



MEMORANDUM

To: Matt Maloney, Metropolitan Transportation Commission
CC: Aidan Hughes, Tony Bruzzone, and Lauren Dong, Arup
From: Nadine Fogarty, Alison Nemirow, and Flavio Coppola, Strategic Economics
Date: April 15, 2016
Title: Revised Oakland Market Assessment

1 Introduction

This memorandum assesses the potential for employment and household growth in Downtown Oakland between 2015 and 2040, based on an analysis of recent employment, demographic, and real estate market trends. The analysis is intended to inform the Core Capacity Transit Study (CCTS), and accompanies Strategic Economics' previous assessment of the potential for future employment growth in the San Francisco Core.

Following this introduction, the memorandum includes the following sections:

- Purpose, Approach, and Limitations of the Analysis
- Demographic and Residential Market Trends
- Employment and Commercial Market Trends
- Household and Employment Growth Scenarios

Appendix A includes a detailed description of the assumptions and methodology used to develop the household and employment growth scenarios. Appendix B compares the scenarios to projections from other sources. Appendix C provides an overview of recent development trends in the Broadway-Valdez area.

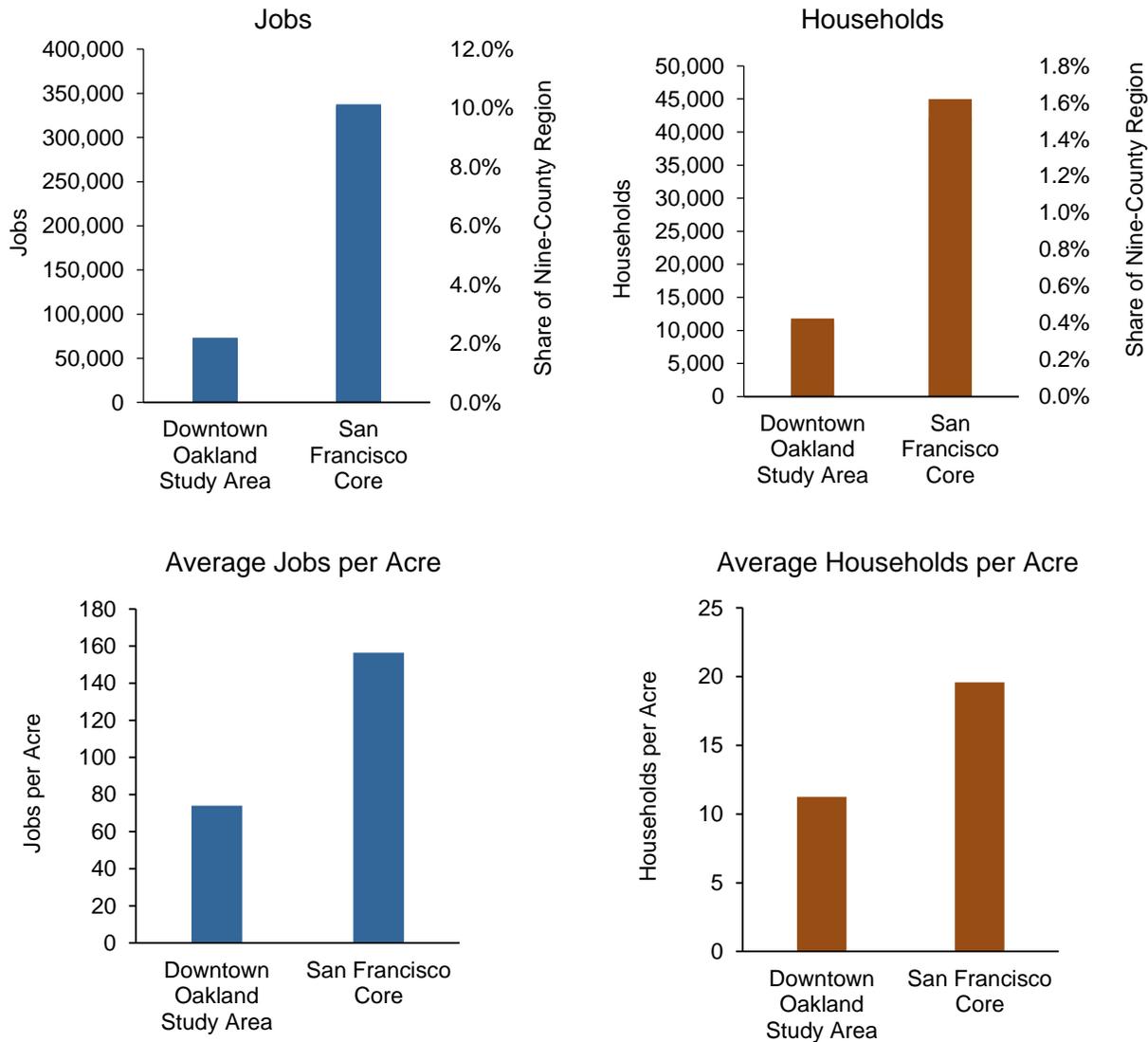
2 Purpose, Approach, and Limitations of the Analysis

2.1 Purpose

Downtown Oakland serves as one of the key regional employment centers in the Bay Area, accounting for the largest concentration of employment in the East Bay (Alameda and Contra Costa Counties) and benefiting from its location at the center of the region, excellent transit access, and proximity to the Oakland International Airport and Port of Oakland. Downtown Oakland accounted for approximately 2.2 percent of the nine-county Bay Area's jobs and 0.4 percent of the region's households in 2013 – making it substantially smaller and less dense than the San Francisco Core (Figure 1). However, recent trends suggest that the Downtown may be entering a period of transformative growth. Between 2000 and 2013, Downtown Oakland added more than 2,600 new households, an increase of nearly one-third. As of late 2015, an additional 5,000 new housing units were proposed, approved, or under construction. Meanwhile, Downtown's employment base has experienced a strong recovery from the recession. In the past two years, a number of major employers including Uber and Gensler have either moved to or announced plans to open new offices in Downtown Oakland. With San Francisco office rents at an all-time high and trans-bay transportation systems (including the Bay Bridge, BART, and AC Transit) operating at full capacity, Downtown Oakland is attracting a growing number of jobs, and new office development may be imminent.

In light of these recent trends, this analysis evaluates the potential for future household and employment growth in Downtown Oakland between 2015 and 2040. While the analysis is quantitative in nature, it is intended to help inform future transportation planning in a qualitative way by providing an understanding of the likely magnitude of future growth and the opportunities and barriers to achieving that growth. The analysis is not intended to serve as a definitive land use forecast or as a direct input into transportation planning models.

Figure 1. Downtown Oakland Study Area and the San Francisco Core: Jobs, Households, and Average Densities, 2013



Sources: U.S. Census Bureau, Longitudinal Employer-Household Dynamics, 2013; U.S. Census Bureau, Five-Year American Community Survey, 2009-2013; Strategic Economics, 2015.

2.2 Approach

In order to develop scenarios for the likely pace and magnitude of household and employment growth in Downtown Oakland, Strategic Economics evaluated recent demographic and employment trends, analyzed data on real estate market trends, and interviewed brokers, developers, and other experts. The analysis included mapping existing concentrations of households and employment in the East Bay in order to provide context about Downtown’s position within the region. While the memorandum focuses on the Downtown Oakland Study

Area (as defined in Figure 2), Appendix C also provides a brief assessment of the amount of growth that has occurred in the neighboring Broadway-Valdez Area (also shown in Figure 2).

The analysis builds on other, recent studies of Downtown Oakland, including Strategic Economics' market analysis for the ongoing Downtown Oakland Specific Plan process,¹ and SPUR's May 2015 study, *A Downtown for Everyone: Shaping the Future of Downtown Oakland*.² These previous studies found that there is significant developable land in Downtown Oakland and that capacity is not a barrier to growth. Therefore, this analysis focuses on the market for commercial and residential development in Oakland, and does not include an assessment of development capacity.³

2.3 Limitations of the Analysis

The results of the employment and household growth scenarios are sensitive to assumptions about regional growth rates and the share of regional growth captured in the Study Area. This analysis incorporates reasonable assumptions based on data and observations about current conditions and recent trends in Downtown Oakland. However, the analysis was limited by the quality of the data available at the time of the study. Major limitations include:

- **Employment data sources:** This analysis incorporates information from two different employment data sources: the U.S. Census Bureau's Longitudinal Employer-Household Dynamics (LEHD) and the California Employment Development Department's Quarterly Census of Employment and Workforce (QCEW).⁴ Each source reports different employment totals for the Downtown Study Area and the City of Oakland. Based on an evaluation of data and consultation with economists who have studied Oakland's economy,⁵ this analysis uses LEHD to estimate current employment counts by sector,⁶ but relied on QCEW to assess employment change over time.
- **Regional growth projections:** The employment and household growth scenarios for Downtown Oakland are based in part on the 2013 Plan Bay Area projections for the nine-county Bay Area region. The Metropolitan Transportation Commission (MTC) and Association of Bay Area Governments (ABAG) are currently in the process of updating the region's employment and household projections as part of the Plan Bay Area 2017 Update.

¹ "Priority Development Area Profile Report Draft," Downtown Oakland Specific Plan: Existing Conditions," <http://www2.oaklandnet.com/oakcal/groups/ceda/documents/report/oak055798.pdf>.

² Available at <http://www.spur.org/publications/spur-report/2015-09-09/downtown-everyone>.

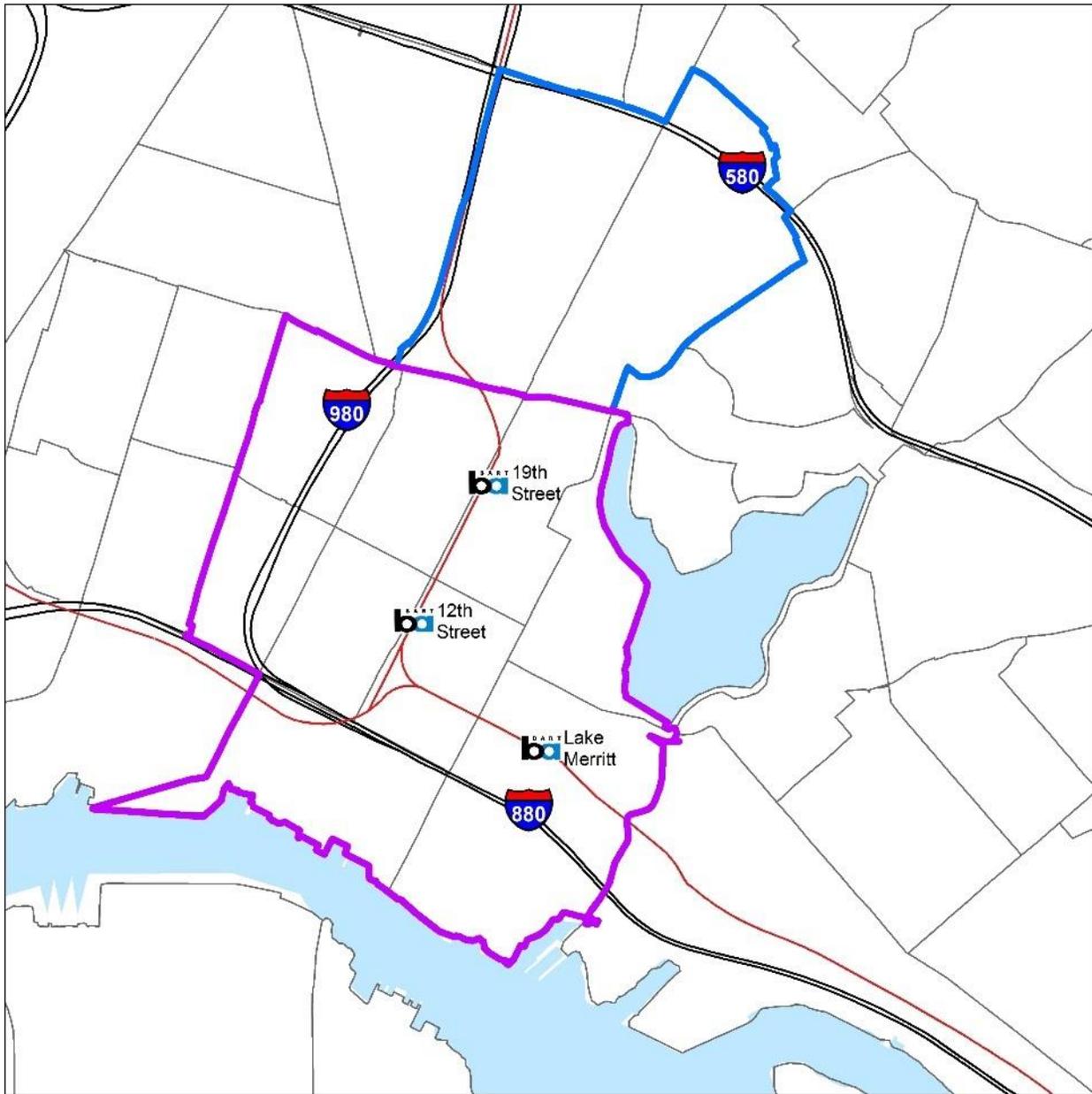
³ In contrast, development capacity is seen a significant potential constraint on future growth in the San Francisco Core, and Strategic Economics' previous assessment of the potential for future employment growth in the San Francisco Core included a development capacity analysis.

⁴ Strategic Economics estimated employment for the city and study area using business-level QCEW data provided by the City of Oakland. QCEW is also called Detailed Industry Data and Employment and Payroll Data, and was formerly known as the ES202 Program data.

⁵ Including Linda Hausrath (Hausrath Economics Group) and Egon Terplan (SPUR).

⁶ Note that LEHD data includes private, state and local government, and federal government workers. The data exclude self-employed workers, members of the military, and some agricultural workers.

Figure 2. Downtown Oakland Study Area and Broadway-Valdez



Downtown Oakland Study Area Boundary

-  Study Area
-  Broadway-Valdez
-  Alameda County TAZ
-  BART Line

3 Demographic and Residential Market Trends

This section assesses recent demographic and residential market trends in Downtown Oakland. The section concludes with a discussion of factors that are likely to affect the timing and magnitude of future residential growth in the Study Area.

3.1 Demographic Trends

Approximately 11,000 households resided in the Downtown Oakland Study Area in 2013, representing 7.2 percent of Oakland households and 0.4 percent of all Bay Area households (Figure 4). Downtown Oakland has a lower household density (11 households per acre on average) compared to some other neighborhoods in Berkeley and North and East Oakland (Figure 3). However, the number of households in Downtown has risen rapidly, particularly over the last decade.

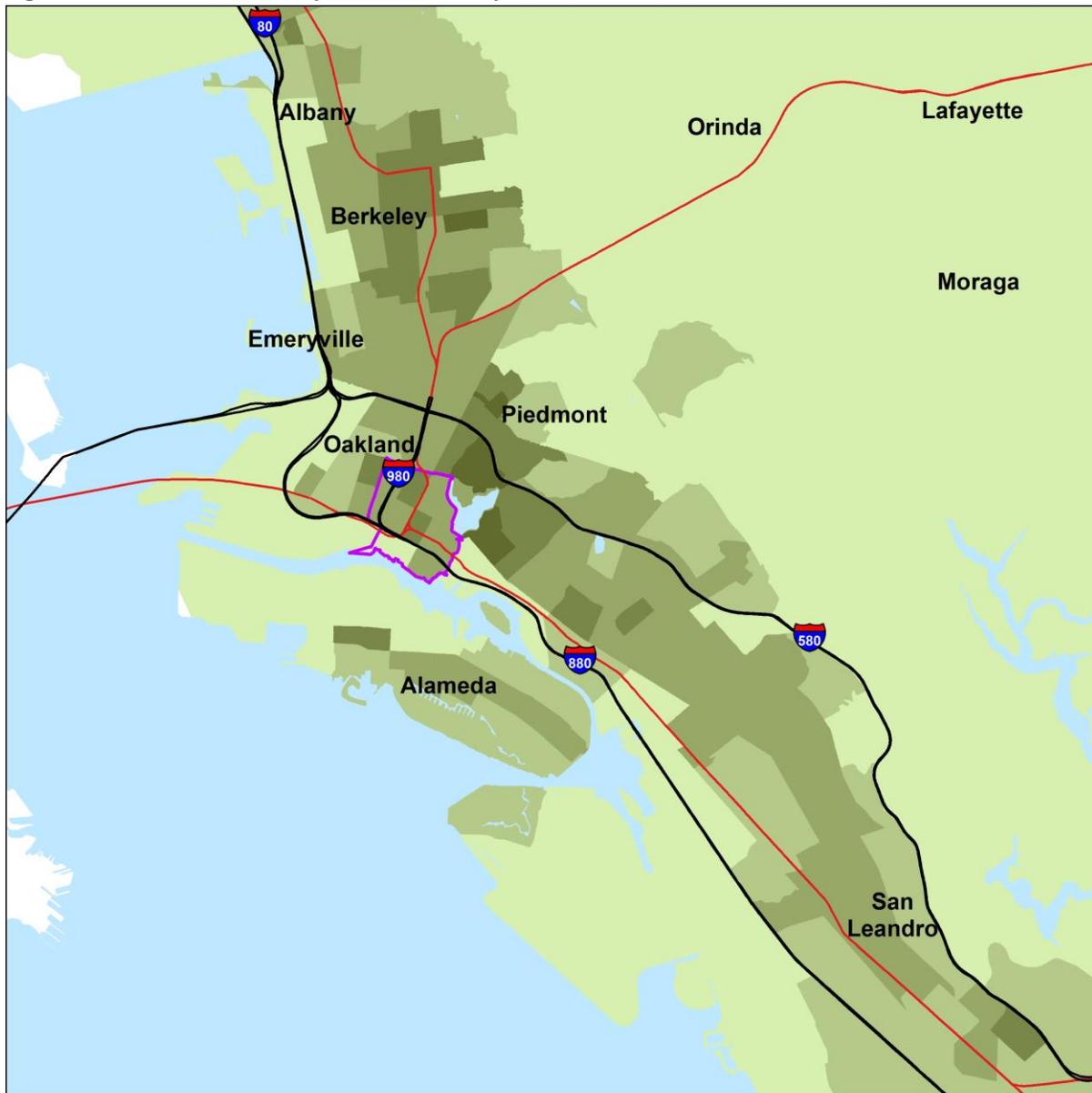
Figures 4-11 compare Downtown Oakland's demographics to the City of Oakland and the nine-county region as a whole. Some of the key characteristics of Downtown Oakland's population and households include:

- **Rapid household growth since 2000:** After adding just 740 new households between 1990 and 2000, the Study Area added 2,610 new households between 2000 and 2013. This represented a 30 percent increase in the total number of households living Downtown between 2000 and 2013 (Figure 5). As shown in Figure 5, Downtown's population has grown more slowly than its households, reflecting a declining average household size.
- **Growing share of city and regional household and population growth.** Between 2000 and 2013, 68 percent of the city's net new households and 1.8 percent of the region's net new household located in the Downtown. This is a significantly higher capture rate than in the 1990-2000 period, when the Study Area captured 12 percent of citywide household growth and just 0.3 percent of regional household growth. The Study Area's capture of regional population growth also increased, from 0.2 percent between 1990 and 2000, to 0.6 percent between 2000 and 2013. However, the city's total population actually declined during the 2000s (despite a small increase in total households) while the Study Area's population grew, leading to a negative population capture rate for this time period (Figure 5). The fact that the Study Area has generally captured a higher share of citywide and regional household growth than population growth reflects the fact that household sizes tend to be smaller in Downtown Oakland compared to Oakland and the Bay Area as a whole.
- **Small households:** Almost 60 percent of Downtown Oakland households consisted of a single person in 2013, compared to 36 percent in the city as a whole (Figure 6).
- **High proportion of younger adults and seniors:** More than 20 percent of Downtown residents were between 25 and 34 in 2013, compared to 17 percent of the city's population. The Downtown also had a higher share of residents aged 55 and older, and relatively few children (Figure 7).
- **Shifting racial and ethnic composition:** The racial and ethnic composition of the Study Area is diverse, with Asian and Pacific Islander residents making up the largest racial and ethnic group (40 percent of the population in 2013, as shown in Figure 8). However, the Study Area's racial and ethnic composition has changed over time, adding

White, Hispanic, and Asian residents while the Black population declined. This reflects similar demographic trends in the rest of Oakland (Figure 9).

- **High share of low-income households, but a growing high-income population:** Nearly 40 percent of Downtown Oakland households had an annual income of less than \$20,000 in 2013, compared to 22 percent of households citywide (Figure 10). In part, this reflects the many income-restricted housing units located in Downtown. However, the number of high-income households earning more than \$75,000 who live Downtown has nearly doubled since 2000 after adjusting for inflation (Figure 11).

Figure 3. Household Density in the East Bay, 2013



East Bay Household Density, 2013

Households per Acre

- Fewer than 3
- 4 - 6
- 7 - 11
- 12 - 20
- More than 20

- Major Highways
- BART Line
- Downtown Oakland Study Area

Sources: American Community Survey 5-Year Estimates, 2009-2013; Strategic Economics, 2015.

0 1 2 Miles



Figure 4. Population and Number of Households: Downtown Oakland Study Area, City of Oakland, and the Bay Area, 1990, 2000, 2013

	1990	2000	2013
Population			
Study Area	15,322	16,575	19,513
Oakland	372,242	399,484	397,011
9 County Bay Area Region	6,023,577	6,783,760	7,257,501
Study Area as Share of Oakland	4.1%	4.1%	4.9%
Study Area as Share of Region	0.3%	0.2%	0.3%
Households			
Study Area	7,764	8,504	11,114
Oakland	144,766	150,971	154,786
9 County Bay Area Region	2,246,242	2,466,019	2,613,055
Study Area as Share of Oakland	5.4%	5.6%	7.2%
Study Area as Share of Region	0.3%	0.3%	0.4%

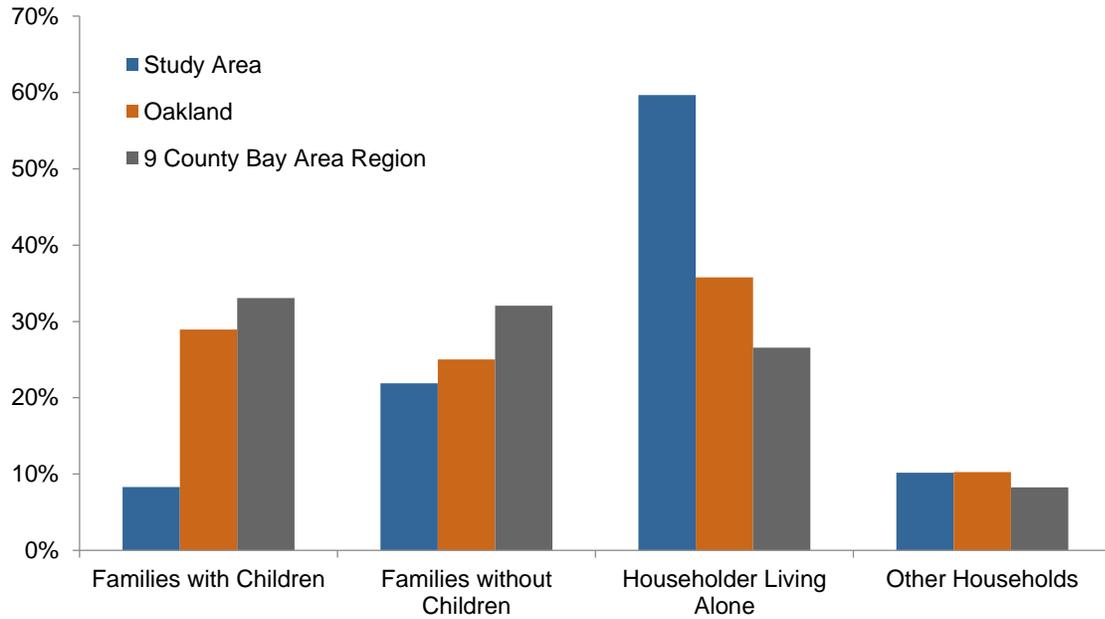
Sources: US Census, 1990, 2000; American Community Survey 5-Year Estimates, 2009-2013; Strategic Economics, 2015.

Figure 5. Change in Population and Number of Households: Downtown Oakland Study Area, City of Oakland, and the Bay Area, 1990-2000 and 2000-2013

	1990-2000		2000-2013	
	Numeric Change	Percent Change	Numeric Change	Percent Change
Population				
Study Area	1,253	8.2%	2,938	17.7%
Oakland	27,242	7.3%	-2,473	-0.6%
9 County Bay Area Region	760,183	12.6%	473,741	7.0%
Study Area Capture of Net Oakland Growth		4.6%		-118.8%
Study Area Capture of Net Regional Growth		0.2%		0.6%
Households				
Study Area	740	9.5%	2,610	30.7%
Oakland	6,205	4.3%	3,815	2.5%
9 County Bay Area Region	219,777	9.8%	147,036	6.0%
Study Area Capture of Net Oakland Growth		11.9%		68.4%
Study Area Capture of Net Regional Growth		0.3%		1.8%

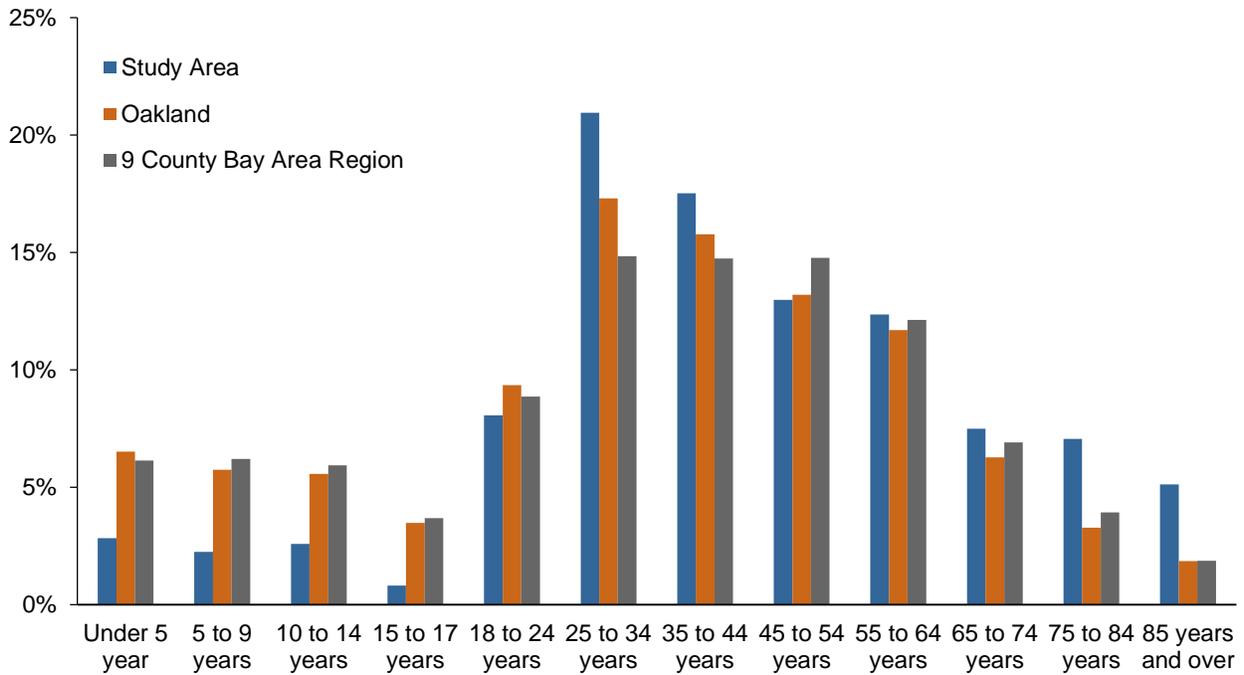
Sources: US Census, 1990, 2000; American Community Survey 5-Year Estimates, 2009-2013; Strategic Economics, 2015.

Figure 6. Households by Type: Downtown Oakland Study Area, City of Oakland, and the Bay Area, 2013



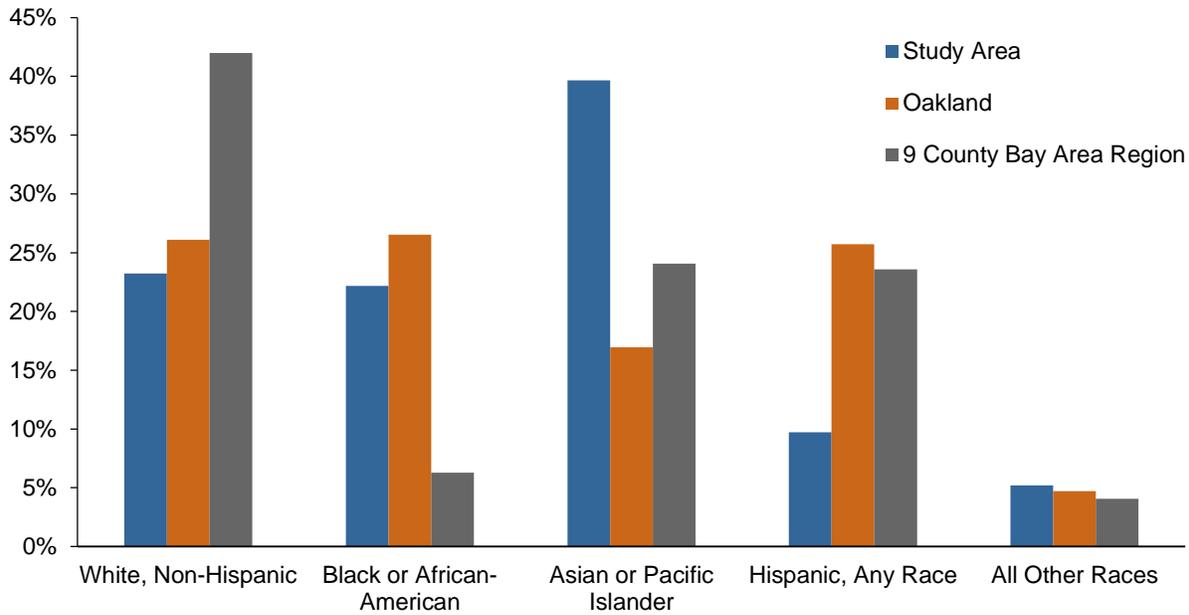
Sources: US Census, American Community Survey 5-Year Estimates, 2009-2013; Strategic Economics, 2015.

Figure 7. Population Age: Downtown Oakland Study Area, City of Oakland, and the Bay Area, 2013



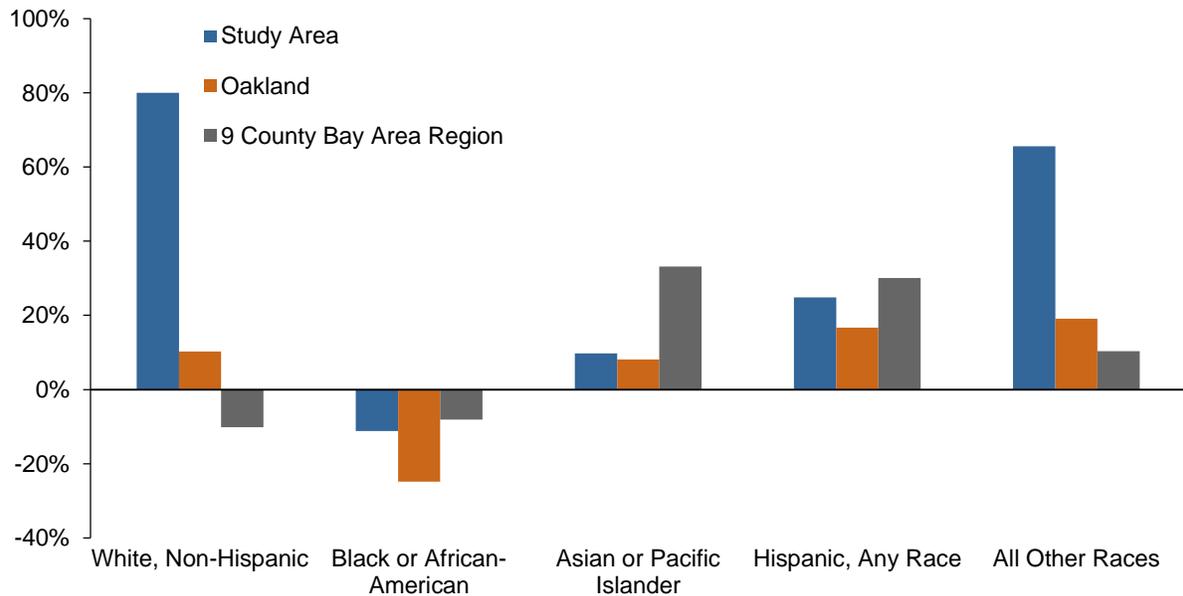
Sources: US Census, American Community Survey 5-Year Estimates, 2009-2013; Strategic Economics, 2015.

Figure 8. Population by Race and Ethnicity: Downtown Oakland Study Area, City of Oakland, and the Bay Area, 2013



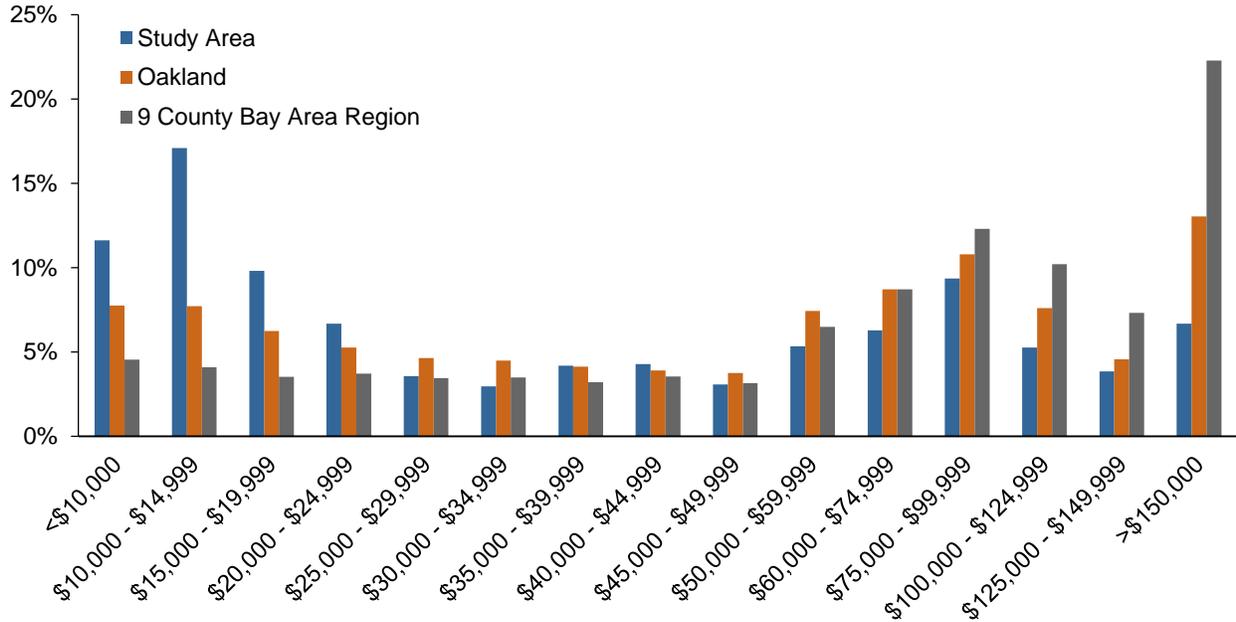
Sources: US Census, American Community Survey 5-Year Estimates, 2009-2013; Strategic Economics, 2015.

Figure 9. Percent Change in Population by Race and Ethnicity: Downtown Oakland Study Area, City of Oakland, and the Bay Area, 2000-2013



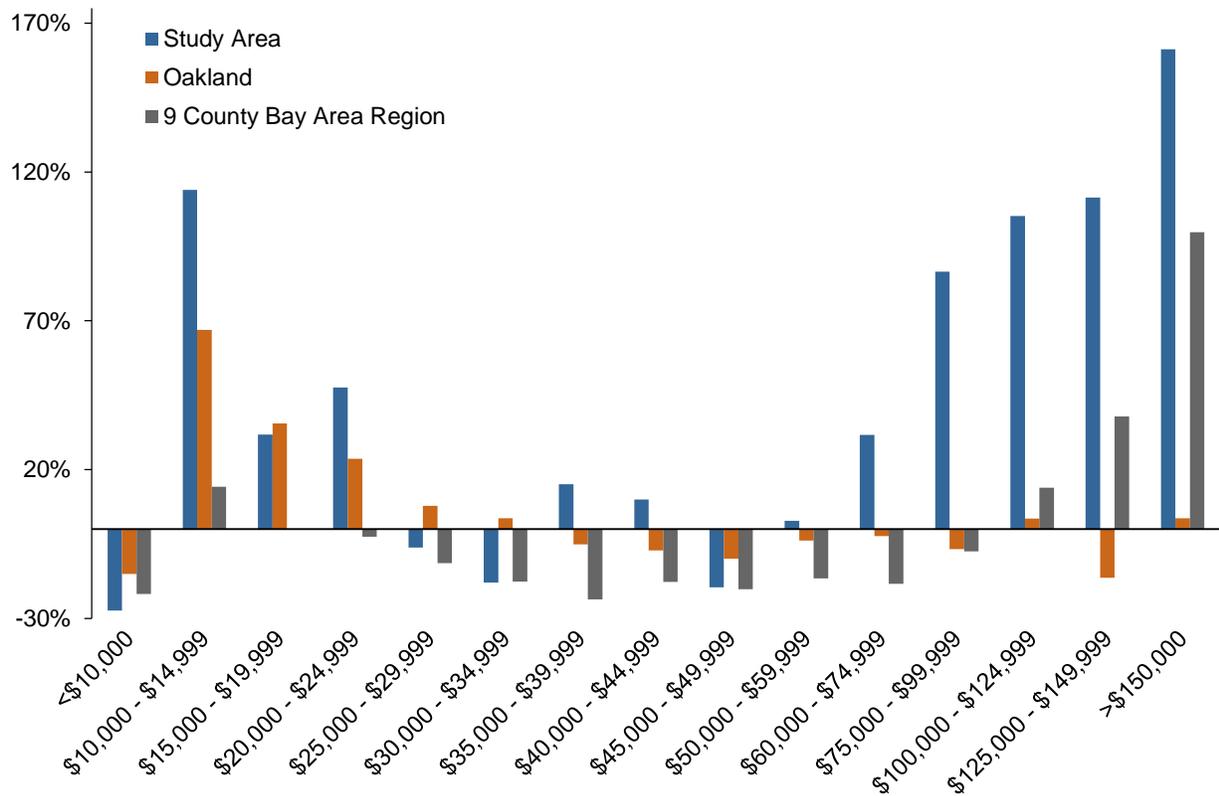
Sources: US Census, 2000; American Community Survey 5-Year Estimates, 2009-2013; Strategic Economics, 2015.

Figure 10. Households by Income Level: Downtown Oakland Study Area, City of Oakland, and the Bay Area, 2013



Sources: US Census, American Community Survey 5-Year Estimates, 2009-2013; Strategic Economics, 2015.

Figure 11. Percent Change in Number of Households by Income Level: Downtown Oakland Study Area, City of Oakland, and the Bay Area, 2000-2013 (in 2013 Dollars)



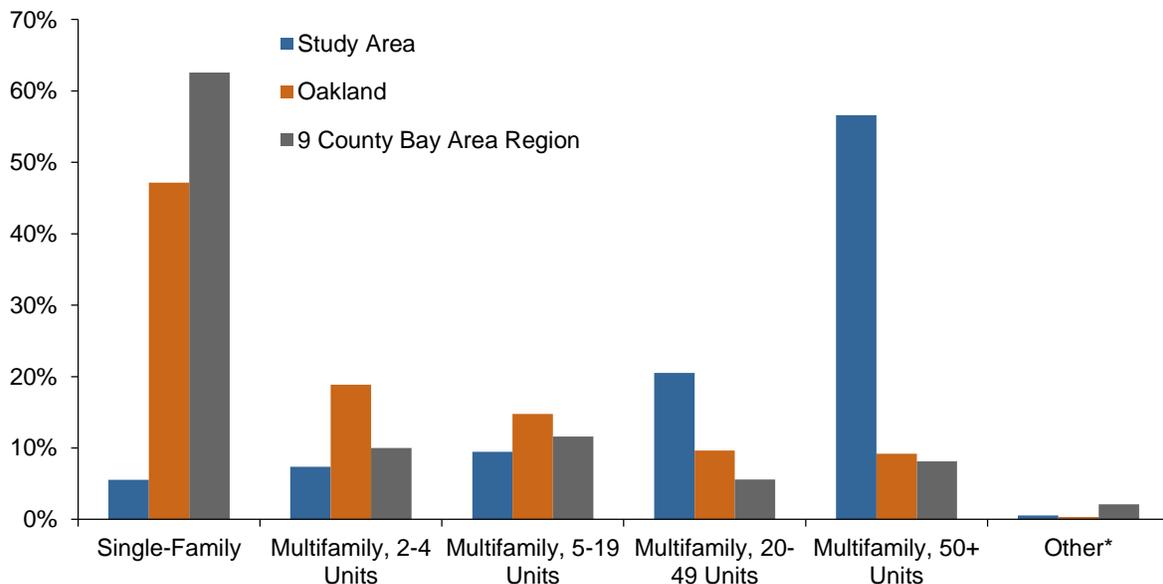
Sources: US Census, 2000; American Community Survey 5-Year Estimates, 2009-2013; Strategic Economics, 2015.

3.2 Characteristics of the Existing Housing Stock

Information about the Downtown Study Area’s housing stock, with comparisons to the city and region, are presented in Figures 12-14. Key characteristics of Downtown’s housing stock include:

- Predominantly multi-family:** Almost all of Downtown Oakland’s 12,500 housing units were multifamily in 2013 (Figure 12). Single-family homes represented only 6 percent of all Downtown housing units. Many of the single-family homes are located in the western side of the Study Area, along Interstate 980.
- Significant recent development:** According to 2013 U.S. Census estimates – which do not include housing development that has been completed since 2013 – about 24 percent of residential units in Downtown Oakland were built after 2000 (Figure 13). Much of the older housing stock is found in the traditionally residential neighborhoods such as Old Oakland and the Lakeside area (also known as the Gold Coast), while the Uptown and Jack London areas have been redeveloped with contemporary, mid-rise and high-rise multifamily buildings. A number of legacy industrial and commercial buildings in Koreatown Northgate and Jack London Square have also been adapted to loft-style condominiums and apartments.
- A high proportion of rental housing, but a growing owner-occupied housing stock:** While the majority of units in Downtown Oakland are occupied by renters (83 percent in 2013, compared to 60 percent in the city as a whole), recent residential development has boosted the number of owner-occupied units from 1,100 in 2000 to 1,900 in 2013. Over this time period, owner-occupied units increased from 13 percent to 17 percent of all Downtown housing.

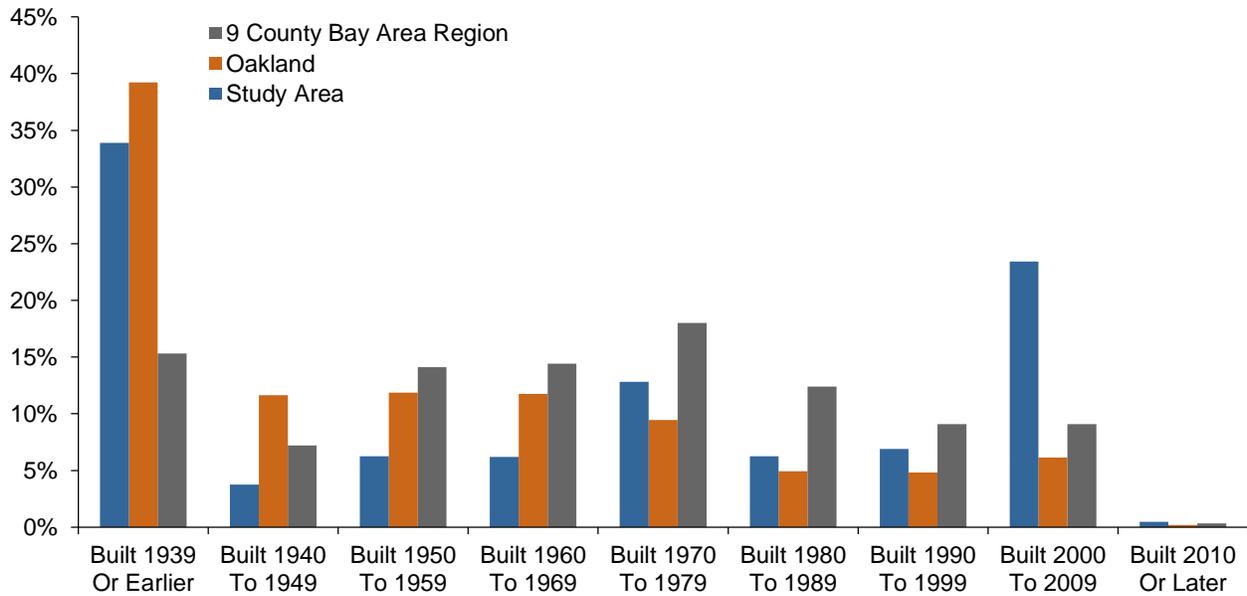
Figure 12. Housing Units by Number of Units in Building: Downtown Oakland Study Area, City of Oakland, and the Bay Area, 2013



*Mobile Home, Trailer, Other.

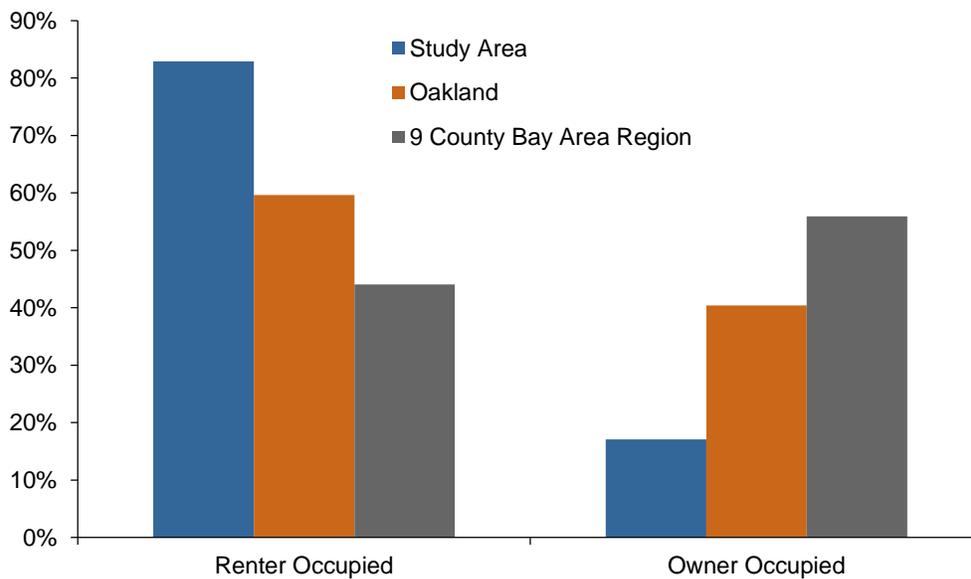
Sources: US Census, American Community Survey 5-Year Estimates, 2009-2013; Strategic Economics, 2015.

Figure 13. Housing Units by Year Built: Downtown Oakland Study Area, City of Oakland, and the Bay Area, 2013



Sources: US Census, American Community Survey 5-Year Estimates, 2009-2013; Strategic Economics, 2015.

Figure 14. Housing Units by Tenure: Downtown Oakland Study Area, City of Oakland, and the Bay Area, 2013



Sources: US Census, American Community Survey 5-Year Estimates, 2009-2013; Strategic Economics, 2015.

3.3 Recent and Planned Residential Development

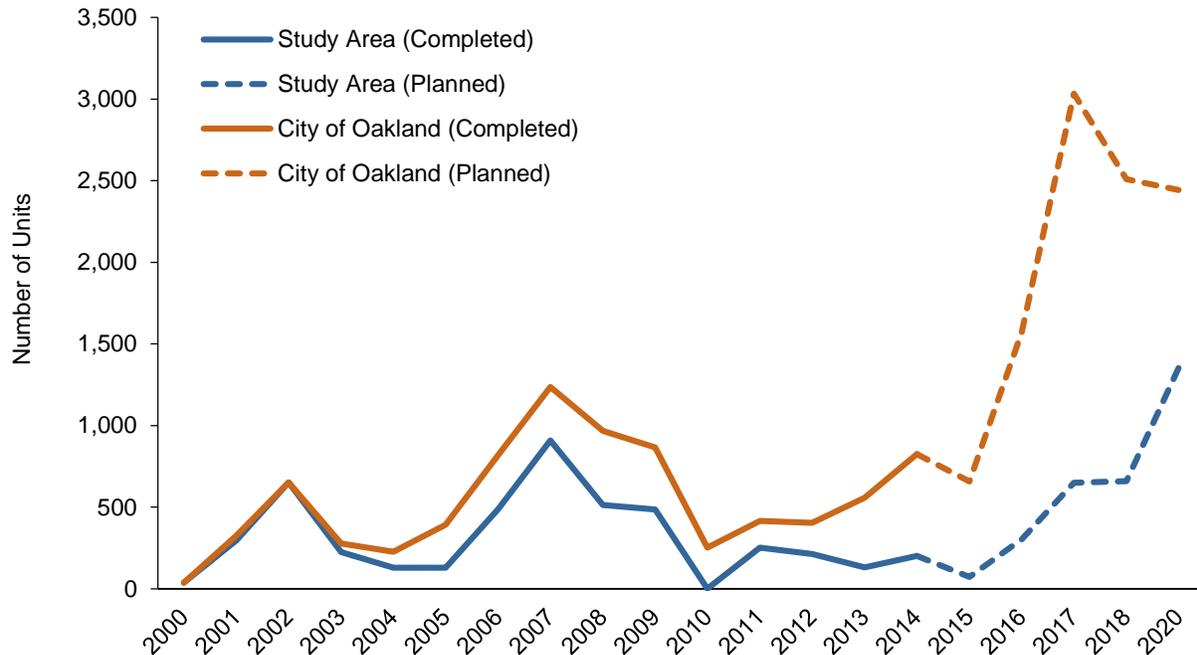
Downtown has attracted significant new housing development since 2000. Figures 15 and 16 show new housing units by year completed for Downtown compared to the City of Oakland as a whole. Between 2000 and 2014, 56 percent of all completed residential units in Oakland were located in the Downtown.

The pace of development has varied over time. Housing deliveries peaked between 2006 and 2009, with an average of 600 new units a year completed in the Downtown Study Area during that period. After 2010, production declined to approximately 160 new units a year in the Study Area, with affordable housing accounting for more than half of new development (Figure 16). In addition to the effects of the Great Recession and its aftermath, the post-2010 decline in housing production may also partly reflect the dissolution of Oakland's Redevelopment Agency in 2011.

An additional 5,000 new units are proposed, approved, or under construction in the Study Area, accounting for 29 percent of all planned units in Oakland. There are several major projects outside the Study Area, including Brooklyn Basin and Oak Knoll, that largely account for the projected spike in housing deliveries. Within the Study Area, most of the planned development is market-rate, and developers have submitted proposals for both mid- and high-rise buildings. However, with the exception of a few small market-rate projects of around 20 units each, most of the residential development currently under construction in the Study Area consists of subsidized, affordable housing. Several large, market-rate multi-family projects are under construction just north of the Study Area, in Broadway-Valdez (see discussion in Appendix C).

Note that the pipeline data includes some projects that the City has been tracking for many years, but that have not yet moved forward. Historically, development in Oakland has been slowed by challenges in obtaining financing, in part driven by the perception that investing in other locations (such as San Francisco or Silicon Valley) is more profitable and/or less risky. Anecdotal evidence from recent transactions suggests that the perception of Oakland as a risky investment location may be shifting, and may begin to change more rapidly if and when completed development projects begin to create a track record of success in the market. Interviews with developers also suggest that new "Type V" wood frame development (fewer than seven stories) may be financially feasible in some locations, although rising construction and land costs are creating challenges for new development. High-rise buildings are more expensive to construct than mid-rise development, making development more difficult. Given the limitations of the pipeline data and the shifting perceptions around risk, it is not clear how much of the development in the pipeline will be completed in the short to mid-term.

Figure 15. Completed and Planned Residential Units: Downtown Oakland and the City of Oakland, 2000-2020



Sources: City of Oakland, 2015; Strategic Economics, 2015.

Figure 16. New Residential Units by Year of Completion, 2000-2014

Period	Downtown Study Area		City of Oakland		Study Area as a Share of City	
	New Units	New Affordable Units	New Units	New Affordable Units	New Units	New Affordable Units
Total Units Completed						
2000-2005	1,470	59	1,913	309	77%	19%
2006-2009	2,398	307	3,891	917	62%	33%
2010-2014	797	401	2,457	1,739	32%	23%
Total, 2000-2014	4,665	767	8,261	2,965	56%	26%
Annual Average						
2000-2005	245	10	319	52	77%	19%
2006-2009	600	77	973	229	62%	33%
2010-2014	159	80	491	348	32%	23%
Total, 2000-2014	311	51	551	198	56%	26%

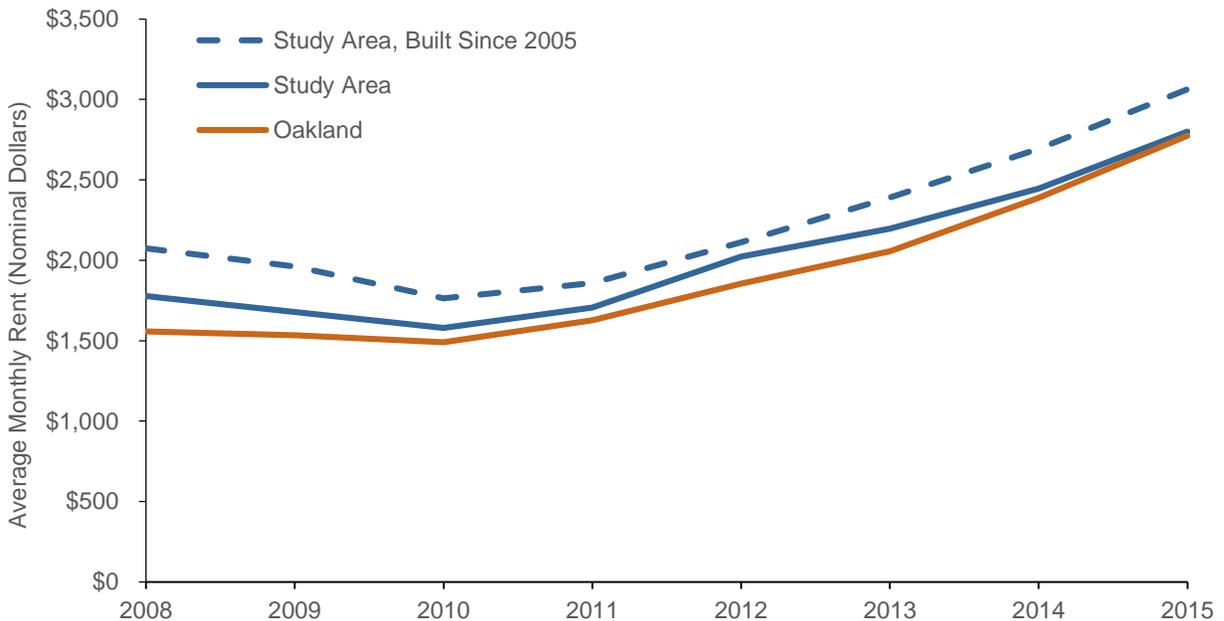
Sources: City of Oakland, 2015; Strategic Economics, 2015.

3.4 Apartment Market Trends

Figures 17 and 18 compare average rents and vacancy rates for rental housing in the Study Area and City of Oakland.⁷ During the recession (2008-2010), average rents declined slightly (Figure 17). However, a significant number of new units continued to come on the market in 2008 and 2009, as development projects begun prior to the recession were completed. New units that came on the market during this time were absorbed slowly, leading to the very high vacancy rates shown in Figure 18.

Since 2011, however, rents have grown significantly and vacancies have declined below 5 percent. A recent report ranked Oakland as the fourth most expensive rental market in the country, after San Francisco, New York, and Boston. The same report found that one-bedroom rents in Oakland increased by 19 percent in the past year alone, while growth in San Francisco rents appears to be slowing.⁸

Figure 17. Average Monthly Rent, Downtown Oakland, Oakland, 2008-2015

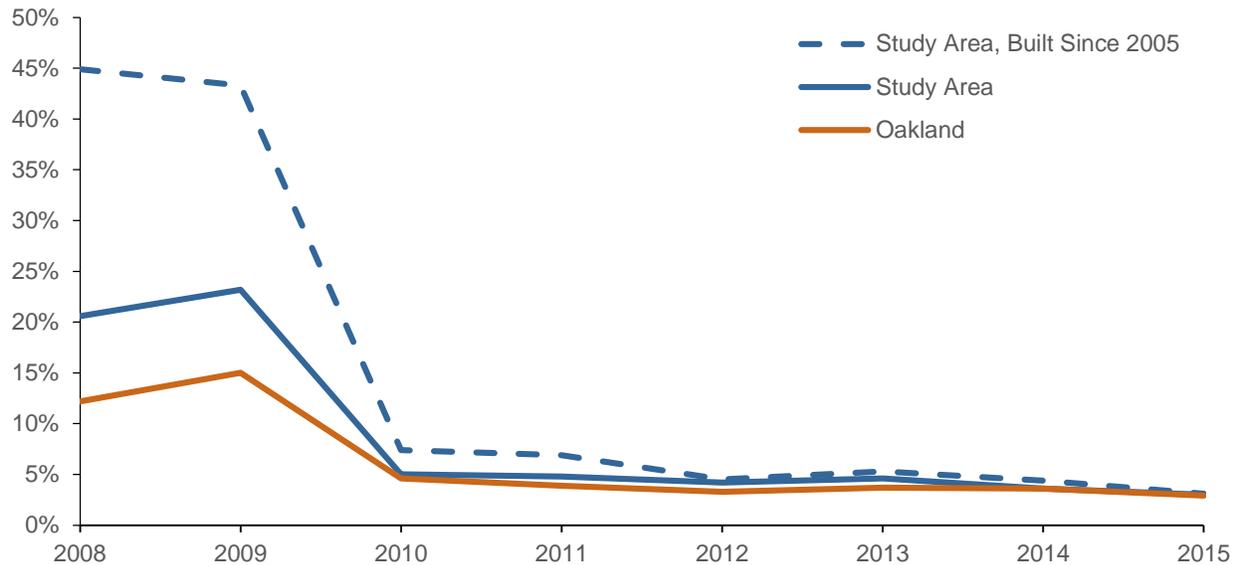


Sources: Real Answers, 2015; Strategic Economics, 2015.

⁷ Note that rental data shown in Figures 17 and 18 only include apartment buildings with 50 or more units.

⁸ Zumper National Rent Report: December 2015, <https://www.zumper.com/blog/2015/12/zumper-national-rent-report-december-2015/>.

Figure 18. Average Residential Vacancy Rate, Downtown Oakland, Oakland, 2008-2015



Note that high vacancy rates in 2008 and 2009 reflects the slow absorption of new rental units completed during this time period. Sources: Real Answers, 2015; Strategic Economics, 2015.

3.5 Factors Influencing Future Downtown Growth

Downtown Oakland has experienced transformative residential growth since 2000. More than 4,665 new housing units have been completed since 2000, and the number of households living in the Study Area has increased by one-third. Rapidly rising rents, low vacancies, and a significant volume of development proposals indicate that Downtown continues to be a highly attractive location for new households and residential development. However, the pace of future residential development and household growth will depend on a number of factors, including:

- Development feasibility and availability of financing:** As discussed above, 5,000 new housing units are proposed, approved, or under construction in the Study Area. While the majority of planned housing units are market-rate, most of the units currently under construction are affordable. Historically, development in Oakland has been slowed by challenges in obtaining financing, in part driven by the perception that investing in other locations (such as San Francisco or Silicon Valley) is more profitable and/or less risky. Anecdotal evidence from recent transactions suggests that the perception of Oakland as a risky investment location may be shifting, but land and construction costs have been rising and may make mid-rise development challenging in the short- to mid-term. Nevertheless, developers interviewed for the Downtown Specific Plan noted that Type V projects (mid-rise, wood frame buildings with fewer than seven stories) are viable at this time, at least in some parts of the Downtown. Several high-rise buildings have also been proposed, but these are more expensive to construct than mid-rise buildings, and therefore more challenging to develop given current market conditions.
- Continued local and regional employment growth:** Residential development in Downtown Oakland is closely tied to employment growth, especially in Downtown San Francisco and Downtown Oakland. Approximately a quarter of Downtown Oakland residents work in San Francisco and another quarter work in Oakland, with most of

these residents commuting either to Downtown San Francisco or staying within Downtown Oakland.⁹ Anecdotally, many households look for housing in Downtown Oakland in order to take advantage of the excellent transit access to regional employment centers, including Downtown San Francisco, Downtown Berkeley, and the University of California, Berkeley. Continued employment growth in these locations, as well as in Downtown Oakland itself, has the potential drive additional residential development in the Study Area.

- **Amenities and quality of life:** Growth in Downtown’s residential population has been accompanied by a significant increase in retail and dining opportunities. These amenities, combined with excellent access to transit (BART and AC Transit) and recent city investments (including improvements to Lake Merritt), make Downtown Oakland an attractive place to live. Continued public investment, reinforced by additional private development, has the potential to contribute to a virtuous cycle that could make Downtown an increasingly appealing place to both live and work.

⁹ Commute statistics are for the Downtown Plan Area (Source: U.S. Census, LEHD, 2013).

4 Employment and Commercial Market Trends

This section provides a discussion of recent employment trends at the local and regional levels, and a brief overview of Downtown Oakland’s commercial real estate market. The market overview builds on the detailed market analysis conducted for the Downtown Oakland Specific Plan.¹⁰ The section concludes with a discussion of factors that are expected to influence future Downtown employment growth.

4.1 Employment Trends

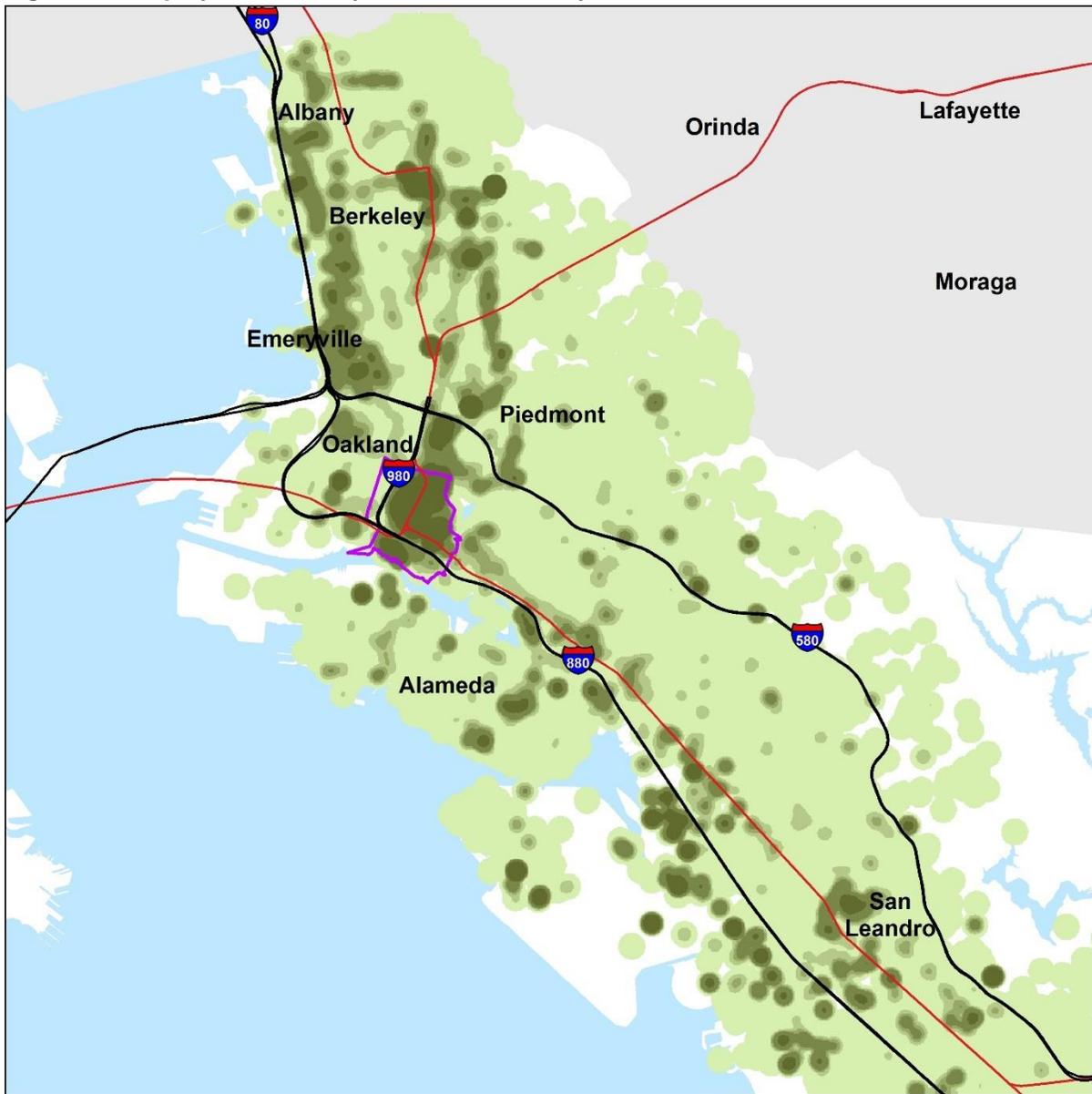
The employment analysis incorporates information from two different employment data sources. The U.S. Census Bureau’s Longitudinal Employer-Household Dynamics (LEHD) provides the most recent (2013) reliable employment counts by sector and location. The California Employment Development Department’s Quarterly Census of Employment and Workforce (QCEW) provides the best available information on how employment has changed over time, and is used below to discuss recent trends in the Study Area’s employment relative to the city and the region as a whole.

4.1.1 Employment Concentrations in Alameda County

Maps of employment concentrations in Alameda County are provided on the following pages, including all jobs (Figure 19), office-based jobs (Figure 20), retail and entertainment jobs (Figure 21), and production, distribution, and repair (PDR) jobs (Figure 22). Downtown Oakland is the largest and most densely concentrated job center in Alameda County and the East Bay as a whole (Figure 19). Employment in office-based sectors – a category that includes professional and managerial services, financial and leasing services, and information – is particularly concentrated in Downtown (Figure 20). In contrast, retail and entertainment jobs tend to be distributed along major arterials (Figure 21). PDR jobs – including manufacturing, wholesale, and transportation and utilities – are concentrated along the I-80 and I-880 corridors (Figure 22).

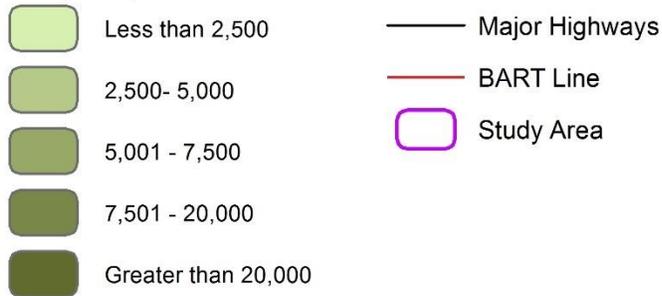
¹⁰ For additional information, see “Priority Development Area Profile Report Draft,” Downtown Oakland Specific Plan: Existing Conditions,” <http://www2.oaklandnet.com/oakca1/groups/ceda/documents/report/oak055798.pdf>.

Figure 19: Employment Density in Alameda County, 2013



Alameda County Employment Density, 2013

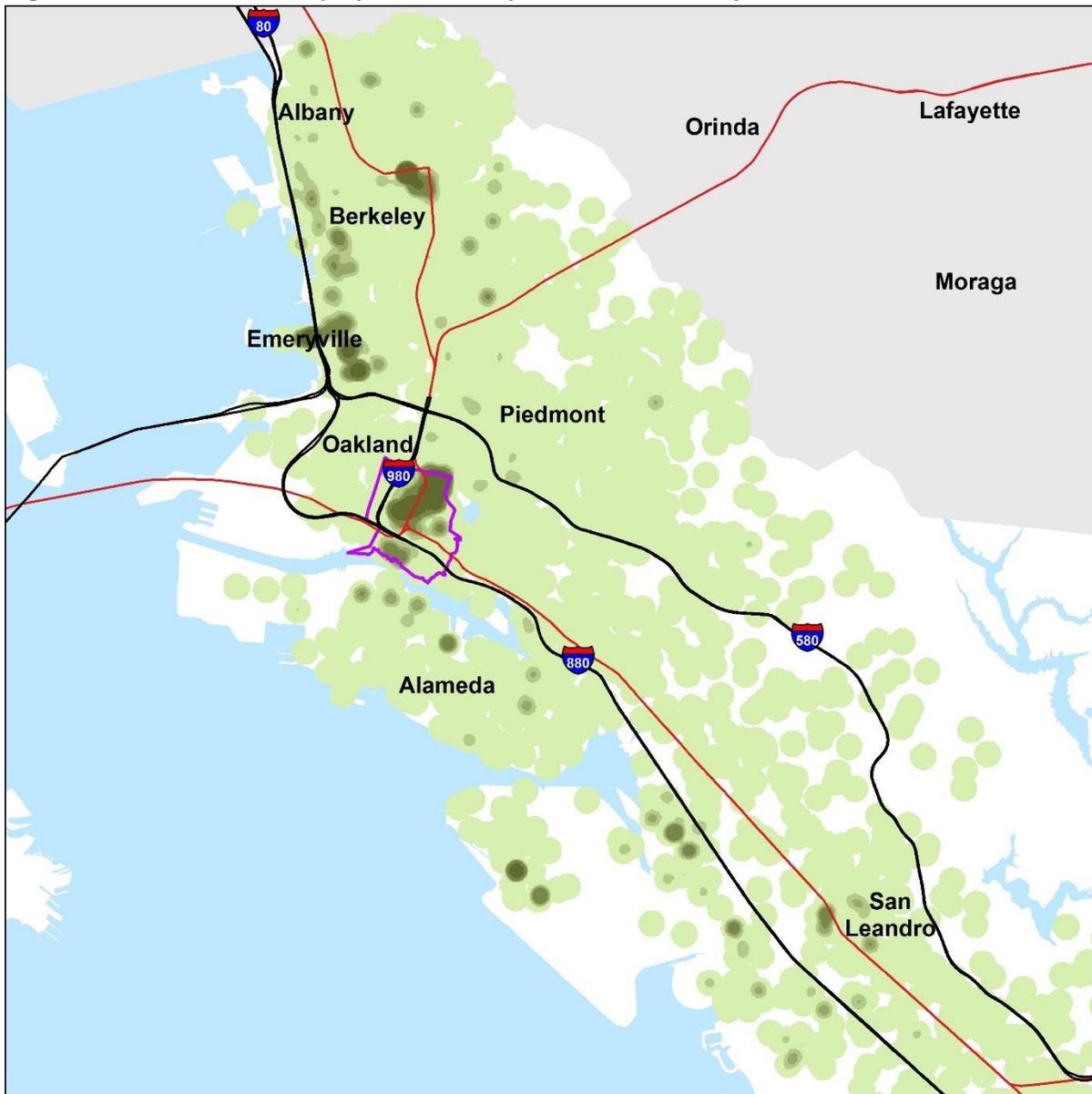
Jobs per Square Mile



Sources: LEHD, 2013; Strategic Economics, 2015.

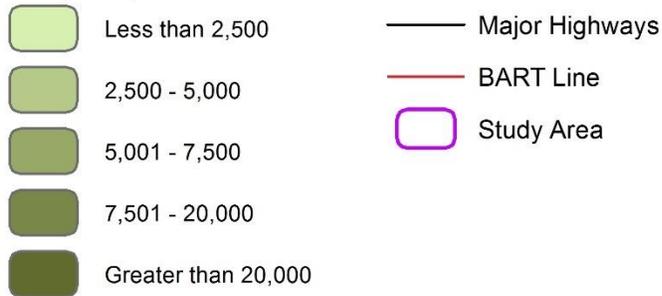


Figure 20: Office-Based Employment Density in Alameda County, 2013



Alameda County Office-Based Employment Density, 2013

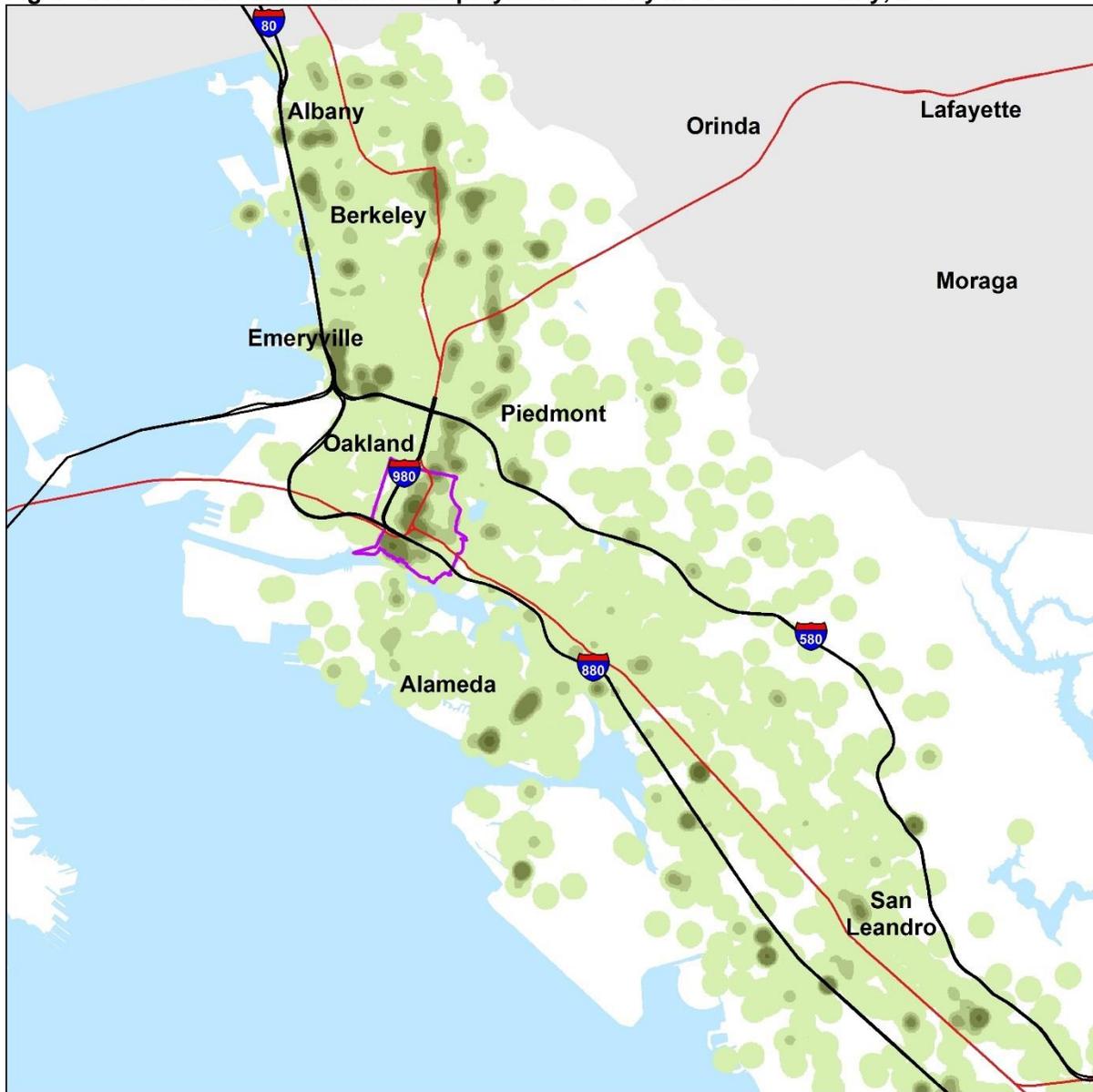
Jobs per Square Mile



Includes Professional and Managerial Services, Financial and Leasing Services, Information (NAICS Codes 51-55).
Sources: LEHD, 2013; Strategic Economics, 2015.

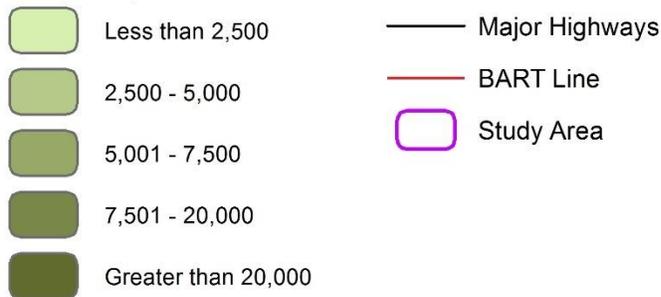


Figure 21: Retail and Entertainment Employment Density in Alameda County, 2013



Alameda County Retail and Entertainment Group Employment Density, 2013

Jobs per Square Mile

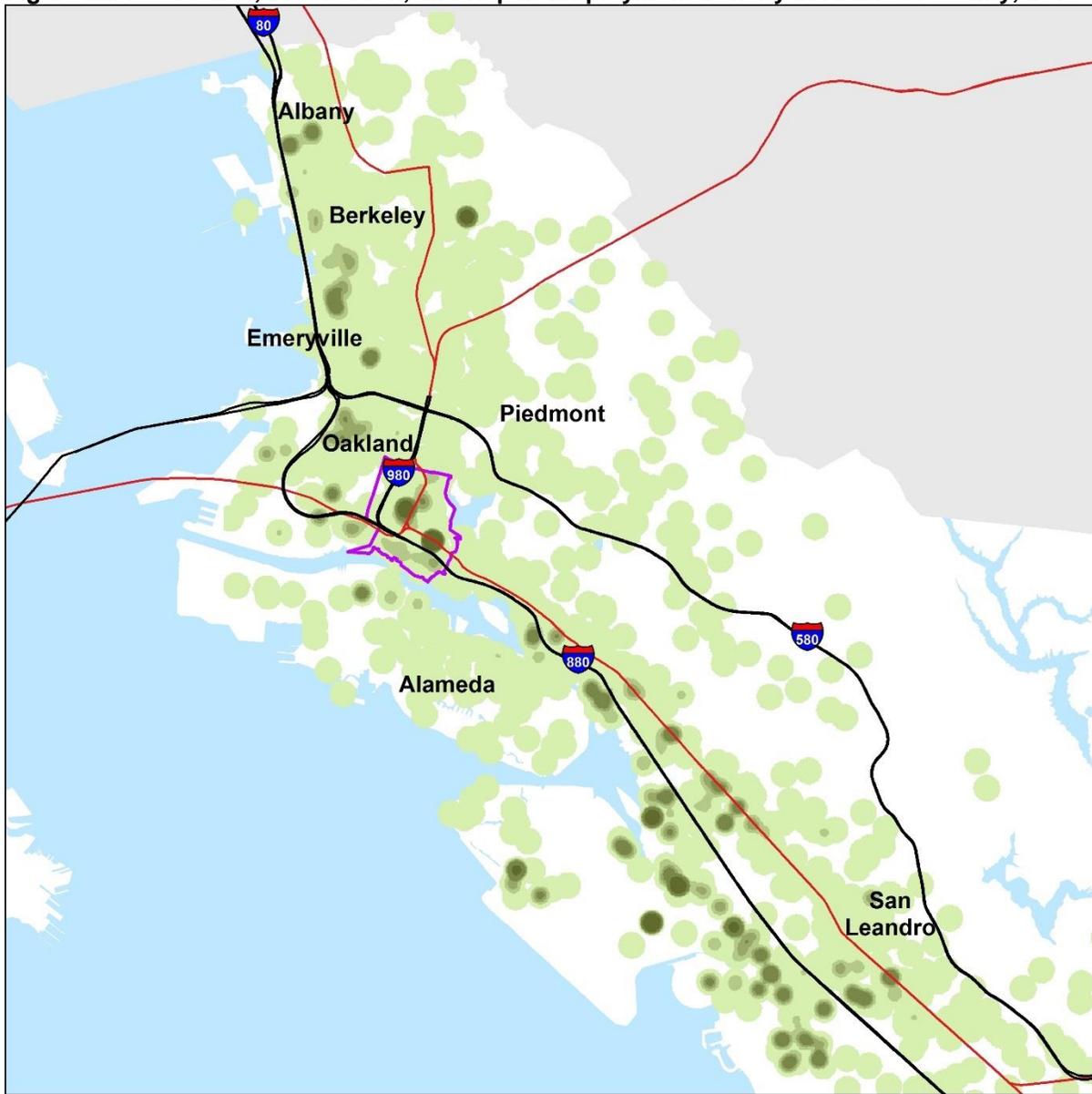


Includes Retail, Arts, Entertainment, and Recreation, and Accommodation and Food Services Jobs (NAICS Codes 44-45 and 71-72).

Sources: LEHD, 2013; Strategic Economics, 2015.

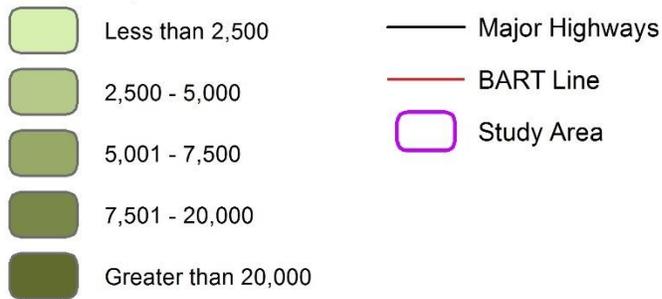


Figure 22: Production, Distribution, and Repair Employment Density in Alameda County, 2013



Alameda County PDR Industry Group Employment Density, 2013

Jobs per Square Mile



Includes Manufacturing, Wholesale, and Transportation and Utilities Jobs (NAICS codes 31-33, 42, and 48-49).
Sources: LEHD, 2013; Strategic Economics, 2015.



4.1.2 Current Study Area Employment

Approximately 73,200 jobs were located in the Study Area in 2013, accounting for 38 percent of total employment in Oakland (Figure 23). While the Study Area accounts for just 2 percent of the Bay Area's total employment, Downtown's excellent transit and freeway access – as well as its location within the Bay Area's third most populous city – make it an important employment center for the entire region.

Professional and managerial services, government, and health and educational services account for the largest share of employment in Downtown Oakland (Figure 23). Together, these three sectors employed 60 percent of all Downtown workers in 2013. Arts, recreation, and other services – a category that includes dining, hotels, and arts-related businesses – is the next largest sector, with 11 percent of employment in 2013.

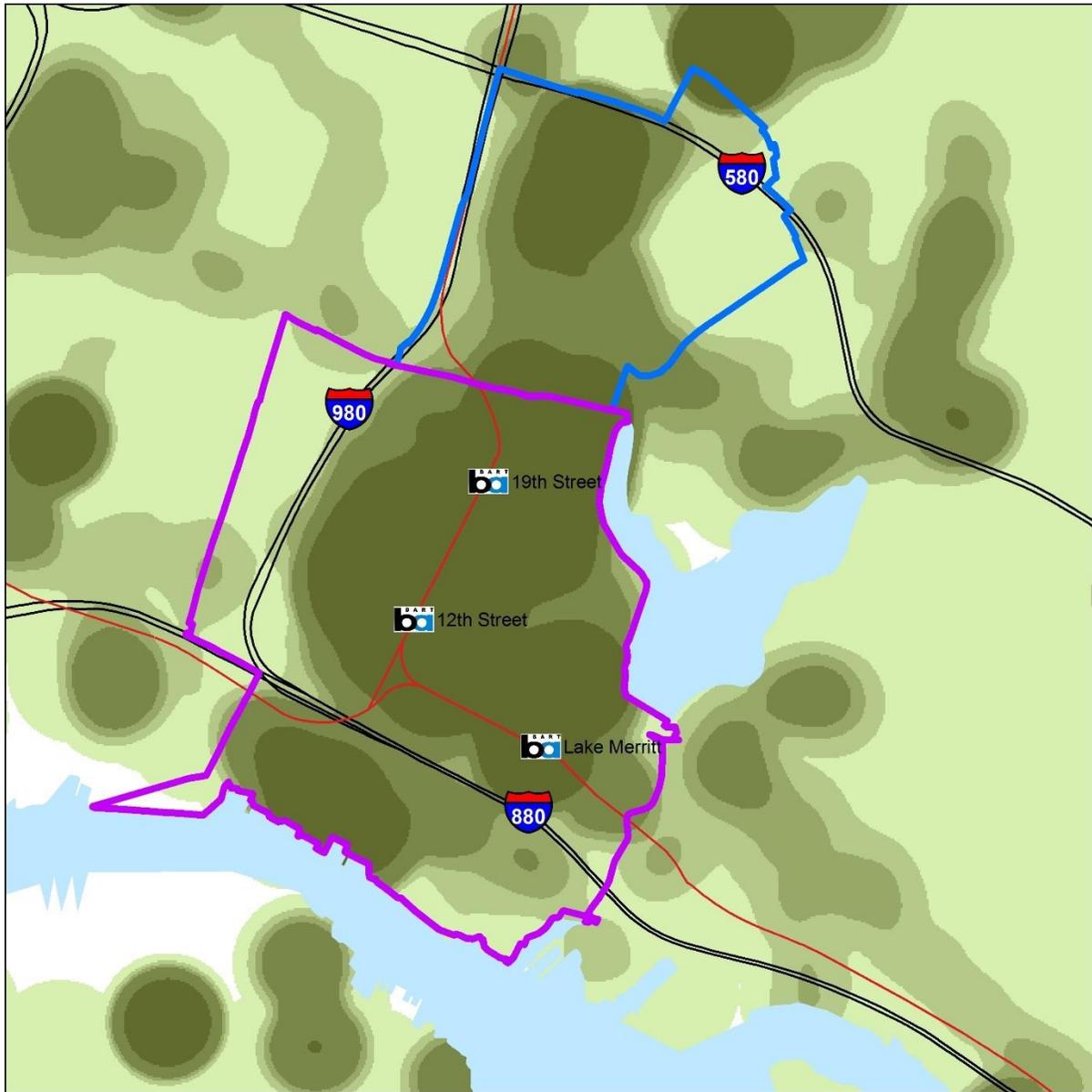
Within Downtown, employment in office-based sectors tends to be concentrated along Broadway and in the Lake Merritt office district, with a smaller concentration in the Jack London area (Figure 25). Employment in retail and services is also concentrated in Jack London and along Broadway, but also extends north of the Study Area into Broadway-Valdez (Figure 26). Nodes of PDR employment are present in Jack London Square and along the waterfront, including the Oakland Produce Market and other wholesalers on the eastern end of the district (Figure 27). The PDR employment concentrations near the 12th Street and Lake Merritt BART stations may reflect office-based employment in the transportation and logistics sectors.

Figure 23. Employment by Sector: Downtown Oakland Study Area, City of Oakland, and the 9-County Region, 2013

Sector	Downtown Oakland Study Area		City of Oakland		Nine-County Bay Area		Study Area as a % of Total Oakland Jobs	Study Areas as a % of Total Regional Jobs
	Jobs	% of Total	Jobs	% of Total	Jobs	% of Total		
Professional & Managerial Services	19,742	27%	31,282	16%	688,072	20%	63%	3%
Government	15,021	21%	16,405	9%	122,893	4%	92%	12%
Health & Educational Services	10,268	14%	55,413	29%	731,852	22%	19%	1%
Arts, Recreation & Other Services	8,288	11%	26,302	14%	479,811	14%	32%	2%
Transportation & Utilities	6,643	9%	18,844	10%	120,761	4%	35%	6%
Financial & Leasing	3,782	5%	7,340	4%	178,850	5%	52%	2%
Manufacturing & Wholesale	3,344	5%	14,849	8%	424,347	13%	23%	1%
Information	2,344	3%	3,217	2%	141,570	4%	73%	2%
Construction	2,164	3%	6,901	4%	138,975	4%	31%	2%
Retail	1,598	2%	11,560	6%	311,565	9%	14%	1%
Agriculture & Natural Resources	2	0%	372	0%	22,275	1%	1%	0%
Total	73,196	100%	192,485	100%	3,360,971	100%	38%	2%

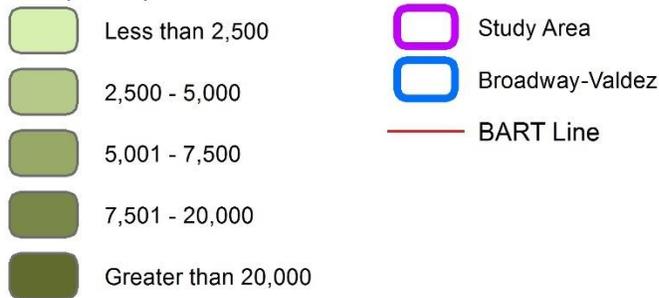
Sources: U.S. Census Bureau, Longitudinal Employer-Household Dynamics, 2013; Strategic Economics, 2015.

Figure 24. Study Area Employment Density, 2013



Downtown Oakland Employment Density, 2013

Jobs per Square Mile



Sources: LEHD, 2013; MTC, 2012; Strategic Economics, 2015.

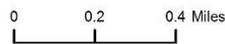
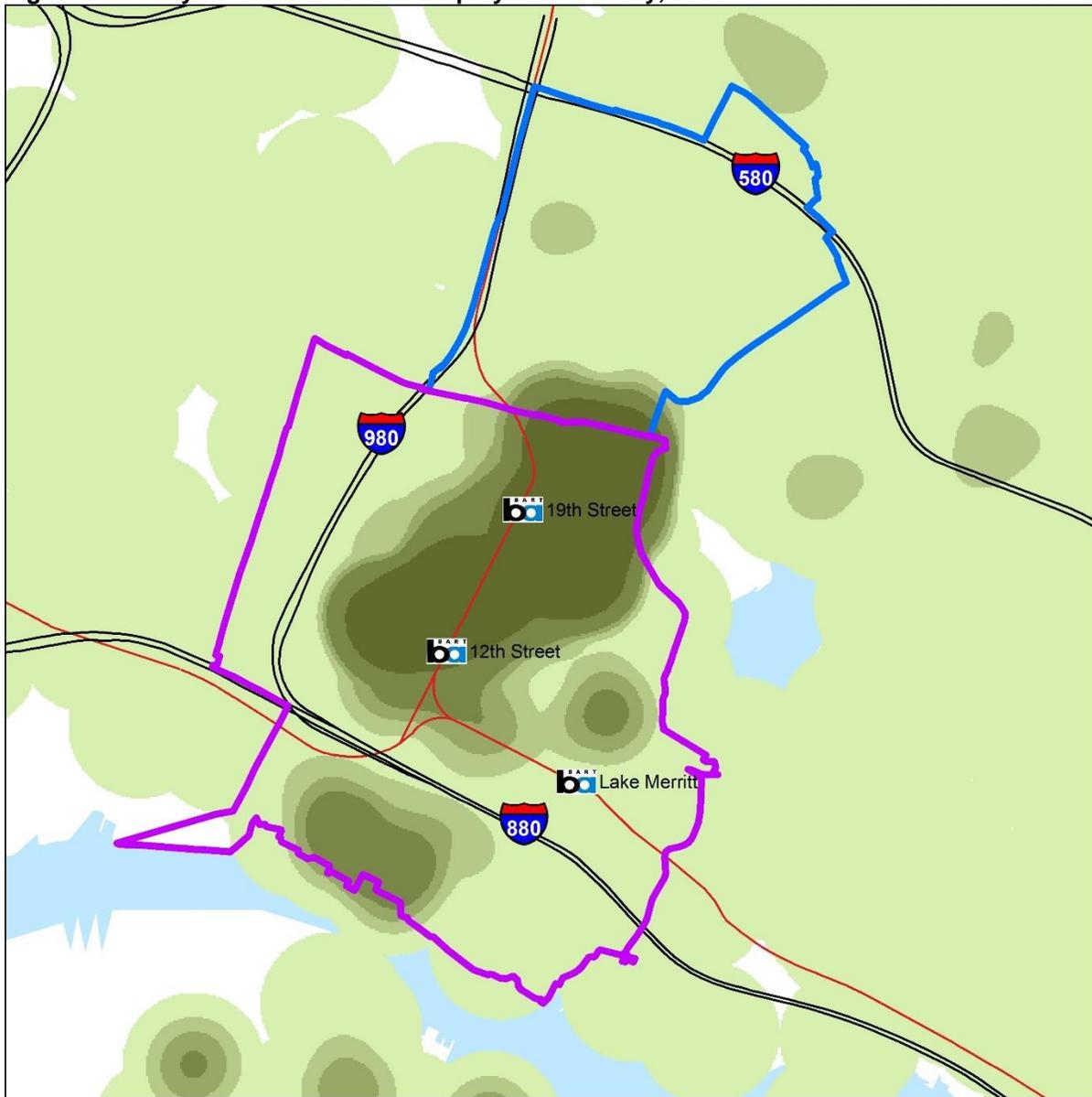
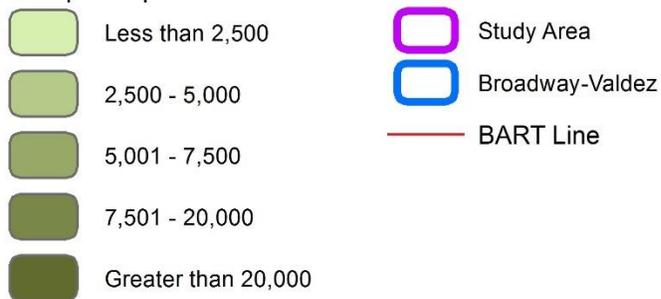


Figure 25: Study Area Office-Based Employment Density, 2013



Downtown Oakland Office-Based Employment Density, 2013

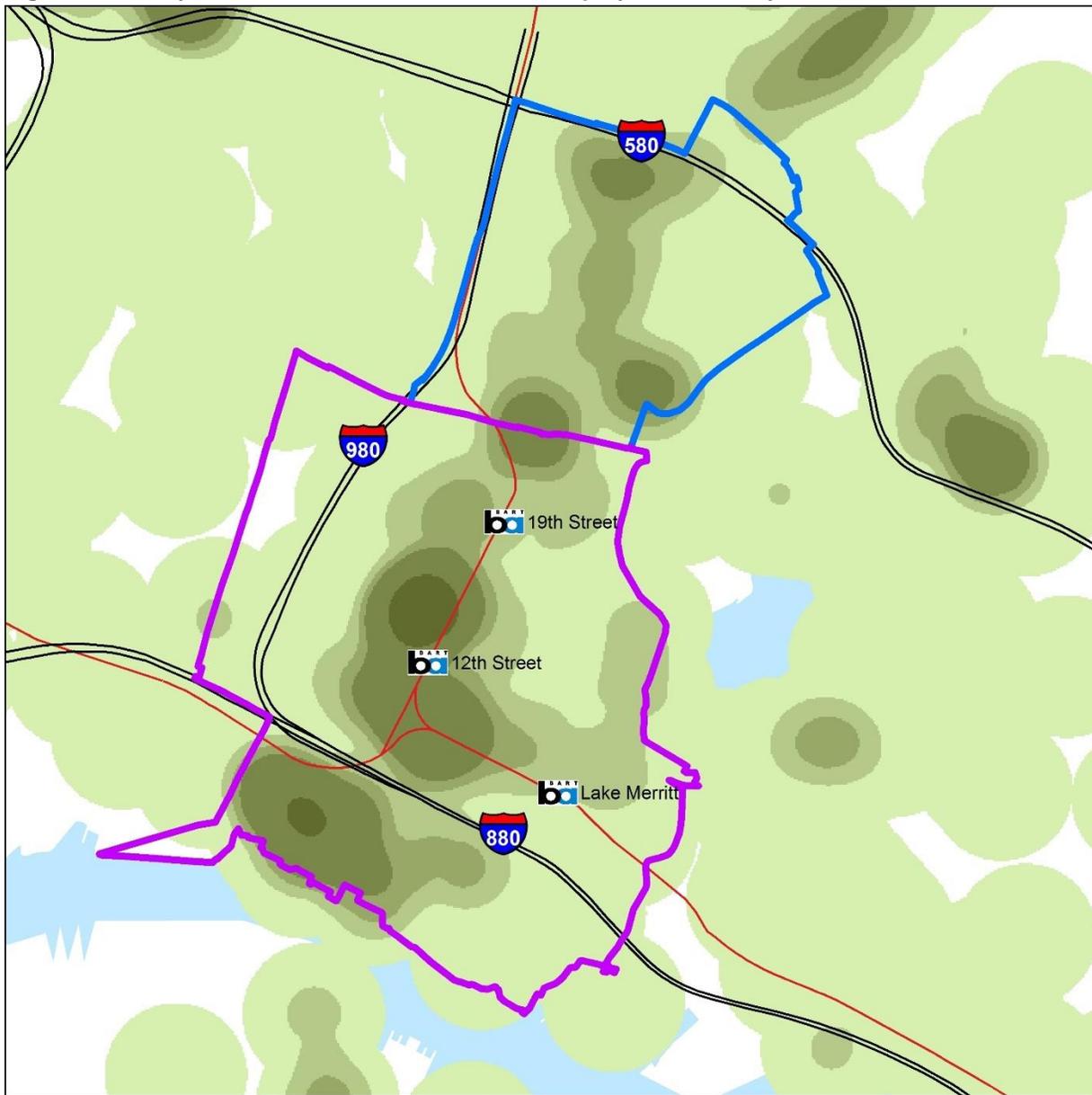
Jobs per Square Mile



Includes Professional and Managerial Services, Financial and Leasing Services, Information (NAICS Codes 51-55).
Sources: LEHD, 2013; MTC, 2012; Strategic Economics, 2015.

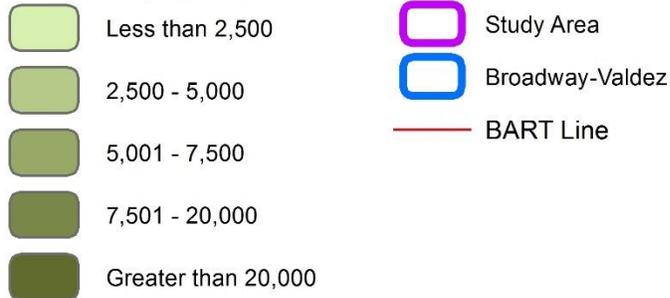


Figure 26: Study Area Retail and Entertainment Employment Density, 2013



Downtown Oakland Retail and Entertainment Employment Density, 2013

Jobs per Square Mile

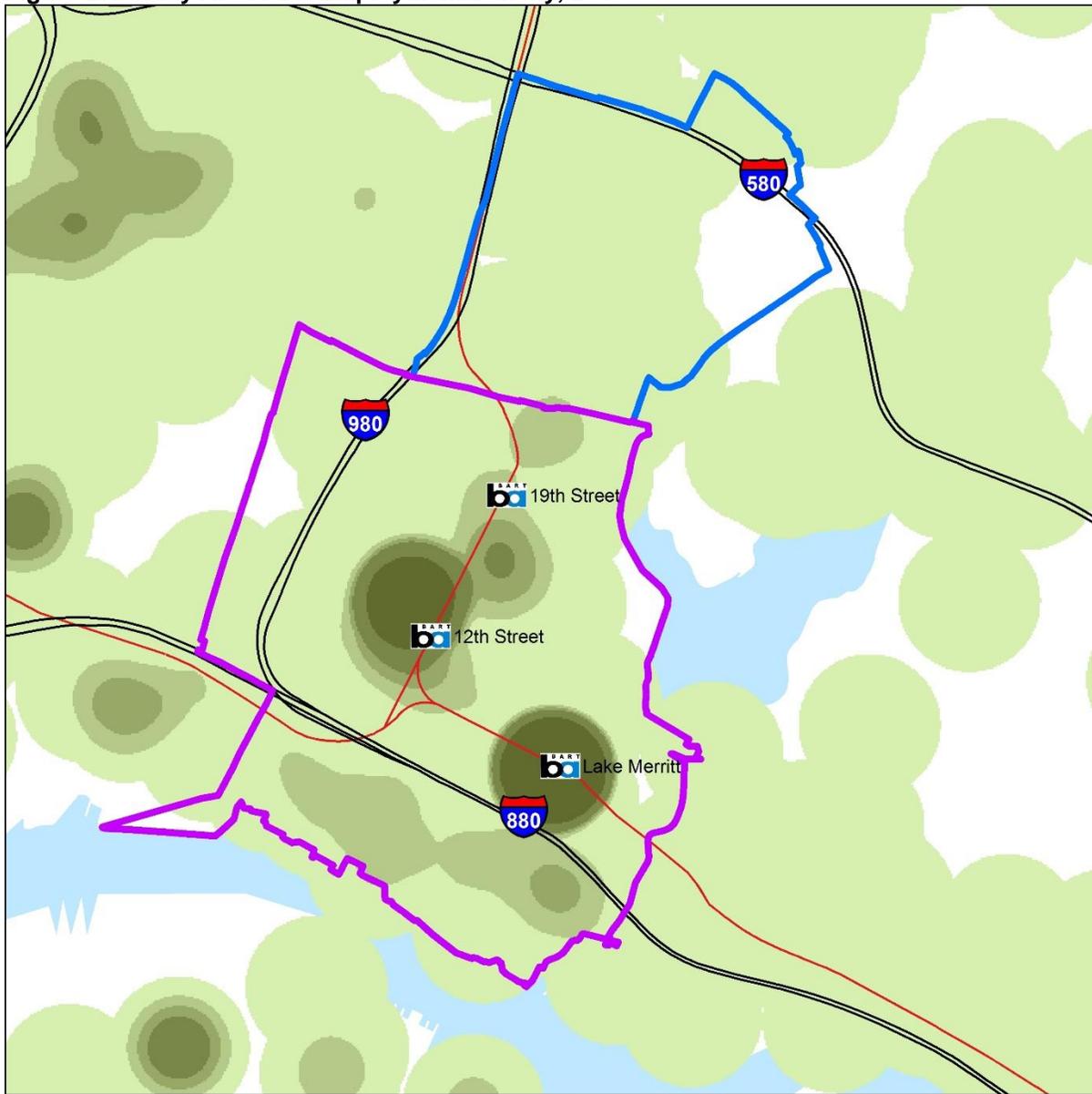


Includes Retail, Arts, Entertainment, and Recreation, and Accommodation and Food Services Jobs (NAICS Codes 44-45 and 71-72).

Sources: LEHD, 2013; MTC, 2012; Strategic Economics, 2015.

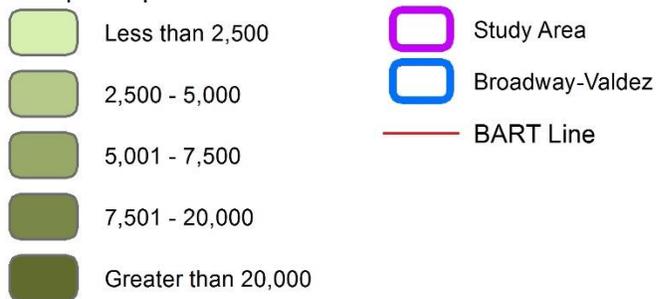


Figure 27: Study Area PDR Employment Density, 2013



Downtown Oakland PDR Employment Density, 2013

Jobs per Square Mile



Includes Manufacturing, Wholesale, and Transportation and Utilities Jobs (NAICS codes 31-33, 42, and 48-49).
Sources: LEHD, 2013; MTC, 2012; Strategic Economics, 2015.



4.1.3 Recent Employment Trends

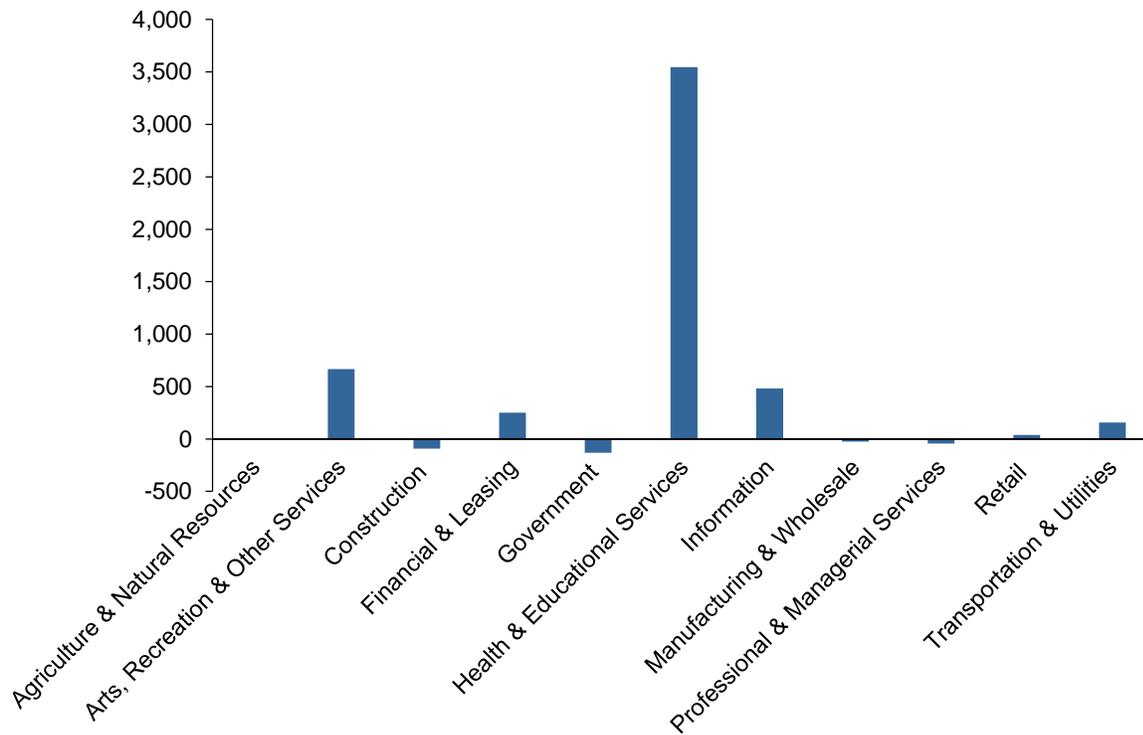
The Study Area has seen a significant increase in jobs in the recovery from the great recession, adding almost 5,000 new jobs between 2011 and 2014. As shown in Figure 28, Downtown Oakland's employment growth has been driven by a few sectors, including health and educational services, arts and recreation (a sector that includes dining), and information. The increase in health and educational services jobs is due in part to the recent relocation of the Oakland Unified School District offices into the Study Area. Growth in arts and recreation and information jobs reflects Downtown's burgeoning arts and dining scene and the city's growing tech sector.

During the 2011-2014 period, the Study Area lost jobs in the construction and manufacturing and wholesale sectors. As discussed below, this is consistent with a trend of PDR uses in the Downtown being replaced by office, arts, and retail uses. Employment in the professional and managerial services and government sectors also declined slightly during this period. The decline in government employment reflects the public sector's delayed recovery from the budget cuts that occurred during the recession, and mirrors regional trends. The loss of a small number of professional and managerial services jobs (approximately 40) may be due to changes at a few employers.

For comparison, Figure 29 shows employment change by sector for the nine-county Bay Area region over the same time period (2011-2014). Much like the Study Area, the region saw job growth in health and educational services, and smaller increases in information and arts and recreation. In contrast to the Study Area, the region added a significant number of jobs in professional and managerial services, as well as jobs in the construction and manufacturing and wholesale sectors.

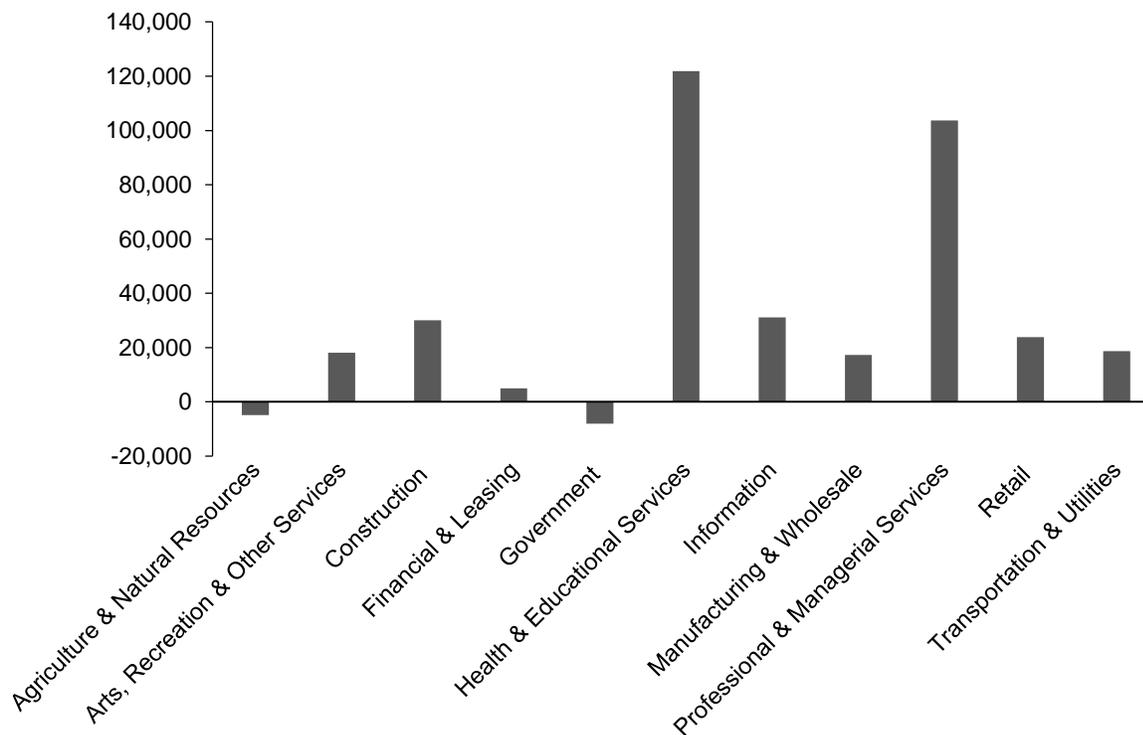
Figure 30 shows the share of net new Bay Area jobs added between 2011 and 2014 that were located in Downtown Oakland (i.e., the Study Area's capture of net new regional jobs). Overall, the Study Area captured 1.4 percent of net new regional jobs during this time period, less than its share of all Bay Area jobs in 2011 (1.9 percent). Between 2011 and 2014, the Study Area captured a particularly high share of regional growth in financial and leasing services, arts and recreation, health and educational services, and information jobs. Note that the capture rate for government is positive because Downtown and the region both lost jobs in this sector between 2011 and 2014.

Figure 28. Net New Jobs by Employment Sector: Downtown Oakland, 2011-2014*



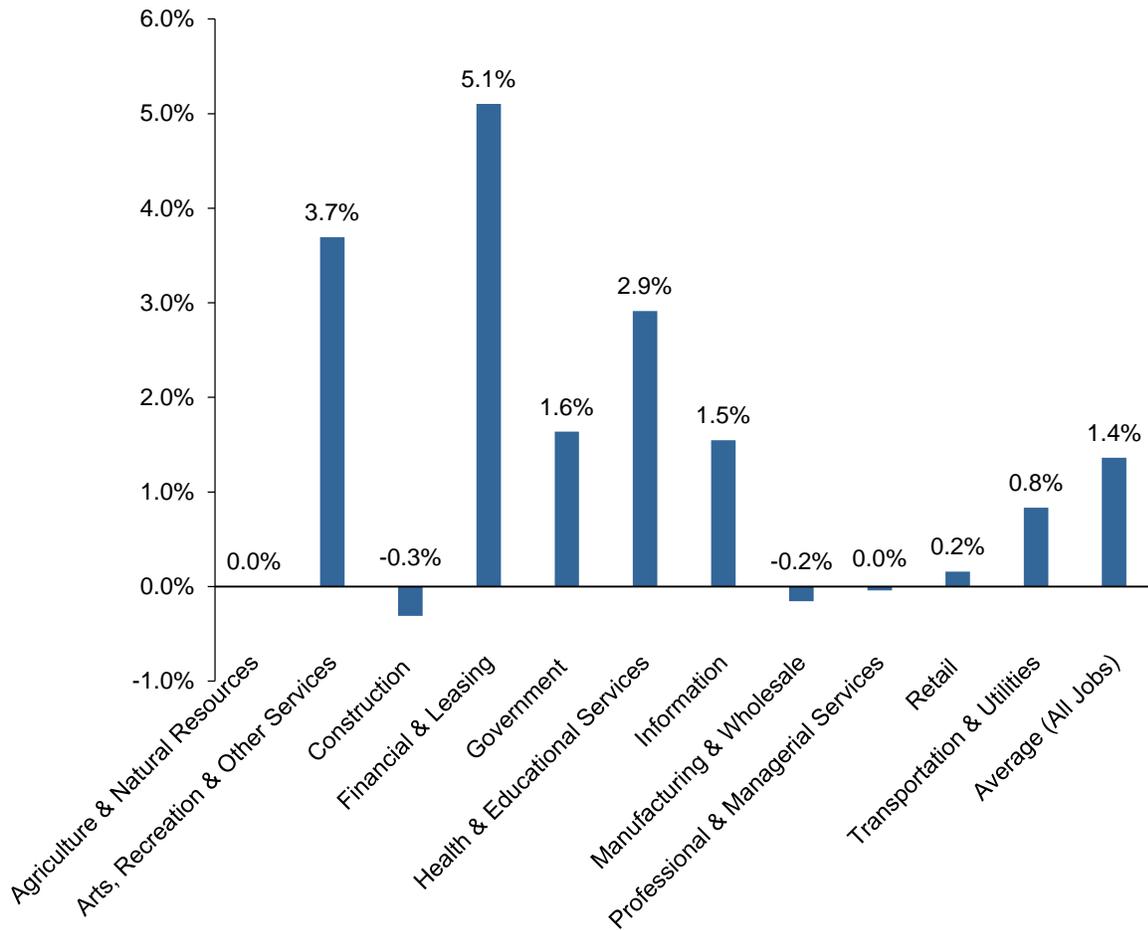
*Q4 2013 - Q3 2014 4 quarter average.
 Source: California EDD, 2015; Strategic Economics, 2015.

Figure 29. Net New Jobs by Employment Sector: 9 County Bay Area Region, 2011-2014



Source: Quarterly Census of Employment and Wages, 2015; Strategic Economics, 2015.

Figure 30. Percent of Net New Regional Jobs Captured by Downtown Oakland, by Sector: 2011-2014*



*For Downtown Oakland, 2014 data are based on the Q4 2013 - Q3 2014 4 quarter average.
 Source: California EDD, 2015; Quarterly Census of Employment and Wages, 2015; Strategic Economics, 2015.

4.1.4 Commute Patterns

Figures 31 and 32 show the top ten locations for Downtown workers and residents, respectively. Among workers employed in Downtown Oakland, almost 20 percent live in Oakland. A much smaller share of workers live in San Francisco (10 percent) or other East Bay communities. Among employed residents of Downtown Oakland, nearly a quarter work in San Francisco, and another quarter work in Oakland.

Figure 31. Top Ten Home Locations for Workers Employed in Downtown Oakland

Place of residence	Percent of Total
Oakland	19.8%
San Francisco	9.9%
Alameda	3.5%
Berkeley	3.0%
San Leandro	2.8%
San Jose	2.7%
Hayward	2.5%
Richmond	2.0%
Castro Valley	1.9%
Concord	1.7%

Based on Downtown Specific Plan Area.
Sources: U.S. Census LEHD, 2013; Strategic Economics, 2015.

Figure 32. Top Ten Work Locations for Employed Residents of Downtown Oakland

Place of residence	Percent of Total
San Francisco	23.9%
Oakland	23.5%
Berkeley	5.6%
San Jose	2.5%
Los Angeles	1.9%
Alameda	1.8%
Sacramento	1.7%
Hayward	1.5%
Emeryville	1.4%
San Leandro	1.3%

Based on Downtown Specific Plan Area.
U.S. Census LEHD, 2013; Strategic Economics, 2015.

4.2 Office Market Trends

Downtown Oakland's office inventory exceeds 18 million square feet and accounts for approximately two-thirds of office space in Oakland (Figure 33). The Study Area's major office-based tenants have historically included government agencies (at the federal, state, regional, county, and municipal levels), some large private sector tenants (such as Pandora, Clorox, Kaiser Permanente, and Ask.com), and a variety of small, professional service firms typically occupying spaces under 10,000 square feet.

However, Downtown is increasingly attracting tenants seeking larger spaces, particularly in the creative industries. According to brokers working in San Francisco and Oakland, high office rents and limited availability in San Francisco are driving tenants to look for space in Downtown Oakland. Recent, high-profile moves to Oakland include Gensler, Sunset Magazine, and the California Stem Cell Institute. Most recently, Uber announced plans to open an office in Downtown Oakland in 2017.

The growing interest in Downtown Oakland has resulted in increased absorption, lower vacancies, and higher rents. Between 2011 and mid-2015, more than 200,000 square feet of office space was absorbed on average each year. This is a higher absorption rate than at any period since the late 1990s (Figure 35), and is particularly significant considering that no major new office buildings have been constructed in recent years. The Study Area's vacancy rate in the third quarter of 2015 reached 5.9 percent, and Class A office space rented at an average of \$3.20 per square foot per month (Figure 33). As shown in Figure 34, rents in Downtown Oakland are now higher than at any time since the late 2000s, and the gap between Oakland and San Francisco rents is declining, although it remains significant, with rents for Class A space in San Francisco averaging nearly \$6.00 a square foot in late 2015. Indeed, Downtown Oakland rents are nearing the record levels seen in the late 1990s, the last time major new office construction occurred Downtown.

Downtown Oakland has attracted minimal office development over the last 15 years. As shown in Figure 35, just under 500,000 square feet of office was built between 2007 and 2009, and no additional office development has been completed since 2009. Developers report that rents are now approaching the level at which Class A development can become financially feasible. However, the lending community continues to perceive Oakland as a relatively risky place to invest. According to developers, 50 to 75 percent of a proposed development must be pre-leased by a major tenant in order to receive financing.

While new, ground-up development has yet to begin, demand for creative office space has spurred a range of rehabilitations and conversions, including the 444,000 square feet currently under construction (the Kapor Center and Uptown Station, which will be occupied by Uber; see Figure 36).

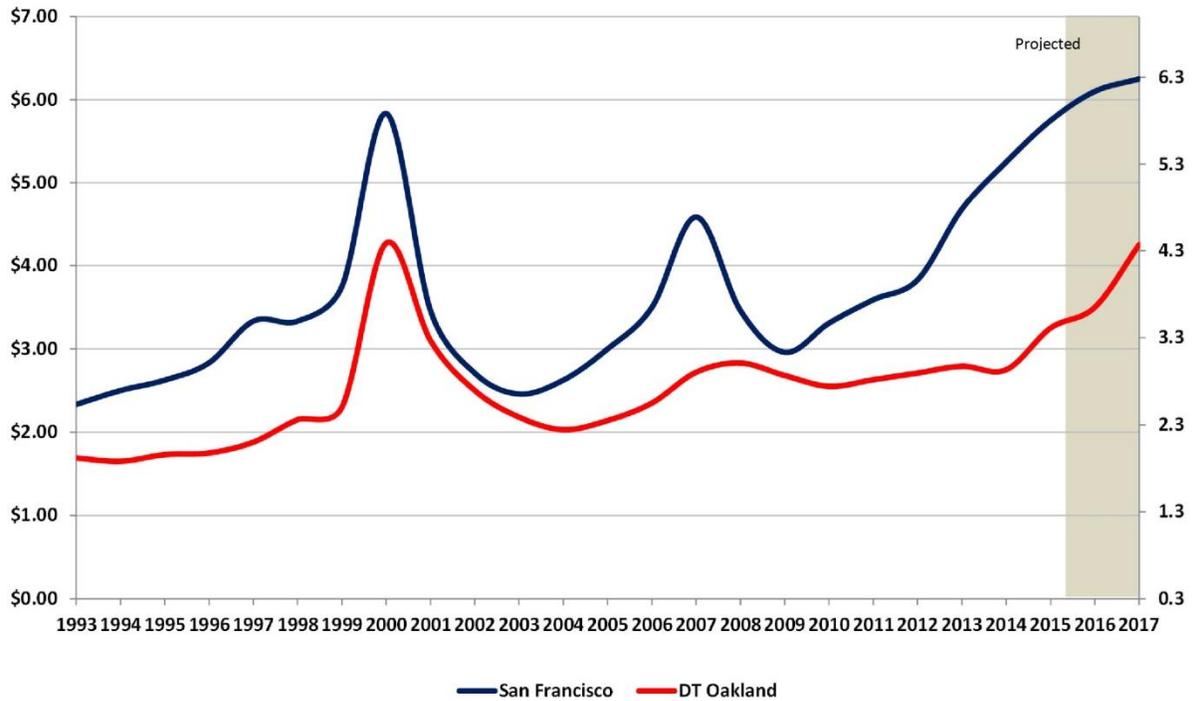
Figure 33. Office Inventory, Vacancy Rate and Asking Rent, Downtown Oakland, Oakland, Third Quarter, 2015

Area	Inventory (Rentable Building Area)	Percent of Total Inventory	Vacancy Rate	Average Asking Rent per Sq. Ft.*
Study Area				
Class A	7,941,193	44%	6.2%	\$3.20
Class B	7,831,684	43%	5.6%	\$2.40
Class C	2,468,753	14%	5.6%	\$2.29
Total	18,241,630	100%	5.9%	\$2.68
City of Oakland				
Class A	8,287,622	30%	6.5%	\$3.20
Class B	12,010,735	44%	8.7%	\$1.90
Class C	6,917,744	25%	4.9%	\$1.85
Total	27,225,301	100%	7.1%	\$2.17

*Monthly rent, full service.

Sources: CoStar Group, 2015; Strategic Economics, 2015.

Figure 34. Class A Office Rents in San Francisco and Downtown Oakland, 1993-2017 (Projected)



Source: Colliers International. Used with permission.

Figure 35. Average Annual Net Absorption of Office Space: Downtown Oakland and Oakland, 1998 – 2nd Quarter 2015

	Study Area	Oakland
1998 to 2000	499,068	602,829
2001 to 2005	40,416	87,934
2006 to 2010	-54,849	-120,602
2011 to 2nd Quarter 2015	203,242	264,386
1998 to 2nd Quarter 2015	133,693	161,993

Absorption refers to the net change in occupancy over a given time period.
 Source: CoStar Group, 2015; Strategic Economics, 2015.

Figure 36. Recently Completed and Planned Major Office Development, Rehabilitations, and Conversions

Project	Address	Retail (Sq. Ft.)	Office (Sq. Ft.)	Status
Center 21	2100 Franklin Street	15,000	218,000	Completed (2007)
Ferry Landing	10 Clay Street	15,000	15,000	Completed (2008)
Thomas Berkley Square	2000 San Pablo Ave	5,000	114,000	Completed (2009)
Jack London Market	55 Harrison St	62,000	110,000	Completed (2009)
Kapor Center	2134 Broadway	0	44,000	Under Construction
Uptown Station	1945 Broadway	0	400,000	Under Construction
City Center T12 (2005)	12th and Jefferson	0	600,000	Approved
Kaiser Center	300 Lakeside Drive	22,000	1,345,000	Approved
1100 Broadway	1100 Broadway	9,810	310,285	Approved
Total				
Completed Since 2005		97,000	457,000	
Under Construction		0	444,000	
Approved or Proposed		31,810	2,255,285	

Sources: City of Oakland, 2015; Strategic Economics, 2015.

4.3 Retail and Hotel

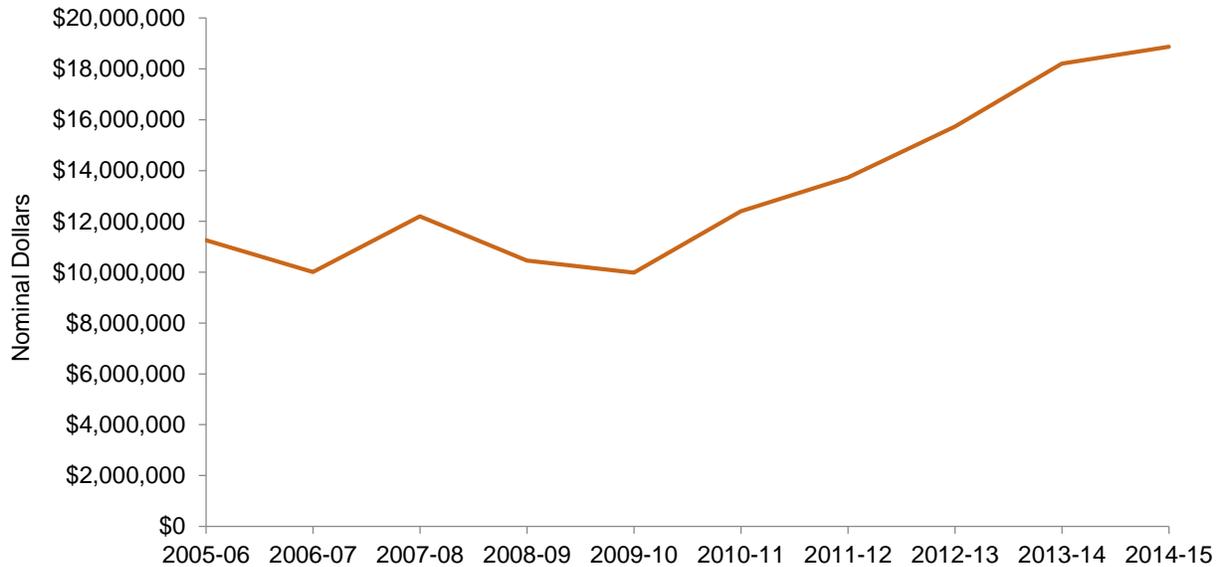
In addition to an increase in demand for office space, Downtown Oakland has also experienced growing demand for retail and hotel uses. The Study Area is becoming a regional destination for dining, drinking, and entertainment businesses, while also benefitting from the growing residential and daytime populations. Restaurants and entertainment establishments are concentrated in Jack London, Uptown, Old Oakland, and Chinatown, while other areas of the Downtown tend to serve clients primarily during the daytime. According to brokers, the uptick in demand has led to the vacancy rate dipping below five percent for street retail storefronts along the major corridors in the Study Area. Brokers report that typical rents range from \$2.00 to \$2.25 per square foot, up to \$2.50 at highly desirable locations such as Broadway and Grand Avenue. Despite the growing demand for space, retail development has been relatively limited in recent years. Approximately 170,000 square feet of new retail space has been completed since 2005, almost all on the ground floor of mixed-use residential or office buildings.

Hotels in the Study Area have also benefited from Downtown’s growing employment base, as well as from increased tourism to Oakland and the Bay Area. Figure 37 shows that citywide transient occupancy (hotel) tax receipts have increased by nearly 90 percent since the 2009/2010 fiscal year. Oakland hotel occupancy rates were 79 percent in 2015;¹¹ hotel demand is typically considered to exceed supply when occupancy rates exceed 70 percent. While Downtown Oakland has seen no new major hotel development since the Courtyard Marriott opened in 2002, the strength of the current market and limited existing options are driving

¹¹ Data prepared by STR for Visit Oakland; cited in Annie Sciacca, “Oakland Tourism Smashes Records as Industry Considers New Hotel Fee,” San Francisco Business Journal, May 5, 2015. <http://www.bizjournals.com/sanfrancisco/blog/2015/05/tourism-hospitality-visit-oakland-economy-hotel.html>

investments to improve existing properties, as well as heightened interest from hotel developers. There is currently a proposal to construct a new 95 room, 6-story Hampton Inn hotel half a block outside the City Center subarea.

Figure 37. Oakland Transient Occupancy Tax Receipts by Fiscal Year (Not Adjusted for Inflation)



Sources: City of Oakland, 2006 to 2015; Strategic Economics, 2015.

4.4 Production, Distribution, and Repair

The Study Area contains less than five percent of Oakland’s production, distribution, and repair (PDR) space. This space is largely located in the Jack London district, and includes early- to mid-20th century warehouse and manufacturing buildings.¹² According to brokers, PDR space is in high demand and vacancies are very low. Monthly rents in the Jack London area approach \$0.90 to \$1.00 per square foot per month, compared to approximately \$0.60 citywide. However, this strong performance in part reflects the growing interest from office, residential, arts, and retail uses in occupying PDR spaces. These users can support higher rents and values than traditional industrial users, and are driving reuse and redevelopment of industrial properties.

4.5 Factors Influencing Future Downtown Growth

As the East Bay’s major employment center, Downtown Oakland has made a strong recovery from the great recession, with recent job growth driven by the health and educational services, arts and recreation (including dining), and information sectors. As demand for office space has increased, rents have increased and vacancies have declined significantly. However, while a

¹² Note that the PDR employment concentrations near the 12th Street and Lake Merritt BART stations, shown in Figure 27, appear to reflect office-based employment in the transportation and logistics sectors.

few major office projects have been proposed, no new Class A office building has yet been built, in part because lenders remain wary about the strength of the market.

The potential for future employment growth in Downtown Oakland is tied to several factors, including:

- **Oakland’s economic competitiveness:** Research has found that most job growth in California jurisdictions is generated by existing companies growing in the city or county where they are located, rather than by companies moving in from another region or state.¹³ According to SPUR, companies that started in Oakland (such as Pandora, Ask, Sungevity, Sfuncube, and BrightSource Energy) have accounted for most of the job growth in Oakland’s tech sector.¹⁴ However, recent relocations of major firms from San Francisco into Downtown Oakland have contributed to the growing perception of Downtown as a regionally important, fast-growing employment center. According to local brokers, the “spillover” from San Francisco was initially limited to the most price-sensitive tenants, such as non-profits, but has more recently expanded to include creative and high-tech businesses. (Indeed, most of the recent moves to the Study Area are not yet reflected in the employment or real estate market data available at the time of this analysis.) Firms are drawn to Downtown Oakland not only because rents are significantly lower than in San Francisco, but also because of Downtown’s urban environment, excellent transit access, and expanding retail and dining options. Continued public and private investments in infrastructure and amenities have the potential to support additional job growth. At the same time, however, the limited availability of office space may limit the potential to grow jobs in the short- to mid-term, whether from companies that originate in or move to Oakland.
- **Timing of new office development:** Developers report that rents are nearly high enough to make office development feasible in Downtown Oakland. However, obtaining financing remains a barrier, as investments in Oakland may still be perceived as high-risk. According to developers, 50 to 75 percent of a proposed development must be pre-leased by a major tenant in order to receive financing. Nevertheless, anecdotal evidence from recent transactions suggests that the perception of Oakland as a risky investment location may be shifting, encouraging the entrance of institutional investors into this market.¹⁵ Downtown appears to be reaching an inflection point. Increasing demand, a continuing strong market, and shifting perceptions of risk could lead to one or more office buildings being constructed in the current market cycle, providing space to accommodate a significant increase in employment. Alternatively, the construction of new office buildings may not become viable before the next market downturn, pushing new construction to the following expansionary period and limiting short-term employment growth.

¹³ Karen Chapple and Carrie Makarewicz, “Restricting New Infrastructure: Bad for Business in California?,” 2010, <http://escholarship.org/uc/item/5rx2z17b.pdf>.

¹⁴ SPUR, *A Downtown for Everyone: Shaping the Future of Downtown Oakland*, May 2015, <http://www.spur.org/publications/spur-report/2015-09-09/downtown-everyone>.

¹⁵ “Exclusive: UBS in Contract to Buy Clorox Building in Oakland”, Roland Li, San Francisco Business Times, November 20 2015, <http://www.bizjournals.com/sanfrancisco/blog/real-estate/2015/11/ubs-oakland-office-clorox-westcore-properties.html>

- **Availability of prime office sites:** Previous analyses have found that Downtown has a significant amount of developable land, including many vacant parcels and parking lots. While land availability is not generally a constraint, office development is more location sensitive than residential development, and there are only a limited number of prime sites for office development (i.e., on or near Broadway, close to the BART stations).¹⁶ Whether or not these sites are preserved for office development depends on in part the pace and timing of future residential development relative to new office construction, as well as future land use decisions by the City, which is currently in the process of drafting the Downtown Specific Plan.

¹⁶ SPUR, *A Downtown for Everyone: Shaping the Future of Downtown Oakland*, May 2015, <http://www.spur.org/publications/spur-report/2015-09-09/downtown-everyone>.

5 Employment and Household Growth Scenarios

This section provides a range of job and household growth projections for the Downtown Oakland Study Area through 2040. The projections are intended to inform future transportation planning in a qualitative way by providing an understanding of the likely magnitude of future growth under a range of scenarios.

Based on the trends described in previous sections, Strategic Economics constructed two scenarios. Each scenario incorporates assumptions about the share of future regional growth captured within the Study Area, based on ABAG's 2013 Plan Bay Area projections for the nine-county region. The scenarios include:

- **Scenario 1 (Moderate Growth):** The moderate growth scenario is based on recent employment and household growth trends. In this scenario, the Study Area continues to capture a similar share of the region's net new employment growth in each sector as in the 2011 to 2014 period.

The Scenario 1 household capture rate is based on the share of the region's net new housing units that the Study Area captured between 1990 and 2013 (0.9 percent). The Study Area is assumed to capture 0.9 percent of regional household growth between 2015 and 2020, with the capture rate increasing gradually in each subsequent five-year period.

- **Scenario 2 (Rapid Growth):** This scenario represents a significantly more rapid growth trajectory for Downtown Oakland. The Study Area is assumed to become increasingly competitive in high-tech and other office-based sectors over time, attracting companies that are priced out of San Francisco while also continuing to grow existing businesses. The scenario also assumes that the Study Area attracts a higher share of the region's jobs in retail, arts, dining, lodging, and other services.

The Scenario 2 household capture rate is based on the share of the region's net new housing units that the Study Area captured between 2000 and 2013 (1.8 percent). The scenario assumes that the Study Area captures 1.8 percent of regional household growth between 2015 and 2020, and that the household capture rate increases in each subsequent five-year period.

Appendix A describes the assumptions and methodology of the scenarios in more detail.

5.1 Scenario Results

Between 2015 and 2040, the Study Area is projected to attract 12,100 net new jobs under Scenario 1, and 23,900 net new jobs under Scenario 2. This represents or 1.4 to 2.9 percent of total projected regional job growth during this time period (Figure 38). Figures 39 and 40 show projected job growth on an annual average basis and by sector, respectively. The estimated amount of office space required to absorb the level of job growth projected in each scenario is

shown in Figure 41.¹⁷ Given Downtown's very low vacancy rates, significant new office development will be required under either scenario. Scenario 1 implies net new office absorption of 773,000 square feet between 2015 and 2020 – i.e., at least one to two major office towers, in addition to the 444,000 square feet of office space that is currently under construction in the Study Area. Scenario 2 will require significantly more new office development in the short, medium, and long terms, as well as continued intensification of existing space.¹⁸

The Study Area is projected to accommodate 6,500 new households by 2040 under Scenario 1, and 12,900 net new households under Scenario 2. This represents 1.1 to 2.2 percent of projected regional household growth (Figure 38), and approximately 260 to 520 new households a year on average between 2015 and 2040 (Figure 39). As a point of comparison, the Study Area has added more than 260 new housing units a year in six of the last 15 years, while more than 500 units have been completed in only three years: 2002, 2007, and 2008. Thus, both scenarios will require the pace of housing development in Downtown to increase over time.

The household and job projections in Scenarios 1 and 2 should be considered independently. Employment and residential growth in the Downtown are likely to be mutually reinforcing, but the pace of residential development is not necessarily tied to local employment growth. Downtown Oakland's central location within the region and excellent transit access make the Study Area an attractive residential location for many households. While some people who live in Downtown Oakland also work there, many others work in San Francisco, Berkeley, or other places within the region. Downtown also has a relatively high share of adults who are at or near retirement age. Therefore, while more rapid employment growth in Downtown Oakland would likely support faster residential growth, the Downtown could also experience significant new residential development as a result of the expanding regional economy, even if local job growth slows.

Figure 42 compares Scenarios 1 and 2 to the Plan Bay Area (2013) projections for the Study Area.¹⁹ As shown, Plan Bay Area projects a similar number of new households for the Study Area by 2040 as Scenario 2 (Rapid Growth), but significantly more new jobs. The 30,000 net new jobs that Plan Bay Area projects would represent 3.7 percent of projected regional jobs through 2040. This aggressive projection may in part reflect differences in the underlying estimates of baseline employment; Plan Bay Area estimates that the Study Area had more than 100,000 jobs in 2015, significantly higher than reported by other sources.

¹⁷ Assuming that 100 percent of employment in the financial and leasing and professional managerial services sectors, 55 percent of employment in information, and 15 percent of employment in health and education require office space; and an average employment density of 275 square feet of office space per worker.

¹⁸ For simplicity, Figure 38 does not assume that employers continue to decrease the amount of space allocated to each worker over time; however, intensification of existing space could reduce the amount of new office space required.

¹⁹ As calculated from TAZ-level projection data provided by MTC. See Appendix B for additional comparison of the scenarios to Plan Bay Area, the Downtown Specific Plan Draft Alternatives, and SPUR's vision for Downtown.

Figure 38. Scenario Results: Projected Jobs and Households, 2015-2040

	Jobs/Households				Total Change, 2015-40	% Change, 2015-40	% of Regional Growth, 2015-40
	2015*	2020	2030	2040			
Jobs							
Scenario 1: Moderate Growth	76,800	81,900	84,700	88,900	12,100	15.8%	1.4%
Scenario 2: Rapid Growth	76,800	84,400	90,200	100,700	23,900	31.1%	2.9%
Households							
Scenario 1: Moderate Growth	11,400	12,500	14,900	17,900	6,500	56.6%	1.1%
Scenario 2: Rapid Growth	11,400	13,500	18,400	24,300	12,900	113.3%	2.2%

*Estimated; see discussion in Appendix A.

Source: Strategic Economics, 2015.

Figure 39. Scenario Results: Net New Jobs and Households, 2015-2040

	2015-20	2020-30	2030-40	Total Change, 2015-40
	Jobs			
Net New Jobs				
Scenario 1: Moderate Growth	5,100	2,800	4,200	12,100
Scenario 2: Rapid Growth	7,600	5,800	10,500	23,900
Average Annual Net New Jobs				
Scenario 1: Moderate Growth	1,010	280	420	480
Scenario 2: Rapid Growth	1,520	580	1,050	960
Households				
Net New Households				
Scenario 1: Moderate Growth	1,100	2,400	3,000	6,500
Scenario 2: Rapid Growth	2,100	4,900	5,900	12,900
Average Annual Net New Households				
Scenario 1: Moderate Growth	210	240	300	260
Scenario 2: Rapid Growth	420	490	590	520

Source: Strategic Economics, 2015.

Figure 40. Projected Jobs by Sector, 2015-2040

	2015 Jobs (Estimated*)	2040 Jobs (Projected)	Net Change, 2015-40	Percent Change, 2015-40
Scenario 1: Moderate Growth				
Agriculture & Natural Resources	0	0	0	N/A
Arts, Recreation & Other Services	8,859	9,827	967	11%
Construction	2,064	2,118	54	3%
Financial & Leasing	3,971	5,597	1,627	41%
Government	14,794	17,121	2,327	16%
Health & Educational Services	12,890	13,554	663	5%
Information	2,830	3,280	450	16%
Manufacturing & Wholesale	3,324	2,866	-458	-14%
Professional & Managerial Services	19,709	25,492	5,783	29%
Retail	1,625	1,848	224	14%
Transportation & Utilities	6,760	7,232	473	7%
Total Jobs	76,826	88,935	12,109	16%
Scenario 2: Rapid Growth				
Agriculture & Natural Resources	0	0	0	N/A
Arts, Recreation & Other Services	8,859	10,794	1,935	22%
Construction	2,064	2,118	54	3%
Financial & Leasing	3,971	5,979	2,008	51%
Government	14,794	17,121	2,327	16%
Health & Educational Services	12,890	13,554	663	5%
Information	2,830	3,864	1,034	37%
Manufacturing & Wholesale	3,324	2,866	-458	-14%
Professional & Managerial Services	19,709	35,141	15,432	78%
Retail	1,625	2,072	447	28%
Transportation & Utilities	6,760	7,232	473	7%
Total Jobs	76,826	100,741	23,915	31%

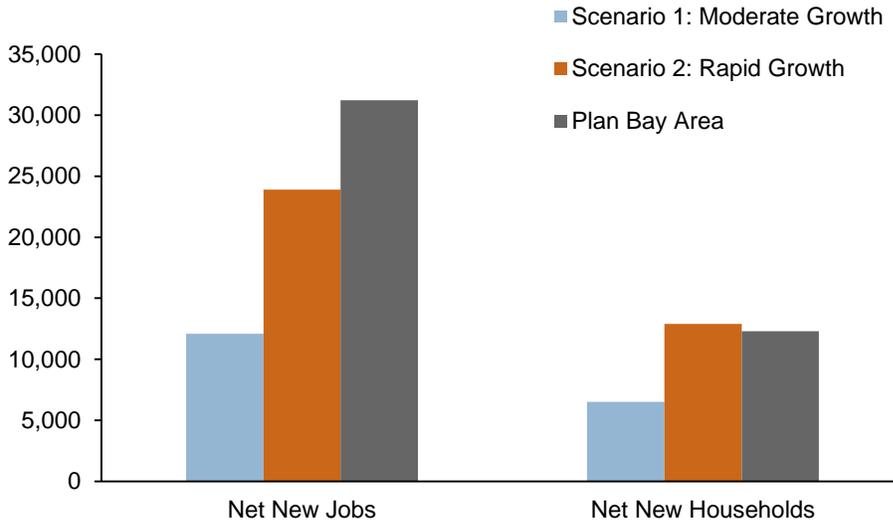
*See discussion in Appendix A.
Source: Strategic Economics, 2015.

Figure 41. Estimated Office Absorption (Square Feet) *

	2015-20	2020-30	2030-40	Total Change, 2015-40
Total Absorption				
Scenario 1: Moderate Growth	773,000	559,000	820,000	2,152,000
Scenario 2: Rapid Growth	1,256,000	1,308,000	3,390,000	5,954,000
Annual Average Absorption				
Scenario 1: Moderate Growth	155,000	56,000	82,000	86,000
Scenario 2: Rapid Growth	251,000	131,000	339,000	238,000

*Assumes that 100 percent of employment in the financial and leasing and professional managerial services sectors, 55 percent of employment in information, and 15 percent of employment in health and education require office space; and an average employment density of 275 square feet of office space per worker.
Source: Strategic Economics, 2015.

Figure 4243. Net New Jobs and Households: Scenarios 1 and 2 Compared to Plan Bay Area



Sources: ABAG and MTC, Plan Bay Area 2013; Strategic Economics, 2015.

6 Appendix A: Assumptions and Methodology for the Employment and Residential Growth Scenarios

This appendix describes the assumptions and methodology used to develop the employment and residential scenarios.

6.1 Employment Scenarios

The employment scenarios are based on a model that estimates future employment in the Downtown Oakland Study Area using the following three steps:

1. Estimate existing (2015) employment in the Study Area.
2. Derive a range of capture rates for each employment sector.
3. Apply capture rates to regional employment projections.

Each step is described in more detail below.

6.1.1 Estimate Existing (2015) Employment in the Study Area

In order to estimate 2015 employment in the Study Area, Strategic Economics began with the 2013 LEHD estimate of employment in the Study Area by sector, and assumed that between 2013 and 2015, the Study Area continued to grow at the same rate as reported by QCEW for the 2011-2014 period. Figure A-1 shows this calculation.

Figure A-1: Estimate of Existing (2015) Employment in the Study Area

	2013 Employment (LEHD)	2011-14 ^(a) Compounded Annual Average Growth Rate (QCEW)	Estimated 2015 Employment ^(b)
Agriculture & Natural Resources	2	0%	0
Arts, Recreation & Other Services	8,288	3.4%	8,859
Construction	2,164	-2.3%	2,064
Financial & Leasing	3,782	2.5%	3,971
Government	15,021	-0.8%	14,794
Health & Educational Services	10,268	12.0%	12,890
Information	2,344	9.9%	2,830
Manufacturing & Wholesale	3,344	-0.3%	3,324
Professional & Managerial Services	19,742	-0.1%	19,709
Retail	1,598	0.8%	1,625
Transportation & Utilities	6,643	0.9%	6,760
Total	73,196		76,826

(a) 2014 employment estimate based on last quarter of 2013 and first three quarters of 2014 (most recent data available).

(b) Assumes employment continued to grow at 2011-14 growth rate from 2013 to 2015 (two years).

Sources: U.S. Census Bureau, Longitudinal Household-Employer Dynamics, 2013; California Employment Development Department, Quarterly Census of Employment and Workforce, 2011-2014; Strategic Economics, 2015.

6.1.2 Derive a Range of Capture Rates for Each Employment Sector

For each scenario, Strategic Economics estimated the Study Area's capture of future regional growth by sector and time period (in five-year increments). Figure A-2, below, shows these capture rates.

The **Scenario 1 (Moderate Growth)** capture rates are based on recent trends, as reported by two sources:

- *The percent of Bay Area employment growth that the Study Area captured during the recovery from the recent recession (2011-2014), as reported by QCEW.* These historic capture rates were projected forward for all sectors except Professional and Managerial Services, Government, and Arts, Recreation, and Other Services.
- *The share of Bay Area employment located in the Study Area in 2013, as reported by LEHD.* Capture rates based on the 2013 share were used for Professional and Managerial Services and Government because the 2011-14 historic capture rates reflected a period during which the Study Area actually lost jobs in these sectors, a trend that is not expected to continue. Capture rates based on the 2013 share were used for Arts, Recreation, and Other Services because the Study Area's 2011-14 capture rate of regional growth in this sector was unusually high, reflecting a period in which arts and dining employment the Study Area grew rapidly while the rest of the region stagnated.

Scenario 2 (Rapid Growth) assumes that the Study Area captures an increased share of regional employment growth in certain industries, including both the office-based sectors (Information, Professional and Managerial Services, and Financial and Leasing Services) that are expected to drive Oakland's future job growth, and the retail and service industries. Specifically, the capture rates for these industries were adjusted upwards from Scenario 1 as follows:

- *Information and Professional and Managerial Services:* In the 2015-2020 period, the Study Area's capture rate for these sectors is doubled compared to Scenario 1. The capture rates for these sectors is assumed to increase by an additional 15% in every subsequent period, starting in 2020-2025.
- *Financial and Leasing Services:* In the 2015-2020 period, the Study Area's capture rate for this sector is the same as in Scenario 1 (5.1 percent). However, the capture rates for this sector is assumed to increase by an additional 15% in every subsequent period, starting in 2020-2025.
- *Retail and Arts, Recreation, and Other Services:* In all periods, the Study Area's capture rate for these sectors is doubled compared to Scenario 1.

6.1.3 Apply Capture Rates to Regional Employment Projections

Figure A-3, below, shows the net new regional jobs projected by ABAG for each five-year period between 2015 and 2040. Strategic Economics applied the sectoral capture rates (shown in Figure A-2) to the regional projections (Figure A-3) to arrive at the Study Area employment projections for each sector (Figure A-4).

Over the full 2015 to 2040 period, the sectoral projections add to a total of 12,100 net new jobs in the Study Area in Scenario 1 (or 1.4 percent of total projected regional employment growth), and 23,915 net new jobs in the Study Area in Scenario 2 (2.9 percent of total projected regional employment growth).

6.2 Residential Scenarios

Like the employment scenarios, the residential scenarios are also based on a three-step model:

1. Estimate existing (2015) households in the Study Area.
2. Derive a range of household capture rates.
3. Apply capture rates to regional household projections.

Each step is described in more detail below.

6.2.1 Estimate Existing (2015) Households in the Study Area

The 2009-2013 American Community Survey (the most recent demographic data available at the time of this analysis) estimates that there were 11,114 households in 2013. As shown above in Figure 15, approximately 330 additional housing units were completed in the Study Area in 2013 and 2014. Assuming that most but not all of the new units were occupied by the beginning of 2015, there are approximately 11,414 households in the Study Area.

6.2.2 Estimate Capture Rates for the Two Scenarios:

For each scenario, Strategic Economics estimated the Study Area's capture of future regional household growth by time period (in five-year increments). Figure A-2, below, shows these capture rates.

The **Scenario 1 (Moderate Growth)** household capture rate is based on the share of the region's net new housing units that the Study Area captured between 1990 and 2013 (0.9 percent). The scenario assumes that the Study Area captures 0.9 percent of regional household growth between 2015 and 2020, and that the household capture rate increases by 10 percent a year in each subsequent five-year period.

The **Scenario 2 (Rapid Growth)** household capture rate is based on the share of the region's net new housing units that the Study Area captured between 2 and 2013 (1.8 percent). The scenario assumes that the Study Area captures 1.8 percent of regional household growth between 2015 and 2020, and that the household capture rate increases by 10 percent a year in each subsequent five-year period.

6.2.3 Apply Capture Rates to Regional Household Projections

Figure A-3, below, shows the net new households projected by ABAG for the nine-county region for each five-year period between 2015 and 2040. Strategic Economics applied the household capture rates (shown in Figure A-2) to the regional projections (Figure A-3) to arrive at household projections for the Study Area (Figure A-4).

Over the full 2015 to 2040 period, the sectoral projections add to a total of 6,460 net new jobs in the Study Area in Scenario 1 (or 1.1 percent of total projected regional household growth), and 12,930 net new jobs in the Study Area in Scenario 2 (2.2 percent of total projected regional household growth).

Figure A-2: Capture Rate Assumptions: Share of Future Regional Employment and Household Growth Captured by the Study Area, by Scenario

	2015-20	2020-25	2025-30	2030-35	2035-40
Scenario 1: Moderate Growth					
Agriculture & Natural Resources	0.0%	0.0%	0.0%	0.0%	0.0%
Arts, Recreation & Other Services ^(a)	1.7%	1.7%	1.7%	1.7%	1.7%
Construction	-0.3%	-0.3%	-0.3%	-0.3%	-0.3%
Financial & Leasing	5.1%	5.1%	5.1%	5.1%	5.1%
Government ^(a)	12.2%	12.2%	12.2%	12.2%	12.2%
Health & Educational Services	2.9%	2.9%	2.9%	2.9%	2.9%
Information	1.5%	1.5%	1.5%	1.5%	1.5%
Manufacturing & Wholesale	-0.2%	-0.2%	-0.2%	-0.2%	-0.2%
Professional & Managerial Services ^(a)	2.9%	2.9%	2.9%	2.9%	2.9%
Retail	0.2%	0.2%	0.2%	0.2%	0.2%
Transportation & Utilities	0.8%	0.8%	0.8%	0.8%	0.8%
Households ^(b)	0.9%	1.0%	1.1%	1.2%	1.3%
Scenario 2: Rapid Growth					
Agriculture & Natural Resources	0.0%	0.0%	0.0%	0.0%	0.0%
Arts, Recreation & Other Services ^(c)	3.4%	3.4%	3.4%	3.4%	3.4%
Construction	-0.3%	-0.3%	-0.3%	-0.3%	-0.3%
Financial & Leasing ^(d)	5.1%	5.9%	6.7%	7.8%	8.9%
Government	12.2%	12.2%	12.2%	12.2%	12.2%
Health & Educational Services	2.9%	2.9%	2.9%	2.9%	2.9%
Information ^(e)	3.1%	3.6%	4.1%	4.7%	5.4%
Manufacturing & Wholesale	-0.2%	-0.2%	-0.2%	-0.2%	-0.2%
Professional & Managerial Services ^(e)	5.7%	6.6%	7.6%	8.7%	10.0%
Retail ^(c)	0.3%	0.3%	0.3%	0.3%	0.3%
Transportation & Utilities	0.8%	0.8%	0.8%	0.8%	0.8%
Households ^(f)	1.8%	2.0%	2.2%	2.4%	2.6%

(a) Scenario 1 capture rates for Arts, Recreation & Other Services, Government, and Professional & Managerial Services are based on Study Area's share of regional employment in 2013, as reported by LEHD. All other sectoral capture rates in Scenario 1 are based on Downtown's share of regional growth from 2011 to 2014, as reported by EDD.

(b) Scenario 1 household capture rate for 2015-20 based on Study Area's 1990-2013 capture of regional household growth; capture rate is assumed to increase by 10% a year in each subsequent five-year period.

(c) Scenario 2 capture rates for Arts, Recreation, & Other Services and Retail assume that the Study Area captures two times the employment in these sectors, compared to Scenario 1.

(d) Scenario 2 assumes Financial & Leasing capture rate increases by 15% in every period, starting in 2020-2025.

(e) Scenario 2 capture rates for Information and Professional & Managerial Services assume that the Study Area captures two times the employment in these sectors in the 2015-20 period compared to Scenario 1, and that the capture rates for these sectors increase by 15% in every period starting in 2020-2025.

(f) Scenario 2 household capture rate for 2015-20 based on Study Area's 2000-2013 capture of regional household growth; capture rate is assumed to increase by 10% a year in each subsequent five-year period.

Sources: U.S. Census Bureau, Longitudinal Household-Employer Dynamics, 2013; California Employment Development Department, 2011-2014; U.S. Census Bureau, 1990 and 2000 Decennial Census, 2013 American Community Survey; Strategic Economics, 2015.

Figure A-3: 2013 Plan Bay Area Regional Projections: Net New Jobs and Households, Nine-County Bay Area, 2015-2040

	2015-20	2020-25	2025-30	2030-35	2035-40	Total Net New Jobs/ Households, 2015-40
Agriculture & Natural Resources	510	-890	-860	-610	-580	-2,430
Arts, Recreation & Other Services	29,180	5,720	5,870	7,930	8,210	56,910
Construction	13,360	-10,140	-9,570	-5,680	-5,250	-17,280
Financial & Leasing	17,710	1,950	1,850	5,150	5,210	31,870
Government	10,760	1,570	1,440	2,670	2,600	19,040
Health & Educational Services	15,090	1,250	1,240	2,590	2,610	22,780
Information	20,790	1,250	910	3,200	2,910	29,060
Manufacturing & Wholesale	93,330	42,740	44,960	55,450	58,930	295,410
Professional & Managerial Services	56,610	30,550	32,390	39,670	42,320	201,540
Retail	51,140	18,840	19,420	25,540	26,610	141,550
Transportation & Utilities	8,680	9,330	9,610	14,330	14,840	56,790
Total	317,160	102,170	107,260	150,240	158,410	835,240
Households	117,270	115,230	120,010	115,410	119,760	587,680

Source: Association of Bay Area Governments, 2013.

Figure A-4: Scenario Results: Net New Employment and Households Projected for the Study Area, by Scenario

	2015-20	2020-25	2025-30	2030-35	2035-40	Total Net New Jobs & Households, 2015-40	Total Capture of Regional Growth, 2015-40
Scenario 1: Moderate Growth							
Agriculture & Natural Resources	0	0	0	0	0	0	0.0%
Arts, Recreation & Other Services	496	97	100	135	140	967	1.7%
Construction	-42	32	30	18	16	54	-0.3%
Financial & Leasing	904	100	94	263	266	1,627	5.1%
Government	1,315	192	176	326	318	2,327	12.2%
Health & Educational Services	439	36	36	75	76	663	2.9%
Information	322	19	14	50	45	450	1.5%
Manufacturing & Wholesale	-145	-66	-70	-86	-91	-458	-0.2%
Professional & Managerial Services	1,624	877	929	1,138	1,214	5,783	2.9%
Retail	81	30	31	40	42	224	0.2%
Transportation & Utilities	72	78	80	119	124	473	0.8%
Total Jobs	5,068	1,394	1,420	2,079	2,149	12,109	1.4%
Total Capture of Regional Growth	1.6%	1.4%	1.3%	1.4%	1.4%	1.4%	
Households	1,055	1,141	1,307	1,382	1,578	6,464	1.1%
Scenario 2: Rapid Growth							
Agriculture & Natural Resources	0	0	0	0	0	0	0.0%
Arts, Recreation & Other Services	992	194	200	270	279	1,935	3.4%
Construction	-42	32	30	18	16	54	-0.3%
Financial & Leasing	904	114	125	400	465	2,008	6.3%
Government	1,315	192	176	326	318	2,327	12.2%
Health & Educational Services	439	36	36	75	76	663	2.9%
Information	644	45	37	151	158	1,034	3.6%
Manufacturing & Wholesale	-145	-66	-70	-86	-91	-458	-0.2%
Professional & Managerial Services	3,248	2,016	2,458	3,462	4,247	15,432	7.7%
Retail	162	59	61	81	84	447	0.3%
Transportation & Utilities	72	78	80	119	124	473	0.8%
Total Jobs	7,590	2,700	3,133	4,816	5,676	23,915	2.9%
Total Capture of Regional Growth	2.4%	2.6%	2.9%	3.2%	3.6%	2.9%	
Households	2,111	2,282	2,614	2,765	3,156	12,927	

Source: Strategic Economics, 2015.

7 Appendix B: Comparison of Employment and Household Growth Scenarios to Other Projections

Figure B-1, below, compares the results of the employment and household growth scenarios to projections from other sources, including Plan Bay Area, SPUR's "A Downtown for Everyone" vision report, and the Downtown Specific Plan Alternatives currently under consideration.

Figure B-1: Comparison of Employment and Household Growth Scenarios to Other Projection Sources

	Estimated 2015	Projected 2040	Net New	Percent Change
Jobs				
Scenario 1: Moderate Growth	76,826	88,935	12,109	16%
Scenario 2: Rapid Growth	76,826	100,741	23,915	31%
Plan Bay Area 2013*	100,143	131,387	31,244	31%
SPUR "A Downtown for Everyone" Vision**	84,000	134,000	50,000	60%
Households				
Scenario 1: Moderate Growth	11,414	17,878	6,464	57%
Scenario 2: Rapid Growth	11,414	24,341	12,927	113%
Plan Bay Area 2013*	13,764	26,073	12,309	89%
Downtown Specific Plan Alternatives***	N/A	N/A	12,641 - 16,481	N/A

*Note that ABAG is currently in the process of revising projections for the 2017 Plan Bay Area; however, the revised projections were not available at the time of this analysis.

**SPUR's existing employment estimate is for 2014, and the forecast of 50,000 new jobs is presented as a vision for 2040, rather than a projection. SPUR does not provide a vision for household growth.

***Note that this projection is capacity-based and is for the Downtown Specific Plan geography. The Downtown Specific Plan Alternatives do not provide total projected jobs (only office jobs)

Sources: ABAG and MTC, Plan Bay Area 2013; SPUR, *A Downtown for Everyone: Shaping the Future of Downtown Oakland*, May 2015; Dover, Kohl & Partners, *Plan Alternatives Report: Public Draft*, prepared for the City of Oakland, March 1, 2016; Strategic Economics, 2016.

8 Appendix C: Recent Development in Broadway-Valdez

8.1 The Broadway-Valdez Specific Plan

Located north of the Study Area, the Broadway-Valdez neighborhood has historically specialized in auto-related uses (dealerships and auto body shops), earning it the title of Oakland's "Auto Row." However, in the mid-2000s, the City of Oakland began to re-envision the function of the corridor. In 2008, spurred by a decline in automobile-related businesses and a desire to attract new retail and sales tax dollars to Oakland, the City Council endorsed a vision of Broadway-Valdez as a mixed-use district anchored by major retail development. In July 2014, the City adopted the Broadway-Valdez Specific Plan. One of the objectives of the Specific Plan is to help the area move away from automobile specialization and towards the development of a mix of housing and destination retail. The Plan envisions 1,800 new residential units and 1.8 million square feet of commercial space (mostly retail) by 2035, representing 4,000 net new jobs.²⁰

8.2 Recent Development in the Broadway-Valdez Area

In recent years, developers have completed or proposed a number of residential and retail projects in the Broadway-Valdez area, as shown in Figure C-1. Approximately 112,000 square feet of retail space and 176 residential units were recently completed, while another 185,000 square feet of retail space and 1,780 housing units are currently proposed.

Overall, completed and planned residential development exceeds the amount of new housing envisioned in the Specific Plan. The 296,589 square feet of retail that has been recently completed or proposed represent 16 percent of the amount of retail development called for in the Plan by 2035.

²⁰ City of Oakland, *Broadway-Valdez District Specific Plan*, June 2014, <http://www2.oaklandnet.com/oakca1/groups/ceda/documents/report/oak048577.pdf>

Figure C-1: Recently Completed and Planned Major Commercial and Residential Development in the Broadway-Valdez Area

Project	Address	Retail (Sq. Ft.)	Residential Units	Status
CVS Pharmacy	2964 Broadway	26,312		Completed
2425 Valdez	2425 Valdez	1,024	71	Completed
The Hive	2323 Broadway	85,000	105	Completed
Shops at Broadway	Broadway and 30th	39,000		Under Construction
3093 Broadway	3093 Broadway	22,000	432	Building Permit Filed
23rd and Valdez	23rd and Valdez	31,500	193	Building Permit Filed
2315 Valdez	2315 Valdez	15,000	235	Approved Planning Permit
2270 Broadway	2270 Broadway	8,000	223	Approved Planning Permit
2820 Broadway	2820 Broadway	9,000	222	Application Filed
2630 Broadway	2630 Broadway	36,288	253	Application Filed
2460 Valdez	2460 Valdez	23,465	224	Pre-Application
Completed		112,336	176	
Under Construction		39,000	0	
Approved or Proposed		145,253	1,782	
Total		296,589	1,958	

Sources: City of Oakland Planning Department, 2015; Strategic Economics, 2015.