, when considered as a whole, some of the most notable trends displayed in census tract 4231 are significant indicators of a trend towards the much more potentially detrimental phenomenon of neighborhood gentrification.

In the *Cityscape* journal article "Forewarned: The Use of Neighborhood Early Warning Systems for Gentrification and Displacement", Chapple and Zuk discuss a number of factors that suggest neighborhood susceptibility to gentrification. Many of the distinctions exhibited by census tract 4231 align with those factors, including higher education attainment levels, change in property values (increases in median home value), changes in tenure (increases in share of renter-occupied units), and increasing reliance on public transit. The tract's access to neighborhood features such as Strawberry creek Park and its surrounding recreation facilities, as well as the recent completion of major bicycle thoroughfares are also signs of neighborhood investment, which can be an indicator of increasing gentrification.

In acknowledgement of this neighborhood's potential for gentrification, the planning commission would be wise to consider the historical impact of gentrification on neighborhoods throughout the Bay Area, which has disproportionately affected marginalized and economically disadvantaged communities. The higher than average percentage of black or African American residents in census tract 4231 compared to the city of Berkeley as a whole represents one such historically vulnerable community in the Bay Area (and across the United States).

Planning departments should consider the potential effects of gentrification in this tract, particularly with representation to historically disadvantaged communities. Further analysis of dynamics related to income, education, and tenure with respect to black and African American communities in this tract and at the city and county level are recommended to better inform policy and planning decisions.

Sources

- U.S. Census Bureau, 2005-2009 American Community Survey 5-Year Estimated
- U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimated
- Karen Chapple, and Miriam Zuk. "Cityscape: Volume 18 Number 3 | Forewarned: The Use of Neighborhood Early Warning Systems for Gentrification and Displacement |." Cityscape 18, no. 3. Accessed February 20, 2020.

https://www.huduser.gov/portal/periodicals/cityscpe/vol18num3/article5.html.

JJ Barrow. "Berkeley's West Street Pathway Mired in Debate | Berkeley, CA Patch." Accessed February 20, 2020. https://patch.com/california/berkeley/berkeleys-west-street-pathway-mired-in-debate.

Appendix:

Section I – People and Households

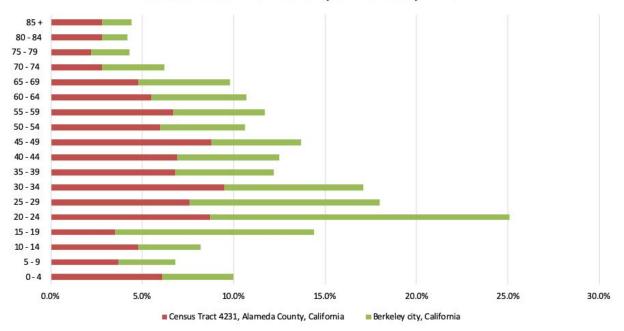
	Census Tract 4231, Alameda County, Califo								
	20	09	20	17	20	009	2017		
	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error	
Total number of people	3,532	308	4,319	284	100,877	41	120,179	55	
Total number of households	1,641	100	1,966	101	40,079	1,365	45,515	781	

Sources: U.S. Census Bureau, 2005-2009 and 2013-2017 American Community Survey 5-Year Estimates, B01003: TOTAL POPULATION; S1101: Households and Families

Section II - Age Structure of the Population

2017 Age Distribution in Tract 4231 and City of Berkeley





Sources: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates S0101: Age and Sex

Section III - Household Type and Composition

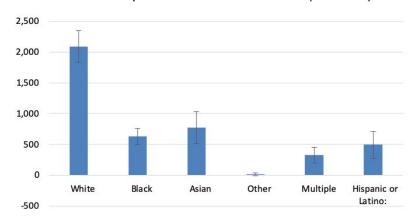
Household Type and Children: 2017

Household Type	Tract 42	231	Berkeley		
	Total	Percent	Total	Percent	Location Quotient
Family	913	46%	20789	46%	1.02
with children	414	21%	8478	19%	1.13
Nonfamily	1053	54%	24726	54%	0.99

Sources: U.S. Census Bureau, 2005-2009 and 2013-2017 American Community Survey, Table B11016 - HOUSEHOLD TYPE BY HOUSEHOLD SIZE , Table S1101: HOUSEHOLDS AND FAMILIES

Section IV – Racial and Ethnic Composition

Racial and Ethnic Composition for Tract 4231 in 2017 (with MOE)



Sources: U.S. Census Bureau, 2013-2017 American Community Survey, Table B03002: HISPANIC OR LATINO ORIGIN BY RACE - Universe: Total population

Racial and ethnic composition

	Census Tract 4231	, Alameda C	ounty, California	Berk	eley city, Cali	fornia	Location Quotient
	2009	2017	% Change	2009	2017	% Change	2017
Total:	3,532	4,319	22%	100,877	120,179	19%	
Non-Hispanic or Latino:	**						
White	1,772	2,087	18%	58,387	65,656	12%	0.88
Black	517	630	22%	9,766	10,019	3%	1.75
American Indian	7	0	-100%	177	295	67%	0.00
Asian	303	769	154%	17,577	23,528	34%	0.91
Other	19	11	-42%	646	890	38%	0.34
Multiple	92	328	257%	3,786	6,611	75%	1.38
Hispanic or Latino:	822	494	-40%	10,538	13,180	25%	1.04

Sources: U.S. Census Bureau, 2005-2009 and 2013-2017 American Community Survey, Table B03002: HISPANIC O LATINO ORIGIN BY RACE - Universe: Total population

Year: 2017 Census Tract 4231, Alameda County, California

	Estimate	Margin of Error	90% CI lower	90% Cl upper
White	2,087	256	1,831	2,343
Black	630	129	501	759
Asian	769	262	507	1,031
Other	11	24	-13	35
Multiple	328	128	200	456
Hispanic or Latino:	494	216	278	710

Sources: U.S. Census Bureau, 2013-2017 American Community Survey, Table B03002: HISPANIC OR LATINO ORIGIN BY RACE -

Universe: Total population

Section V – Income and Poverty

Median Income (in 2017 \$)

		Census Tract 4231, Alameda County, California	Berkeley city, California
	2009	\$56,270	\$67,521
80	2017	\$67,786	\$75,709

Sources: U.S. Census Bureau, 2005-2009 and 2013-2017 American Community Survey, Table S1903: Median Income in the Past 12 Months

Per Capita Income (in 2017 \$)

	Tract 4231	Berkeley city
2009	\$34,983	\$42,043
2017	\$45,967	\$45,738

Sources: U.S. Census Bureau, 2005-2009 and 2013-2017 American Community Survey, Table B19301: PER CAPITA INCOME IN THE PAST 12 MONTHS

2017 poverty:

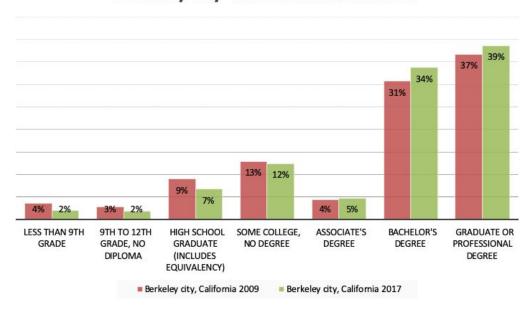
	Census Tract 4231, Alameda County, California				Berkeley city, California			
	Estimate	Margin of Error	90% CI Lower	90% CI Upper	Estimate	Margin of Error	90% CI Lower	90% CI Upper
Total:	4,278	264	4,014	4,542	108,126	777	107,349	108,903
Below poverty	697	197	500	894	21,422	1,231	20,191	22,653
100% - 149% of the	83	45	38	128	5,925	604	5,321	6,529
150% + of the	3,498	256	3,242	3,754	80,779	1,167	79,612	81,946

2017 PCI:

	Census Tract 4231, Alameda County,				Berkeley city, California			
	Estimate	Margin of Error	90% CI Lower	90% CI Upper	Estimate	Margin of Error	90% CI Lower	90% CI Upper
Per capita income in the past 12 months	45967	4,409	41,558	50,376	45738	1,310	44,428	47,048

Section VI - Educational Attainment

Berkeley City Educational Attainment

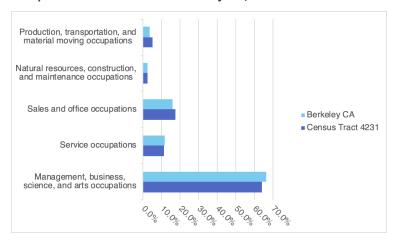


Sources: U.S. Census Bureau, 2013-2017 American Community Survey, Table S1501: Educational Attainment

Section VII: Labor Force Characteristics



Occupations of Residents of Berkeley CA, and Census Tract 4231

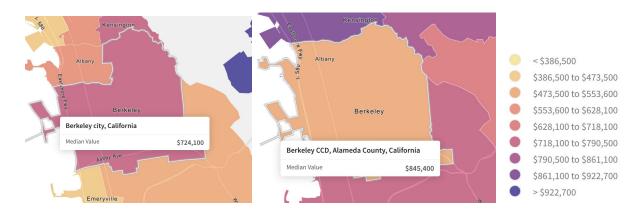


Sources: U.S. Census Bureau, 2005-2009 and 2013-2017 American Community Survey, Table S2405: INDUSTRY BY OCCUPATION FOR THE CIVILIAN EMPLOYED POPULATION 16 YEARS AND OVER

Section VIII: Composition of Housing Stock

Berkeley Median Home Value 2009

Berkeley Median Home Value 2017



	Census	s Tract 4231, Alar	meda County, 0	Berkeley city, California						
	200	9	2017		2009		2017			
	Margin of			Margin of		Margin of	Margin of			
	Estimate	Error	Estimate	Error	Estimate	Error	Estimate	Error		
Total:	1,64	1 100	1,966	101	40,079	1,365	45,515	781		
Owner occupied	66	7 94	710	129	18,062	667	19,517	539		
Renter occupied	97	4 106	1,256	135	22,017	931	25,998	625		

Sources: U.S. Census Bureau, 2013-2017 American Community Survey, Table B25003: TENURE - Universe: Occupied housing units

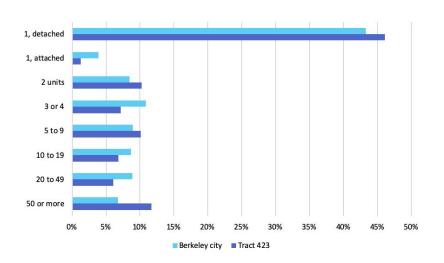
Section IX: Physical characteristics of the housing stock

S (4)	Census Tract 42	31, Alameda C	County, Californ	keley city, California			
	Estimate	Percentage of housing units	Margin of Error	Estimate	Percentage of housing units	Margin of Error	
Total:	2,078		56	49,137	S	938	
Built 2014 or later	0	0%	12	152	0%	104	
Built 2010 to 2013	24	1%	22	455	1%	128	
Built 2000 to 2009	71	3%	54	2,380	5%	304	
Built 1990 to 1999	120	6%	71	1,612	3%	211	
Built 1980 to 1989	112	5%	47	2,182	4%	276	
Built 1970 to 1979	151	7%	64	4,611	9%	426	
Built 1960 to 1969	262	13%	82	4,656	9%	329	
Built 1950 to 1959	129	6%	57	4,616	9%	424	
Built 1940 to 1949	301	14%	101	4,272	9%	392	
Built 1939 or earlier	908	44%	140	24,201	49%	870	

Sources: U.S. Census Bureau, 2017 American Community Survey, Table B25034: YEAR STRUCTURE BUILT 2017 -

Universe: Housing units

Figure 8. Number of Units in Housing Structures (2017)



Sources: U.S. Census Bureau, 2013-2017 American Community Survey, Table B25032: TENURE BY UNITS IN STRUCTURE - Universe: Occupied housing units

Section X: Journey To Work

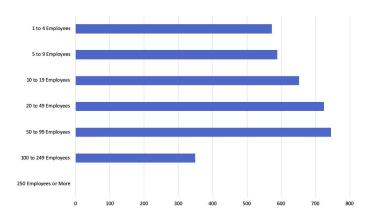
Travel Time to Work From 2017 to 2009, Census Tract 4231

	Census Tract 4231 (2017)	Census Tract 4231 (2009)						
Travel time (minutes)	ne (minutes) percentage of population							
0-9 minutes	8%	9%						
10-19 minutes	27%	31%						
20-39 minutes	39%	32%						
40-59 minutes	15%	16%						
60-89 minutes	8%	10%						
90 or more minutes	3%	3%						

Sources: U.S. Census Bureau, 2005-2009 and 2013-2017 American Community Survey, Table B08303: TRAVEL TIME TO WORK - Universe: Workers 16 years and over who did not work at home

Section XI: Business characteristics in the zip code

Employment Characteristics



Source: Social Explorer, ZIP Codes Business Pattern 2014

Distribution of Establishment Types, zip code 94702

	Total	Construction	Manufacturin g	Wholesale Trade		Transportatio n and Warehousing	Information	Finance and	and Rental	Services	Management of Companies and Enterprises		Educational		Entertainmen	n and Food	Other Services (Except Public Administration)	Not
Number of Establishme nts	391	37	17	9	66	2	7	8	15	49	1	9	19	33	6	43	65	5
Percentage		9%	4%	2%	17%	1%	2%	2%	4%	13%	0%	2%	5%	8%	2%	11%	17%	1%

Source: Social Explorer, ZIP Codes Business Pattern 2014

Section XII: Commuting Flows

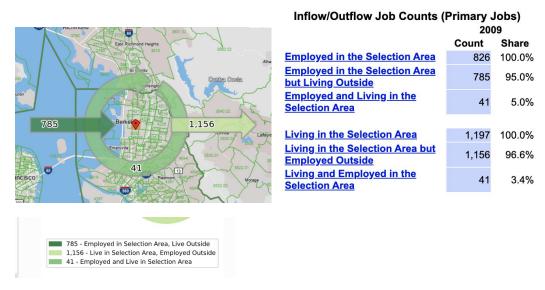
2017 Job Inflow/Outflow Analysis Percentage Tables for Census Tract 4231 and Berkeley

Inflow/Outflow Job Counts (Primary Jobs) 2017 2017 Count Share Count Share **Employed in the Selection Area Employed in the Selection Area** 100.0% 59,908 100.0% 833 **Employed in the Selection Area Employed in the Selection Area** 798 95.8% 50,034 83.5% **but Living Outside but Living Outside Employed and Living in the Employed and Living in the** 35 4.2% 9,874 16.5% **Selection Area Selection Area Living in the Selection Area** 1,712 100.0% **Living in the Selection Area** 42,749 100.0% **Living in the Selection Area but** Living in the Selection Area but 98.0% 1,677 32,875 76.9% **Employed Outside Employed Outside** Living and Employed in the Living and Employed in the 35 2.0% 9,874 23.1%

2009 Job Inflow/Outflow Analysis Percentage Tables for Census Tract 4231 and Berkeley

Selection Area

Selection Area



Souces: U.S. Bureau of the Census, Longitudinal Employer-Household Dynamics Origin-Destination Employment Statistics, 2017.