San Jose Market Overview and Employment Lands Analysis

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City of San Jose
Four-Year General Plan Review

TABLE OF CONTENTS

TABLE OF CONTENTS **2**

TABLE OF FIGURES **3**

EXECUTIVE SUMMARY **5**

Growth Area and Subarea Geographies 5
Recent Employment Trends 5
Office, R&D, and Industrial Markets 10
Retail Market 11
Supply of Vacant Employment Lands 11
Market Potential of Urban Villages 15

I. INTRODUCTION **18**

Defining Geographies for Analysis 18

II. EMPLOYMENT TRENDS **22**

Regional Employment Trends 22
San Jose Employment Trends 23
Conclusions 37

III. REAL ESTATE MARKET OVERVIEW: OFFICE, R&D, AND INDUSTRIAL **38**

Office and R&D 38
Industrial and Warehouse 42
San Jose's Major Employment Subareas 46
Conclusions 56

IV. RETAIL MARKET OVERVIEW **57**

National and Regional Retail Trends 57
Retail Market Overview 58
San Jose Retail Submarkets 60
Conclusions 64

V. LAND DEMAND AND SUPPLY ANALYSIS **65**

Supply of Vacant Employment Lands 65
Demand for Employment Lands 72
Comparing Supply and Demand 79

VI. URBAN VILLAGES MARKET ASSESSMENT **81**

Urban Villages Indices 81
Market Potential of Urban Villages 84

APPENDIX A: EMPLOYMENT LANDS DEMAND METHODOLOGY **92**

APPENDIX B. MAJOR DEVELOPMENT PROJECTS **104**

TABLE OF FIGURES

I. INTRODUCTION

Figure I-1.General Plan Growth Areas 20
Figure I-2. San Jose Market Subareas 21

II. EMPLOYMENT TRENDS

Figure II-1. Employment Trends: San Jose Metropolitan Statistical Area (MSA), 1990-2014 22
Figure II-2. Employment by Industry: San Jose Metropolitan Statistical Area (MSA), 2014 23
Figure II-3. Employment in San Jose, 1st Quarter 2008 through 3rd Quarter 2014[a] 24
Figure II-4. Industry Cluster Definitions 25
Figure II-5. Employment by Industry Cluster: City of San Jose, 2008, 2010, and 2014[a] 27
Figure II-6. Employment Change by Industry Cluster: City of San Jose, 2008-2014[a] 28
Figure II-7. San Jose Employment Composition by Subarea, 2014 31
Figure II-8. Employment by Subarea and Growth Area Type 32
Figure II-9. San Jose Employment Density: All Jobs, 2014 33
Figure II-10. San Jose Employment Density: Driving Industries, 2014 34
Figure II-11. San Jose Employment Density: Business Support Industries, 2014 35
Figure II-12. San Jose Employment Density: Household Serving Industries, 2014 36

III. REAL ESTATE MARKET OVERVIEW: OFFICE, R&D, AND INDUSTRIAL

Figure III-1. Office and R&D Overview: Silicon Valley Cities, Second Quarter 2015 39
Figure III-2. New Office/R&D Inventory Added, Santa Clara County and San Jose, 2006-2015 41
Figure III-3. Recently Completed, Under Construction, and Pending or Approved Office/R&D Projects in San Jose, 2009-2015[a] 41
Figure III-4. Industrial and Warehouse Overview: Silicon Valley Cities, Second Quarter 2015 43
Figure III-5. New Industrial/Warehouse Inventory Added, Santa Clara County and San Jose, 2006-2015 45
Figure III-6. Recently Completed, Under Construction, and Pending or Approved Industrial/Warehouse Projects in San Jose, 2009-2015 45
Figure III-7. Total Inventory by Type: Golden Triangle/Alviso, 2nd Quarter 2015 46
Figure III-8. Recently Completed, Pending/Approved, and Under Construction Development in Northern San Jose, 2009- February 2015 47
Figure III-9. Total Inventory by Type: International Business Park, 2nd Quarter 2015 49
Figure III-10. Total Inventory by Type: Central San Jose, 2nd Quarter 2015 50
Figure III-11. Total Inventory by Type: Southern and Eastern San Jose, 2nd Quarter 2015 51
Figure III-12. Office and R&D Market Statistics by Subarea, Second Quarter of 2015 53
Figure III-13. Industrial and Warehouse Market Statistics by Subarea, Second Quarter of 2015 54
Figure III-14. Office/R&D Development in San Jose, by Status and Subarea, 2009-February 2015 55
Figure III-15. Industrial/Warehouse Development in San Jose, by Status and Subarea, 2009-February 2015 55

IV. RETAIL MARKET OVERVIEW

Figure IV-1. Retail Overview, Silicon Valley and San Jose, 2nd Quarter 2015 58
Figure IV-2. Taxable Sales Per Household: San Jose and Santa Clara County, 2013 59
Figure IV-3. Total Estimated Sales by Category: San Jose, 2008 and 2014 60
Figure IV-4. Retail Inventory, Taxable Sales, and Average Sales per Square Foot by Subarea, 2014 61
Figure IV-5. Square Feet of Recent and Proposed Retail Development, by Subarea and Status: 2009-2015 61

V. LAND DEMAND AND SUPPLY ANALYSIS

Figure V-1. General Plan Land Use Categories: Employment Lands 66
Figure V-2. Vacant Employment Lands by Growth Area Designation and Land Use 68
Figure V-3. Vacant Employment Lands by Subarea and Land Use 69
Figure V-4. Vacant Employment Lands by Growth Area Designation and General Plan Land Use (Detail) 70
Figure V-5. Vacant Employment Lands by Subarea and General Plan Land Use (Detail) 71
Figure V-6. CCSCE Employment Projections (in Thousands): Bay Area and San Jose, 2013-2040 73
Figure V-7. Employment by Industry Cluster (in Thousands): Projection-Based Demand and Recommended Planned Job Capacity Ratio Scenarios, 2013-2040 74
Figure V-8. Distribution of Employment Across Land Use Types 75
Figure V-9. Employment Density and FAR Assumptions by Land Use Type 76
Figure V-10. Vacant Land Development Assumptions by Land Use Type 76
Figure V-11. Net New Demand for Employment Lands (Acres): Projection-Based Demand Scenario, 2013-2040 78
Figure V-12. Net New Demand for Employment Lands (Acres): Recommended Planned Job Capacity Ratio, 2013-2040 79

VI. URBAN VILLAGES MARKET ASSESSMENT

Figure VI-1. Office/Industrial Index Criteria 82
Figure VI-2. Retail Index Criteria 83
Figure VI-3. Urban Villages with Short-Term Potential for Office/Industrial Development 85
Figure VI-4. Urban Villages with Short Term Potential for Retail Development 86
Figure VI-5. Urban Villages with Short-Term Potential for Retail or Office/Industrial Development 87
Figure VI-6. Urban Villages Market Assessment: Office/Industrial Index Results 88
Figure VI-7. Urban Villages Market Assessment: Retail Index Results 90

APPENDIX A: EMPLOYMENT LANDS DEMAND METHODOLOGY

Figure A-1. Employment by Industry Cluster (in Thousands): Projection-Based Demand and Recommended Planned Job Capacity Ratio Scenarios, 2013-2040 93
Figure A-2. Land Use Distribution Factors 94
Figure A-3. Net New Employment by Industry Cluster and Land Use Type: Projection-Based Demand Scenario, 2013-2040 (in Thousands) 95
Figure A-4. Building and Land Demand by Land Use Type: 2013-2040 97
Figure A-5. Estimated Employment Densities for Selected Employers 98
Figure A-6. Estimated Floor Area Ratio (FAR) for Selected Recent Development Projects 99
Figure A-7. Vacant Land Development Assumptions by Land Use Type 101
Figure A-8. Net New Demand for Employment Lands (Acres): Projection-Based Demand Scenario, 2013-2040 102
Figure A-9. Net New Demand for Employment Lands (Acres): Recommended Planned Job Capacity Ratio, 2013-2040 103

APPENDIX B: MAJOR DEVELOPMENT PROJECTS

Figure B-1. Major Development Projects, 2009-February 2015 105

EXECUTIVE SUMMARY

The City of San Jose is in the process of conducting the first Four-Year Review of the Envision San Jose 2040 General Plan. This report is intended to support the Four-Year Review process by providing an overview of recent employment growth and office, industrial, and retail market trends in San Jose. The report also assesses the match between the projected demand for and the existing supply of employment land in San Jose, and identifies the Urban Villages that are most likely to accommodate employment growth in the next decade based on market factors.

GROWTH AREA AND SUBAREA GEOGRAPHIES

The report provides data and information about different locations within San Jose, using two different types of local geographies: designated Growth Areas and Market Subareas.

Growth Areas, shown in **Figure 1**, are identified in the Envision 2040 General Plan as locations that will accommodate the majority of the city's future job and housing growth. The Growth Areas are divided into several types, including:

- Downtown San Jose.
- Specific Plan Areas.
- Employment Areas, which are planned to accommodate most of the city's employment growth including a wide variety of industry types and development forms.
- Urban Villages, which are planned for focused housing and job growth in a compact, walkable, urban setting.

Market Subareas were also defined in order to better characterize the different employment concentrations and real estate markets within the city (**Figure 1**). The five Market Subareas roughly correspond to the real estate submarket geographies often used by commercial real estate brokers to characterize different parts of the city, and they include the following:

- Northern San Jose, which includes the Golden Triangle, Alviso Specific Plan Area, and Berryessa Industrial Park.
- Central San Jose, which includes the Downtown, Diridon Station, Japantown, a variety of commercial corridors and San Jose International Airport.
- Eastern San Jose, the area east of Highway 101 and I-680.
- Southern San Jose, which includes Monterey Corridor, Edenvale and the Coyote Valley area.
- Western San Jose., which includes Santana Row, Stevens Creek, and Winchester Boulevard.

RECENT EMPLOYMENT TRENDS

In 2014, there were approximately 382,200 jobs in San Jose, representing approximately 38 percent of all jobs in the San Jose Metropolitan Statistical Area (MSA).[1] San Jose's share of the metro area's jobs remained stable between 2008 and 2014, at about 38 to 40 percent.

The city has more than recovered all the jobs lost during the recession. Between 2008 and 2010, total employment in San Jose fell from 375,900 to 339,900, a decline of 36,000 jobs. However, by 2014, total

[1] Employment represented in this report is based on wage and salary jobs and does not include self-employed jobs. The San Jose-Sunnyvale-Santa Clara MSA is comprised of San Benito and Santa Clara Counties.

employment (382,200) exceeded the 2008 total. The recovery was led by growth in the healthcare sector, with smaller increases in retail, creative professional services, education, and a variety of other sectors.

Figure 1. General Plan Growth Areas

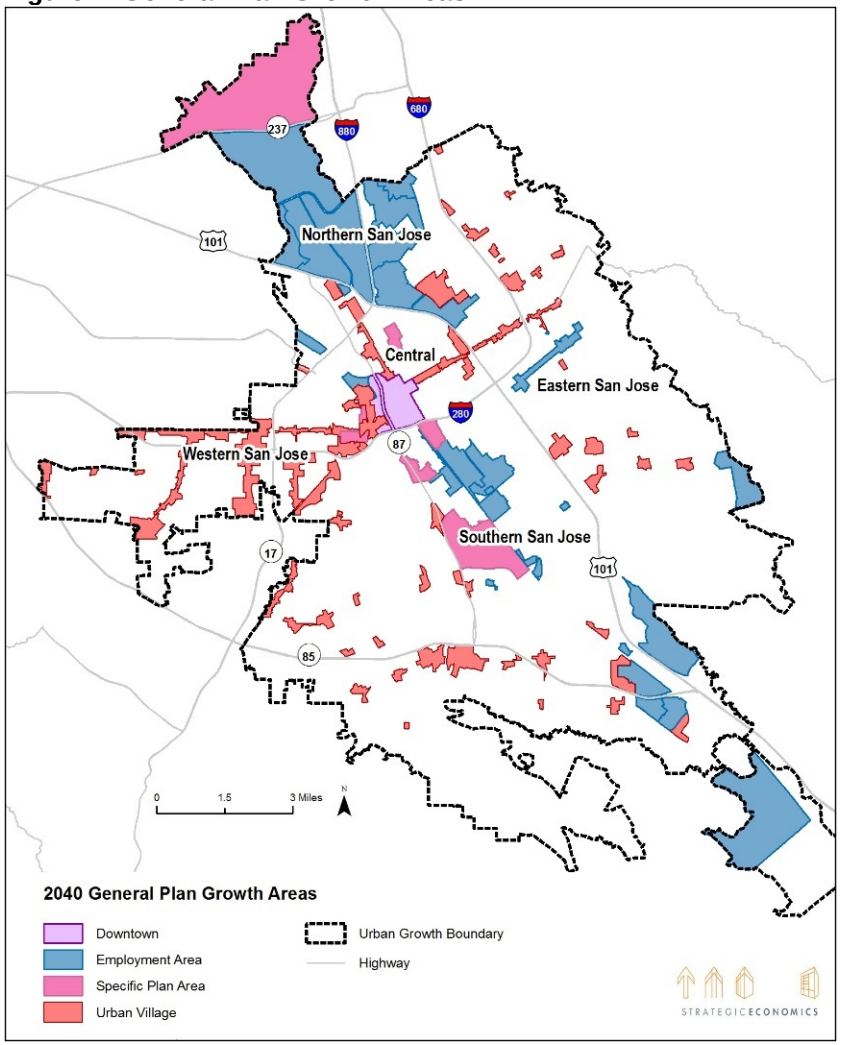
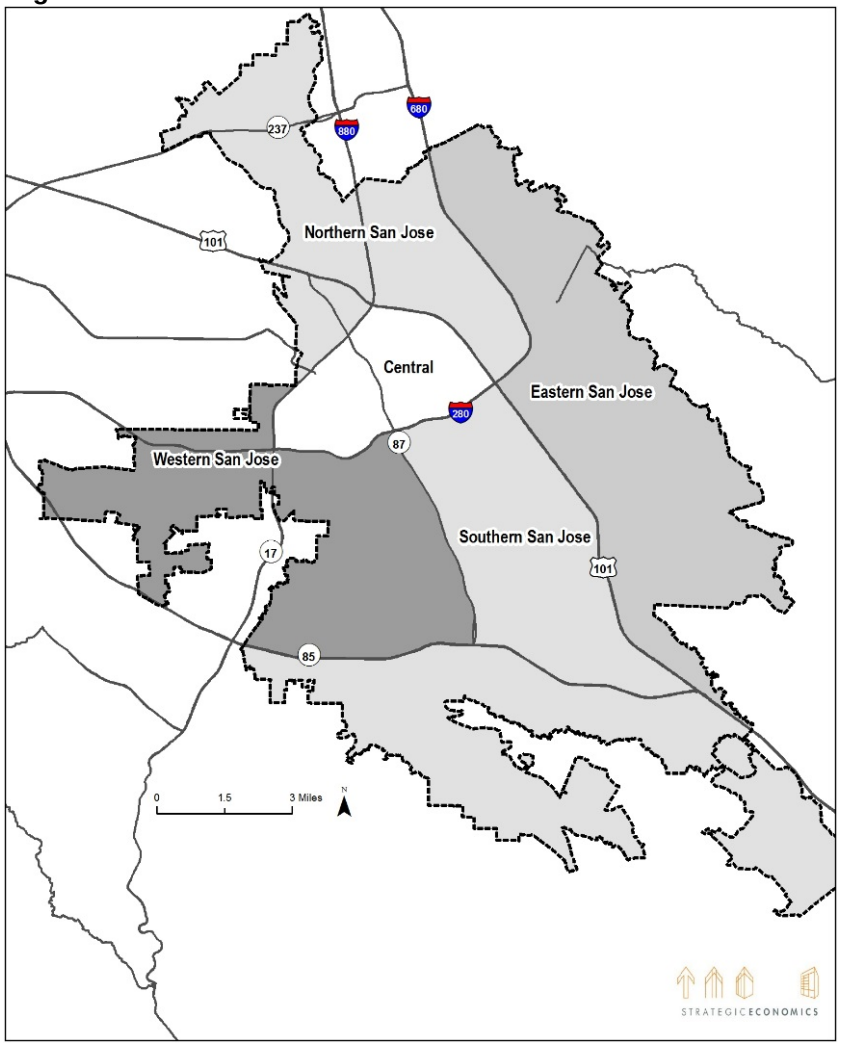


Figure 2. San Jose Market Subareas



Household support industries account for the largest share of San Jose's employment, and have experienced the fastest growth in recent years. Household serving industries provide goods and services to residents, and include healthcare and education, retail and consumer services, and civic and utility employment. Together, these industries account for 45 percent of total jobs in San Jose. Healthcare in particular has driven the city's recent employment growth, accounting for more than a third of new jobs added between 2010 and 2014.[2]

Driving industries account for almost one-third of all jobs in San Jose, and have also added significant jobs in recent years. Driving industries sell their goods and services to customers outside of the region, bringing in revenues that are spent locally and help drive the San Jose economy. Industries in this cluster include manufacturing, technical and creative professional services, and visitor services. The driving industries expanded by 8 percent between 2010 and 2014, driven by rapid employment growth in software/information services and creative professional services. This reflects the city's growing strength as a high tech center. Employment in high-tech manufacturing has declined slightly, in part because of improved productivity.

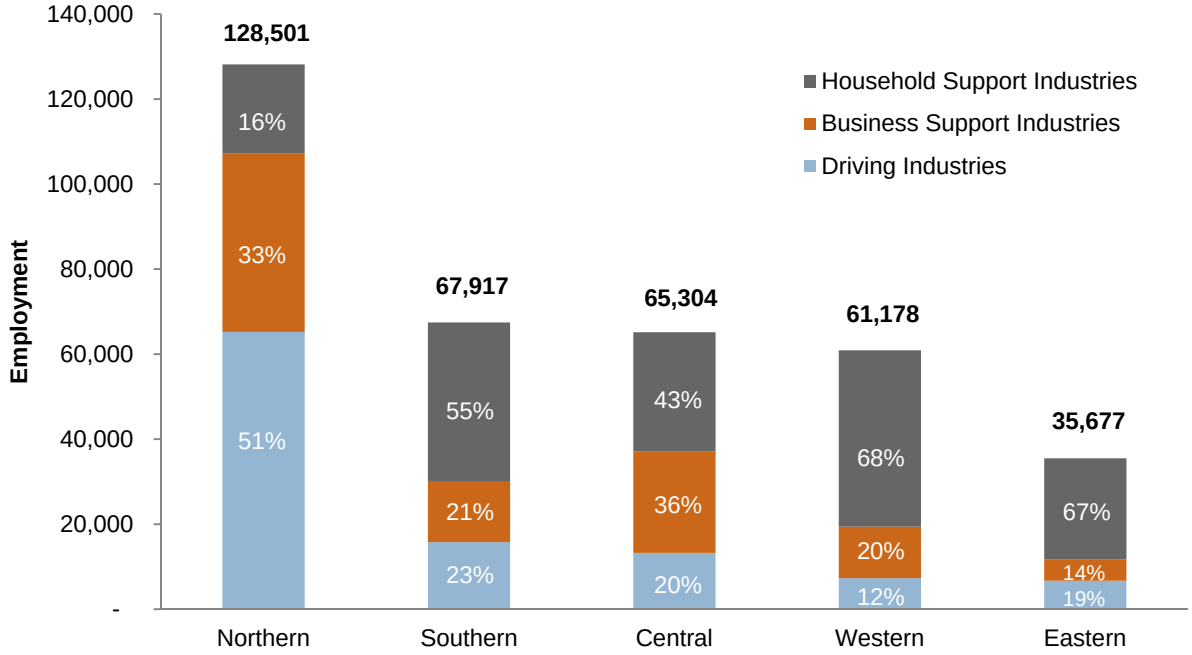
Employment growth in business support industries has lagged behind other categories. Business support industries sell their goods and services to other companies within the local economy, including driving industries. Business support industries include business services (e.g., law, accounting, real estate), financial services, transportation/distribution, and construction. Overall, business support employment declined slightly between 2008 and 2014. However, this category will likely grow as the rest of the city's economy expands.

Within San Jose, Northern San Jose is the primary employment center, followed by the Central and Southern San Jose subareas. As shown in Figure 3, Northern San Jose has a particular strength in driving industries, while the Central and Southern subareas are characterized by a diverse mix of driving, business support, and household support industries. Employment in the Western and Eastern subareas is more limited, and predominantly consists of household support jobs.

Citywide, 30 percent of employment is in designated Employment Areas and 13 percent is within Urban Villages. Nearly 50 percent of employment is located outside of a designated growth area. In Northern San Jose in particular, employment is highly concentrated in the Employment Areas, while in other subareas jobs are more dispersed.

[2] Healthcare industries include hospitals, offices of health practitioners (physicians, dentists, etc.), outpatient care centers, medical and diagnostic laboratories, home health care services, nursing care facilities, individual and family services, community food and housing and other relief services, and child day care services. Individual and family services saw the greatest growth in employment in the healthcare sector.

Figure 3. San Jose Employment Composition by Subarea, 2014



Employment that is not assigned to an industry cluster (e.g., household employment) is not shown; as a result, percentages may not add to 100% for each subarea.
Sources: California Employment Development Department, 2014; City of San Jose, 2015; Strategic Economics, 2015.

OFFICE, R&D, AND INDUSTRIAL MARKETS

While San Jose is the biggest city in the region in terms of population, it has a much lower inventory of office space than San Francisco. San Jose has approximately 24 million square feet of office space, holding the greatest amount of office inventory in the Silicon Valley. However, San Jose's office inventory is only one-third of the office space in San Francisco, which contains almost 77 million square feet of office space. San Jose's rental rates and occupancy rates for office and R&D tend to be lower than the regional average, while the city's industrial rents and occupancy rates are comparable with the regional average.

The city's industrial/warehouse market has long played a critical role within the region, providing competitively priced space that allows for both large and small users. The city's industrial base includes a growing advanced manufacturing sector. San Jose has accounted for the majority of new industrial development in Santa Clara County over the past ten years.

Traditional industrial space, including manufacturing and industrial/warehouse, is concentrated in the International Business Park in Northern San Jose and the Monterey Corridor in Southern San Jose. As the Silicon Valley commercial real estate market continues to evolve towards higher-intensity, multi-story, office and R&D uses, Southern San Jose's lower-cost, lower-density industrial buildings and land may become increasingly attractive for the region's manufacturers. Southern San Jose is better positioned to attract new large-scale development and warehouses, while Northern San Jose is more suited to accommodate advanced manufacturing and high tech/R&D tenants.

While the city has traditionally been a secondary office location compared to other Silicon Valley cities, San Jose has recently attracted new office and R&D development, especially in North San Jose. As the real estate market in the Silicon Valley continues to strengthen, with rising prices and occupancy rates, San Jose is becoming increasingly attractive for high tech and other office tenants.

San Jose offers several competitive advantages for tech companies and other firms looking for office and R&D space in Silicon Valley. These include:

- **Campus settings.** San Jose remains a lower-cost alternative for companies seeking campus settings with indoor and outdoor amenities, especially compared to other Silicon Valley cities where space is more constrained.
- **Flexible office spaces.** With rents increasing and space demands changing, former manufacturing and warehouse buildings throughout the region are increasingly being rehabbed and converted into contemporary high tech offices and/or R&D. San Jose has a significant stock of this type of flexible industrial space, which has helped attract companies including Apple (which recently leased a former manufacturing building in Northern San Jose).
- **Significant housing supply, retail, transit, and other amenities.** According to brokers, many employers see San Jose's large housing stock and residential retail amenities as an asset, supporting future workforce growth. In addition, San Jose's existing transit system, which includes Caltrain, Capitol Corridor, and VTA, will be expanded with the addition of BART service.

Within San Jose, Northern San Jose is considered the strongest location for high-tech office and R&D uses. Downtown San Jose also has a significant office market, although the Downtown has seen little new office development in recent years. An R&D/life sciences cluster is emerging in the Edenvale Technology Park in Southern San Jose.

RETAIL MARKET

San Jose is located in one of the strongest performing retail markets in the country. The Bay Area region – and particularly Silicon Valley – has some of the highest average retail rents and lowest vacancies in the country. The region's strong retail spending is strongly associated with population and job growth, high incomes, and low unemployment rates.

The city's large population and high disposable incomes makes the city highly attractive for retailers. Moreover, the city's central location draws customers from surrounding high-income cities, such as Cupertino and Santa Clara. Within San Jose:

- **Western San Jose** is one of the premier shopping destinations in Silicon Valley, with its mix of high-end shopping malls and regional-serving shopping centers.
- **Northern San Jose** has an emerging concentration of new, high-performing shopping centers that serve the subarea's large daytime population and growing residential population.
- **Central San Jose,** especially Downtown, contains hundreds of restaurants, bars, and a variety of small shops in a walkable setting. In addition, more residential-serving retailers and amenities are being added to the area as new high-density housing is completed.
- **Southern San Jose** includes a mix of neighborhood-serving shopping centers, regional malls, and big box and discount stores.
- **Eastern San Jose's** retail includes the high-performing Eastridge Mall, as well as smaller neighborhood-serving centers, and reflects the area's large, ethnically diverse residential population.

While many of San Jose's existing retail areas are thriving, the city captures lower retail sales per household than the county on average. The per household retail sales captured within San Jose (retail store sales divided by number of households) are lower than in Santa Clara County. This confirms recent analysis by City staff, which shows that San Jose has significant sales leakage – i.e., much of the retail spending potential by San Jose residents and workers is captured in stores and restaurants outside of the city, resulting in lower sales than would be expected based on the city's size.

Regional trends suggest that future retail expansions may be limited. Although Silicon Valley has some of the highest retail rents and lowest vacancies in the country, most of the development activity in the region consists of expansions or redevelopment of existing centers. Competition for land with office and residential development – which typically generate higher net revenues and can afford to pay higher land prices – is limiting retail development. Moreover, many retail sectors that compete directly with e-commerce are closing brick-and-mortar locations, while others are consolidating or looking for opportunities to use space more efficiently. These trends suggest that the slowdown in new retail development may continue in the future, with a significant share of retail demand being met through the expansion of online sales as well as the reconfiguration of existing space.

DEMAND AND SUPPLY OF VACANT EMPLOYMENT LANDS

Strategic Economics estimated future demand for employment lands based on two scenarios:

- **Projection-Based Demand**: The projection-based demand estimate is calculated from employment projections prepared by the Center for Continuing Study of the California Economy (CCSCE). The projection-based demand estimate is based on the Alternative 3 growth scenario,

the highest of CCSCE's three scenarios, which projects that San Jose will add 184,100 net new jobs between 2013 and 2040.

- **Recommended Planned Job Capacity:** In addition to the demand estimates described above based on CCSCE's Alternative 3 employment projection, Strategic Economics also estimated the amount of employment lands needed to accommodate City Staff's Recommended Planned Job Capacity, based on a jobs/employed resident ratio of 1.1 to 1. In order to meet this new employment target, San Jose would need to add 318,300 net new jobs by 2040.

The analysis incorporates reasonable assumptions about future development based on observations about current conditions and recent trends in San Jose and the Silicon Valley, and compares the total projected demand to the existing supply of vacant employment lands. For most cities, it is ideal for the supply of employment lands to exceed demand for space, in order to be able to accommodate future commercial and industrial development. The results of the supply and demand analysis provide insight into the types of land uses that are likely to be required in San Jose to accommodate future job growth, but are not intended to be definitive land use forecasts.

The city has a total of 3,978 acres of vacant land designated for employment uses. San Jose currently has an estimated 1,175 acres of total vacant employment lands in its core employment areas.[3]

Most of the vacant employment lands in San Jose are located at the periphery of the city. There are approximately 2,803 acres of vacant employment lands in North Coyote Valley, the Alviso Specific Plan Area, and Evergreen Industrial Park. However, these peripheral employment areas currently present barriers to attracting new development, including significant infrastructure and environmental constraints. Furthermore, there has been limited interest from private commercial developers to pursue projects in some of the peripheral areas. Due to these constraints, the timing and nature of future development in these areas remain uncertain.

Industrial demand exceeds vacant employment lands in the city's core employment areas. Excluding the peripheral employment lands, there are 840 acres of vacant lands designated for industrial uses (**Figure 4**). In comparison, there are 972 acres of net demand under the Projection-Based Demand scenario and 1,489 acres of net demand under the city's Recommended Planned Job Capacity scenario (**Figure 5**). While some of the demand could be accommodated in areas outside of the city's core employment areas, most of the vacant employment lands are located on the periphery of the city. These peripheral employment lands include 1,616 acres in North Coyote Valley, 321 acres in Evergreen Industrial Park, and 305 acres in Alviso.

The city also has a shortage of vacant land supply designated specifically for office and retail (non-industrial) uses. There are 247 acres of vacant land designated for primarily commercial (office and retail) uses, all of which is located in the core employment areas of the city (Figure 4)**.** Meanwhile, the combined demand for these uses totals 903 net additional acres under the Projection-Based Demand scenario, and 1,296 acres under the city's Recommended Planned Job Capacity scenario (Figure 4). This indicates that a large share of future office and retail development will need to be accommodated in lands that are currently designated for industrial uses in both the core and peripheral employment areas, or through intensification of existing commercial sites.

There is likely to be increasing competition for vacant land, especially in the core employment areas of the city, and industrial users may be priced out of the most desirable locations. Most of San Jose's industrial designations allow for a wide range of employment uses, including R&D and office as well as

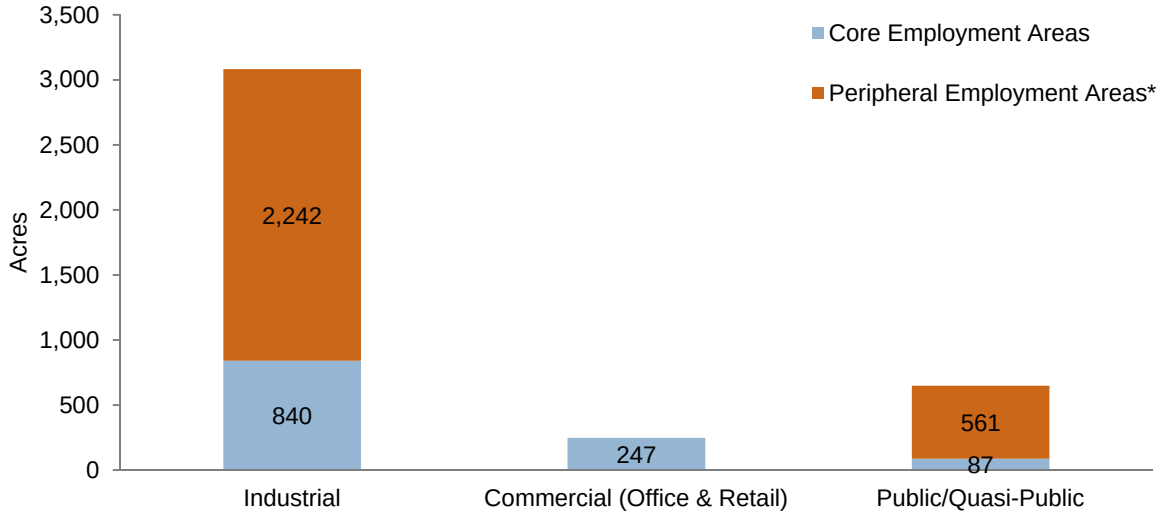
[3] Core vacant employment lands exclude North Coyote Valley, the Alviso Specific Plan Area, and Evergreen Industrial Park.

traditional industrial space. While this flexibility allows businesses and developers to adjust to meet changing space needs, it also could result in office and R&D uses displacing other uses, such as warehouse, distribution, manufacturing, and construction. Industries that are highly price sensitive may have difficulty finding affordable land in the city's premium locations (such as Northern San Jose and Edenvale) if no policy action is taken.

Urban Villages account for half of the city's vacant commercial (non-industrial) land, but most have not attracted a significant amount of office and retail development since Envision 2040 was adopted. There are 124 acres of commercial (office and retail) land in the Urban Villages, nearly half of the total vacant commercial land supply. Urban Villages – which are all located in the core employment areas of the city – also account for 19 acres of industrial lands and seven acres of land designated for public/quasi-public uses. Despite the significant supply of employment lands in Urban Villages, few of the Urban Villages have seen new retail and office development since the adoption of Envision 2040. Some of the likely obstacles include a lack of large developable sites in Urban Villages, and lower market demand in certain locations.

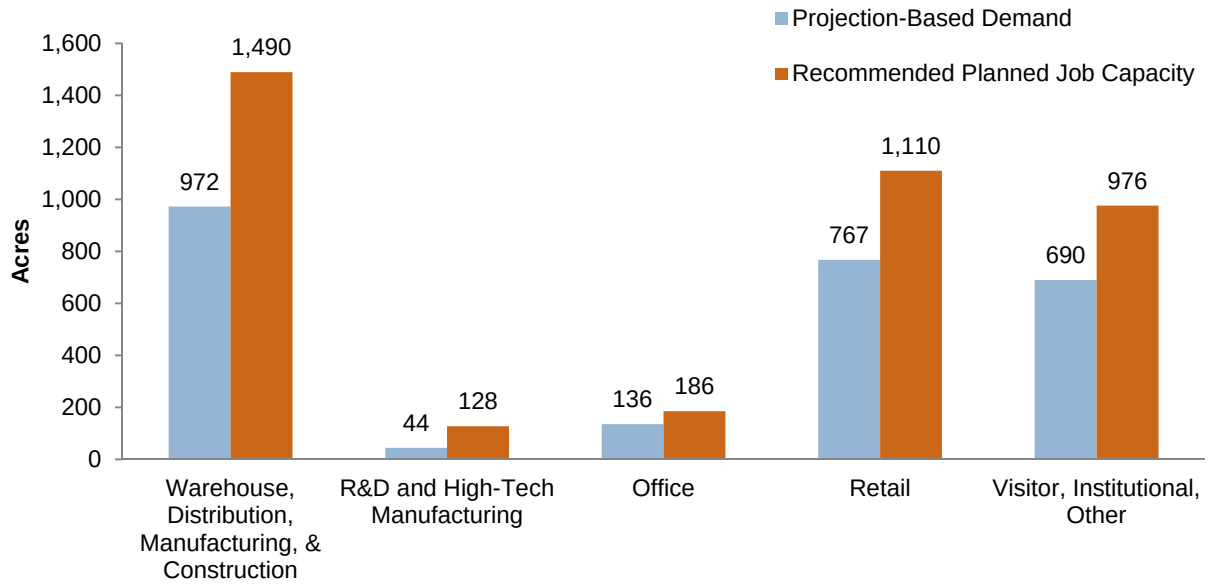
The market potential for retail and office development is stronger in some Urban Villages than others. Office tenants and retailers have very specific preferences for where they locate, and many Urban Villages lack the required characteristics for these users. For example, when looking for sites, retailers typically consider the buying power of area residents, site size and configuration, traffic counts, accessibility, and visibility. In order to identify which Urban Villages are likely to attract new development in the next ten years, Strategic Economics measured the market potential of each Urban Village for retail uses and for office/industrial uses (discussed below).

Figure 4. Vacant Employment Lands by General Plan Designation and Location



*Includes North Coyote Valley, Evergreen Industrial Park, and Alviso Specific Plan Area.
Sources: City of San Jose, 2015; Strategic Economics, 2015.

Figure 5. Net New Demand for Employment Lands by Land Use Type, 2013-2040 and 2013-2040 Recommended Planned Job Capacity Ratio



Sources: CCSCE, 2015; City of San Jose, 2015; Strategic Economics, 2015.

MARKET POTENTIAL OF URBAN VILLAGES

As mentioned above, many of the Urban Villages have not succeeded in attracting new industrial, office, and/or retail development since the General Plan was adopted. In order to identify which Urban Villages are most likely to accommodate non-residential development in the short term (between 2015 and 2025), Strategic Economics developed a methodology for measuring each Urban Village's market potential. Because the market factors that guide industrial and office/R&D development are distinct from those that drive retail development, Strategic Economics developed two distinct indices of market strength: one for office/industrial uses and one for retail uses. Each market index includes a variety of criteria that indicate the likelihood that the local market will support new employment growth and development in the next ten years. The methodology can be found in Chapter VI of the report.

Note that the index results are not intended to be definitive predictors of short-term development, but rather as indicators of the general market strength of different areas within the city. There are other factors that may influence the location and timing of new development, including specific opportunity sites, which are not captured in this analysis.

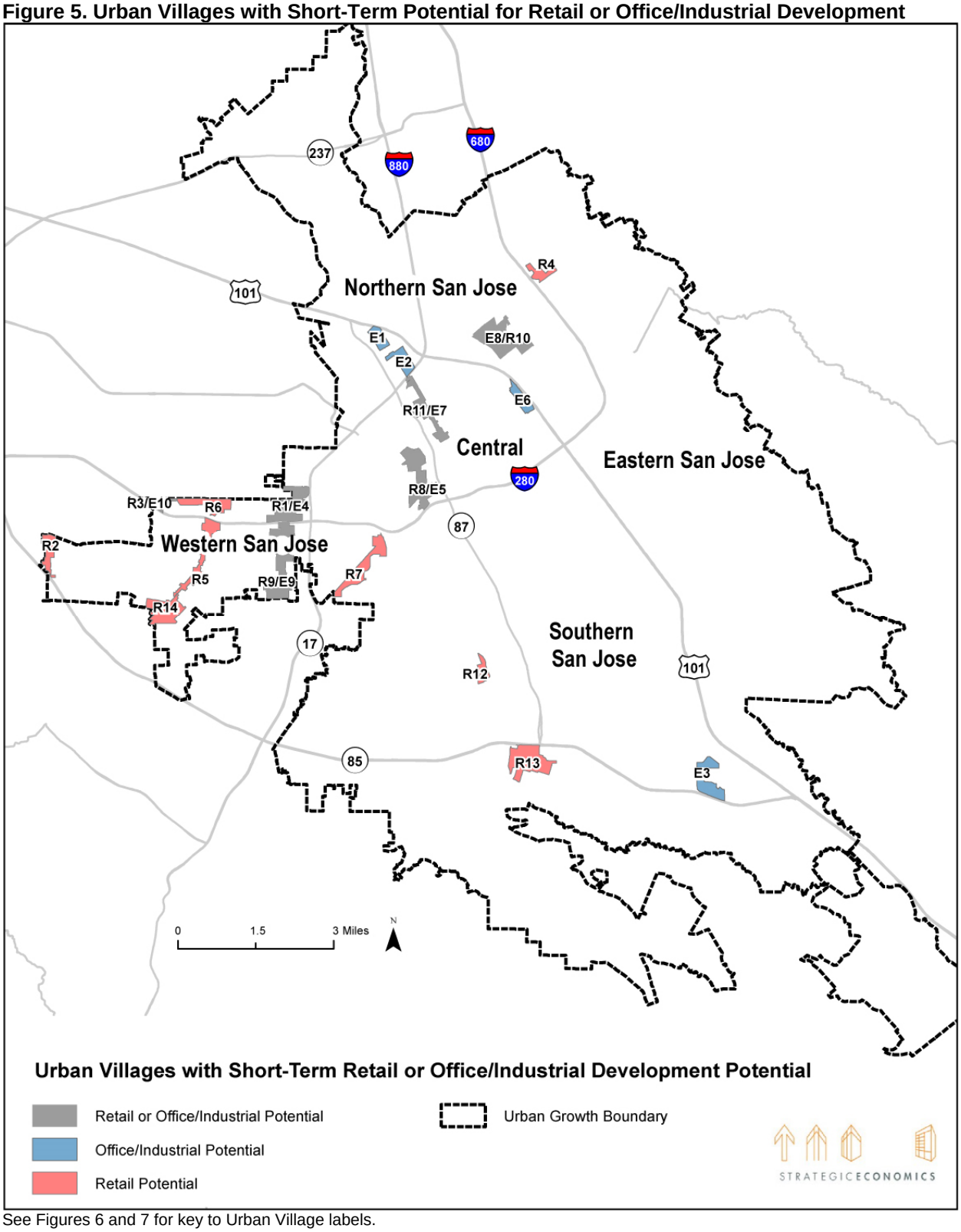
Figures 5, 6, and 7 show the Urban Villages with short-term potential for office/industrial and retail development, based on the results of the indices. Key findings are discussed below.

Most of the Urban Villages with short-term potential for office/industrial development are located in Northern or Central San Jose. The Rincon South 1, Rincon South 2, Diridon Station Area, Five Wounds BART, and N. 1st St Urban Villages are located adjacent to Downtown or major employment centers. Most of these Urban Villages already have a significant base of employment in the driving and business support industries, and many have attracted recent office, R&D, or industrial development. Other Urban Villages with significant near term potential include Valley Fair/Santana Row, Winchester Boulevard, and Stevens Creek Boulevard (Western subarea), as well as several areas in Southern San Jose near the Edenvale employment centers.

Although the office/industrial index indicates short-term potential for this type of development in some of the planned BART station areas, there is uncertainty about the future of these areas. Diridon Station Area and Five Wounds BART both score highly on the office/industrial index. However, the extent to which these areas attract employment growth will depend on future planning decisions and the compatibility of office, R&D, and/or industrial space with the surrounding residential neighborhoods.

For retail development, the Urban Villages in Western San Jose are best positioned to capture new development in the short term, although there are other strong retail locations across the city. Western San Jose is one of the premier shopping destinations in Silicon Valley, with a mix of high-end shopping malls and regional strip centers along major arterials. Retail centers in other parts of the city tend to serve a mix of local workers and residents, although Southern San Jose also includes several regional centers – including Oakridge Mall – that are in a strong position to attract additional retail in the short-term.

Figure 5. Urban Villages with Short-Term Potential for Retail or Office/Industrial Development



See Figures 6 and 7 for key to Urban Village labels.

Figure 6. Urban Villages with Short-Term Potential for Office/Industrial Development

Map Key	Urban Village	Subarea
E1	Rincon South 1	North
E2	Rincon South 2	North
E3	Blossom Hill Rd/Hitachi	South
E4	Valley Fair/Santana Row	West
E5	Diridon Plan	Central
E6	Five Wounds BART	Central
E7	N. 1st St	Central
E8	Berryessa BART	North
E9	Winchester Bl	West
E10	Stevens Creek Bl (West)	West

Source: Strategic Economics, 2015.

Figure 7. Urban Villages with Short-Term Potential for Retail Development

Map Key	Urban Village	Subarea
R1	Valley Fair/Santana Row	Western
R2	S. De Anza Bl	Western
R3	Stevens Creek Bl (West)	Western
R4	N. Capitol Av/Berryessa Rd	Eastern
R5	Saratoga Av	Western
R6	Stevens Creek Bl (Mid)	Western
R7	Southwest Ex	Western
R8	Diridon Plan	Central
R9	Winchester Bl	Western
R10	Berryessa BART	Northern
R11	N. 1st St	Central
R12	Almaden Ex/Hillsdale Av	Western
R13	Oakridge Mall and Vicinity (Edenvale)	Southern
R14	Paseo de Saratoga	Western

Source: Strategic Economics, 2015.

I. INTRODUCTION

The City of San Jose is in the process of conducting the first Four-Year Review of the Envision San Jose 2040 General Plan. The Envision San Jose 2040 General Plan, adopted in November 2011, sets the vision and road map for the city's growth through 2040. Employment growth is one of the central strategies of Envision San Jose 2040. The Plan envisions adding 470,000 jobs by 2040, and increasing the ratio of jobs to employed residents (J/ER) in San Jose to 1.3. This is a significant change from the current (2014) J/ER ratio of 0.84.

The Envision San Jose 2040 General Plan also identifies strategic Growth Areas to accommodate future jobs and housing, including Employment Areas and Urban Villages. The Plan allocates approximately 25 percent of the 470,000 planned new jobs to Urban Villages. However, while the majority of recent development in San Jose has been located in designated Growth Areas – largely in Employment Areas – the Urban Villages have not attracted significant office of retail development in recent years.

Envision San Jose 2040 requires a major review every four years in order to evaluate progress in achieving key General Plan goals, identify significant changes in the planning context, and consider mid-course adjustments toward implementation of the General Plan. As it embarks on its first Four-Year Review, the City may consider a number of potential adjustments to the Plan, including modifying the total planned job growth and the allocation of jobs to designated Growth Areas within San Jose. This report is intended to support the review process by providing economic analysis of the land use implications of future job growth in San Jose.

Strategic Economics analyzed recent employment and commercial development trends in San Jose, evaluated demand for employment land uses, and determined the amount of employment lands required to accommodate future development under different job growth scenarios. The report also includes a spatial analysis of employment and real estate markets in San Jose in order to identify the strongest subareas for office, industrial and retail development, and to identify the Urban Villages that have the greatest market potential to attract jobs in the next decade.

Each of the components of the analysis is described in further detail in the sections of this report.

DEFINING GEOGRAPHIES FOR ANALYSIS

As mentioned above, the report provides data and information about different locations within San Jose, using two different types of local geographies: designated Growth Areas and Market Subareas. The Growth Areas, shown in **Figure**, are identified in the Envision 2040 General Plan as locations that will accommodate the majority of the city's future job and housing growth, and include Downtown San Jose, Specific Plan Areas, Employment Areas, and Urban Villages. In addition to the Growth Areas, Strategic Economics also defined five distinct real estate Market Subareas: Northern, Central, Eastern, Southern and Western San Jose (**Figure I-2).** The five Market Subareas roughly correspond to the submarket geographies that real estate brokers use to characterize different parts of the city, and are intended to be used for descriptive rather than planning purposes.

Each of the geographies referred to throughout this report are described below.

GROWTH AREAS

The Envision 2040 General Plan identifies several types of growth areas that are planned to accommodate the majority of the city's future job and housing growth. These are shown on Figure I-1 and include the following types of growth areas:

- **Downtown:** The General Plan is intended to further support the growth and maturation of Downtown San Jose as a great place to live, work, and visit.
- **Employment Areas:** Employment Areas include most of the city's major existing employment concentrations outside of the Downtown. Employment Areas are planned to accommodate a wide variety of industry types and development forms, including high-rise and mid-rise office or research and development (R&D) uses, heavy and light industrial uses, and supporting retail uses.
- **Specific Plan Areas:** The city's adopted Specific Plans generally have a residential orientation, providing significant capacity for residential and mixed-use development at important infill sites throughout San Jose. However, the Alviso Specific Plan area (north of Highway 237) is planned for significant employment and public uses.
- **Urban Villages:** Urban Villages are planned for focused housing and job growth in a compact, walkable, urban setting. The 2040 General Plan identifies 68 urban villages, including four different types: 1) Regional Transit Urban Villages, or locations within San José with unique access to major transit facilities of regional significance; 2) San Jose Transit Urban Villages, located along light rail or bus rapid transit facilities which are used primarily for travel on a more localized basis; 3) Commercial Center Urban Villages, which are planned to take advantage of the redevelopment potential for existing, underutilized commercial sites; and 4) Neighborhood-Oriented Urban Villages, which are planned throughout the city and intended to enhance established neighborhoods by integrating a mix of uses.

MARKET SUBAREAS

As the largest city in the Bay Area, San Jose includes a variety of subareas with a range of different land uses, employment characteristics, and real estate market conditions. In order to better characterize the different employment concentrations and real estate markets within the city, Strategic Economics created major Market Subareas: Northern, Central, East, South and Western San Jose. The five Market Subareas are shown in Figure I-2 and described briefly below.

- **Northern San Jose** spans 14,500 acres, stretching south from Alviso and Highway 237 to Downtown San Jose and east from the Mineta San Jose International Airport to Berryessa. Northern San Jose is the city's primary employment center. The subarea includes several distinctive submarkets, including the Golden Triangle (bounded by Interstate 880 and Highways 237 and 101), the Alviso Specific Plan Area (north of 237), and the Berryessa/International Business Park area (between I-880 and I-680).
- **Central San Jose** encompasses over 6,300 acres bounded by I-880, I-280, and Highway 101. Central San Jose includes Downtown San Jose, the city's central business district, and Diridon Station, a key transit hub.
- **Eastern San Jose** includes everything east of Highway 101 and I-680 to the foothills. Eastern San Jose is a primarily residential area with a large shopping center (Eastridge Mall), and a variety of neighborhood-serving retail and cultural institutions.
- **Southern San Jose** is bounded by I-280 on the north, Highway 101 on the east, I-87 on the west, and Coyote Valley to the South. Southern San Jose is a large area that includes significant housing, retail, and employment.
- **Western San Jose** is bounded on the north by the city of Santa Clara, on the east by Highway 87, on the south by Highway 85, and on the west by the city of Cupertino. The land uses in Western San Jose are predominantly residential and retail, although more offices are being added to the area.

Figure I-1.General Plan Growth Areas

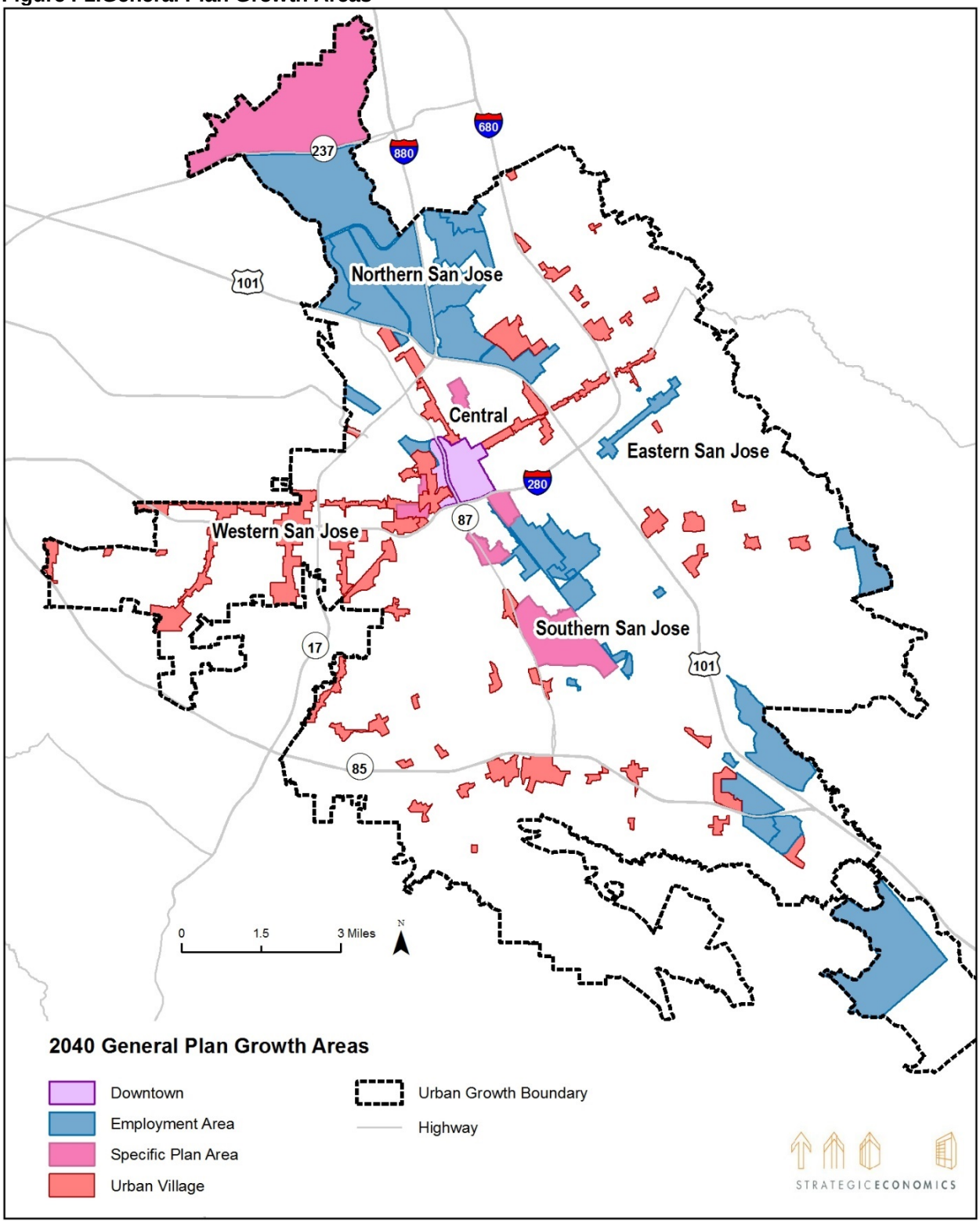
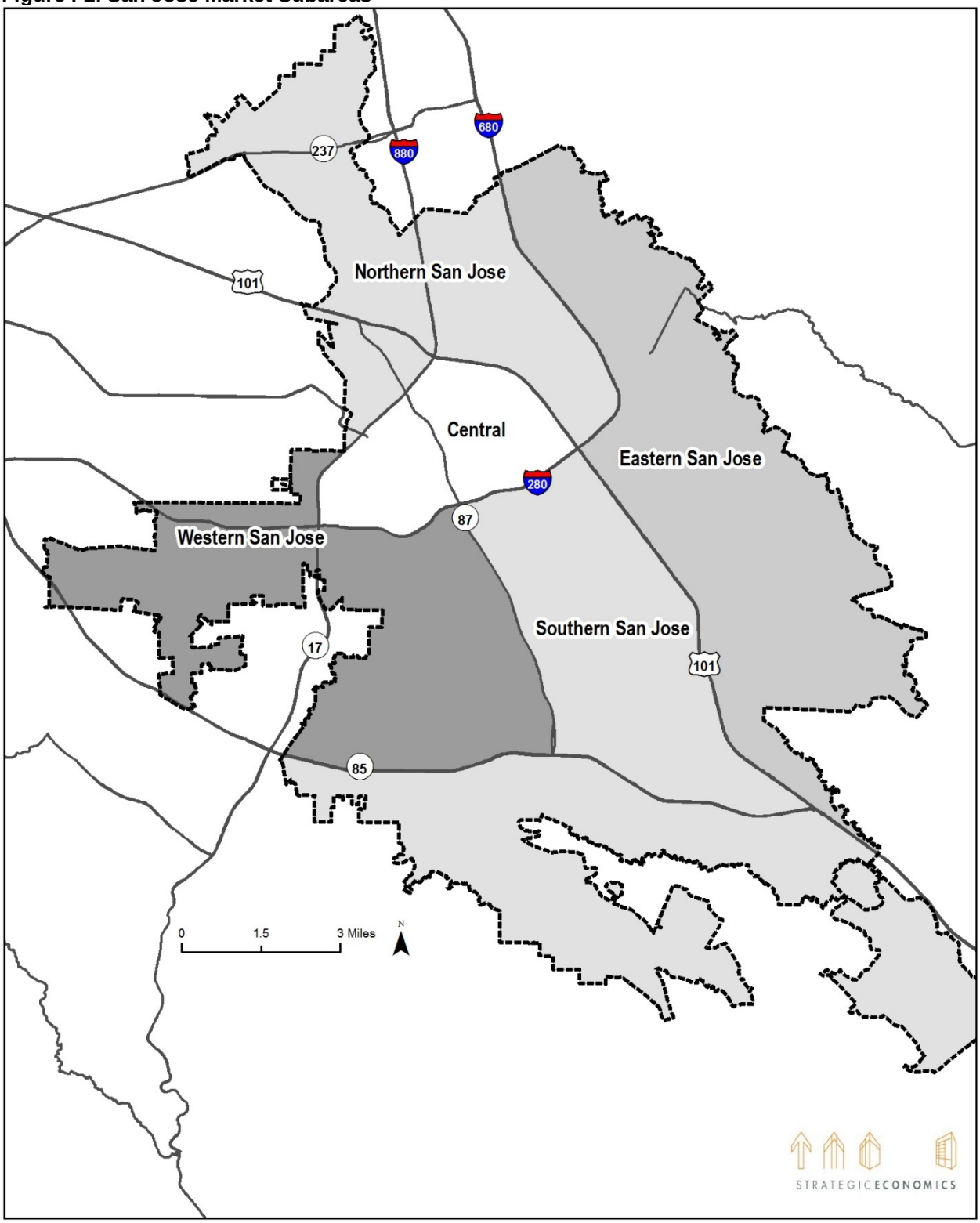


Figure I-2. San Jose Market Subareas



II. EMPLOYMENT TRENDS

This chapter provides an overview of employment trends in the Silicon Valley region, the City of San Jose, and various subareas within the city. Historical trends in job growth by industry and geography (including Employment Areas and Urban Villages) are summarized. This historical employment analysis provides insight into the city's areas of strength for attracting particular types of job growth.

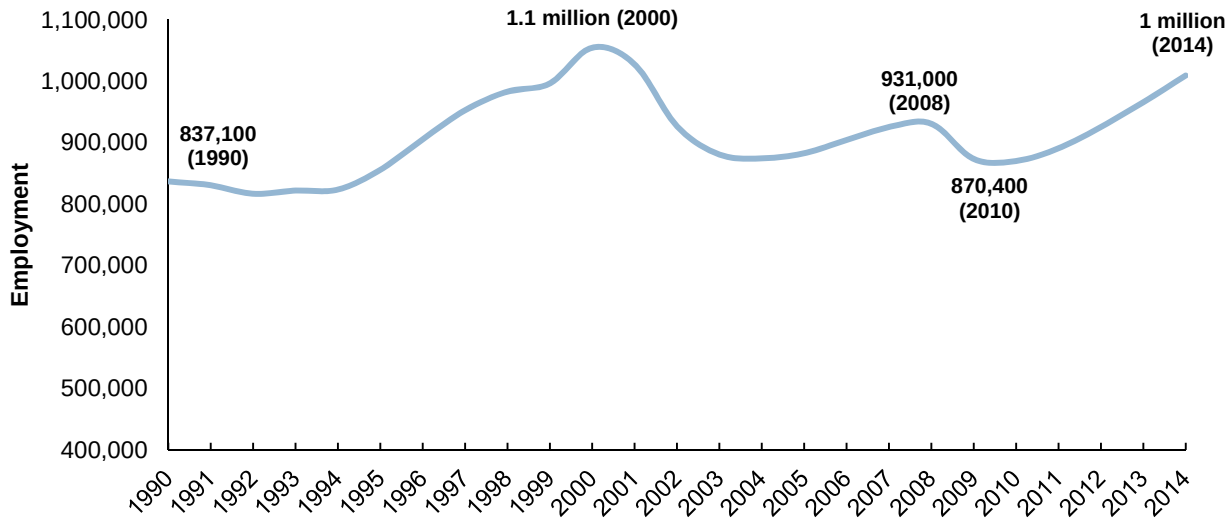
REGIONAL EMPLOYMENT TRENDS

The San Jose Metropolitan Statistical Area (MSA) has experienced rapid job growth since the Great Recession.[4] In 2014, employment was estimated at 1 million, almost reaching the region's peak employment level in 2000 (Figure II-1). Since 2007, the employment growth rate in the San Jose MSA has outpaced all other counties in the Bay Area region, with the exception of San Francisco.[5]

The San Jose MSA's recent employment growth has been driven primarily by the technology sector. The region's two largest sectors – professional and technical services and manufacturing – both have significant employment in high tech. The creative professional and technical professional services industry represents 17 percent of employment in the San Jose MSA (**Figure II-2**). High tech manufacturing, which makes up another 11 percent of employment, also includes a significant amount of tech-related employment.

Employment in other industry sectors has not kept up with growth in technology and the professional services. While technology employment has recovered from the Great Recession, the number of jobs in other sectors such as traditional manufacturing, arts and entertainment, and local government administration, has fallen in recent years.[6]

Figure II-1. Employment Trends: San Jose Metropolitan Statistical Area (MSA), 1990-2014



Source: EDD, October 2015.

[4] The San Jose Metropolitan Statistical Area (MSA) includes San Benito and Santa Clara Counties.
[5] Joint Venture Silicon Valley Index, 2015.
[6] Ibid.

Figure II-2. Employment by Industry: San Jose Metropolitan Statistical Area (MSA), 2014

Industry Cluster	Employment	% of Total
Driving Industries		
High Tech Manufacturing	109,300	11%
Creative Professional Services	100,500	10%
Miscellaneous Manufacturing	49,800	5%
Software/Information Services	15,800	2%
Visitor Services	21,900	2%
Technical Professional Services	72,800	7%
Total	**370,100**	**37%**
Business Support Industries		
Business Services	85,200	8%
Transportation/Distribution	50,000	5%
Construction	39,200	4%
Financial Services	21,700	2%
Total	**196,100**	**19%**
Household Support Industries		
Retail and Consumer Services	183,500	18%
Healthcare	84,000	8%
Education	42,700	4%
Public Administration	93,700	9%
Civic	34,100	3%
Total	**438,000**	**43%**
Other (Agriculture and Mining)	5,500	1%
Grand Total	**1,009,700**	**100%**

Note: Total employment based on wage and salary jobs for all industries.
Source: Center for the Continuing Study of the California Economy (CCSCE), 2015.

SAN JOSE EMPLOYMENT TRENDS[7]

San Jose's employment trends, shown in **Figure II-3**, are discussed in more detail below:

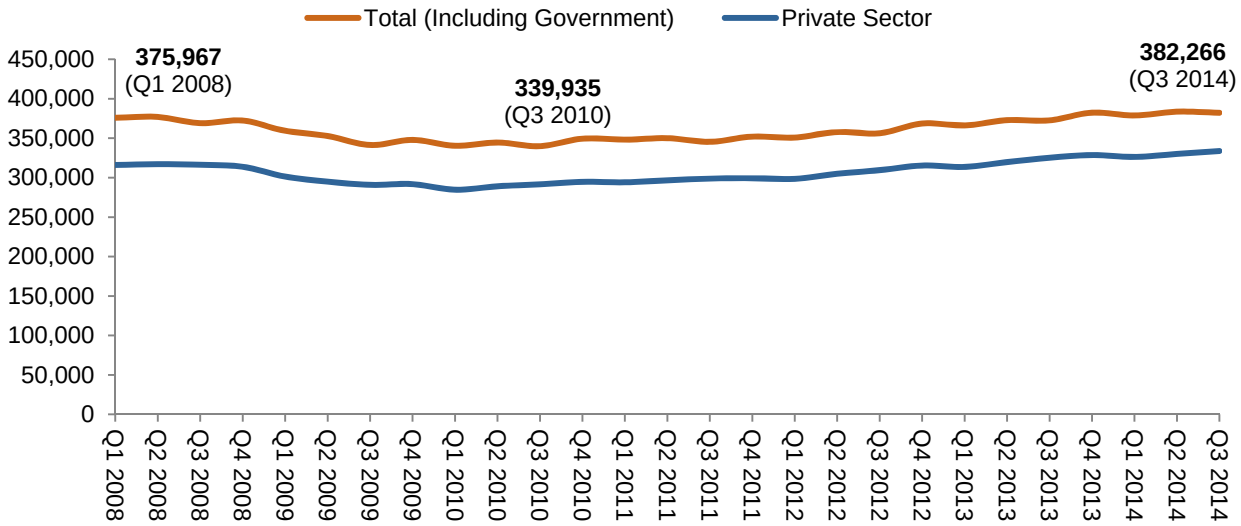
Although employment declined significantly between 2008 and 2010, the city has more than recovered all the jobs lost during the recession. Between the first quarter of 2008 (the earliest period for which data are available and the peak of the last business cycle) and the third quarter of 2010 (the low point of the recession), San Jose lost 36,000 jobs. However, by the third quarter of 2014, total employment exceeded the 2008 total. As discussed below, the recovery was led by growth in the healthcare sector (which includes social services), with smaller increases in retail, creative professional services, education, and a variety of other sectors.

In 2014, there were approximately 382,200 jobs in San Jose, representing approximately 38 percent of all jobs in the San Jose MSA. San Jose's share of the metro area's jobs remained stable between 2008

[7] This section is based on employment and wages data (ES-202) compiled by the California Employment Development Department for the City of San Jose

and 2014, at approximately 38 to 40 percent. In 2014, approximately 87 percent of the jobs in the city (333,780) were in the private sector.

Figure II-3. Employment in San Jose, 1st Quarter 2008 through 3rd Quarter 2014[a]



[a] Most recent data available at time of analysis.
Sources: California Employment Development Department, 2014; City of San Jose, 2015; Strategic Economics, 2015.

EMPLOYMENT BY TYPE

The City of San Jose has traditionally classified its employment into three broad categories: driving industries, business support industries, and household serving industries. Each of these categories and their associated industry cluster are defined in **Figure II-4** and described below:

- **Driving industries** sell their goods and services to customers outside of the region, bringing in significant revenues that are spent locally and help drive the San Jose economy. Driving industries include a number of industry clusters, including: high tech and miscellaneous manufacturing, technical professional services (including software/information), creative professional services (such as architecture and scientific research), and visitor services. Businesses in the driving industries occupy a variety of different land uses, including industrial, office, R&D, and (for visitor services) hotel.
- **Business support industries** sell their goods and services to other companies within the local economy, including driving industries. These include business services (real estate, legal services, and accounting), financial services, transportation/distribution, and construction. These industries primarily require office space (for business and financial services) and industrial/warehouse space (for construction and transportation/distribution activities).
- **Household serving industries** provide goods and services to residents. These include civic/ utilities, healthcare, retail and consumer services, public administration, and education. These industries require a wide range of land uses, including offices (for public administration and other civic uses); hospitals, schools, and other institutional buildings; and retail space.

The following sections discuss trends in each category, including recent employment patterns. **Figure II-5** shows employment by industry cluster in 2008, 2010, and 2014. **Figure II-6** shows employment change

over time during the recession (2008-2010) and during the recovery (2010-2014), as well as net change for entire time period studied (2008-2014).

Figure II-4. Industry Cluster Definitions

Industry Cluster	Industry Category	NAICS Codes	NAICS Code Description
Driving Industries	High Tech Manufacturing	3344	Semiconductor and electronic component mfg.
		3345	Electronic instrument manufacturing
		334x	Other computer and electronic products manufacturing
		311	Food manufacturing
	Miscellaneous Manufacturing	332	Fabricated metal product manufacturing
		333	Machinery manufacturing
		31-3	Other manufacturing
	Software/Information Services	5112	Software publishers
		51x	Other Information services
	Technical Professional Services	54x	Other professional services
		55 M	Management of companies and enterprises
	Creative Professional Services	5413	Architectural and engineering services
		5415	Computer systems design and related services
		5417	Scientific research and development services
	Visitor Services	71	Arts entertainment and recreation
		721	Accommodation
Business Support Industries	Business Services	53	Real estate and rental and leasing
		5411	Legal services
		5412	Accounting and bookkeeping services
		561	Administrative and support services
	Financial Services	52	Finance and insurance
	Transportation & Distribution	42	Wholesale trade
		48-49	Transportation and Warehousing
	Construction	23	Construction
Household Support Industries	Civic/Utilities	562	Waste management and remediation services
		61	Educational services
		22	Utilities
		622	Hospitals
		517	Telecommunications
	Health Care	62x	Other Health care
	Retail & Consumer Services	44-45	Retail
		5111	Newspaper book and directory publishers
		722	Food services and drinking places
		811	Repair and maintenance
		81x	Other services except public administration
	Education	61	Schools and educational support services
	Public Administration	92	Government

NAICS: North American Industry Classification System
Source: City of San Jose.

Driving Industries

In 2014, the driving industries accounted for 109,600 jobs, or approximately one-third of the city's total employment (Figure II-5). The driving industries lost about 5,000 jobs between 2008 and 2010, but rebounded after the recession, adding more than 7,600 jobs between 2010 and 2014 (Figure II-6).

High tech manufacturing makes up the largest share of jobs in this industry category, but employment in this industry cluster has declined over time. In 2014, high tech manufacturing accounted for 12 percent of citywide jobs (Figure II-5). However, employment in this category fell both during and after the recession, declining by seven percent overall between 2008 and 2014 (Figure II-6). To some extent, job losses in this category may reflect productivity gains, as manufacturers increasingly rely on advanced equipment that requires fewer workers to operate.

The creative professional services, software/information services, and miscellaneous manufacturing industry clusters have experienced significant growth since 2010. While these industry clusters each lost employment between 2008 and 2010, they accounted for most of the job growth in the driving industries between 2010 and 2014 (Figure II-6).

Business Support Industries

In 2014, business support industries accounted for 98,000 jobs, or one-quarter of citywide employment. Business services represent 11 percent of San Jose's employment (Figure II-5). The majority of employment in this category is in business services (a category that includes real estate, legal services, and accounting), followed by transportation/distribution, construction, and financial services.

Overall, business support employment declined by three percent between 2008 and 2014. During the recession (between 2008 and 2010), all the industry clusters in the business support category – except for financial services – experienced significant job loss. While the economic recovery between 2010 and 2014 saw jobs rebound in all categories, 2014 employment remained below 2008 levels in every category except financial services (Figure II-6).

While financial services accounts for a relatively small share of citywide employment, it was the only business support industry that experienced a net increase in jobs between 2008 and 2014. Financial services added almost 2,000 jobs between 2008 and 2014, a 24 percent increase. However, this industry remains relatively small, only accounting for about 10,000 jobs (or 3 percent of total employment) in 2014.

Household Serving Industries

In 2014, household serving industries accounted for 45 percent of citywide employment, or 173,100 jobs. Retail and consumer services represents San Jose's largest industry cluster, accounting for 21 percent of total jobs in the city. Healthcare employs another 13 percent of the city's workforce (Figure II-5).

Overall, employment in household support industries increased by 9 percent between 2008 and 2014. Between 2008 and 2010, all household support industries – except for healthcare – experienced job loss. However, by 2014, healthcare, education, and retail employment had increased significantly, leading to a net increase of 9 percent between 2008 and 2010. Healthcare experienced the fastest job growth of any cluster, expanding by more than 15,000 jobs or 40 percent. Healthcare jobs have been growing rapidly across the U.S. in recent years due to and an aging population and the expansion in health insurance coverage associated with the Affordable Care Act. Employment in Civic/Utilities and public administration declined by 9 percent and 5 percent, respectively, between 2008 and 2014 (Figure II-6).

Figure II-5. Employment by Industry Cluster: City of San Jose, 2008, 2010, and 2014[a]

	Employment			Percent of Total Employment		
Industry Cluster	**2008**	**2010**	**2014**	**2008**	**2010**	**2014**
Driving Industries						
High Tech Manufacturing	47,345	45,103	44,169	13%	13%	12%
Creative Professional Services	19,833	19,053	22,695	5%	6%	6%
Miscellaneous Manufacturing	13,298	11,637	13,293	4%	3%	3%
Software/Information Services	7,917	7,793	10,388	2%	2%	3%
Visitor Services	9,219	9,657	10,229	2%	3%	3%
Technical Professional Services	9,293	8,659	8,784	3%	3%	2%
Total	**106,905**	**101,902**	**109,558**	**29%**	**30%**	**29%**
Business Support Industries						
Business Services	43,393	36,008	41,512	12%	11%	11%
Transportation/Distribution	26,600	23,464	25,835	7%	7%	7%
Construction	23,019	17,632	20,769	6%	5%	5%
Financial Services	8,062	9,023	10,025	2%	3%	3%
Total	**101,074**	**86,127**	**98,141**	**27%**	**25%**	**26%**
Household Support Industries						
Retail and Consumer Services	78,865	73,550	79,145	21%	22%	21%
Healthcare	35,739	36,232	50,818	10%	11%	13%
Education	23,758	20,823	24,444	6%	6%	6%
Public Administration	18,068	17,825	16,370	5%	5%	4%
Civic/Utilities	2,489	2,347	2,369	1%	1%	1%
Total	**158,919**	**150,777**	**173,146**	**43%**	**44%**	**45%**
Other[b]	822	500	586	0%	0%	0%
Unclassified	1,320	629	835	0%	0%	0%
Grand Total	**369,040**	**339,935**	**382,266**	**57%**	**100%**	**100%**

[a] All employment data are for the third quarter of the year, latest information available.

[b] "Other" includes agriculture and mining industries.

Sources: California Employment Development Department, 2014; City of San Jose, 2015; Strategic Economics, 2015.

Figure II-6. Employment Change by Industry Cluster: City of San Jose, 2008-2014[a]

Industry Cluster	Change in Employment			Percent Change		
	2008-10	2010-14	Net Change, 2008-14	2008-10	2010-14	Net Change, 2008-14
Driving Industries						
High Tech Manufacturing	-2,242	-934	-3,176	-5%	-2%	-7%
Creative Professional Services	-780	3,642	2,862	-4%	19%	14%
Miscellaneous Manufacturing	-1,661	1,656	-5	-12%	14%	0%
Software/Information Services	-124	2,595	2,471	-2%	33%	31%
Visitor Services	438	572	1,010	5%	6%	11%
Technical Professional Services	-634	125	-509	-7%	1%	-5%
Total	**-5,003**	**7,656**	**2,653**	**-5%**	**8%**	**2%**
Business Support Industries						
Business Services	-7,385	5,504	-1,881	-17%	15%	-4%
Transportation/Distribution	-3,136	2,371	-765	-12%	10%	-3%
Construction	-5,387	3,137	-2,250	-23%	18%	-10%
Financial Services	961	1,002	1,963	12%	11%	24%
Total	**-14,947**	**12,014**	**-2,933**	**-15%**	**14%**	**-3%**
Household Support Industries						
Retail and Consumer Services	-5,315	5,595	280	-7%	8%	0%
Healthcare	493	14,586	15,079	1%	40%	42%
Education	-2,935	3,621	686	-12%	17%	3%
Public Administration	-243	-1,455	-1,698	-1%	-8%	-9%
Civic/Utilities	-142	22	-120	-6%	1%	-5%
Total	**-8,142**	**22,369**	**14,227**	**-5%**	**15%**	**9%**
Other[b]	-322	86	-236	-39%	17%	-29%
Unclassified	-691	206	-485	-52%	33%	-37%
Grand Total	**-29,105**	**42,331**	**13,226**	**-8%**	**12%**	**4%**

[a] All employment data are for the third quarter of the year.

[b] "Other" includes agriculture and mining industries.

Sources: California Employment Development Department, 2014; City of San Jose, 2015; Strategic Economics, 2015.

EMPLOYMENT BY SUBAREA

Within San Jose, the distribution of employment by type varies by location. Strategic Economics defined five Market Subareas, each of which is characterized by a distinctive employment mix: Northern, Southern, Central, Eastern, and Western San Jose.

This section describes the employment characteristics of each subarea. **Figure II-7**, below, summarizes the employment composition of each subarea by industry category.[8] **Figure II-8** further describes the subareas' employment composition by growth area type (Employment Areas, Urban Villages, Specific Plan Areas, and Downtown). The spatial distribution of jobs is visually summarized in four maps. **Figure II-9** depicts the density of jobs in San Jose by subarea and growth area type. **Figures II-10, II-11** and **II-12** show the density of jobs by category (driving industries, business support, and household serving, respectively).

Northern San Jose

Northern San Jose is the largest employment center in the city. With 128,500 jobs, Northern San Jose accounts for 36 percent of citywide employment.

Over half of all jobs in Northern San Jose are in driving industries. In fact, Northern San Jose contains most of the city's employment in the driving industries. The subarea is home to 35,400 high tech manufacturing jobs (80 percent of all such jobs in the city) and 13,400 creative professional services (60 percent of the city's jobs in this category). Within Northern San Jose, the Golden Triangle (the area bounded by I-880, Highway 101, and Highway 237) is the prime location in San Jose for firms in these industries.

Business support industries account for one-third of Northern San Jose employment. In Northern San Jose, the majority of jobs in this category are in business services and transportation/distribution. Most of the transportation/distribution employment is located east of I-880, where there are also areas with high-tech and miscellaneous manufacturing.

The majority of employment in Northern San Jose is located in designated Employment Areas. Employment Areas account for nearly 70 percent of jobs in this subarea, with the majority of jobs located in North San Jose and the Industrial Core Area located along North First Street between Highway 101 and Montague Expressway.

Southern San Jose

Southern San Jose is the second largest employment center in the city. Southern San Jose represents 19 percent of citywide employment with about 67,900 jobs.

Most jobs in Southern San Jose are in household support. The largest industry sectors in this subarea are retail and consumer services (29%), followed by healthcare (18%). The predominance of these household support industries reflects the largely residential character of much of Southern San Jose. As shown in Figure II-12, there are particularly large concentrations of household support industries in and around Urban Villages along Highway 85, reflecting the presence of several large shopping centers (Almaden Plaza and Westfield Oakridge) and Kaiser Permanente Medical Center.

[8] All employment data are for third quarter of each year. About 23,000 jobs were not assigned a subarea due to incomplete addresses and/or home-based businesses.

Combined, the driving industries and business support industries make up about one quarter of employment in Southern San Jose. These include manufacturing (10 percent of all employment in Southern San Jose), including a mix of high tech and miscellaneous manufacturers and construction (8%).

Southern San Jose contains significant concentrations of manufacturing and R&D in designated Employment Areas (Figure II-10). Southern San Jose has a substantial number of R&D and manufacturing jobs, many of which are located in the Monterey Business Corridor, and Old and New Edenvale employment growth areas.

Central San Jose

Central San Jose contains 18 percent of the city's total employment. Central San Jose has approximately 65,300 jobs, of which 25,900 (or 40 percent) are in the Downtown. The remaining jobs are located in a variety of commercial corridors and the airport area.

Central San Jose's jobs are primarily in household support and business support industries. Household support industries account for 43 percent, and business support industries account for another 36 percent of jobs in the subarea. Retail and consumer services provide 20 percent of household support jobs in the subarea, followed by healthcare (11 percent). Business services, including financial services, predominate in the Downtown.

The Central subarea also includes 13,300 jobs in the driving industries, accounting for 20 percent of total jobs in the area (Figure II-7). These industries include high tech manufacturing, software/information services, visitor services, and the creative professional services.

Western San Jose

There are approximately 61,900 jobs in Western San Jose. These account for 17 percent of citywide employment.

Household support industries account for nearly 70 percent of Western San Jose jobs. This includes significant concentrations of employment in retail and consumer services, healthcare, and education, reflecting the relatively high household densities and high household incomes in this subarea. Business support industries represent one-fifth of area jobs, which are mostly in business and financial services.

Employment in Western San Jose is concentrated along major arterials, many of which are Urban Villages. Overall, Urban Villages account for a quarter of employment in Western San Jose (Figure II-8). The largest Urban Village in Western San Jose (by employment) is Valley Fair/Santana Row. While most of these jobs are in retail and other household support industries, many arterials also include some offices.

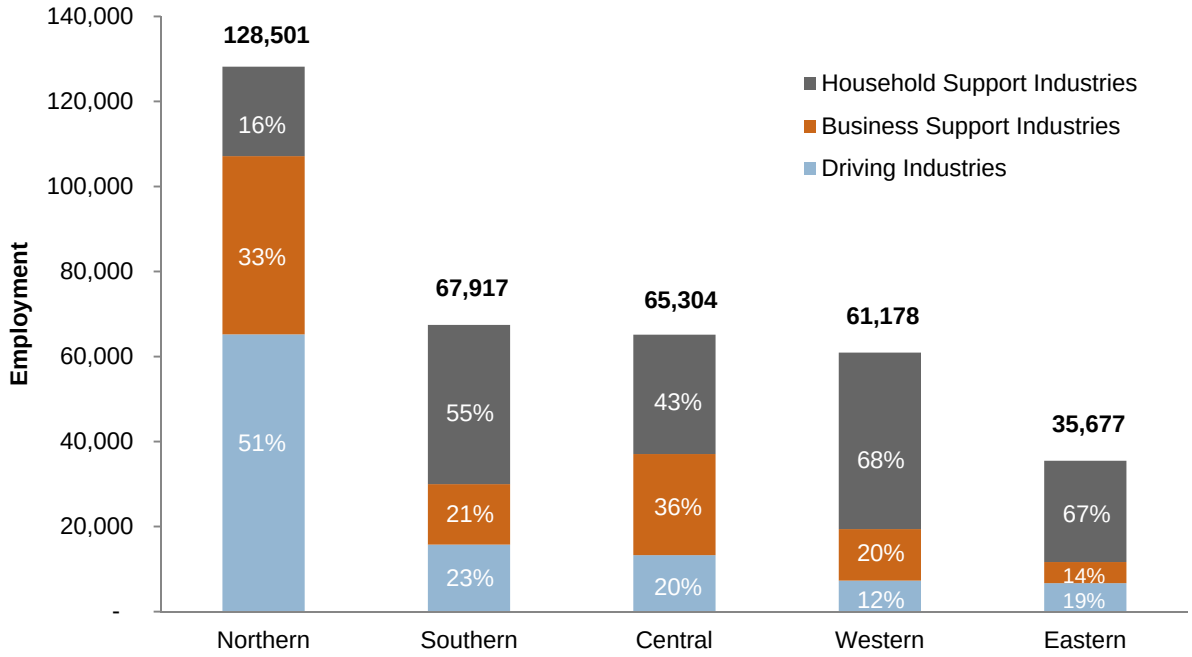
Eastern San Jose

Eastern San Jose is primarily a residential area, with a limited employment base. This subarea represents 10 percent of the city's total employment with about 35,400 jobs.

Household support industries account for over two-thirds of Eastern San Jose employment. Retail and consumer services represent one-third of the area's jobs, followed by healthcare (20 percent) and

education (13 percent). However, the subarea does include some manufacturing, which accounts for 10 percent of area jobs.

Figure II-7. San Jose Employment Composition by Subarea, 2014



Employment that is not assigned to an industry cluster (e.g., household employment) is not shown; as a result, percentages may not add to 100% for each subarea.
Sources: California Employment Development Department, 2014; City of San Jose, 2015; Strategic Economics, 2015.

Figure II-8. Employment by Subarea and Growth Area Type

	Northern		Southern		Central		Western		Eastern		Citywide Total[a]	
	Jobs	% of Total	Jobs	% of Total	Jobs	% of Total	Jobs	% of Total	Jobs	% of Total	Jobs	% of Total
Designated Growth Areas												
Downtown	0	0%	0	0%	25,982	40%	0	0%	0	0%	25,982	7%
Urban Village	9,396	7%	9,272	14%	8,324	13%	15,643	25%	5,469	15%	48,104	13%
Employment Area	89,164	69%	12,114	18%	1,603	2%	0	0%	7,448	21%	110,329	31%
Specific Plan	1,218	1%	2,962	4%	1,611	2%	36	0%	0	0%	5,827	2%
Other Areas	28,718	22%	43,475	64%	27,784	43%	46,213	75%	22,514	64%	168,704	47%
Total Subarea Employment	**128,496**	**100%**	**67,823**	**100%**	**65,304**	**100%**	**61,892**	**100%**	**35,431**	**100%**	**358,946**	**100%**

[a] Excludes approximately 23,000 jobs that were not assigned a subarea or growth area due to incomplete addresses and/or home-based businesses
Sources: California Employment Development Department, 2014; City of San Jose, 2015; Strategic Economics, 2015

Figure II-9. San Jose Employment Density: All Jobs, 2014

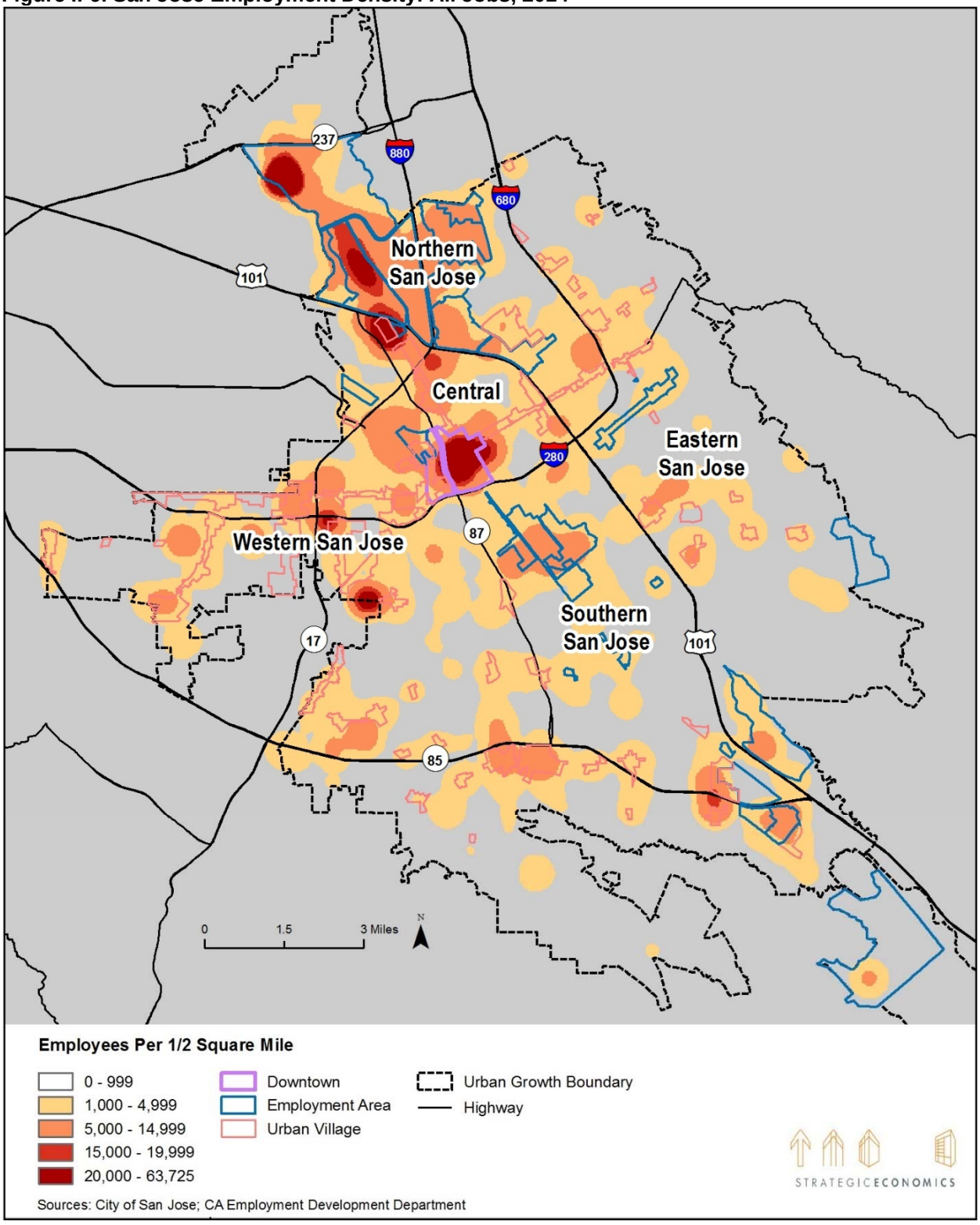


Figure II-10. San Jose Employment Density: Driving Industries, 2014

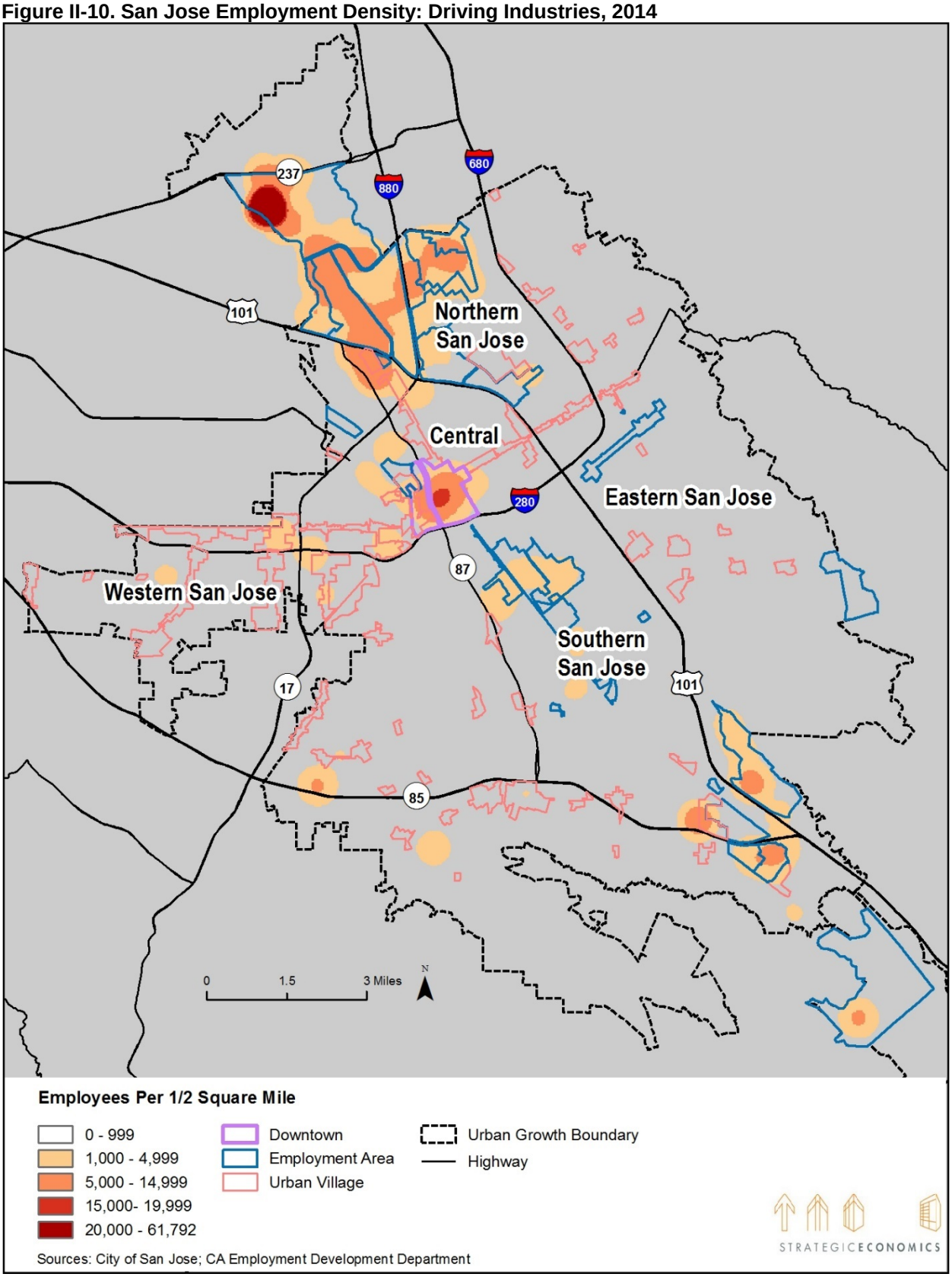


Figure II-11. San Jose Employment Density: Business Support Industries, 2014

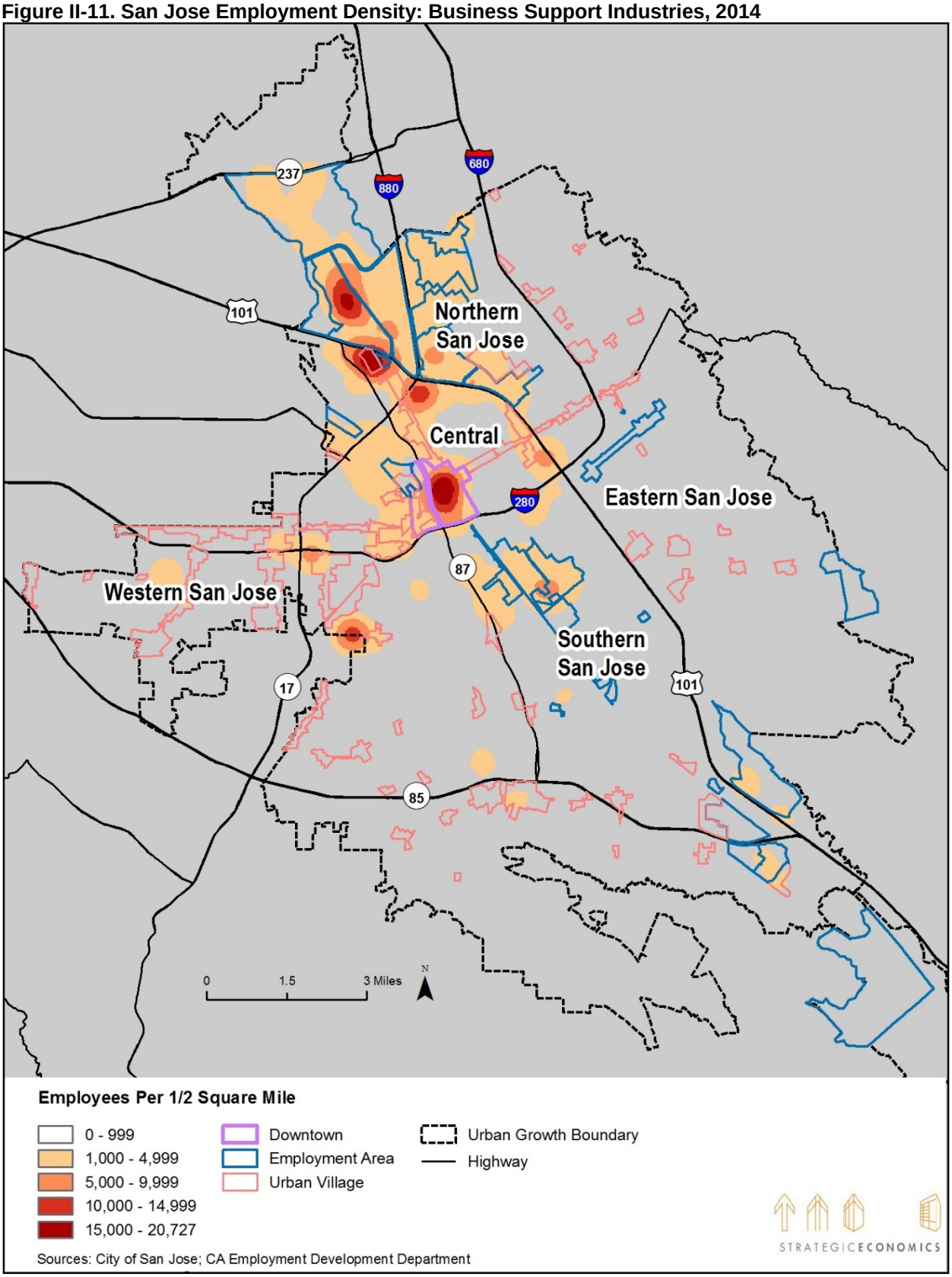
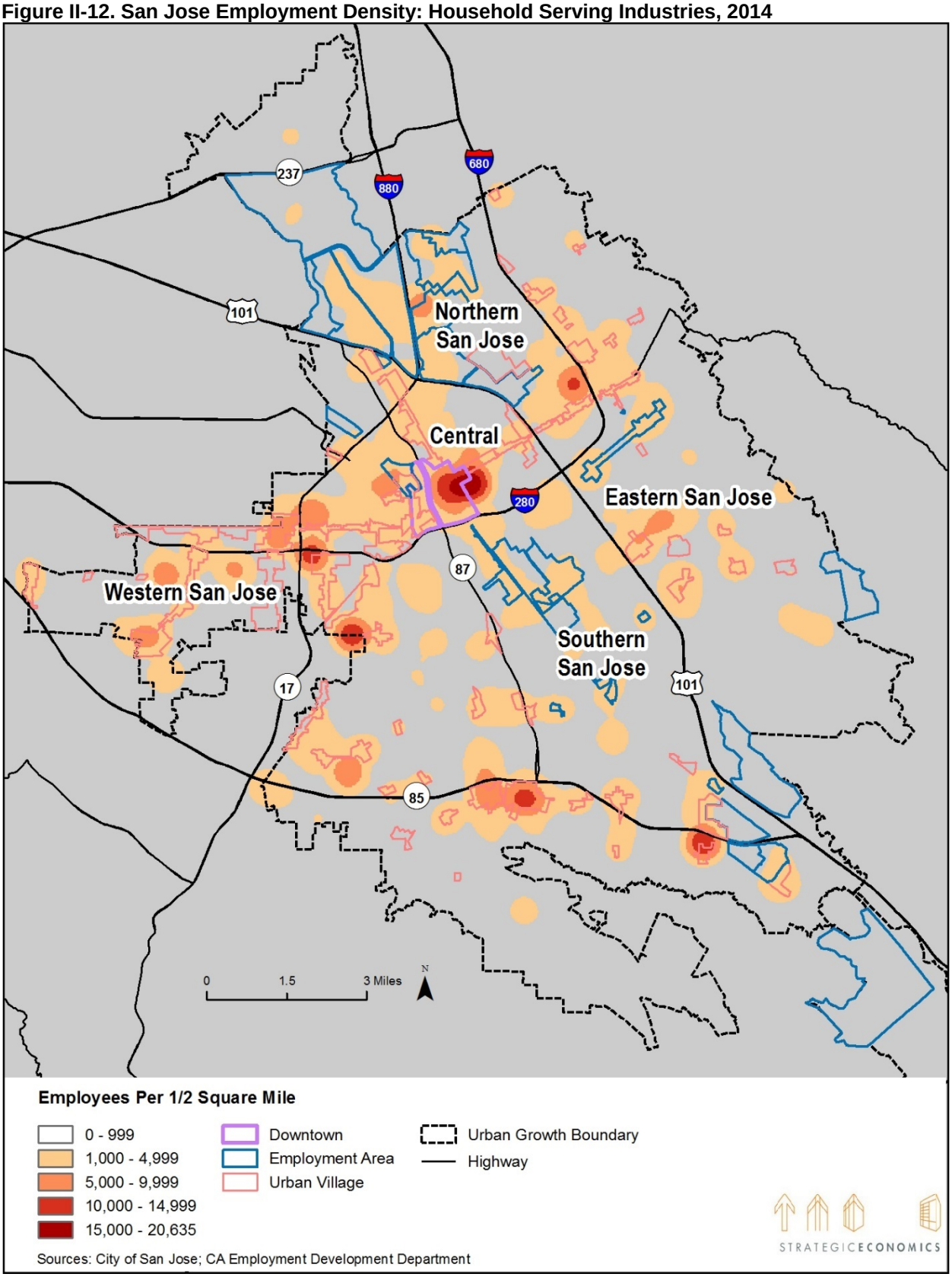


Figure II-12. San Jose Employment Density: Household Serving Industries, 2014



CONCLUSIONS

San Jose has recovered strongly from the recession, with more than 42,000 new jobs gained by late 2014. Household support industries account for the largest share of San Jose's employment (45 percent), and have experienced the fastest growth in recent years. Healthcare in particular has driven the city's recent employment growth, accounting for more than a third of new jobs added between 2010 and 2014.

Driving industries account for almost one third of all jobs in San Jose. The driving industries have also added significant jobs in recent years, driven by rapid employment growth in software/information services and creative professional services – reflecting the city's strength as a high tech center. Employment has declined in the high-tech manufacturing sector, but this may be due to increased automation, which requires fewer workers. Meanwhile, employment in the miscellaneous manufacturing industries have stayed constant between 2008 and 2014. Employment in business support industries contracted from 2008 to 2014, but this category will likely to grow faster as the rest of the city's economy expands.

Within San Jose, Northern San Jose is the primary employment center, followed by the Central and Southern San Jose subareas. Northern San Jose has a strength in driving industries, while the Central and Southern subareas are characterized by a diverse mix of driving, business support, and household support industries. Employment in the Western and Eastern subareas is more limited, and predominantly consists of household support jobs.

Citywide, 30 percent of employment is in designated Employment Areas and 13 percent is Urban Villages. Nearly 50 percent of employment is located outside of a designated growth area. In Northern San Jose in particular, employment is highly concentrated in the Employment Areas, while in other subareas jobs are more dispersed.

III. REAL ESTATE MARKET OVERVIEW: OFFICE, R&D, AND INDUSTRIAL

This chapter provides an overview of office, research and development (R&D), and industrial real estate markets in San Jose. The chapter first assesses the competitiveness of the city's office/R&D and industrial real estate market compared to other markets in Silicon Valley,[9] and then describes market conditions in the city's major subareas.

This analysis draws on a variety of sources including real estate market data, data on recent, planned, and proposed development projects provided by the City of San Jose, and qualitative information provided from interviews with local commercial real estate brokers.

OFFICE AND R&D

SILICON VALLEY

There is strong demand for office and R&D in Silicon Valley, driven by growth in tech employment and related sectors. There are approximately 66 million square feet of office space in Silicon Valley. The overall vacancy rate in the second quarter of 2015 was 7 percent – the region's lowest vacancy rate since 2000. Silicon Valley's R&D market is comprised of over 150 million square feet of inventory, with an average vacancy rate of 9 percent (**Figure III-1**).

Traditionally, North and West Silicon Valley have been the most competitive locations for office and R&D tenants. The region's highest rents and lowest vacancies are found in cities such as Palo Alto, Mountain View, Sunnyvale, Menlo Park, and Cupertino. These communities have historically been at the heart of the tech economy and benefit from a concentration of major employers such as Google, Apple, LinkedIn, and Facebook. As of the second quarter of 2015, the Mountain View/Los Altos, Cupertino, and Sunnyvale office markets were experiencing historically low vacancies, averaging between 1.4 and 3.5 percent. Average office rents in Palo Alto and Mountain View/Los Altos exceeded $7.00 per square foot as of the second quarter of 2015.

Cities along Interstate 880 have historically had lower rents and higher vacancies. Office and R&D vacancies are highest among the East Valley cities along I-880, including Fremont, Milpitas, San Jose, and Santa Clara. In the second quarter of 2015, average asking rents in these markets were between $1.50 and $3.50 per square feet for office, and under $2.00 per square foot for R&D. According to local brokers, the East Valley has historically been less competitive for office tenants because the area is more removed from the heart of Silicon Valley, and Highway 101 and I-880 are perceived as slower and more congested than I-280. In addition, much of the office inventory consists of older, Class B and C product. [10]

9 For the purpose of this section, "Silicon Valley" includes the cities of Palo Alto, Mountain View, Los Altos, Cupertino, Sunnyvale, Santa Clara, Saratoga, Los Gatos, Milpitas, and San Jose. Market data from CBRE, "Silicon Valley Local Market Reports," Q2 2015.

10 Office buildings are traditionally grouped into three classes: A, B, and C. Class A buildings are the most prestigious buildings with high-quality finishings and systems, and compete for premier office users with rents above average for their area. Class B buildings have fair to good finishings, and command average rents for the area. Class C buildings serve tenants requiring functional space at rents below the average for the area.

Figure III-1. Office and R&D Overview: Silicon Valley Cities, Second Quarter 2015

	Office				R&D			
	Existing Inventory (Sq. Ft.)	% of Total Inventory	Vacancy Rate[a]	Average Asking Rent[b]	Existing Inventory (Sq. Ft.)	% of Total Inventory	Vacancy Rate[a]	Average Asking Rent[b]
San Jose[c]	23,749,843	36%	13%	$2.69	44,622,377	30%	11%	$1.55
I-880 Corridor								
Santa Clara	10,053,158	15%	6%	$3.54	19,950,393	13%	12%	$1.99
Milpitas/IBP[d]	1,345,211	2%	8%	$1.53	11,397,630	8%	10%	$1.21
Fremont[e]	2,122,399	3%	8%	$1.73	23,095,531	15%	11%	$0.97
North Valley								
Menlo Park	5,175,184	8%	3%	$6.56				
Mountain View/Los Altos	7,068,492	11%	1%	$7.09	12,497,386	8%	2%	$2.85
Palo Alto	6,907,494	10%	5%	$7.65	10,534,731	7%	0.7%	$5.75
Sunnyvale	7,728,931	12%	3%	$4.68	21,433,991	14%	5%	$2.26
West Valley								
Cupertino	4,026,993	6%	3%	$4.26				
Other West Valley[f]	5,011,218	8%	5%	$3.00	N/A	N/A	N/A	N/A
Silicon Valley Total	66,001,033	100%	7%	$4.10	150,481,062	100%	9%	$2.02

[a] Vacancy rate: Includes direct vacancies & space available for sublease

[b] Per square foot per month. Average asking rates for R&D buildings are reported as triple net. Office rents are reported full service.
Triple Net: A lease under which the tenant pays the base rent plus all the costs of maintenance, repair, taxes and operating fees.
Full Service: The landlord pays for property taxes, insurance, and common area maintenance and utilities.

[c] Calculated from subareas shown in Figure III-12, below.

[d] Includes IBP (International Business Park) in San Jose.

[e] For R&D, Fremont also includes Newark submarket

[f] Includes Los Gatos, Campbell, Saratoga, and Western San Jose.

Sources: CBRE, 2nd Quarter 2015; Strategic Economics, 2015

Office and R&D buildings throughout Silicon Valley increasingly offer similar features and compete for similar tenants. According to brokers, new office and R&D buildings in Silicon Valley are becoming increasingly similar, as property owners are adapting R&D space to accommodate the flexible space needs of tech companies seeking a lower cost alternative to office space. In general, tenants are looking for multi-functional and flexible spaces with large floor plates, high ceilings, indoor/outdoor collaborative workspaces, and significant amenities.

SAN JOSE

While San Jose has the greatest amount of population in the region, its office inventory is significantly lower than San Francisco, the next largest city in the Bay Area. With over 21.7 million square feet of office inventory, San Jose has significantly less office space than San Francisco, which contains 77 million square feet. Meanwhile, neighboring small cities like Santa Clara and Cupertino have a very large amount of office space compared to the size of their population. San Jose's R&D inventory is nearly 45 million square feet. In comparison, Fremont – the market with the second largest R&D inventory – has 23 million square feet of R&D space (Figure III-1).

San Jose's rental rates and occupancy rates tend to be lower than the regional average, but have improved significantly in recent quarters. The city's vacancy rates for office and R&D are significantly higher than the region as a whole, at 13 percent and 11 percent, respectively (Figure III-1). This is in contrast to occupancy rates found in other Silicon Valley cities like Palo Alto, Mountain View, Sunnyvale, where large technology firms dominate the real estate market. However, between the second quarters of 2014 and 2015, San Jose's office vacancy rate decreased from 16 to 13 percent, while the average asking rent for office increased by 13 percent. The R&D market experienced a similar uptick in performance. Recent transaction activity since Q2 2015 – including major new office leases signed by Apple, Google, and other major firms – suggest that the market has continued to improve.

San Jose offers several advantages for tech companies and other firms looking for office space in Silicon Valley. These include:

- **Campus settings.** San Jose remains a lower-cost alternative for companies seeking campus settings with indoor and outdoor amenities, especially compared to other Silicon Valley cities where space is more constrained.
- **Flexible office spaces.** With rents increasing and space demands changing, former manufacturing and warehouse buildings throughout the region are increasingly being rehabbed and converted into contemporary high tech offices and/or R&D. San Jose has a significant stock of this type of flexible industrial space, which has helped attract companies including Apple (which recently leased a former manufacturing building in Northern San Jose).[11]
- **Significant housing supply, retail, transit, and other amenities.** According to brokers, many employers see San Jose's large housing stock and residential retail amenities as an asset, supporting future workforce growth. In addition, San Jose's existing transit system, which includes Caltrain, Capitol Corridor, and VTA, will soon be expanded with the addition of BART. Four BART stops are proposed at key locations within the city, which are planned to accommodate denser employment near transit.

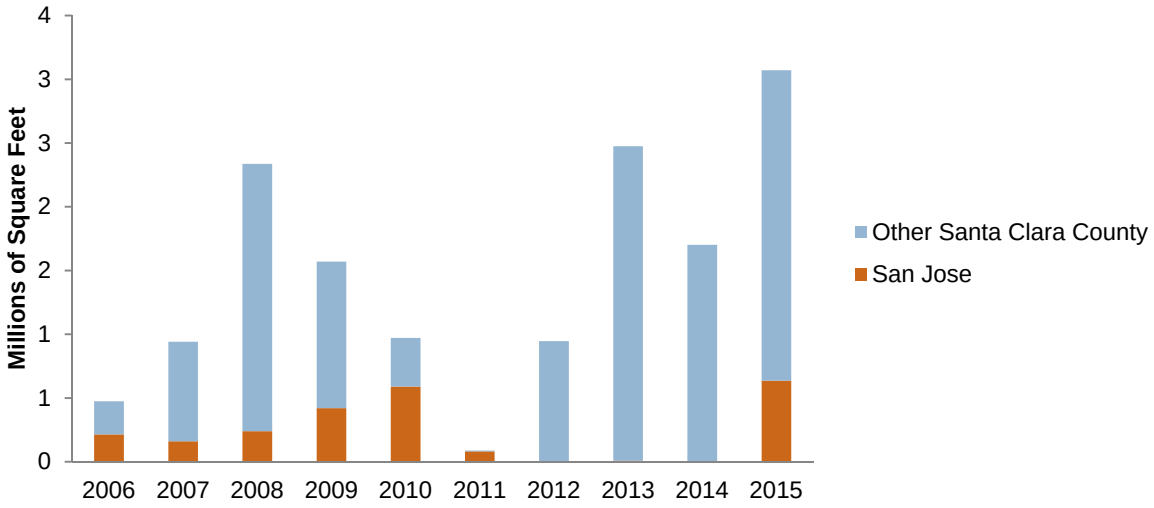
San Jose has historically captured a lower share of the region's office and R&D development than other cities in the region. As depicted in **Figure III-2**, other parts of Santa Clara County outpaced San

[11] "Exclusive: Apple signs major lease in North San Jose, marking first significant entry into city." *Silicon Valley Business Journal*. 9 July 2015.

Jose's office/R&D construction between 2006 and 2015. During this time period, San Jose captured 16 percent of new office/R&D development in the county.

There is increasing interest in development of office and R&D space in San Jose. There is a total of 11.5 million square feet of new office and R&D development in the pipeline (approved or pending entitlements); another 1 million square feet are under construction (**Figure III-3**). Note that this does not include proposals submitted since February 2015. Developers are responding to the region's strong job growth and unique opportunities for larger scale development projects in the city.

Figure III-2. New Office/R&D Inventory Added, Santa Clara County and San Jose, 2006-2015



Sources: CoStar, 2015; Strategic Economics, 2015.

Figure III-3. Recently Completed, Under Construction, and Pending or Approved Office/R&D Projects in San Jose, 2009-2015[a]

Status	Number of Projects	Square Feet
Recently Completed	4	1,433,000
Under Construction	3	1,092,000
Pending or Approved	13	11,459,000
Total	**20**	**13,984,000**

[a] Includes projects pending/approved, under construction, and completed between 2009 and February 2015.See Appendix B for complete listing of projects included in the data.
Sources: City of San Jose, 2015; Strategic Economics, 2015.

INDUSTRIAL AND WAREHOUSE

SILICON VALLEY

Silicon Valley is experiencing historically low levels of available industrial space on the market. The region comprises approximately 102.6 million square feet of industrial supply, with a 3 percent vacancy rate in the second quarter of 2015 (**Figure III-4**). Another 44 million square feet are classified as warehouse space, with a vacancy rate of 4 percent.[12] Industrial and warehouse vacancy rates have declined almost without interruption since 2011. Local real estate experts attribute the resurgence of Silicon Valley's industrial market to the re-shoring of advanced manufacturing, a rise in local manufacturing and assembly operations in Silicon Valley, and an increase in transportation and logistics needs associated with economic growth and the rise of e-commerce and direct shipping to consumers.

Much of the available industrial space in the region is aging and becoming obsolete. The average age of industrial buildings in the region is 46 years old. There is significant demand for new, Class A facilities.[13]

Demand for industrial space is driven by large distribution users including logistics companies, food distributors, and retail supply chain operators. These users typically require 100,000 square feet or more of high cube distribution space (i.e., large, shell buildings with high ceilings) with good power, truck staging, and excellent regional transportation access. In addition, warehouse and distribution tenants are seeking proximity to dense Bay Area markets, prominent visibility, and flexible facilities that can accommodate a variety of supply chain operations.

Within Silicon Valley, the I-880 Corridor is the preferred location for industrial tenants, including automakers, retail supply chain operators, and contract manufacturers. These tenants are attracted to cheaper land in cities along the I-880 and larger blocks of contiguous space (e.g., 200,000 sq. ft.). Industrial and warehouse development is concentrated in locations where land is relatively cheap and development is more cost effective, such as Milpitas, Fremont, Newark, Morgan Hill, and the East Bay. Within San Jose, the Berryessa International Business Park and Southern San Jose are some of the most attractive areas for industrial and warehouse development.

The growing e-commerce market and the expansion of brick-and-mortar retailers' online presence is generating strong demand for fulfillment centers and distribution warehouses near urban areas. Demand for new warehouse space is in part tied to the need to offer rapid deliveries to customers. In select locations in the Bay Area, Amazon, Walmart, Home Depot, and other retailers offer same-day delivery. In order to provide rapid deliveries, retailers are locating distribution facilities near urban areas, where they can benefit from proximity to existing brick-and-mortar store locations, as well as from proximity to shipping companies such as UPS and FedEx.

[12] As a rule of thumb, 5 to 10 percent is generally considered a healthy vacancy rate.
[13] San Francisco Bay Area Commercial Real Estate 2015 Forecast (DTZ)

Figure III-4. Industrial and Warehouse Overview: Silicon Valley Cities, Second Quarter 2015

	Industrial				Warehouse			
	Existing Inventory (Sq. Ft.)	% of Total Inventory	Vacancy Rate[a]	Average Asking Rent[b]	Existing Inventory (Sq. Ft.)	% of Total Inventory	Vacancy Rate[a]	Average Asking Rent[b]
San Jose[c]	35,770,928	35%	3%	$0.84	16,716,097	38%	4%	$0.63
I-880 Corridor								
Santa Clara	15,283,682	15%	2%	$0.94	4,997,763	11%	2%	$0.75
Milpitas	8,335,375	8%	6%	$0.91	5,717,317	13%	7%	$0.65
Fremont/Newark	31,577,628	31%	2%	$0.80	13,047,051	30%	2%	$0.59
North Valley								
Mountain View/Los Altos	1,949,277	2%	1%	$0.90	124,097	0%	0%	$0.90
Palo Alto	1,155,807	1%	5%	$2.55	138,459	0%	4%	$1.80
Sunnyvale	6,566,039	6%	4%	$1.00	2,574,673	6%	8%	$0.85
West Valley[c]	1,758,746	2%	2%	$1.20	344,020	1%	0%	$0.70
Silicon Valley Total	102,557,163		3%	$0.89	43,649,477		4%	$0.65

[a] Vacancy rate: Includes direct vacancies & space available for sublease
[b] Per square foot, per month. Reported as triple net.
c Calculated based on subareas shown in Figure III-8, below.
[d] Includes Los Gatos, Campbell, Saratoga and Western San Jose.
Sources: CBRE, 2nd Quarter 2015; Strategic Economics, 2015.

Developers have responded to the constrained market with the first new speculative development in over a decade, concentrated in the East Bay.[14] Most of the industrial development in Silicon Valley is built-to-suit for a specific tenant. The "Crossings @ 880" project in Fremont, comprised of nearly 700,000 square feet of Class A industrial buildings, was the first speculative development in over a decade and is being marketed to Silicon Valley companies looking for excellent visibility and immediate access to Highways 880 and 237. Two other speculative warehouses were also recently completed in the East Bay: the Oakland Airport Logistics Center and Newark's Cherry Logistics Center. Local brokers and developers project that additional speculative warehouse development will occur in Silicon Valley in the short-term as the remaining blocks of modern industrial space dwindle throughout the region. Some speculative development is underway in San Jose. Projects include Midpoint @237, a speculative manufacturing facility in Alviso, and a recent proposal for a distribution center in North Coyote Valley.[15] [16]

SAN JOSE

San Jose has more industrial space than any other city in the region, totaling nearly 36 million square feet. The city's inventory is larger than the Fremont/Newark market, which has 31 million square feet of industrial supply. The city's industrial rent is competitive to the regional average at $0.84 per square foot, while the city's vacancy rate of three percent matches the regional average (**Figure III-4**).

San Jose's warehouse sector has experienced significant absorption since 2014, and the vacancy rate is very low. San Jose has 16.7 million square feet of warehouse space, accounting for nearly one-third of the city's combined industrial/warehouse inventory. Overall vacancies are at only 4 percent, compared to 8 percent last year.

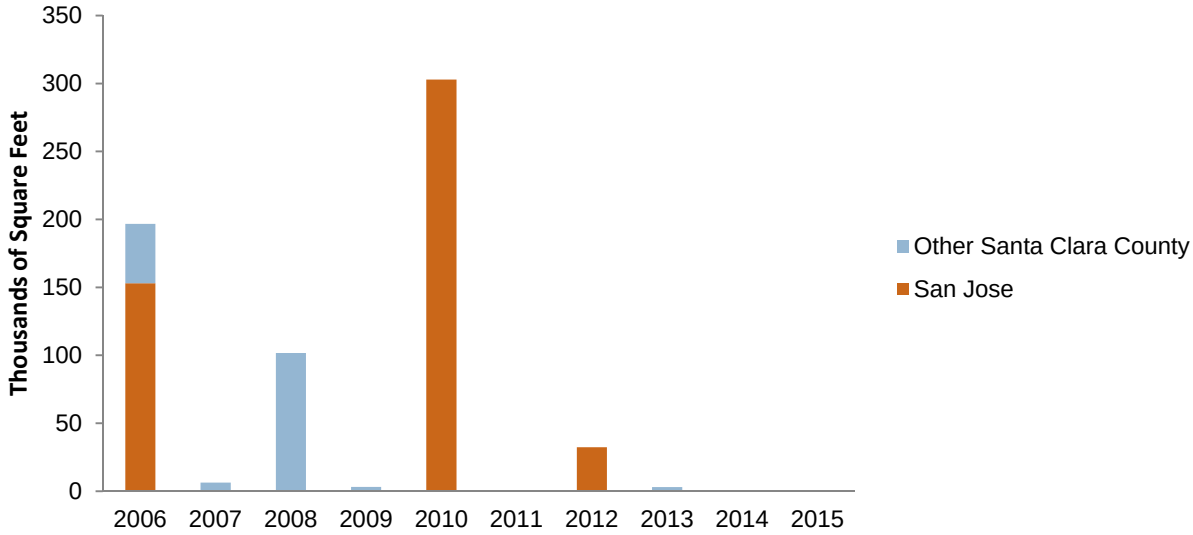
San Jose's competitive rents and availability of large opportunity sites are very attractive to high tech manufacturers. Global electronic manufacturing firms such as Cisco, Jabil, and Western Digital locate in San Jose partly because they can access sites that are large enough to allow them to co-locate their manufacturing facilities with their corporate offices.

San Jose has accounted for the majority of industrial and warehouse development in Santa Clara County over the past ten years. As depicted in **Figure III-5**, construction of new industrial and warehouse supply in Santa Clara County since 2006 has been limited. San Jose attracted some new construction in 2006, 2010, and 2012. The large spike in 2010 was due to the opening of a zero waste facility in Northern San Jose's Alviso Specific Plan Area.

Nearly 2 million square feet of new industrial and warehouse development are currently pending or approved in San Jose. Recent building data retrieved from the City shows that a large amount of new industrial/warehouse projects are coming online throughout San Jose (**Figure III-6**).

[14] "Developer Overton Moore starts Fremont speculative industrial project." *Silicon Valley Business Journal*. 28 Feb. 2014.
[15] "Trammel Crow, Principal break ground on north San Jose manufacturing campus. *Silicon Valley Business Journal.* 7 December 2015.
[16] "Developer proposes distribution center for San Jose's Coyote Valley. *Silicon Valley Business Journal. 30 December 2015.*

Figure III-5. New Industrial/Warehouse Inventory Added, Santa Clara County and San Jose, 2006-2015



Sources: Costar, 2015; Strategic Economics, 2015.

Figure III-6. Recently Completed, Under Construction, and Pending or Approved Industrial/Warehouse Projects in San Jose, 2009-2015

Status	Number of Projects	Square Feet
Recently Completed	2	398,000
Under Construction	1	107,000
Pending or Approved	4	1,013,760
Total	**7**	**1,518,760**

Note: Includes projects pending/approved, under construction, and completed between 2009 and February 2015.
See Appendix B for complete listing of projects included in the data.
Sources: City of San Jose, 2015; Strategic Economics, 2015.

SAN JOSE'S MAJOR EMPLOYMENT SUBAREAS

This section provides an assessment of each of the city's major employment subareas. The figures at the end of the section provide additional information. **Figure III-12** summarizes office and R&D market trends by subarea, compared to the city and Silicon Valley overall. **Figure III-13** provides the same information for industrial and warehouse.[17] **Figure III-14** and **Figure III-15** show new office/R&D and industrial/warehouse development, respectively, by status and subarea.

NORTHERN SAN JOSE

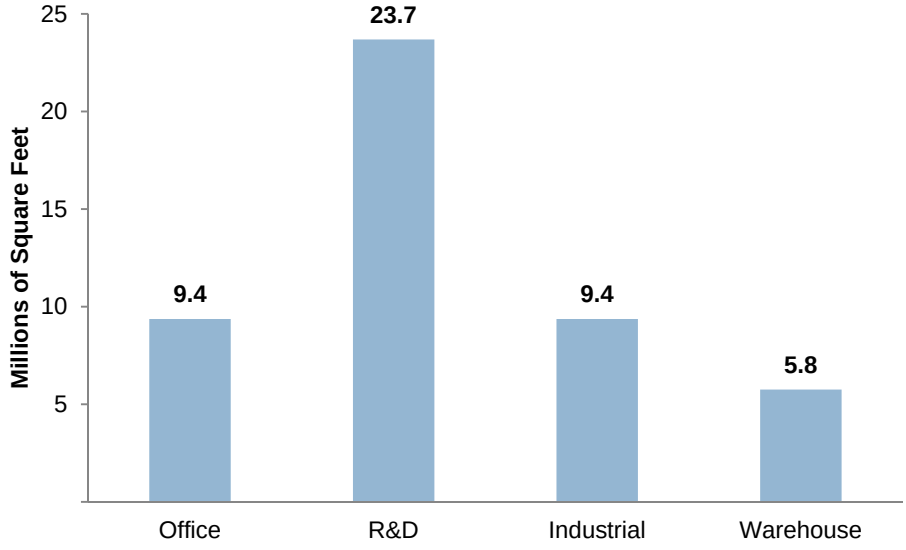
As defined for the purposes of this report, Northern San Jose is an expansive 14,500-acre district that stretches south from Alviso and Highway 237 to Downtown San Jose and east from the Mineta San Jose International Airport to Berryessa. This area includes two distinctive submarkets, the Golden Triangle/Alviso area and International Business Park, which are considered distinct submarkets by local brokers. Each of the submarkets in Northern San Jose is discussed in more detail below.

Golden Triangle/Alviso

The area bounded by Highway 101, I-880, and Highway 237 is commonly referred to as the Golden Triangle. The Golden Triangle has long been known as the premier employment area in San Jose, in part because its strategic location offers a relatively easier commute for workers from the East Bay and Peninsula. New employment uses are increasingly locating north of Highway 237 as well, in the Alviso Specific Plan Area.

Golden Triangle/Alviso has the largest inventory of any submarket in San Jose. There is a combined inventory of 48.2 million square feet of office, R&D, and industrial/warehouse supply in the Golden Triangle/Alviso, with R&D accounting for nearly half of the total inventory (**Figure III-7**). Reflecting the area's competitive advantages, rents tend to be higher in Northern San Jose than in other parts of the city.

Figure III-7. Total Inventory by Type: Golden Triangle/Alviso, 2nd Quarter 2015



Sources: CBRE, 2nd Quarter 2015; Strategic Economics, 2015.

[17] Note that the subareas shown in Figures III-12 and III-13 are based on the submarkets tracked by CBRE, and do not exactly match the subarea boundaries used throughout the rest of the report. Significant discrepancies are noted in the tables and discussed below

The Golden Triangle is considered the premier office/R&D market in San Jose, with a growing tech presence. A growing number of tech companies are transforming the area into the new innovation district of the South Bay. Employers are eager to join the expanding cluster of tech tenants, which is complemented by a growing array of amenities such as hotels, retail, and restaurants. Marquee tech tenants include Cisco, Brocade, Samsung, and Verizon. Apple will soon be added to this list with its recent acquisition of a 43-acre site.[18]

The submarket is also home to a diverse ecosystem of high tech and light manufacturing. Despite pressures of office/R&D conversion, there are still a number of advanced manufacturers in Northern San Jose. Long-term contract manufacturers such as Sanmina are staying in place to take advantage of new amenities. Although medical devices manufacturing continue to be concentrated primarily in Southern San Jose and the IBP, ProteinSimple, a biomedical R&D firm, recently located in Northern San Jose. Northern San Jose is home to both light manufacturing, mostly east of Junction Avenue, as well as advanced manufacturing in the Golden Triangle.

Golden Triangle/Alviso is experiencing the most development activity in the city. Over 9.6 million square feet of office/R&D space will be added to Northern San Jose's development pipeline in the near future, with almost 2 million completed or under construction (**Figure III-14**). In addition, 283,000 square feet of industrial space was recently completed, with another half a million in the pipeline (**Figure III-15**). As shown in **Figure III-8**, most of this new development is concentrated in the Golden Triangle/Alviso area. Recently completed office/R&D projects include Samsung's new corporate headquarters across from the Tasman VTA stop, and Brocade's first phase completed off Highway 237. Notable office/R&D projects under construction include North First Business Park, 101 Tech, and Coleman Highline. Many new projects feature campus-style development including a mix of office, R&D, retail, linked by parks and pedestrian-oriented plazas.

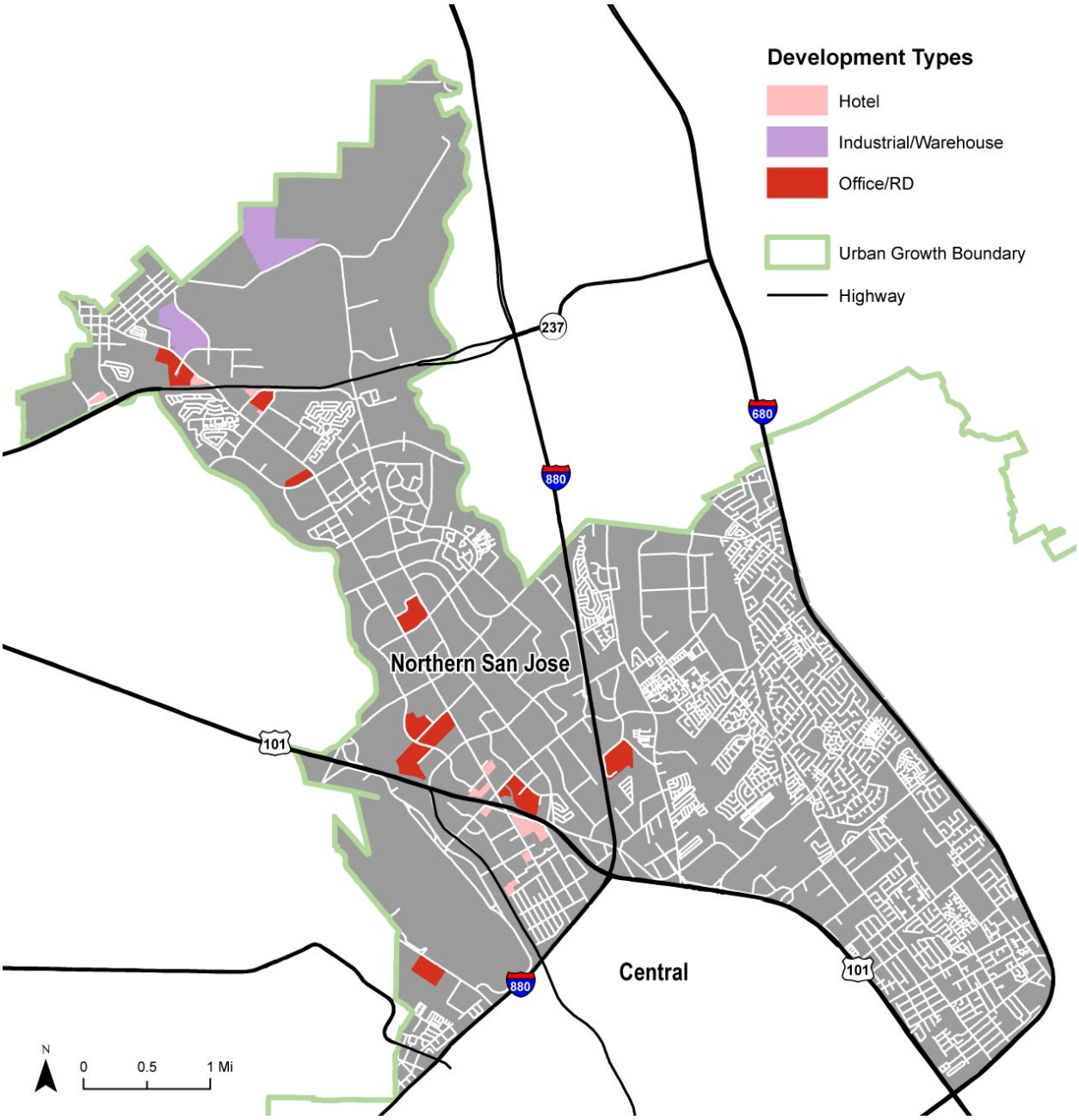
To keep up with demand for quality, modern spaces, many existing Class B buildings are undergoing major renovations. Brokers are calling the older R&D buildings along Orchard Parkway, many of which are currently being rehabbed, "Renovation Row." Many of these second-generation office parks are no longer used for R&D purposes and being converted into higher-value offices, seeking to attract higher rents and creative/high-tech tenants.

The Golden Triangle is also experiencing significant new housing, retail, and hotel development. As of 2014, 16,000 housing units, many of which are apartment homes, were planned or currently under construction. New hotel development is occurring just south of Highway 101, between the airport and the Golden Triangle (Figure III-8). Efforts are also underway to better connect transit to workplaces and housing. Many brokers view the expansion of housing, retail, and other uses in the Golden Triangle as complimentary to existing employment uses, and necessary to attract Millennials who want to live and work in San Jose.

While most of the development is occurring in the Golden Triangle, developers are increasingly proposing projects in Alviso as well. Most of the recent and proposed developments in Alviso are combined office/R&D buildings. The most notable project recently approved is a 1 million square feet combined office/R&D and light manufacturing building proposed by developer Trammell Crow. Two new hotels are also being built in the area.

Figure III-8. Recently Completed, Pending/Approved, and Under Construction Development in Northern San Jose, 2009- February 2015

[18] "Exclusive: Apple buys huge San Jose development site." *Silicon Valley Business Journal*. 3 Aug. 2015.



Sources: City of San Jose, 2015; Strategic Economics, 2015

International Business Park

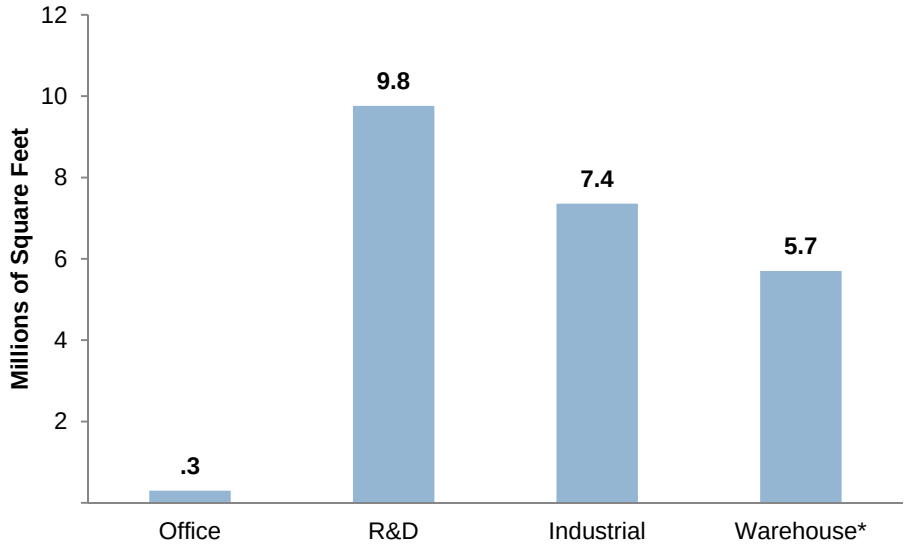
The International Business Park (IBP) area is located east of I-880 in San Jose, and is characterized by more industrial uses.

International Business Park (IBP) is home to a variety of R&D and manufacturing uses. The area's proximity to the Golden Triangle core and efficient access to I-880 make IBP an attractive and relatively affordable area for R&D and light manufacturing uses. Advanced manufacturers include Olympus, Bestronics, Micrel, and BD Bioscience. Food manufacturers, healthcare, and auto parts dealers can also be found in IBP.

IBP's building inventory is primarily comprised of Class B product in low-rise, corporate campus settings. As shown in **Figure III-9**, the inventory is primarily R&D and industrial. Rents tend to be more affordable than in other subareas, but the area has relatively low vacancy rates compared to other parts of the city: 4 percent for R&D (compared to 12 percent on average citywide) and 2 percent for industrial (compared to 3 percent for the city as a whole).

Limited new development has occurred in the International Business Park. Super Micro Computers' office and manufacturing complex is the newest development added to the area. Villa Sport, an 88,000 square feet gym, was recently approved.

Figure III-9. Total Inventory by Type: International Business Park, 2nd Quarter 2015



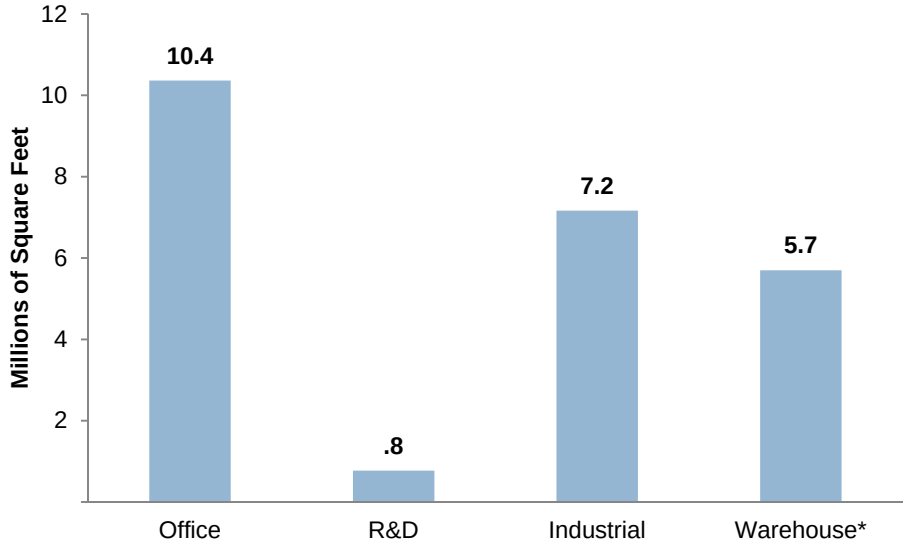
*Warehouse inventory includes Central San Jose and IBP.
Sources: CBRE, 2nd Quarter 2015; Strategic Economics, 2015.

CENTRAL SAN JOSE

Central San Jose includes Downtown and Diridon Station Area, and is bounded roughly by I-880, I-280, and Highway 101. The real estate market data used for this section also includes the area around the airport.

The Central subarea has the largest office market in San Jose. The Central San Jose subarea has just over 10.4 million square feet of office space, more than the Golden Triangle (9.4 million square feet). In addition, Central San Jose has about 800,000 square feet of R&D and 7.2 million square feet of industrial space (**Figure III-10**).

Figure III-10. Total Inventory by Type: Central San Jose, 2nd Quarter 2015



*Warehouse inventory includes Central San Jose and IBP.
Sources: CBRE, 2nd Quarter 2015; Strategic Economics, 2015

While Downtown San Jose has traditionally commanded lower rental rates and occupancy rates than the Silicon Valley as a whole, there are signs of new investment. The office vacancy rate in Downtown San Jose is nearly 12 percent overall and 13 percent for Class A (Figure III-12). As the commercial real estate market has gotten stronger in the region and the city, Downtown vacancy rates have improved. According to brokers, the addition of new BART stations, as well as improved urban amenities in Downtown San Jose, are likely to make it more competitive for attracting new office users**.**

New commercial development activity remains limited in Downtown. In recent years, Downtown has attracted significant residential and mixed-use development. Small commercial and mixed-use projects are in the pipeline, including Parkside Hall, SJSC Towers, a new hotel and few small retail projects.[19] [20] According to office brokers interviewed for this report, if rents and vacancy rates continue to strengthen, the Downtown may be able to attract larger scale commercial development projects.

Commercial developers are increasingly showing interest in the Diridon Station area. Trammell Crow recently purchased an 8.5 acre site immediately to the west of Highway 87, with plans to create a large, mixed-use tech campus with office, R&D, and retail, linked together by public open space.[21]

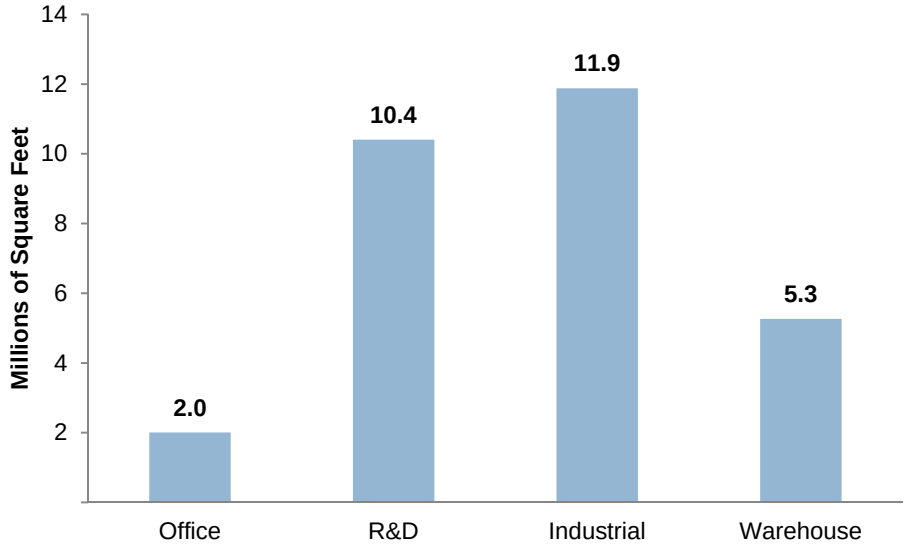
SOUTHERN AND EASTERN SAN JOSE

Southern San Jose is an expansive area that extends south from Highway 280 to Coyote Valley. For the purposes of this section, South and Eastern San Jose are discussed together, reflecting the submarkets that brokers use to track the real estate market.[22] However, nearly all of the employment space is located west of Highway 101, in Southern San Jose.

[19] "Exclusive: San Jose picks mixed-use tower proposal for prime downtown spot." *Silicon Valley Business Journal.* 20 Aug. 2015.
[20] "Office, condo towers envisioned for downtown San Jose across from City Hall." *Silicon Valley Business Journal. 3 Nov. 2015.*
[21] "Exclusive: Big tech campus slated for downtown San Jose gateway site." *Silicon Valley Business Journal*. 25 Sep. 2015.
[22] South and Eastern San Jose as defined throughout this report include the following submarkets tracked by CBRE: San Jose-East, San Jose-Meridian, and San Jose-South.

The subarea has nearly 30 million square feet of combined office, R&D, and industrial/warehouse supply, making Southern San Jose the second largest subarea by inventory after the Golden Triangle. Industrial and warehouse space constitute 48 percent of total inventory (**Figure III-11**). As mentioned above, nearly all of this space is in the area defined as Southern San Jose rather than Eastern San Jose.

Figure III-11. Total Inventory by Type: Southern and Eastern San Jose, 2nd Quarter 2015



Sources: CBRE, 2nd Quarter 2015; Strategic Economics, 2015.

The availability of cheaper land, proximity to the Southern San Jose and Morgan Hill/Gilroy workforce, and transportation access attract many industrial tenants to Southern San Jose. Industrial users in Southern San Jose include auto parts manufacturers, transportation and logistics, public storages, recycling facilities, and contract manufacturers. These industries have concentrated in Southern San Jose due to the availability of cheaper land, proximity to a large workforce, and highway access. At the same time, however, office-based companies often prefer to be closer to regional transportation networks and view Southern San Jose as "too far" from the Silicon Valley workforce and trade area.

The Monterey Corridor supports both heavy industrial and light industrial uses. This corridor, located between Highways 101 and 87, is home to a variety of industries, including garment manufacturing, roofing, cement manufacturing, sheet metal fabrication, transportation services, and general contractor firms.

The Edenvale Technology Park is home to the city's growing electronic devices manufacturing, data storage, and R&D companies. Companies that have large space needs have clustered in the Edenvale area, near the intersection of Highways 101 and 85, attracted by the availability of bulk warehouse space appropriate for data storage, internet technology, and security and networking purposes. Global manufacturing firms such as Jabil, General Electronic, and Celestica occupy both corporate headquarters and local manufacturing facilities on-site or nearby. Stryker Endoscopy is a medical equipment manufacturer in the area, located next door to San Jose BioCube, a business incubator for biomedical manufacturing start-ups. SoloPower (recently closed) and Power Integrations are solar technology companies that have located in the Edenvale Technology Park.

Major development projects include the Western Digital Great Oaks Campus, as well as several public storage facilities and medical facilities. The Great Oaks Campus will support Western Digital's

office, R&D, and manufacturing functions, with outer parcels available for commercial and residential uses. The campus anchors the Cottle Transit Village, a mixed used residential, commercial, and recreational district with access to three transit stations (the Blossom Hill Caltrain station and VTA's Cottle and Santa Teresa light rail stations).[23]

As land prices continue to rise and supply tightens for new-generation data centers, South and Eastern San Jose may be positioned to accommodate additional warehouse facilities. Because office and R&D real estate prices in Silicon Valley have increased significantly, more companies are shifting away from locating data storage in their office buildings and are instead seeking "bare-bones" spaces with good power for their data storage needs[24]. For example, the Silicon Valley Industrial Center is a recently approved project in Southern San Jose, which will add over 240,000 square feet of data center and other warehouse space in Edenvale.

WESTERN SAN JOSE

Western San Jose is an affluent area consisting of primarily homes and shopping centers, with a limited amount of office space. Western San Jose is the premier retail market in the city. The area has approximately 1.7 million square feet of office inventory.[25] Despite the small inventory and low vacancy rates, office in this area has only slightly higher asking rents than any other part of the city (at $3.00 per square foot). There are no industrial or warehouse uses in Western San Jose.

The subarea has begun to attract some high-end office development. Santana Row, an upscale mixed-use shopping district, recently added 65,000 square feet of Class A office space on site. In addition, 234,000 square feet of creative office space is currently under construction at Santana Row's "Lot 11," at the intersection of Winchester Boulevard and Olsen Drive. The building has been fully leased to Splunk, a software development company. At the time of this writing, Federal Realty is seeking entitlements for one million square feet of office space along Winchester Boulevard at the former Century Theatres property across the street from Santana Row.[26] Western San Jose's amenities, highway access, and proximity to other West Valley cities make the area attractive for office development.

[23] "Cottle Transit Village: Dense Mixed Use in San Jose." *Urban Land Institute Magazine*. 25 Sep. 2015.
[24] "Silicon Valley: A Landlord's Data Center Market." 27 February 2015. *Data Center Knowledge.*
[25] Note that this includes Campbell as well as Western San Jose (CBRE's Winchester submarket).
[26] Note that this project is not reflected in Figure III-14 because the proposal was submitted after February 2015.

Figure III-12. Office and R&D Market Statistics by Subarea, Second Quarter of 2015

	Building Inventory (Millions of Sq. Ft.)			Vacancies[a]		Net Absorption (Sq. Ft.)[b]		Average Asking Rent[c]		
	Q2 2014	Q2 2015	% of City Total	Q2 2014	Q2 2015	Q2 2014	Q2 2015	Q2 2014	Q2 2015	14-15 Change
Office										
Subareas										
Northern San Jose[d]	9.3	9.4	39%	18%	15%	(345,984)	(43,296)	$2.47	$2.86	16%
International Business Park	.3	.3	1%	10%	10%	(1,535)	(1,400)	$1.39	$1.53	10%
Central San Jose[(e)]	10.4	10.4	44%	16%	12%	96,647	62,070	$2.35	$2.66	13%
Southern & Eastern San Jose	2.0	2.0	8%	15%	13%	18,827	40,629	$1.75	$1.80	3%
Western San Jose/Campbell[(f)]	1.7	1.7	7%	7%	4%	(1,243)	(16,425)	$2.69	$3.00	12%
San Jose Total	23.7	23.7	100%	16%	13%	(233,288)	41,578	$2.36	$2.68	13%
Silicon Valley	64.4	66.0		13%	7%	510,355	1,053,676	$3.57	$4.10	15%
R&D										
Subareas										
Northern San Jose[d]	22.8	23.7	53%	14%	12%	445,185	19,681	$1.65	$1.92	16%
International Business Park	9.8	9.8	22%	8%	4%	179,539	164,806	$0.94	$1.07	14%
Central San Jose[e]	.8	.8	2%	1%	1%	0	0	$1.05	$1.12	7%
Southern & Eastern San Jose	10.3	10.4	23%	22%	19%	31,107	47,069	$0.95	$1.20	26%
San Jose Total	43.6	44.6	100%	14%	12%	655,831	231,556	$1.32	$1.55	18%
Silicon Valley	150.0	150.5		13%	9%	911,285	155,621	$1.71	$1.90	11%

Note that subareas are based on CBRE submarkets, and do not exactly match the subarea boundaries used throughout the rest of the report. Major discrepancies are noted below.

[a] Vacancy rate: Includes direct vacancies & space available for sublease

[b] Net Absorption: the total amount of square feet leased over a period of time less space vacated during the same period

[c] Per square foot per month. Average asking rates for R&D buildings are reported as triple net. Office rents are reported full service.

[d] Includes Golden Triangle and Alviso. This area experienced negative absorption during this time period because one major user (Micro Technology) vacated their campus.

[e] Includes Downtown, Diridon, and Airport areas.

[f] Based on CBRE's Winchester submarket.

Source: CBRE, 2nd Quarter 2015 & 2nd Quarter 2014; Strategic Economics, 2015

Figure III-13. Industrial and Warehouse Market Statistics by Subarea, Second Quarter of 2015

	Building Inventory (Millions of Sq. Ft.)			Vacancies[a]		Net Absorption (Sq. Ft.)[b]		Average Asking Rent[c]		
	Q2 2014	Q2 2015	% of City Total	Q2 2014	Q2 2015	Q2 2014	Q2 2015	Q2 2014	Q2 2015	14-15 Change
Industrial										
Subareas										
Northern San Jose[d]	9.4	9.4	26%	3%	1%	116,920	50,087	$0.71	$0.99	39%
Central/IBP[e]	14.6	14.5	41%	5%	2%	91,077	24,471	$0.59	$0.70	19%
Southern & Eastern San Jose	11.9	11.9	33%	8%	6%	(85,830)	(91,176)	$0.65	$0.89	37%
San Jose Total	35.9	35.8	100%	6%	3%	122,167	(16,618)	$0.64	$0.84	31%
Silicon Valley	103.1	102.6		6%	3%	1,267,522	1,652,434	$0.70	$0.89	27%
Warehouse										
Subareas										
Northern San Jose[d]	5.6	5.8	34%	3%	1%	57,800	191,792	$0.60	$0.69	15%
Central/IBP[e]	5.8	5.7	34%	9%	2%	89,735	66,141	$0.51	$0.60	18%
Southern & Eastern San Jose	5.2	5.3	32%	12%	9%	(52,422)	526,840	$0.46	$0.61	33%
San Jose Total	16.7	16.7	100%	8%	4%	95,113	784,773	$0.53	$0.63	21%
Silicon Valley	43.3	43.3		8%	4%	1,215,401	1,462,310	$0.55	$0.65	18%

Note that subareas are based on CBRE submarkets, and do not exactly match the subarea boundaries used throughout the rest of the report. Major discrepancies are noted below.

[a] Vacancy rate: Includes direct vacancies & space available for sublease

[b] Net Absorption: the total amount of square feet leased over a period of time less space vacated during the same period

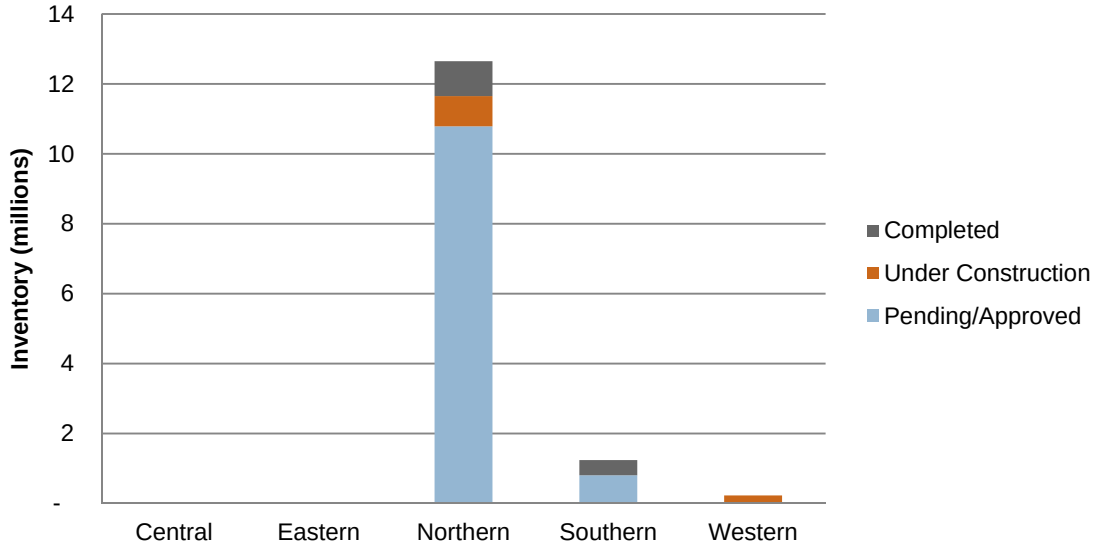
[c] Per square foot per month, triple net.

[d] Includes Golden Triangle and Alviso.

[e] Includes Downtown, Diridon, Airport, and International Business Park areas.

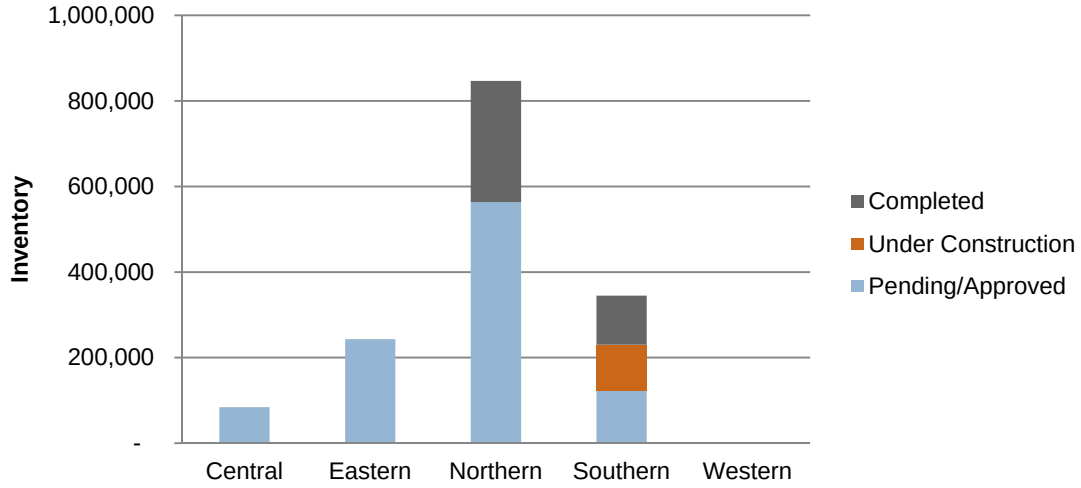
Source: CBRE, 2nd Quarter 2015 & 2nd Quarter 2014; Strategic Economics, 2015

Figure III-14. Office/R&D Development in San Jose, by Status and Subarea, 2009-February 2015



Note: Includes projects pending/approved, under construction, and completed between 2009 and February 2015. See Appendix B for complete listing of projects included in the data.
Sources: City of San Jose, 2015; Strategic Economics, 2015.

Figure III-15. Industrial/Warehouse Development in San Jose, by Status and Subarea, 2009-February 2015



Note: Includes projects pending/approved, under construction, and completed between 2009 and February 2015. See Appendix B for complete listing of projects included in the data.
Sources: City of San Jose, 2015; Strategic Economics, 2015.

CONCLUSIONS

While San Jose is the biggest city in the region in terms of population, it has a much lower inventory of office space than San Francisco. San Jose has approximately 24 million square feet of office space, holding the greatest amount of office inventory in the Silicon Valley. However, San Jose's office inventory is only one-third of the office space in San Francisco, which contains almost 77 million square feet of office space. San Jose's rental rates and occupancy rates for office and R&D tend to be lower than the regional average, while the city's industrial rents and occupancy rates are comparable with the regional

The city's industrial/warehouse market has long played a critical role within the region, providing competitively priced space that allows for both large and small users. The city's industrial base includes a growing advanced manufacturing sector. San Jose has accounted for the majority of new industrial development in Santa Clara County over the past ten years.

Traditional industrial space, including manufacturing and industrial/warehouse, is concentrated in the International Business Park and Monterey Corridor. As the Silicon Valley commercial real estate market continues to evolve towards higher-intensity, multi-story, office and R&D uses, Southern San Jose's lower-cost, lower-density industrial buildings and land may become increasingly attractive for the region's manufacturers. Southern San Jose is better positioned to attract new large-scale development and warehouses, while Northern San Jose is more suited to accommodate advanced manufacturing and high tech/R&D tenants.

While the city has traditionally been a secondary office location compared to other Silicon Valley cities, the market for office and R&D is strengthening. As the regional economy continues to grow, San Jose is becoming increasingly attractive for high tech and other office tenants. In particular, the city's campus settings, flexible office/R&D spaces (including converted industrial/warehouse buildings), significant housing supply, and many amenities are seen as setting San Jose apart from other Silicon Valley communities.

Within San Jose, the Golden Triangle is considered the strongest location for high-tech office and R&D uses. Downtown San Jose also has a significant office market, although the Downtown has seen little new office development in recent years. An R&D/life sciences cluster is emerging in the Edenvale Technology Park in Southern San Jose.

IV. RETAIL MARKET OVERVIEW

This chapter describes national retail trends and market conditions in Santa Clara County and the City of San Jose, and then takes a more detailed look at the competitiveness of the city's major retail submarkets. The chapter draws on retail market and sales data, interviews with local retail brokers, and a review of literature on national and regional retail trends.

NATIONAL AND REGIONAL RETAIL TRENDS

Demand for retail in San Jose is affected by shifts in the nature of retail that are occurring across the region and the country. Major trends affecting demand for and supply of retail space are described below.

Retail rents and vacancy rates are strong in the Silicon Valley, due to a combination of strong economic growth and limited new construction. Demand for retail space is particularly strong in Santa Clara and San Mateo Counties, driven by rapid job growth, household growth, and strong demographics. The delivery of new supply has lagged behind demand, leading to rapidly rising rents and historically low vacancy rates. The San Francisco Bay Area region in particular has added very little new inventory in recent years, recently ranking 17th out of 19 primary markets for retail construction, despite having the lowest vacancy rate in the country.[27]

Demand for new retail space is shifting due to competition from online sales. Much of the growth in retail sales is in categories like grocery stores, restaurants, and personal services, which do not compete as much with online retailers as other types of stores. Other uses driving tenant demand include fitness centers, health and spa concepts, pet supply stores, and off-price apparel.[28] At the same time, demand from the retail categories most directly affected by e-commerce – such as books, music, office supplies, and consumer electronics – has declined significantly.

Nationally, luxury retailers and discount chains are driving new store expansions. Luxury retailers are looking for space in upscale, pedestrian-friendly shopping districts and renovated shopping malls (e.g., San Mateo's Hillsdale Shopping Center and San Jose's Westfield Valley Fair). Discount retailers, including low-cost apparel and dollar stores, are filling much of the big box space that became vacant during the recession.

Mid-priced retailers that do compete with e-commerce are adjusting their business models to remain competitive. Companies are looking for cost-cutting strategies and efficiencies within their own buildings. Retailers such as Sears and Staples are increasingly closing underperforming locations, consolidating with other brands, finding ways to use their brick-and-mortar locations as hubs for distribution, and shifting towards "omni-channel" business models – a hybrid approach to sales that encourages consumers to shop either online or in the store. For example, many retailers are allowing items purchased online to be picked up at a local store.

[27] JLL, United States Retail Outlook, Q2 2015.
[28] DTZ. "Retail Real Estate: The New Frontier." May 2015.

RETAIL MARKET OVERVIEW

San Jose is located in one of the strongest performing retail markets in the country. The Bay Area region – and particularly Silicon Valley – has some of the highest average retail rents and lowest vacancies in the country. The region's strong retail spending is strongly associated with population and job growth, high incomes, and low unemployment rates.

Most of the development activity in the Silicon Valley retail sector consists of expansions or redevelopment of existing centers. As discussed above, few new shopping centers have been added in recent years, in part reflecting competition for land with office and residential development.

San Jose's rents and vacancies are similar to the averages for the county as a whole, reflecting the city's strengths as a retail location. As shown in **Figure IV-1**, San Jose has about 35 million square feet of retail, or about 46 percent of the county's total retail inventory**.** In the second quarter of 2015, the average retail rent was $2.50 per square foot and the overall vacancy was 4 percent, almost identical to the county averages. According to local real estate brokers, San Jose's large population and high disposable incomes makes the city attractive for retailers. Moreover, the city's central location draws customers from surrounding high-income cities, such as Cupertino and Santa Clara.

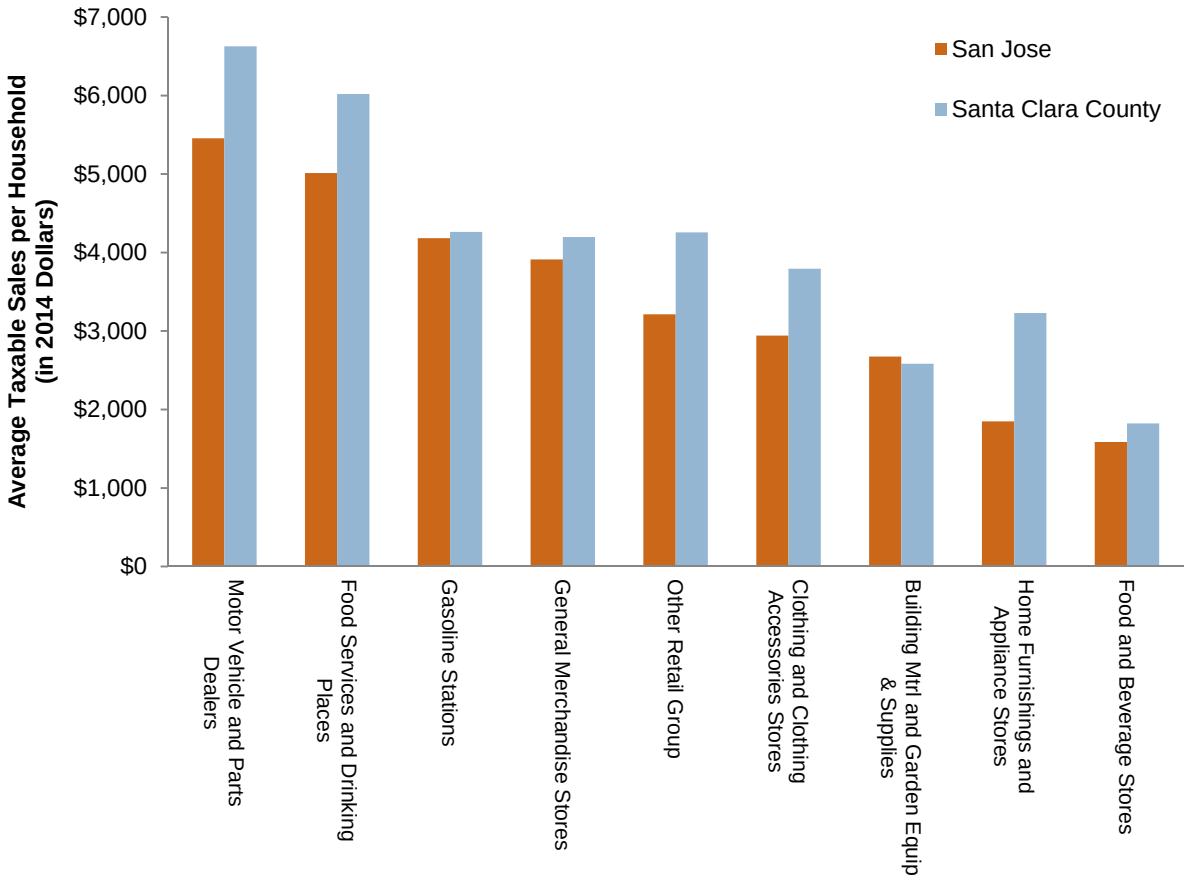
Figure IV-1. Retail Overview, Silicon Valley and San Jose, 2nd Quarter 2015

	Building Inventory	Vacancies		Net Absorption		Average Asking Rate		
	Sq. Ft.	Q2 2014	Q2 2015	Q2 2014	Q2 2015	Q2 2014	Q2 2015	14-15 Change
Retail[a]								
San Jose	35,344,536	3.5%	4.0%	139,632	5,180	$2.39	$2.50	5%
Santa Clara County	72,372,109	3.8%	3.7%	271,013	34,929	$2.35	$2.52	7%

[a] Reported triple net
Sourcess: CBRE, 2nd Quarter 2015; Costar, 2015; Strategic Economics, 2015.

While many of San Jose's existing retail areas are thriving, the city's stores captures less retail sales per household than the county average. The per household retail sales captured within San Jose (retail store sales divided by number of resident households) are lower than in Santa Clara County. This confirms recent analysis by City staff showing that San Jose has significant sales leakage – i.e., much of the retail spending potential by San Jose residents and workers is captured in stores and restaurants outside of the city.

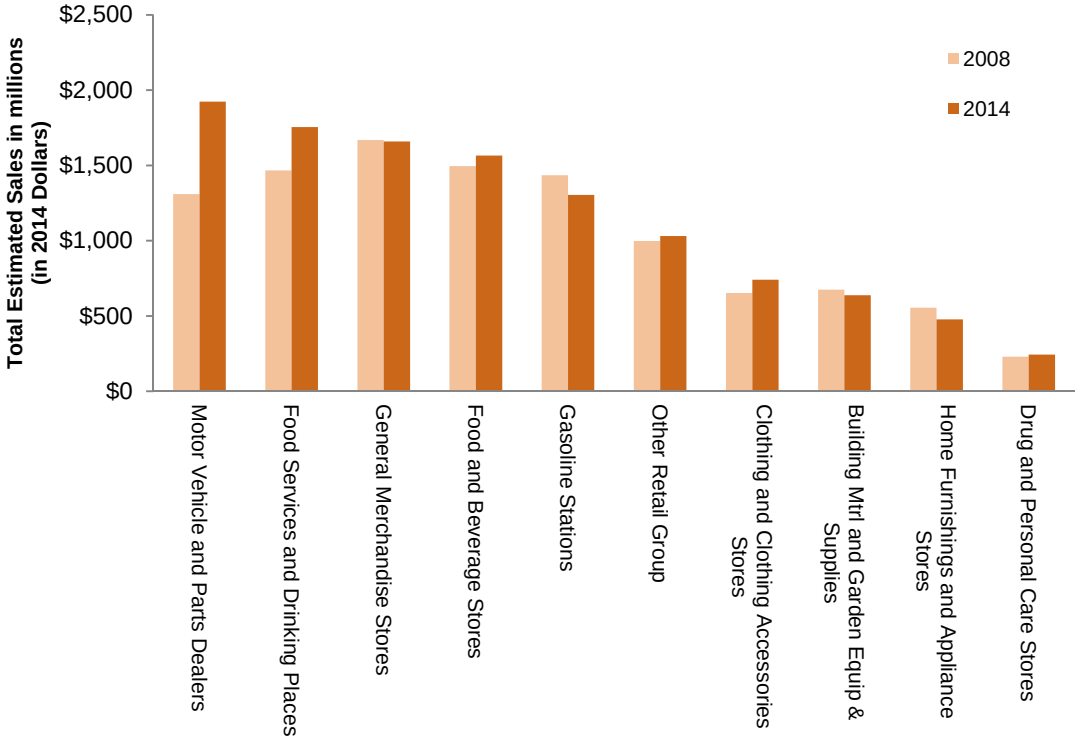
Figure IV-2. Per Household Retail Sales in San Jose and Santa Clara County, 2013



Sources: California Board of Equalization, 2015; 2013 and 2014 American Community Survey; Strategic Economics, 2015.

Sales in motor vehicle and parts dealers, clothing and accessories stores, and restaurants and drinking establishments are growing. Overall, estimated retail sales in San Jose totaled $11.3 million in 2014, slightly higher than the 2008 peak of $10.5 million (in 2014 dollars).[29] In particular, sales in motor vehicles, food services and drinking places (i.e., restaurants), and clothing stores have increased since 2008 (**Figure III-3**). At the same time, general merchandise stores (e.g. sporting goods, department stores), gasoline stations, and home furnishings and appliance stores experienced a net decline in sales between 2008 and 2014.

Figure IV-3. Total Estimated Sales by Category: San Jose, 2008 and 2014



Sources: City of San Jose, 2015; Strategic Economics, 2015.

SAN JOSE RETAIL SUBMARKETS

This section provides a more detailed look at the competitiveness of each of the city's retail subareas: Central San Jose (including Downtown), Eastern San Jose, Northern San Jose, Southern San Jose, and Western San Jose. **Figure IV-4** summarizes retail inventory, taxable sales, and average sales per square foot broken down by each submarket.[30]

Southern San Jose and Western San Jose lead the city with the most retail inventory and taxable sales, together accounting for nearly 60 percent of the city's total retail supply. However, Northern San Jose has the highest average sales per square foot at $565, followed by $399 per square foot in Western

[29] Total sales were estimated from sales tax receipts, by adjusting sales in categories with significant non-taxable sales (food and beverage stores, drug and personal care stores, and general merchandise stores) to account for the share of sales that are not taxable.

[30] Accurate data on retail rents and vacancies by subarea were not available.

San Jose. As discussed below, the high sales per square foot in Northern San Jose reflect the composition of the retail in this subarea, which includes many national brands.[31]

New retail construction is underway throughout the city but primarily concentrated in Western San Jose. In total, only 611,000 square feet of new retail space has been completed since 2009. However, another 658,000 square feet are under construction and more than 1.9 million square feet are either approved or pending entitlements (**Figure IV-5**). Fifty-four percent of new retail that is pending, under construction, or recently completed is located in Western San Jose. Another 18 percent of new development is in Northern San Jose, followed by South at 15 percent.

The retail real estate market of each subarea is described in more detail below**.**

Figure IV-4. Retail Inventory, Taxable Sales, and Average Sales per Square Foot by Subarea, 2014

	Retail Inventory		Taxable Sales		Avg. Sales Per Sq. Ft.
	Sq. Ft.	% of Total	$	% of Total	
Subarea					
Southern	9,754,108	30%	$2,436,089,676	25%	$250
Western	9,581,351	29%	$3,826,991,625	39%	$399
Eastern	7,105,255	22%	$1,366,553,754	14%	$192
Central	4,296,666	13%	$927,877,750	9%	$216
Northern	2,235,800	7%	$1,264,277,148	13%	$565
City Total	**32,973,180**	**100%**	**$9,821,789,953**	**100%**	**$298**

Sources: BOE, 2014; CoStar, 2014; Strategic Economics, 2015

Figure IV-5. Square Feet of Recent and Proposed Retail Development, by Subarea and Status: 2009-2015

	Pending/ Approved	Under Construction	Completed	Total	% Total
Subarea					
Western	585,000	407,000	66,000	1,058,000	42%
Northern	149,000	45,000	372,000	566,000	23%
Southern	215,500	206,000	51,000	472,500	19%
Eastern	288,000	0	0	288,000	11%
Central	0	0	122,000	122,000	5%
Total	**1,237,500**	**658,000**	**611,000**	**2,506,500**	**100%**

Note: Includes projects pending/approved, under construction, and completed between 2009 and February 2015. See Appendix B for complete listing of projects included in the data.
Sources: City of San Jose, 2015; Strategic Economics, 2015.

SOUTHERN SAN JOSE

Southern San Jose is the largest retail subarea in the San Jose. Southern San Jose is an expansive area that stretches from Campbell to communities east of Highway 101 and as far south to Coyote Valley. The subarea includes over 9.7 million square feet of rentable retail space, or 30 percent of citywide inventory. The large residential population in Southern San Jose has attracted many retail shopping centers, including Oakridge Mall, Silver Creek Plaza, Princeton Plaza, and Grand Century mall. Most of the city's big box

[31] Strategic Economics estimated average taxable sales per square foot for retail by dividing San Jose's total taxable retail sales in 2014 ($9.8 billion) by the total estimated square footage of the city's retail supply (33 million), resulting in an estimate of $298 per square foot.

retailers are also located in Southern San Jose, including three Walmart stores, four Target stores, and four Home Depot stores.

While Southern San Jose accounts for 30 percent of the city's retail inventory, the subarea only generates 25 percent of taxable sales. Overall, Southern San Jose's retail averages $250 in taxable sales per square foot, lower than the citywide average of $298. Most of Southern San Jose's retail consists of older, Class B strip centers or indoor malls.

Retail development is underway in Southern San Jose, tied to new residential development. Southern San Jose makes up 15 percent of all new retail inventory added to the city. A new retail center anchored by Bass Pro Shops is under construction in Almaden Ranch, and another shopping center was recently approved as part of Communications Hill, a master-planned residential community.

Southern San Jose's retail also reflects the area's diverse residential population. Along Story Road, there are several Asian-focused retail malls, including Vietnam Town, Grand Century Shopping Mall, and shopping centers at Tully and King and Capitol Expressway and Silver Creek Road.

NORTHERN SAN JOSE

Northern San Jose accounts for a relatively small share of the city's total retail inventory, but leads the city in sales per square foot. Northern San Jose has approximately 2.2 million square of rentable retail space. Although this only accounts for 7 percent of the citywide inventory, the subarea provides 13 percent of citywide taxable sales and leads with the highest average sales per square foot at $565.

Northern San Jose's strong retail performance is linked to the subarea's large daytime population, high household incomes, and concentration of national retailers. As discussed in Chapter II, businesses in Northern San Jose employ more than 128,000 workers, by far the largest employment concentration in the city. While the household population is relatively small compared to other subareas, household incomes are among the highest in the city. The subarea's strong daytime population and high household incomes make the location attractive for national retailers, restaurants, and hotels**.**

Northern San Jose currently has two major shopping centers: Brokaw Commons and @First. These centers, all of which are located in the Golden Triangle, have been built relatively recently and are anchored by major national tenants such as Target, Safeway, and a mix of restaurant chains and personal services.

Ground floor retail is also a common feature among new mixed-use residential projects in Northern San Jose. For example, the recently completed River View Apartments, Verdant Apartments, and North Park Apartments all include ground floor retail.

New retail development in Northern San Jose is tied to a growing residential and employment population. Between 2009 and 2015, Northern San Jose attracted over a half million square feet of recent and proposed retail development, accounting for 18% of new retail in the city. Additional retail is expected to follow as more residential units are added.

CENTRAL SAN JOSE

There are approximately 4.3 million square feet of rentable retail space in Central San Jose. This subarea accounts for 13 percent of the city's total retail inventory.

Downtown San Jose features hundreds of restaurants, bars, and a variety of small shops in a walkable setting. Downtown's daytime population base, which includes thousands of workers and students, supports an active retail and street life.

On a per square foot basis, Central San Jose's retail performs below the city average. Central San Jose averages $216 per square foot in retail sales, well below the citywide average of $298 per square foot. According to local retail brokers, the lack of national anchors in the Downtown makes it more challenging to attract other, smaller retailers, since retailers often prefer to locate in concentrated clusters and/or near an anchor that draws significant customer traffic. Unlike other, smaller downtowns and centers, Downtown San Jose lacks a clear center of activity.[32]

As more housing units are added to Central San Jose, more residential-serving retailers and amenities are being added to the area. Recent retail projects include a new Whole Foods Market and an Orchard Supply Hardware (built to replace an outdated existing store), both located west of Downtown. However, Central San Jose accounted for only 4 percent of recent and proposed citywide retail development between 2009 and February 2015.

EASTERN SAN JOSE

Eastern San Jose's retail is predominantly neighborhood serving and reflects the area's large, diverse residential population. There are over 7 million square feet of rentable retail inventory in Eastern San Jose, accounting for 22 percent of all citywide retail supply. The subarea includes a number of neighborhood shopping centers anchored by grocery stores and pharmacies, as well as older strip centers featuring a variety of ethnic retail and restaurants, small food stores, and fast food restaurants.

On average, Eastern San Jose retail establishments generate $192 taxable sales per square foot. Much of the retail in Eastern San Jose is locally owned, and serves a lower income population compared to other parts of the city.

There are signs of new retail investment occurring in Eastern San Jose through revitalization of existing shopping malls. The recent sale of Eastridge Mall shows continued investor interest in reinvigorating traditional shopping malls. [33] Eastridge Mall performs well, with strong overall occupancy rates.

While no new retail has been completed in Eastern San Jose since 2009, the subarea has attracted proposals for some new development. For example, a shopping mall called "Plaza at Evergreen" was recently approved for 200,000 square feet of retail development in the Evergreen area.

WESTERN SAN JOSE

Western San Jose is one of the premier shopping areas of Santa Clara County with its mix of high-end shopping malls and regional commercial strip centers. Western San Jose has the second largest retail inventory in the city, with 9.6 million square feet or 29% of citywide supply. The subarea averages $400 per square foot in retail sales, reflecting the many Class A malls and shopping centers including Westfield Valley Fair, Santana Row, and Westgate Center. These centers are located within a short distance of each other along the Stevens Creek corridor, drawing customers from surrounding high-income cities such as Cupertino and Santa Clara. Reflecting high sales volumes, Western San Jose's retail centers command some of the highest asking rents in the city.

[32] SPUR. "The Future of Downtown San Jose." March 2014.
[33] "San Jose's Eastridge mall sold in retail megadeal backed by Goldman Sachs." *Silicon Valley Business Journal.* 15 January 2016.

Stevens Creek Boulevard in Western San Jose is also home to a dozen car dealerships, often referred to as the Stevens Creek Automall. As shown in Figure IV-3 above, this retail category generates the highest retail sales in San Jose.

Western San Jose also contains smaller strip retail centers that have weaker performance. For example, there are a number of Class B and Class C strip centers on Winchester Boulevard that achieve lower sales revenues.

Western San Jose accounts for 42 percent of new retail development in San Jose, most of which are expansions of existing shopping centers. For example, Westfield Valley Fair has plans to expand and add another retail anchor, Bloomingdales, as well as a luxury entertainment complex called ShowPlace ICON which will be the first of its kind in California.[34] With the completion of these projects, Westfield will reach 2.2 million square feet, up from its current footprint of 1.5 million square feet. The expansion will also include dozens of new shop spaces along Stevens Creek Boulevard and a 2,000-stall parking garage.

CONCLUSIONS

San Jose's large population and high disposable incomes makes the city highly attractive for retailers. Moreover, the city's central location draws customers from surrounding high-income cities, such as Cupertino and Santa Clara. Western San Jose in particular is one of the premier shopping destinations in Silicon Valley, with its mix of high-end shopping malls and regional strip centers. Northern San Jose also has an emerging concentration of new, high-performing shopping centers that serve the subarea's large daytime population and growing residential population. Downtown San Jose features hundreds of restaurants, bars, and a variety of small shops in a walkable setting, and more residential-serving retailers and amenities are being added to the area to serve new residents. Southern San Jose includes a mix of neighborhood-serving shopping centers, regional malls, and big box and discount stores, while Eastern San Jose's retail is predominantly neighborhood-serving and reflects the area's large, ethnically diverse residential population.

While many of San Jose's existing retail areas are thriving, future retail expansions may be limited. Although Silicon Valley has some of the highest rents and lowest vacancies in the country, most of the development activity in the Silicon Valley retail sector consists of expansions or redevelopment of existing centers. Competition for land with office and residential development – which typically generates higher net revenues and can afford to pay higher land prices – is limiting retail development. Moreover, retail demand is shifting in response to the growth of e-commerce. Many retail sectors that compete directly with e-commerce are closing brick-and-mortar locations, while others are consolidating or looking for opportunities to use space more efficiently. These trends suggest that the slowdown in new retail development may continue in the future, with a significant share of retail demand being met through the expansion of online sales as well as the reconfiguration of existing space.

[34] "Westfield confirms $600M expansion to feature ShowPlace ICON theater in 2017, high-tech garage this year." *Silicon Valley Business Journal*. 2 March 2015.

V. LAND DEMAND AND SUPPLY ANALYSIS

This chapter assesses the amount of future demand for employment uses between 2013 and 2040, in comparison to the supply of lands designated for employment uses in San Jose. The methodology and key findings from the supply and demand analyses are presented below, followed by a comparison of projected demand and supply.

SUPPLY OF VACANT EMPLOYMENT LANDS

METHODOLOGY

The supply of vacant employment lands was estimated based on the City of San Jose's Vacant Land Inventory, last updated in April 2015.[35] The City's Vacant Land Inventory is based on interpretation of aerial photographs of San Jose obtained from the United States Geological Survey. Land is considered vacant if no building foundations or structures are observed. The inventory includes vacant lands identified within San Jose's Urban Service Area[36] that are designated for urban development in the Envision San Jose 2040 General Plan. For example, land designated as open space, parklands, or habitat land use is excluded.[37]

The Vacant Land Inventory categorizes land by General Plan designation, and by whether the designation is primarily industrial, commercial, residential, or public/quasi-public (**Figure V-1)**. Note that San Jose's industrial designations are flexible, and allow for office and R&D uses as well as traditional industrial development. As shown in Figure V-1, the City's industrial designations allow for a wide range of employment uses, including R&D and office as well as traditional industrial space (warehouse, distribution, manufacturing, and construction). R&D is explicitly permitted in many of the city's industrial designations, but not in most of the commercial designations.

35 Strategic Economics further updated the database by removing parcels with major development projects that were either under construction, or had been recently completed, as of February 2015.

36 San Jose's Urban Service Area boundary defines the areas where services and facilities provided by the City and other public agencies are generally available, and where urban development requiring such services should be located. In many locations, the Urban Service Area boundary and the Urban Growth Boundary – which is the geography used throughout most of this analysis -- are coterminous. A notable exception is that the South Almaden Valley and Coyote Valley Urban Reserves are located outside the Urban Service Area, but within the Urban Growth Boundary. Additional development potential ultimately exists on vacant lands within the City's Urban Reserves. However, due to the environmental and fiscal impacts associated with development in these areas, the Envision San Jose 2040 General Plan does not allow urban/suburban development in Urban Reserves through 2040.

37 For more information, see City of San Jose, Planning Division, "City of San Jose Vacant Land Inventory," March 2012, http://www.sanjoseca.gov/DocumentCenter/View/792.

Figure V-1. General Plan Land Use Categories: Employment Lands

Employment Lands	General Plan Description
Industrial Land Uses	
Combined Industrial/Commercial	Commercial, office, industrial, or mix
Heavy Industrial	Heavy and light manufacturing and warehousing
Industrial Park	R&D, manufacturing, assembly, testing and offices
Light Industrial	Warehousing, wholesaling, and light manufacturing
Transit Employment Center	Retail and service commercial uses with office, R&D, or industrial use on upper floors
Commercial Land Uses	
Downtown	Office, retail, service, residential, and entertainment
Mixed Use Commercial	Neighborhood retail, mid-rise office, low impact industrial uses
Neighborhood/Community Commercial	Neighborhood retail and services, commercial/professional office development
Regional Commercial	Regional shopping centers, warehousing
Urban Village	Commercial, residential, institutional, or mix
Public/Quasi-Public[a]	Public/private uses involved in the provision of public services

[a] Some vacant lands designated as Public/Quasi-Public may not be suitable for urban development or may be intended for permanent open space uses (e.g., buffer lands surrounding the Regional Wastewater Facility in Alviso).
Sources: City of San Jose, Envision 2040 General Plan; Strategic Economics, 2015.

SUMMARY OF LAND SUPPLY

A summary of findings from the supply analysis are discussed below and shown in the following tables. **Figure V-2** summarizes the vacant employment lands by growth area designation (Employment Lands, Urban Villages, etc.). **Figure V-3** summarizes the vacant employment lands by market subarea (Northern San Jose, Southern San Jose, etc.). **Figures V-4 and V-5** provide more detailed tabulations of same information, with the land use categories split out into each specific designation.

San Jose currently has an estimated 3,978 acres of total vacant employment lands, of which 1,175 acres are located in the core of the city, and an additional 2,803 acres are in peripheral areas that face challenges for new development. There are 2,803 acres of vacant lands in areas with environmental and infrastructure constraints for development. These areas include North Coyote Valley, Evergreen Industrial Park, and the Alviso Specific Plan Area. The timing and nature of future development in these area remains uncertain. If the acreage in these peripheral areas is excluded, the city has 1,175 acres of vacant employment lands (Figure V-2).

Nearly three-quarters of the city's vacant industrial land is located in the periphery. North Coyote, Evergreen, and Alviso account for 73 percent of the city's total vacant industrial land. Another 21 percent of the industrial inventory is located in Employment Areas in the City's core. Only one percent of industrial land is in the Urban Villages (Figure V-2).

Within the core, most of the vacant industrial land is located in Northern, Eastern, and Southern San Jose. As shown in Figure V-3, Northern San Jose has the most industrial land (312 acres), followed by Eastern (285 acres) and Southern San Jose (205 acres). As discussed in the previous chapters, Northern San Jose is well suited to accommodate advanced manufacturing and high tech/R&D tenants, while Southern San Jose is better positioned to attract new large-scale development and warehouses. Eastern San Jose currently has a very limited industrial and R&D market.

Half of the city's vacant commercial (office and retail) land is located in Urban Villages, but these areas have been slow to attract new employment uses. There are 124 acres of commercial land in the Urban Villages, accounting for 50 percent of the city's total commercial inventory (Figure V-2). The majority of commercial lands in the Urban Villages (109 acres) fall into the Neighborhood/Community Commercial land use designation (Figure V-4). This designation allows for neighborhood retail and services, as well as commercial/professional office development. However, while there is significant land supply overall, many of the parcels in the Urban Villages are small; 60 percent of vacant parcels in the Urban Villages are less than one acre in size.

Within the core, most vacant commercial land is in Southern and Eastern San Jose (Figure V-3). These subareas each have about 95 to 100 acres of vacant commercial land.

The majority of vacant land designated for public and quasi-public uses is located in the periphery. Nearly 90 percent of vacant employment lands for public and quasi-public uses are located in the Alviso Specific Plan Area, which includes the San Jose-Santa Clara Regional Wastewater Facility and associated bufferlands. The remainder is largely located outside of a designated growth area (Figure V-2).

Central and Western San Jose have relatively little vacant employment land, but there may be opportunities for reuse and intensification. Overall, Central San Jose has just 57 acres of vacant employment land, while Western San Jose has just 25 acres (Figure V-3). However, there are significant opportunities for redevelopment and intensification, especially in the Central subarea. For example, there are surface parking lots and other underutilized sites throughout Downtown and Diridon that may see development in the short- to mid-term.

Figure V-2. Vacant Employment Lands by Growth Area Designation and Land Use

	Acres				Percent of Total			
	Industrial/ R&D	Commercial (Office/Retail)	Public/Quasi-Public	Total	Industrial/ R&D	Commercial (Office/Retail)	Public/Quasi-Public	Total
CORE EMPLOYMENT LANDS[a]	**840**	**247**	**87**	**1,175**	**27%**	**100%**	**13%**	**30%**
Downtown	10	5	0	15	0%	2%	0%	0%
Employment Area	650	81	9	741	21%	33%	1%	19%
Specific Plan Area	84	5	0	89	3%	2%	0%	2%
Urban Village	19	124	7	150	1%	50%	1%	4%
Other Areas	77	32	71	181	3%	13%	11%	5%
PERIPHERAL EMPLOYMENT LANDS	**2,242**	**0**	**561**	**2,803**	**73%**	**0%**	**87%**	**70%**
North Coyote Valley	1,616	0	0	1,616	52%	0%	0%	41%
Alviso	305	0	561	866	10%	0%	87%	22%
Evergreen	321	0	0	321	10%	0%	0%	8%
Citywide Total	**3,083**	**247**	**648**	**3,978**	**100%**	**100%**	**100%**	**100%**

[a] Excludes North Coyote Valley, Alviso, and Evergreen.

Source: City of San Jose, 2015; Strategic Economics, 2015.

Figure V-3. Vacant Employment Lands by Subarea and Land Use

	Acres				Percent of Total			
	Industrial/ R&D	Commercial (Office/Retail)	Public/Quasi-Public	Total	Industrial/ R&D	Commercial (Office/Retail)	Public/Quasi-Public	Total
CORE EMPLOYMENT LANDS[a]	**840**	**247**	**87**	**1,175**	**27%**	**100%**	**13%**	**30%**
Northern San Jose	312	17	32	361	10%	7%	5%	9%
Central San Jose	35	19	3	57	1%	8%	0%	1%
Southern San Jose	205	95	6	307	7%	39%	1%	8%
Eastern San Jose	285	99	41	425	9%	40%	6%	11%
Western San Jose	3	17	5	25	0%	7%	1%	1%
PERIPHERAL EMPLOYMENT LANDS	**2,242**	**0**	**561**	**2,803**	**73%**	**0%**	**87%**	**70%**
North Coyote Valley	1,616	0	0	1,616	52%	0%	0%	41%
Alviso	305	0	561	866	10%	0%	87%	22%
Evergreen	321	0	0	321	10%	0%	0%	8%
Citywide Total	**3,083**	**247**	**648**	**3,978**	**100%**	**100%**	**100%**	**100%**

[a] Excludes North Coyote Valley, Alviso, and Evergreen.

Source: City of San Jose, 2015; Strategic Economics, 2015.

Figure V-4. Vacant Employment Lands by Growth Area Designation and General Plan Land Use (Detail)

	Industrial/R&D						Commercial (Office/Retail)						Public/ Quasi-Public	Total
	CIC	HI	IP	LI	TEC	Total	DT	MUC	NCC	RC	UV	Total		
CORE EMPLOYMENT LANDS	**96**	**45**	**499**	**78**	**122**	**840**	**7**	**10**	**154**	**0**	**75**	**247**	**87**	**1,175**
Downtown	10	0	0	0	0	10	4	0	1	0	0	5	0	15
Employment Area[a]	55	37	391	45	122	650	0	0	16	0	64	81	9	741
Specific Plan Area[b]	15	0	69	0	0	84	0	5	0	0	0	5	0	89
Urban Village	0	0	13	5	0	19	3	1	109	0	11	124	7	150
Other Areas	17	8	26	27	0	77	0	4	28	0	0	32	71	181
PERIPHERAL EMPLOYMENT LANDS	**168**	**0**	**1,937**	**137**	**0**	**2,242**	**0**	**0**	**0**	**0**	**0**	**0**	**561**	**2,803**
Employment Area (North Coyote/Evergreen)	0	0	1,937	0	0	1,937	0	0	0	0	0	0	0	1,937
Specific Plan Area (Alviso)	168	0	0	137	0	305	0	0	0	0	0	0	561	866
Citywide Total	**264**	**45**	**2,436**	**215**	**122**	**3,083**	**7**	**10**	**154**	**0**	**75**	**247**	**648**	**3,978**

CIC = Combined Industrial/Commercial; HI = Heavy Industrial; IP = Industrial Park; LI = Light Industrial; TEC = Transit Employment Center; DT = Downtown; MUC = Mixed Use Commercial; NCC = Neighborhood Community Commercial; RC = Regional Commercial; UV = Urban Village

[a] Excluding North Coyote Valley and Evergreen

[b] Excluding Alviso

Sources: City of San Jose, 2015; Strategic Economics, 2015.

Figure V-5. Vacant Employment Lands by Subarea and General Plan Land Use (Detail)

	Industrial/R&D						Commercial (Office/Retail)						Public/ Quasi-Public	Total
	CIC	HI	IP	LI	TEC	Total	DT	MUC	NCC	RC	UV	Total		
CORE EMPLOYMENT LANDS	**96**	**45**	**496**	**80**	**122**	**840**	**7**	**10**	**154**	**0**	**75**	**247**	**87**	**1,175**
Northern San Jose [a]	21	16	162	29	84	312	0	0	14	0	2	17	32	361
Golden Triangle	16	3	137	23	84	262	0	0	7	0	1	8	9	279
Eastern North San Jose	5	13	25	7	0	50	0	0	7	0	1	8	23	80
Airport	1	0	0	0	0	1	0	0	1	0	0	1	0	1
Central San Jose	13	0	0	21	1	35	7	2	6	0	3	19	3	57
Southern San Jose [b]	28	29	88	22	38	205	0	8	18	0	69	95	6	307
Eastern San Jose [c]	31	0	246	8	0	285	0	0	99	0	0	99	41	425
Western San Jose	3	0	0	0	0	3	0	0	17	0	0	17	5	25
PERIPHERAL EMPLOYMENT LANDS	**168**	**0**	**1,937**	**137**	**0**	**2,242**	**0**	**0**	**0**	**0**	**0**	**0**	**561**	**2,803**
North Coyote Valley	0	0	1,616	0	0	1,616	0	0	0	0	0	0	0	1,616
Alviso	168	0	0	137	0	305	0	0	0	0	0	0	561	866
Evergreen	0	0	321	0	0	321	0	0	0	0	0	0	0	321
Citywide Total	**264**	**45**	**2,433**	**218**	**122**	**3,083**	**7**	**10**	**154**	**0**	**75**	**247**	**648**	**3,978**

CIC = Combined Industrial/Commercial; HI = Heavy Industrial; IP = Industrial Park; LI = Light Industrial; TEC = Transit Employment Center; DT = Downtown; MUC = Mixed Use Commercial; NCC = Neighborhood Community Commercial; RC = Regional Commercial; UV = Urban Village

[a] Excluding Alviso

[b] Excluding North Coyote Valley

[c] Excluding Evergreen

Sources: City of San Jose, 2015; Strategic Economics, 2015.

DEMAND FOR EMPLOYMENT LANDS

METHODOLOGY

To estimate the market demand for employment lands, Strategic Economics converted employment projections into the number of acres needed to accommodate future job growth by 2040. Two demand scenarios were tested:

- **Projection-Based Demand**: The projection-based demand estimate is calculated from employment projections prepared by the Center for Continuing Study of the California Economies (CCSCE). The demand projection uses Alternative 3, the highest of CCSCE's three growth scenarios. CCSCE's Alternative 3 projects that San Jose will add 184,100 net new jobs between 2013 and 2040, accounting for 16 percent of total Bay Area employment growth over that time period (**Figure V-6)**.
- **Recommended Planned Job Capacity:** In addition to the demand estimates described above based on CCSCE's Alternative 3 employment projection, Strategic Economics also estimated the amount of commercial and industrial lands needed to accommodate the City's Recommended Planned Job Capacity, based on a jobs to employed residents ratio of 1.1 to 1. In order to meet this target, San Jose would need to add 318,300 net new jobs by 2040.[38]

Figure V-7 shows the Projected Based Demand (Alternative 3) and Recommended Planned Job Capacity employment projections by industry cluster.[39]In order to convert the employment projections into demand for employment land, Strategic Economics factored in assumptions regarding: 1) the types of land uses that would accommodate each industry type; 2) typical employment densities for different building types; 3) typical floor area ratios for new development projects; and 4) the extent to which job growth would be accommodated on vacant lands. Each of these factors is explained in more detail below:

1. **The type of space required to accommodate jobs in each industry cluster.** Each industry cluster includes a range of different types of firms, which may occupy a variety of land uses. In order to allocate employment to land uses, employment in each industry cluster was multiplied by the percentages shown in **Figure V-8.** For example, the approximately 1,200 net new jobs projected for the miscellaneous manufacturing cluster under the Project-Based Demand scenario are assumed to occupy traditional industrial space (30 percent of employment growth, or about 400 jobs), light manufacturing and construction space (50 percent, or about 600 jobs), high tech R&D/manufacturing space (10 percent, or about 100 jobs), and R&D/life sciences space (10 percent, or about 100 jobs).
2. **Employment densities (gross building square feet per employee). Figure V-9** shows the average amount of building space allocated per worker, by land use. For example, traditional office is assumed to provide 300 gross square feet per workers, while creative office allocates 175 gross square feet per worker.
3. **Floor area ratios (FARs).** FAR is the ratio of a building's gross floor area to the land area on which it is built. Figure V-9 shows FAR assumptions for each land use, which were used to translate demand for building space into demand for land. For example, at a 0.3 FAR, a 100,000 square foot retail building requires 333,333 square feet of land.

[38] Note that this scenario assumes that the 2040 distribution of jobs by industry would be the same as in CCSCE's Alternative 3 projection.

[39] See Figure II-4 in Chapter II for definition of industry clusters. Note that jobs that do not fall in an industry cluster – including self-employment and government, household, and unclassified employment – were excluded from the employment lands demand analysis.

4. **The extent to which future job growth is accommodated through redevelopment or intensification of developed sites.** This analysis is focused on the demand for vacant employment lands. Some employment demand will be accommodated through redevelopment or intensification of land that is already developed. Assumptions about the percent of demand that could be met through development on vacant land for each land use type were developed in consultation with San Jose City staff, based on an analysis of recent development patterns in San Jose (Figure V-10).

The results of the analysis are sensitive to assumptions about future employment growth, average employment densities, FARs, and other variables. Actual employment densities and FARs can vary depending on the specific employer's preferences, site characteristics, building design, and other factors. Furthermore, the extent to which future job growth is accommodated on vacant employment lands (as opposed to redevelopment and intensification of existing uses, or in mixed-use development) also depends on future market conditions, site conditions, and land use policy. This analysis incorporates reasonable assumptions based on observations about current conditions and recent trends in San Jose and the Silicon Valley. The results of the demand analysis provide insight into the types of land uses that are likely to be required in San Jose to accommodate future job growth, but are not intended to be definitive land use forecasts.

Appendix A provides a more detailed description of each step of the methodology.

Figure V-6. CCSCE Employment Projections (in Thousands): Bay Area and San Jose, 2013-2040

	Employment				Employment Change
	2013	2025	2035	2040	2013-2040
BAY AREA JOBS					
Total Jobs in Industry Cluster	2,995.1	3,656.4	3,825.3	4,015.9	1,020.8
Other Jobs[a]	788.4	868.6	983.8	941.8	153.4
Total Jobs	3,783.5	4,525.0	4,809.0	4,957.7	1,174.2
SAN JOSE JOBS					
Alternative 1 (Low)					
Total Jobs in Industry Cluster	366.0	444.4	466.8	479.8	113.8
Other Jobs[a]	47.5	50.2	51.0	51.1	3.6
Total Jobs	413.5	494.7	517.8	530.9	117.4
Percent of Bay Area Jobs	11%	11%	11%	11%	10%
Alternative 2 (Medium)					
Total Jobs in Industry Cluster	366.0	465.7	497.9	516.2	150.3
Other Jobs[a]	47.5	52.5	54.4	55.3	7.8
Total Jobs	413.5	518.2	552.3	571.6	158.1
Percent of Bay Area Jobs	11%	11%	11%	12%	13%
Alternative 3 (High)					
Total Jobs in Industry Cluster	366.0	484.2	519.6	539.7	173.7
Other Jobs[a]	47.5	51.6	55.7	57.9	10.4
Total Jobs	413.5	535.8	575.3	597.6	184.1
Percent of Bay Area Jobs	11%	12%	12%	12%	16%

Source: Center for the Continuing Study of the California Economy (CCSCE), 2015.

Figure V-7. Employment by Industry Cluster (in Thousands): Projection-Based Demand and Recommended Planned Job Capacity Ratio Scenarios, 2013-2040

	Projection-Based Demand[a]				Recommended Planned Jobs Capacity[b]			
	Jobs 2013 (Actual)	Jobs 2040 (Projected)	Change	Percent Change	Jobs 2013 (Actual)	Jobs 2040 (Recom-mended)	Change	Percent Change
Driving Industries								
High Tech Manufacturing	41.8	37.3	-4.5	-11%	41.8	42.6	0.9	2%
Miscellaneous Manufacturing	12.6	13.9	1.2	10%	12.6	15.9	3.3	26%
Software/Information Services	8.0	18.3	10.3	129%	8.0	21.0	13.0	162%
Technical Professional Services	9.9	15.6	5.7	58%	9.9	17.8	8.0	81%
Creative Professional Services	21.6	39.2	17.6	81%	21.6	44.9	23.3	108%
Visitor Services	10.1	14.3	4.2	42%	10.1	16.4	6.3	62%
Total	**104.0**	**138.5**	**34.6**	**33%**	**104.0**	**158.6**	**54.6**	**53%**
Business Support Industries								
Construction	20.7	36.2	15.5	75%	20.7	41.5	20.8	100%
Business Services	40.1	65.0	24.8	62%	40.1	74.4	34.2	85%
Financial Services	10.2	15.7	5.5	54%	10.2	18.0	7.8	77%
Transportation/Distribution	26.5	32.7	6.2	24%	26.5	37.5	11.0	41%
Total	**97.5**	**149.7**	**52.1**	**53%**	**97.5**	**171.3**	**73.8**	**76%**
Household Support Industries								
Civic/Infrastructure	17.0	27.5	10.5	62%	17.0	31.5	14.5	85%
Healthcare	37.9	64.2	26.3	69%	37.9	73.5	35.6	94%
Retail and Consumer Services	80.0	116.9	36.9	46%	80.0	133.8	53.8	67%
Education	29.6	42.8	13.3	45%	29.6	49.0	19.5	66%
Total	**164.5**	**251.5**	**87.0**	**53%**	**164.5**	**287.8**	**123.4**	75%
Total, Employment in Industry Clusters[c]	**366.0**	**539.7**	**173.7**	**47%**	**366.0**	**617.7**	**251.8**	**69%**
Total, All Jobs	**413.5**	**597.6**	**184.1**	**45%**	**413.5**	**731.8**	**318.3**	**77%**

[a] Projections shown are from CCSCE's "Alternative 3" projections (most aggressive projections).
[b] Note that this scenario assumes that the 2040 distribution of jobs by industry would be the same as in CCSCE's Alternative 3 projection.
[c] Excludes self-employment and government jobs.
Source: Center for the Continuing Study of the California Economy (CCSCE), 2015; Strategic Economics, 2015.

Figure V-8. Distribution of Employment Across Land Use Types

Industry Cluster	Land Use Type										
	Retail (Large)[a]	Retail (Small)	Traditional Office	Creative/ High Tech Office	Traditional Industrial [b]	Light Manufacturing & Construction	High Tech R&D/ Manufacturing	R&D/Life Sciences	Hotel	Institutional/ Other	Total
Driving Industries											
High Tech Manufacturing							100%				100%
Miscellaneous Manufacturing					30%	50%	10%	10%			100%
Software/Information Services[c]	10%			70%			20%				100%
Technical Professional Services			60%	30%			10%				100%
Creative Professional Services				70%			20%	10%			100%
Visitor Services									40%	60%	100%
Business Support Industries											
Construction			10%			90%					100%
Business Services		10%	90%								100%
Financial Services			90%	10%							100%
Transportation/Distribution		10%	10%		80%						100%
Household Support Industries											
Civic/Utilities			15%		35%	35%				15%	100%
Healthcare		10%	40%							50%	100%
Retail and Consumer Services	50%	50%									100%
Education			10%							90%	100%

[a] Retail storefronts 25,000 square feet or larger.
[b] Warehouse, Distribution, Heavy Manufacturing.
[c] Note that this industry cluster includes movie theaters, which are assumed to occupy retail (large) space.
Source: Strategic Economics, 2015.

Figure V-9. Employment Density and FAR Assumptions by Land Use Type

Land Use Type	Employment Density (Gross Sq. Ft per Employee)	Floor Area Ratio
Retail (Large)[a]	650	0.3
Retail (Small)	250	0.3
Traditional Office	300	1.5
Creative/High Tech Office	175	1.5
Traditional Industrial[b]	1,000	0.3
Light Manufacturing	500	0.4
Tech R&D/Manufacturing	300	0.5
R&D/Life Sciences	450	0.5
Hotel	2,000	2
Institutional/Other	1,000	0.8

[a] Retail storefronts 25,000 square feet or larger.
[b] Warehouse, Distribution, Heavy Manufacturing.
Source: Strategic Economics, 2015.

Figure V-10. Vacant Land Development Assumptions by Land Use Type

Land Use Type	Percent of Development Occurring on Vacant Employment Lands
Retail (Large) [a]	60%
Retail (Small)	40%
Traditional Office	50%
Creative/High Tech Office	50%
Traditional Industrial[b]	80%
Light Manufacturing	80%
Tech R&D/Manufacturing	70%
R&D/Life Sciences	70%
Hotel	50%
Institutional/Other	80%

[a] Retail storefronts 25,000 square feet or larger.
[b] Warehouse, Distribution, Heavy Manufacturing.
Source: Strategic Economics, 2015.

SUMMARY OF DEMAND

Findings from the Projection-Based Demand and Recommended Planned Job Capacity scenarios are discussed separately below.

Projection-Based Demand

The following summarizes the demand analysis based on the jobs projected under CCSCE's Alternative 3.

Overall, there is projected demand for 2,069 acres of employment lands by 2040. Figure V-11, below, shows the net new demand for employment lands projected for the 2013-2040 period, by land use. The majority of projected demand (1,803 acres) is expected to occur by 2025, after which job growth is projected to slow.

There is an estimated demand for 972 vacant acres of land to accommodate warehouse, distribution, manufacturing, and construction uses, accounting for 37 percent of total demand for employment lands. CCSCE projects slow but steady employment growth in many of the industry clusters that drive demand for industrial space, including high tech manufacturing, miscellaneous manufacturing, and transportation/distribution. Although the total job growth in these sectors is relatively modest compared to other industries, and the average employment density is typically low, industrial businesses require large floor plates to accommodate equipment and materials. Therefore, the buildings typically have very low floor-area-ratios (FARs) and require large sites (Figure V-9).

Demand for office and R&D land totals 180 acres, or 7 percent of total demand for employment lands. The projected demand for office lands is estimated at 136 acres, and the demand for R&D lands is 44 acres. The types of businesses that will occupy office and R&D spaces are projected to grow significantly. However, the amount of space required per worker is low, and the buildings tend to be higher density. Furthermore, half of the demand for new office space and 30 percent of demand for new R&D space is assumed to be accommodated through intensification of existing sites rather than building on vacant lands.

There is projected demand for about 770 acres of vacant land for new retail, or 30 percent of total demand for employment lands. This assumes that 60 percent of the demand for large retail space and 40 percent of the demand for small retail space will be accommodated through development on vacant lands. However, retailers have very specific criteria for selecting locations, including the buying power of area residents, site size and configuration, traffic counts, accessibility, and visibility. Large retailers may find it particularly challenging to identify vacant sites that meet their requirements. As a result, over time, more demand may be accommodated through redevelopment or expansion of existing shopping centers. Changes to the retail industry, such as the continued expansion of e-commerce, may also affect retail demand.

Institutional uses account for approximately 690 acres, or about one-quarter of projected demand for employment lands. Institutional uses include schools, hospitals and other medical facilities, and arts and entertainment uses.

Figure V-11. Net New Demand for Employment Lands (Acres): Projection-Based Demand Scenario, 2013-2040

Land Use	Net New Demand (Acres) 2013-2025	2025-2040	2013-2040	Percent of Total 2013-2025	2025-2040	2013-2040
Retail	**482**	**285**	**767**	**27%**	**35%**	**29%**
Retail (Large)[a]	364	218	582	20%	27%	22%
Retail (Small)	117	68	185	7%	8%	7%
Office	**88**	**48**	**136**	**5%**	**6%**	**5%**
Traditional Office	70	36	106	4%	4%	4%
Creative/High Tech Office	17	12	29	1%	1%	1%
Warehouse, Distribution, Manufacturing, & Construction	**672**	**300**	**972**	**37%**	**37%**	**37%**
Traditional Industrial[b]	412	142	553	23%	18%	21%
Light Manufacturing & Construction	261	158	419	14%	20%	16%
R&D and High-Tech Manufacturing	**78**	**-33**	**44**	**4%**	**-4%**	**2%**
High Tech R&D/Manufacturing	63	-46	17	3%	-6%	1%
R&D/Life Sciences	15	12	27	1%	2%	1%
Other	**483**	**206**	**690**	**27%**	**26%**	**26%**
Hotel	9	11	19	0%	1%	1%
Institutional/Other	475	195	670	26%	24%	26%
Total Net Demand	**1,803**	**806**	**2,609**	**100%**	**100%**	**100%**

[a] Retail storefronts 25,000 square feet or larger.
[b] Warehouse, Distribution, Heavy Manufacturing.
Source: Strategic Economics, 2015.

Recommended Planned Job Capacity Ratio

The following summarizes the results of the analysis based on the employment numbers from the Recommended Planned Job Capacity Ratio (1.1 jobs per employed resident).

Overall, 3,889 acres would be required to accommodate the Recommended Planned Job Capacity scenario. Figure V-12 shows the estimated amount of land required for San Jose to meet a target jobs/employed housing ratio of 1.1 to 1 by 2040. Similar to the Projection-Based Demand scenario, warehouse, distribution, manufacturing, and construction uses would require the most land (1,490 acres). After these industrial uses, the biggest land users would be retail (1,110 acres), other (976 acres), office (186 acres), and R&D/high-tech manufacturing (128 acres).

Figure V-12. Net New Demand for Employment Lands (Acres): Recommended Planned Job Capacity Ratio, 2013-2040

	Net New Demand (Acres)			Percent of Total		
Land Use	2013-2025	2025-2040	2013-2040	2013-2025	2025-2040	2013-2040
Retail	**482**	**628**	**1,110**	**27%**	**30%**	**29%**
Retail (Large)[a]	364	478	842	20%	23%	22%
Retail (Small)	117	150	268	7%	7%	7%
Office	**88**	**98**	**186**	**5%**	**5%**	**5%**
Traditional Office	70	77	147	4%	4%	4%
Creative/High Tech Office	17	21	38	1%	1%	1%
Warehouse, Distribution, Manufacturing, & Construction	**672**	**817**	**1,490**	**37%**	**39%**	**38%**
Traditional Industrial[b]	412	496	907	23%	24%	23%
Light Manufacturing & Construction	261	322	582	14%	15%	15%
R&D and High-Tech Manufacturing	**78**	**50**	**128**	**4%**	**2%**	**3%**
High Tech R&D/Manufacturing	63	26	89	3%	1%	2%
R&D/Life Sciences	15	23	38	1%	1%	1%
Other	**483**	**492**	**976**	**27%**	**24%**	**25%**
Hotel	9	20	29	0%	1%	1%
Institutional/Other	475	472	947	26%	23%	24%
Total Net Demand	**1,803**	**2,086**	**3,889**	**100%**	**100%**	**100%**

[a] Retail storefronts 25,000 square feet or larger.
[b] Warehouse, Distribution, Heavy Manufacturing.
Source: Strategic Economics, 2015.

COMPARING SUPPLY AND DEMAND

Industrial demand exceeds vacant employment lands in the city's core employment areas. Excluding the peripheral employment lands, there are 840 acres of vacant lands designated for industrial uses (Figure V-2). In comparison, there are 972 acres of net demand under the Projection-Based Demand scenario and 1,489 acres of net demand under the city's Recommended Planned Job Capacity scenario (Figures V-11 and V-12). While some of the demand could be accommodated in areas outside of the city's core employment areas, most of the vacant employment lands on the periphery are in places that are challenging

for new development due to topographical and access constraints. These peripheral employment lands include 1,616 acres in North Coyote Valley, 321 acres in the Evergreen Industrial Park, and 305 acres located in the Alviso Specific Plan Area.

The city has a shortage of vacant land supply designated specifically for office and retail uses (non-industrial). There are 247 acres of vacant land designated for primarily commercial office and retail uses, all of which is located in the core of the city (Figure V-2)**.** Meanwhile, the combined demand for these uses totals 903 net additional acres under the Projection-Based Demand scenario, and 1,296 acres under the city's Recommended Planned Job Capacity scenario (Figure V-11 and V-12). This indicates that a large share of future office and retail development would need to be accommodated in lands that are currently designated for industrial uses in both the core and peripheral employment areas.

There is likely to be increasing competition for vacant land, especially in the core employment areas of the city, and industrial users may be priced out of the most desirable locations. Most of San Jose's industrial designations allow for a wide range of employment uses, including R&D and office as well as traditional industrial space. While this flexibility allows businesses and developers to adjust to meet changing space needs, it also could result in office and R&D uses displacing other uses, such as warehouse, distribution, manufacturing, and construction. Industries that are highly price sensitive may have difficulty finding affordable land in the city's premium locations (such as Northern San Jose and Edenvale).

A significant share of new retail development is likely to occur on existing shopping centers and in mixed-use developments. Office and R&D are often able to pay higher prices for land than retail, and may price out retail uses, especially in prime employment locations. It may be particularly difficult for large retailers to find sites that meet their specific size and location requirements. As a result, there is likely to be increasing pressure over time to redevelop or expand existing shopping centers to add larger retail space, while mixed-use commercial and residential development may accommodate an increasing percentage of future demand for smaller retail formats.

Urban Villages account for half of the city's vacant commercial land, but most have not attracted a significant amount of office and retail development since Envision 2040 was adopted. There are 124 acres of commercial (office and retail) land in the Urban Villages, about half of the total vacant commercial land supply. Urban Villages also account for 19 acres of industrial lands and seven acres of employment lands designated for public/quasi-public uses. Despite the significant supply of employment lands in Urban Villages, few of the Urban Villages have seen new retail and office development since the adoption of Envision 2040. Some of the likely obstacles include a lack of large developable sites in Urban Villages, and lower market demand in certain locations.

The market potential for retail and office development is stronger in some Urban Villages than others. Office tenants and retailers have very specific preferences for where they locate, and many Urban Villages lack the required characteristics for these users. For example, when looking for sites, retailers typically consider the buying power of area residents, site size and configuration, traffic counts, accessibility, and visibility. In order to identify which Urban Villages are likely to attract new development in the next ten years, Strategic Economics measured the market potential of each Urban Village for retail uses and for office/industrial uses (discussed below).

VI. URBAN VILLAGES MARKET ASSESSMENT

The 2040 General Plan identifies 68 Urban Villages that are planned for focused housing and job growth in a compact, walkable, urban setting. The Urban Villages include a variety of planned and existing transit station areas, regional- and neighborhood-serving commercial centers, and linear commercial corridors located across the city. Many factors will influence how the Urban Villages change over time, including local market strength, the existing land use context, and planning and policy decisions. This chapter identifies the Urban Villages that are most likely to accommodate employment growth in the next decade based on market factors.

URBAN VILLAGES INDICES

In order to identify which Urban Villages are most likely to accommodate significant employment growth and development in the short term (between 2015 and 2025), Strategic Economics developed a methodology to rank each Urban Village's market strength. Because the market factors that guide office and industrial development are distinct from those that drive retail development, Strategic Economics developed two indices of market strength: one for office/industrial uses and one for retail uses. Each market index includes a variety of criteria that indicate the likelihood that the local market will support new employment growth and development in the short term (2015 to 2025).

Note that the index results are not intended to be definitive predictors of short-term development, but rather as indicators of the general market strength of different areas within the city. There are other factors that may influence the location and timing of new development, including specific opportunity sites, which are not captured in this analysis. Similarly, the retail index does not fully capture the highly localized factors that determine the suitability of a specific site for retail, such as specific demographics and competitive supply, the presence of anchors and other complimentary retail uses, and the visibility, accessibility, and design of specific storefronts and shopping centers.

OFFICE/INDUSTRIAL INDEX

Figure VI-1 shows the criteria and scoring system used to evaluate the relative strength of the Urban Villages for office/R&D and industrial development. As shown, each Urban Village was scored based on the following factors:

- **Existing non-retail employment**: Total 2014 employment in the driving industries and business support industries (by quartile)[40]
- **Recent office/industrial development:** Proposed, under construction, or recently built (2009-February 2015)
- **Proximity to an established Employment Area, Downtown, or major transit station (e.g. Caltrain or planned BART station)**: This accounts for proximity to designated Employment Areas within San Jose, as well as major existing and planned employment nodes in neighboring cities (such as the planned Apple Campus II in Cupertino and the Dell Avenue district in Campbell).
- **Direct access to a freeway ramp.**

[40] For the employment criterion, the urban villages were ranked by total employment in the driving and business support industries, and then divided into four quartiles.

The point system for each factor is described in Figure VI-1 below. In total, each Urban Village scored between 0.25 and 5 points. Urban Villages that scored 2.5 or more were considered to have stronger short-term potential for office/industrial employment growth and development.

Figure VI-1. Office/Industrial Index Criteria

Criteria	Points
Total Non-Retail Employment Existing employment in Driving Industries and Business Support Industries (2014)	+ 1 if Urban Village employment falls within the 100th percentile + .75 if Urban Village employment falls within the 75th percentile + .50 if Urban Village employment falls within the 50th percentile + .25 if Urban Village employment falls within the 25th percentile
Major Office/Industrial Development Proposed, under construction, or recently built (2009-February 2015)[a]	+ 1 if major office/industrial development (over 40,000 square feet) has occurred in the Urban Village
Proximity to Downtown, Employment Area, or Major Transit Station	+ 1 if Urban Village is adjacent to a San Jose Employment Area, Downtown, or includes major transit station (Caltrain or future BART) +1 if Urban Village is located next to major employment centers in surrounding cities (e.g., Cupertino, Sunnyvale, Milpitas, Santa Clara, Campbell)
Direct Access to a Freeway Ramp	+ 1 if Urban Village has direct access to freeway entrance and exit ramp

[a] See Appendix B for complete project listing.

RETAIL INDEX

Figure VI-2 shows the criteria and point system that were used to represent the strength of each Urban Village location for new retail development. The criteria included:

- **Existing retail sales:** The magnitude of retail sales in 2014 (by quartile).
- **Recent retail development:** Proposed, under construction, or recently built (2009-February 2015)
- **Local buying power** as measured by median household and income and household density (by quartile).
- **Direct access to a freeway ramp.**

Each urban village earned between 1.5 and 5 points. Urban Villages with 3 or more points were considered to have short-term potential for new retail development.

Figure VI-2. Retail Index Criteria

Criteria	Points
Retail Sales Total taxable sales, 2014 *(excluding business-to-business sales)*	+ 2 if Urban Village retail sales fall within the 100th percentile + 1.5 if Urban Village retail sales fall within the 75th percentile + 1 if Urban Village retail sales fall within the 50th percentile + .5 if Urban Village retail sales fall within the 25th percentile
Major Retail Development Proposed, under construction, or recently built (2009-February 2015	+ 1 if major retail development (over 25,000 square feet) has occurred in the urban village
Median Household Income in nearest Census Block Group	+ 1 if median household income falls within the 100th percentile + .75 if median household income falls within the 75th percentile + .50 if median household income falls within the 50th percentile + .25 if median household income falls within the 25th percentile
Household Density Average households/acre in nearest Census Block Group	+ 1 if household density falls within the 100th percentile + .75 if household density falls within the 75th percentile + .50 if household density falls within the 50th percentile + .25 if household density falls within the 25th percentile
Direct Access to a Freeway Ramp	+ 1 if Urban Village has direct access to freeway entrance and exit ramp

[a] See Appendix B for complete project listing.

MARKET POTENTIAL OF URBAN VILLAGES

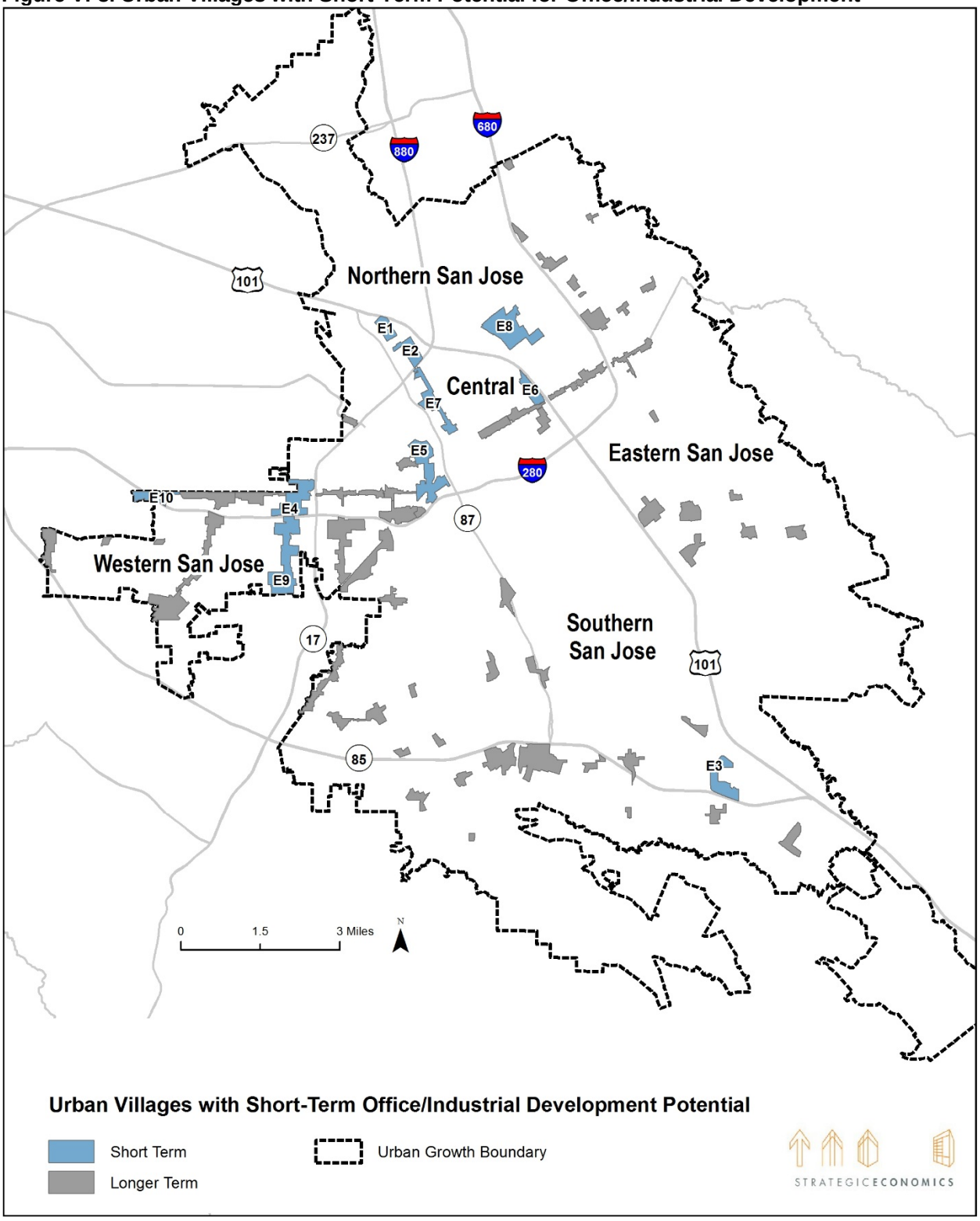
Figures VI-3 and **VI-4** show the Urban Villages with short-term potential for office/industrial and retail development, respectively, based on the indices described above. **Figure VI-5** shows Urban Villages with short-term potential for either – and in some cases, both – types of growth. **Figure VI-6** and **VI-7** show the complete results of the indices for each of the 68 Urban Villages.

Most of the Urban Villages with short-term potential for office/industrial development are located in Northern or Central San Jose. The Rincon South 1, Rincon South 2, Diridon Station Area, Five Wounds BART, and N. 1st St Urban Villages are located adjacent to Downtown or major employment centers. Most of these Urban Villages already have a significant base of employment in the driving and business support industries, and many have attracted recent office, R&D, or industrial development. Other Urban Villages with significant near term potential include Valley Fair/Santana Row, Winchester Boulevard, and Stevens Creek Boulevard (Western subarea), as well as several areas in Southern San Jose near the Edenvale employment centers.

The office/industrial index indicates short-term potential for some office, R&D, or industrial development in the planned BART station areas, but there is some uncertainty about the timing and nature of development in the station areas. Diridon Station Area, Berryessa BART, and Five Wounds BART, all of which are future BART station areas, score highly on the office/industrial index. However, the extent to which any of these areas can attract employment growth will depend on the exact timing of BART service, as well as future land use planning decisions and the compatibility of office, R&D, and/or industrial space with the surrounding residential neighborhoods.

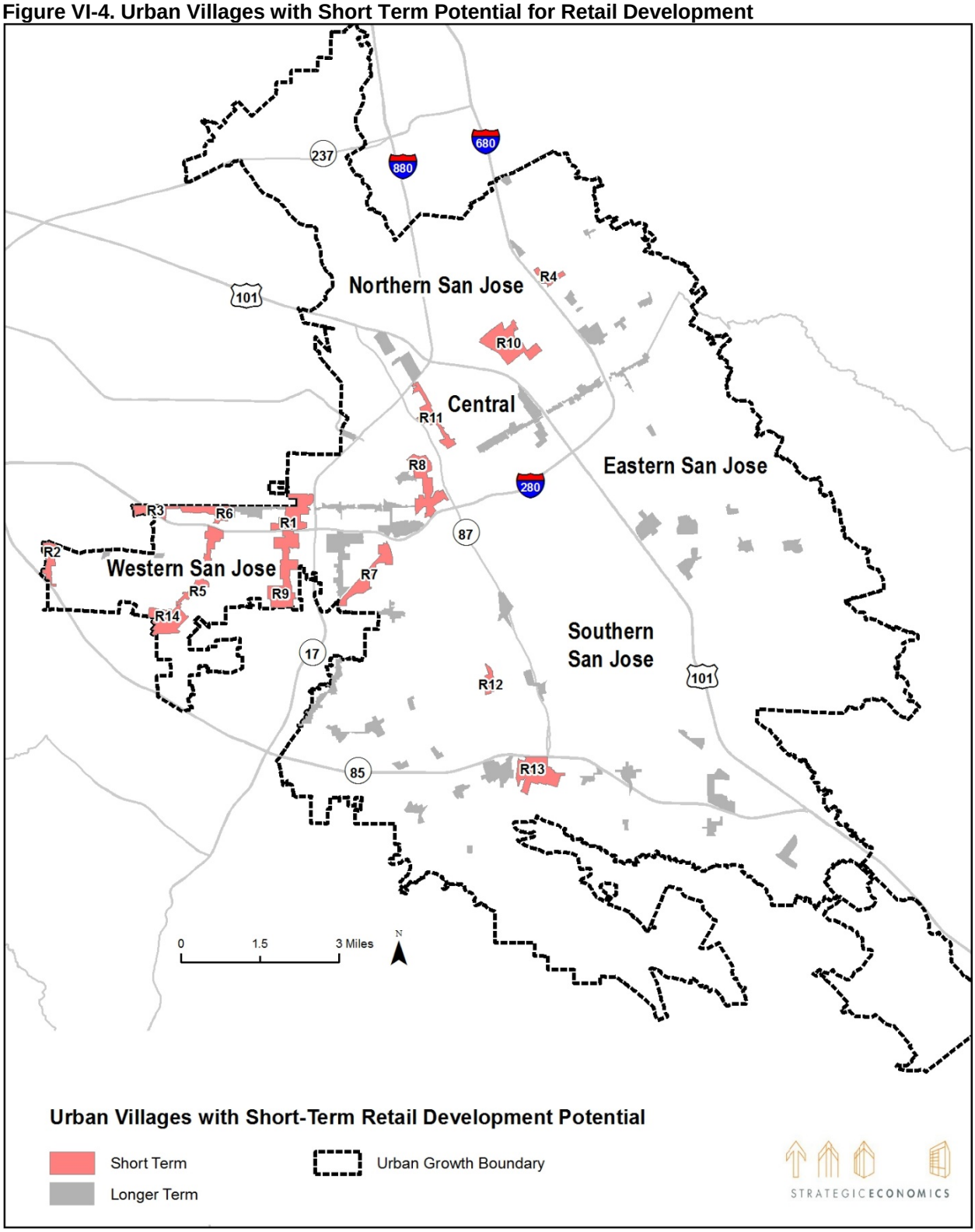
For retail development, the Urban Villages in Western San Jose are best positioned to capture new development in the short term, although there are other strong retail locations across the city. Western San Jose is one of the premier shopping destinations in Silicon Valley, with a mix of high-end shopping malls and regional commercial strip centers along major arterials. Retail centers in other parts of the city tend to serve a mix of local workers and residents, although Southern San Jose also includes several regional centers – including Oakridge Mall – that are in a strong position to attract additional retail in the short-term.

Figure VI-3. Urban Villages with Short-Term Potential for Office/Industrial Development



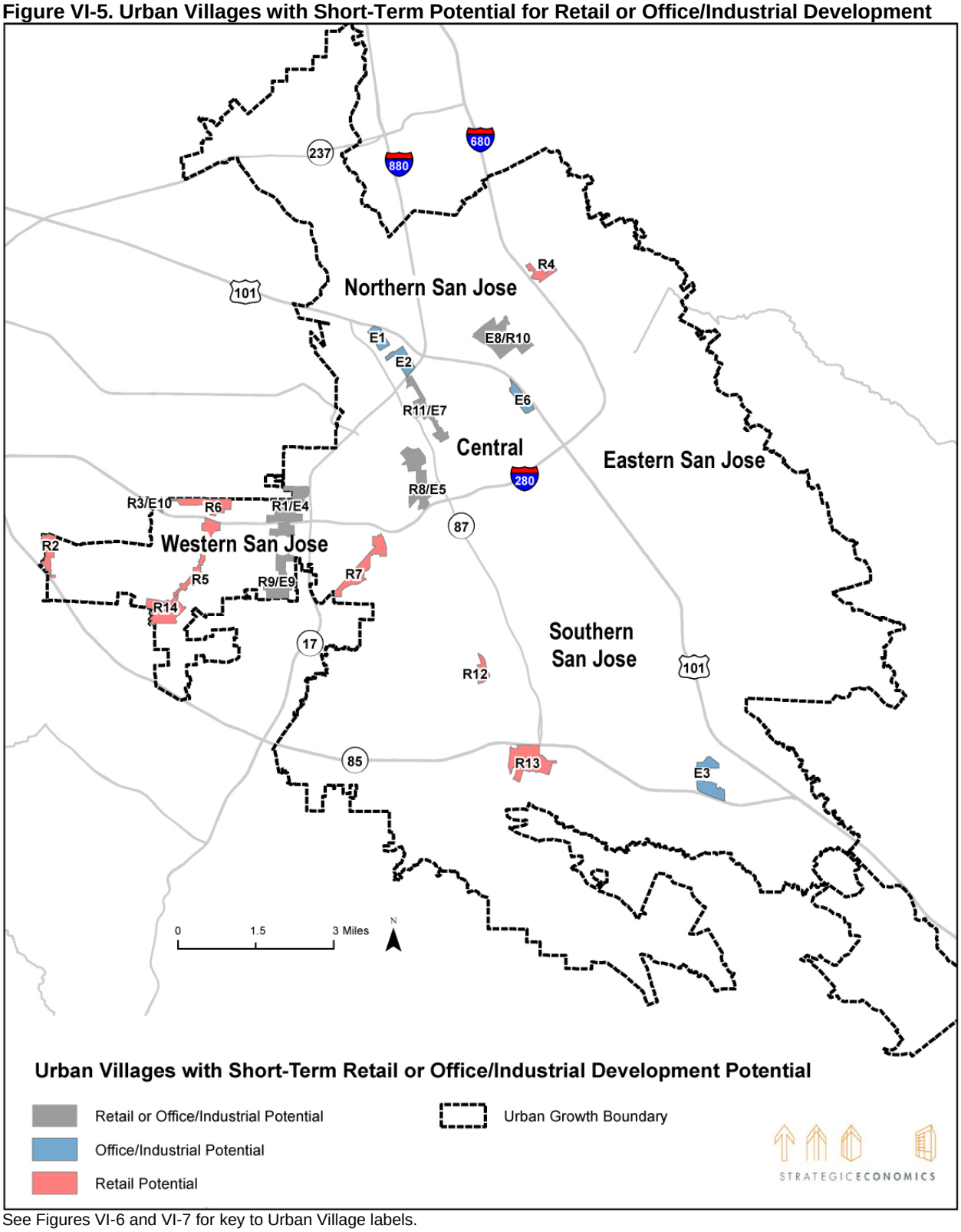
See Figure VI-6 for key to Urban Village labels.

Figure VI-4. Urban Villages with Short Term Potential for Retail Development



See Figure VI-7 for key to Urban Village labels.

Figure VI-5. Urban Villages with Short-Term Potential for Retail or Office/Industrial Development



See Figures VI-6 and VI-7 for key to Urban Village labels.

Figure VI-6. Urban Villages Market Assessment: Office/Industrial Index Results

Urban Village	Subarea	Score	Projected Timing of Development	Map Key
Rincon South 1	North	5	Short Term	E1
Rincon South 2	North	5	Short Term	E2
Blossom Hill Rd/Hitachi	South	4.25	Short Term	E3
Valley Fair/Santana Row	West	4	Short Term	E4
Diridon Plan	Central	3	Short Term	E5
Five Wounds BART	Central	3	Short Term	E6
N. 1st St	Central	3	Short Term	E7
Berryessa BART	North	3	Short Term	E8
Winchester Bl	West	2.5	Short Term	E9
Stevens Creek Bl (West)	West	2.5	Short Term	E10
Oakridge Mall and Vicinity (Cambrian/Pioneer)	South	2	Longer Term	
Oakridge Mall and Vicinity (Edenvale)	South	2	Longer Term	
Race St Light Rail (West of Sunol)	Central	2	Longer Term	
S. 24th St/William Ct	Central	2	Longer Term	
S. Bascom Av (North)	West	2	Longer Term	
S. De Anza Bl	West	2	Longer Term	
Saratoga Av	West	2	Longer Term	
Santa Teresa Bl/Bernal Rd	South	1.75	Longer Term	
Alum Rock Av (East of 680)	East	1.75	Longer Term	
Alum Rock Av (NBD Area)	North	1.75	Longer Term	
Blossom Hill Rd/Snell Av	South	1.75	Longer Term	
N. Capitol Av/McKee Rd	East	1.75	Longer Term	
Santa Teresa Bl/Cottle Rd	South	1.75	Longer Term	
Southwest Ex	West	1.75	Longer Term	
Stevens Creek Bl (Mid)	West	1.75	Longer Term	
The Alameda (West)	North	1.75	Longer Term	
Tully Rd/S. King Rd	East	1.75	Longer Term	
Alum Rock Av (5WBT Area)	North	1.5	Longer Term	
Curtner Light Rail/Caltrain	West	1.5	Longer Term	
E. Santa Clara St (5WBT Plan Area)	Central	1.5	Longer Term	
N. Capitol Av/Berryessa Rd	East	1.5	Longer Term	
N. Capitol Av/Hostetter Rd	East	1.5	Longer Term	
Race St Light Rail (Reed & Graham Site)	Central	1.5	Longer Term	
W. San Carlos St (West)	Central	1.5	Longer Term	
Blossom Hill Rd/Cahalan Av	South	1.25	Longer Term	
Camden Av/Branham Ln	West	1.25	Longer Term	
Capitol Ex/Hy 87 Light Rail	West	1.25	Longer Term	
Landess Av/Morrill Av	East	1.25	Longer Term	
Almaden Ex/Hillsdale Av	West	1	Longer Term	
S. Bascom Av (South)	West	1	Longer Term	
The Alameda (East)	Central	1	Longer Term	
Aborn Rd/San Felipe Rd	East	0.75	Longer Term	
Camden Av/Hillsdale Av	West	0.75	Longer Term	
E. Santa Clara St (West of 17th St)	Central	0.75	Longer Term	
Evergreen Village	East	0.75	Longer Term	
Hamilton Av/Meridian Av	West	0.75	Longer Term	
Paseo de Saratoga	West	0.75	Longer Term	

Urban Village	Subarea	Score	Projected Timing of Development	Map Key
Quimby Rd/S. White Rd	East	0.75	Longer Term	
Camden Av/Kooser Rd	South	0.5	Longer Term	
E. Capitol Ex/Silver Creek Rd	East	0.5	Longer Term	
Kooser Rd/Meridian Av	South	0.5	Longer Term	
McKee Rd/Toyon Av	East	0.5	Longer Term	
McKee Rd/White Rd	East	0.5	Longer Term	
Monterey Rd/Chynoweth Av	South	0.5	Longer Term	
Stevens Creek Bl (East)	West	0.5	Longer Term	
W. San Carlos St (East)	Central	0.5	Longer Term	
W. San Carlos St (Mid)	Central	0.5	Longer Term	
Arcadia/Eastridge	East	0.25	Longer Term	
Bollinger Rd/Lawrence Ex	West	0.25	Longer Term	
Bollinger Rd/Miller Av	West	0.25	Longer Term	
Branham Ln/Meridian Av	West	0.25	Longer Term	
E. Capitol Ex/Foxdale Dr	East	0.25	Longer Term	
Foxworthy Av/Meridian Av	West	0.25	Longer Term	
Meridian Av/Redmond Av	South	0.25	Longer Term	
N. Capitol Av/Mabury Rd	East	0.25	Longer Term	
Penitencia Creek Light Rail	East	0.25	Longer Term	
Piedmont Rd/Sierra Rd	East	0.25	Longer Term	
Santa Teresa Bl/Snell Av	South	0.25	Longer Term	

Source: Strategic Economics, 2015.

Figure VI-7. Urban Villages Market Assessment: Retail Index Results

Urban Village	Subarea	Score	Projected Timing of Development	Map Key
Valley Fair/Santana Row	Western	5	Short Term	R1
S. De Anza Bl	Western	5	Short Term	R2
Stevens Creek Bl (West)	Western	5	Short Term	R3
N. Capitol Av/Berryessa Rd	Eastern	4.75	Short Term	R4
Saratoga Av	Western	4.75	Short Term	R5
Stevens Creek Bl (Mid)	Western	4.75	Short Term	R6
Southwest Ex	Western	4.5	Short Term	R7
Diridon Plan	Central	4.25	Short Term	R8
Winchester Bl	Western	4.25	Short Term	R9
Berryessa BART	Northern	4	Short Term	R10
N. 1st St	Central	4	Short Term	R11
Almaden Ex/Hillsdale Av	Western	4	Short Term	R12
Oakridge Mall and Vicinity (Edenvale)	Southern	4	Short Term	R13
Paseo de Saratoga	Western	4	Short Term	R14
Alum Rock Av (NBD Area)	Northern	3.75	Longer Term	
Race St Light Rail (West of Sunol)	Central	3.75	Longer Term	
The Alameda (East)	Central	3.75	Longer Term	
Alum Rock Av (East of 680)	Eastern	3.75	Longer Term	
S. Bascom Av (North)	Western	3.75	Longer Term	
Blossom Hill Rd/Snell Av	Southern	3.75	Longer Term	
N. Capitol Av/McKee Rd	Eastern	3.75	Longer Term	
S. Bascom Av (South)	Western	3.75	Longer Term	
Stevens Creek Bl (East)	Western	3.75	Longer Term	
Blossom Hill Rd/Hitachi	Southern	3.5	Longer Term	
Alum Rock Av (5WBT Area)	Northern	3.5	Longer Term	
W. San Carlos St (West)	Central	3.5	Longer Term	
Oakridge Mall and Vicinity (Cambrian/Pioneer)	Southern	3.5	Longer Term	
Rincon South 2	Northern	3.25	Longer Term	
W. San Carlos St (Mid)	Central	3.25	Longer Term	
Camden Av/Branham Ln	Western	3.25	Longer Term	
Hamilton Av/Meridian Av	Western	3.25	Longer Term	
Tully Rd/S. King Rd	Eastern	3.25	Longer Term	
Camden Av/Hillsdale Av	Western	3.25	Longer Term	
Blossom Hill Rd/Cahalan Av	Southern	3	Longer Term	
N. Capitol Av/Hostetter Rd	Eastern	3	Longer Term	
Santa Teresa Bl/Cottle Rd	Southern	3	Longer Term	
The Alameda (West)	Northern	3	Longer Term	
Aborn Rd/San Felipe Rd	Eastern	3	Longer Term	
S. 24th St/William Ct	Central	2.75	Longer Term	
Rincon South 1	Northern	2.75	Longer Term	
W. San Carlos St (East)	Central	2.75	Longer Term	
Evergreen Village	Eastern	2.75	Longer Term	
Landess Av/Morrill Av	Eastern	2.75	Longer Term	
E. Santa Clara St (5WBT Plan Area)	Central	2.75	Longer Term	
E. Santa Clara St (West of 17th St)	Central	2.75	Longer Term	
Kooser Rd/Meridian Av	Southern	2.75	Longer Term	
E. Capitol Ex/Silver Creek Rd	Eastern	2.75	Longer Term	
Capitol Ex/Hy 87 Light Rail	Western	2.5	Longer Term	
Curtner Light Rail/Caltrain	Western	2.5	Longer Term	

Urban Village	Subarea	Score	Projected Timing of Development	Map Key
Race St Light Rail (Reed & Graham Site)	Central	2.5	Longer Term	
Camden Av/Kooser Rd	Southern	2.5	Longer Term	
McKee Rd/Toyon Av	Eastern	2.5	Longer Term	
Quimby Rd/S. White Rd	Eastern	2.5	Longer Term	
Foxworthy Av/Meridian Av	Western	2.25	Longer Term	
Arcadia/Eastridge	Eastern	2.25	Longer Term	
Five Wounds BART	Central	2.25	Longer Term	
Bollinger Rd/Lawrence Ex	Western	2.25	Longer Term	
Santa Teresa Bl/Bernal Rd	Southern	2.25	Longer Term	
Bollinger Rd/Miller Av	Western	2	Longer Term	
Branham Ln/Meridian Av	Western	2	Longer Term	
E. Capitol Ex/Foxdale Dr	Eastern	1.75	Longer Term	
Meridian Av/Redmond Av	Southern	1.75	Longer Term	
Monterey Rd/Chynoweth Av	Southern	1.75	Longer Term	
Penitencia Creek Light Rail	Eastern	1.75	Longer Term	
Santa Teresa Bl/Snell Av	Southern	1.75	Longer Term	
Piedmont Rd/Sierra Rd	Eastern	1.75	Longer Term	
N. Capitol Av/Mabury Rd	Eastern	1.5	Longer Term	
McKee Rd/White Rd	Eastern	1.5	Longer Term	

Source: Strategic Economics, 2015.

APPENDIX A: EMPLOYMENT LANDS DEMAND METHODOLOGY

This appendix describes the methodology and assumptions used to estimate demand for employment lands in San Jose through 2040. Two demand scenarios were tested:

- **Projection-Based Demand**: The projection-based demand estimate is calculated from employment projections prepared by the Center for Continuing Study of the California Economies (CCSCE). The demand projection uses Alternative 3, the highest of CCSCE's three growth scenarios.
- **Recommended Planned Job Capacity:** In addition to the demand estimates described above based on CCSCE's Alternative 3 employment projection, Strategic Economics also estimated the amount of commercial and industrial lands needed to accommodate the city's Recommended Planned Job Capacity, based on a jobs-to-employed-residents ratio of 1.1 to 1. In order to meet this target, San Jose would need to add 318,300 net new jobs by 2040. For the purposes of this analysis, it was assumed that the 2040 distribution of jobs by industry in the Recommended Planned Job Capacity scenario would be the same as in CCSCE's Alternative 3 projection.

Figure A-1 shows the employment projections by industry cluster.[41] In order to convert the employment projections into demand for employment land, Strategic Economics analysis created a three-step model:

1. **Distribute employment from industry clusters to land use types.**
2. **Translate employment into demand for buildings and land.**
3. **Estimate the share of job growth accommodated on vacant lands.**

Each step is described below.

Step One: Distribute Employment from Industry Clusters to Land Use Types

Each industry cluster includes a range of different types of firms, which may occupy a variety of land uses. The following methodology was used to distribute employment from the industry cluster shown in Figure A-1, to land use types.

- **Determine appropriate land use distribution factors for each industry cluster.** In order to determine which land uses are required for each industry cluster, Strategic Economics reviewed the individual, 4-digit NAICS codes that comprise each cluster. **Figure A-2** shows the percentages (or distribution factors) used to allocate employment in each industry cluster to land use types.

5. **Allocate net new employment from industry clusters to land uses.** Employment in each industry cluster was multiplied by the distribution factors shown in Figure A-2**.** For example, the approximately 1,200 net new jobs projected for the miscellaneous manufacturing cluster under the Project-Based Demand scenario are assumed to occupy traditional industrial space (30 percent of employment growth, or about 400 jobs), light manufacturing and construction space (50 percent, or about 600 jobs), high tech R&D/manufacturing space (10 percent, or about 100 jobs), and R&D/life sciences space (10 percent, or about 100 jobs). **Figure A-3** shows net new employment for the Projection-Based Demand scenario by industry cluster and land use type.

[41] See Figure II-4 in Chapter II for definition of industry clusters. Note that jobs that do not fall in an industry cluster – including self-employment and government, household, and unclassified employment – were excluded from the employment lands demand analysis.

Figure A-1. Employment by Industry Cluster (in Thousands): Projection-Based Demand and Recommended Planned Job Capacity Ratio Scenarios, 2013-2040

	Projection-Based Demand[a]				Recommended Planned Jobs Capacity[b]			
	Jobs 2013 (Actual)	Jobs 2040 (Projected)	Change	Percent Change	Jobs 2013 (Actual)	Jobs 2040 (Recom-mended)	Change	Percent Change
Driving Industries								
High Tech Manufacturing	41.8	37.3	-4.5	-11%	41.8	42.6	0.9	2%
Miscellaneous Manufacturing	12.6	13.9	1.2	10%	12.6	15.9	3.3	26%
Software/Information Services	8.0	18.3	10.3	129%	8.0	21.0	13.0	162%
Technical Professional Services	9.9	15.6	5.7	58%	9.9	17.8	8.0	81%
Creative Professional Services	21.6	39.2	17.6	81%	21.6	44.9	23.3	108%
Visitor Services	10.1	14.3	4.2	42%	10.1	16.4	6.3	62%
Total	**104.0**	**138.5**	**34.6**	**33%**	**104.0**	**158.6**	**54.6**	**53%**
Business Support Industries								
Construction	20.7	36.2	15.5	75%	20.7	41.5	20.8	100%
Business Services	40.1	65.0	24.8	62%	40.1	74.4	34.2	85%
Financial Services	10.2	15.7	5.5	54%	10.2	18.0	7.8	77%
Transportation/Distribution	26.5	32.7	6.2	24%	26.5	37.5	11.0	41%
Total	**97.5**	**149.7**	**52.1**	**53%**	**97.5**	**171.3**	**73.8**	**76%**
Household Support Industries								
Civic/Infrastructure	17.0	27.5	10.5	62%	17.0	31.5	14.5	85%
Healthcare	37.9	64.2	26.3	69%	37.9	73.5	35.6	94%
Retail and Consumer Services	80.0	116.9	36.9	46%	80.0	133.8	53.8	67%
Education	29.6	42.8	13.3	45%	29.6	49.0	19.5	66%
Total	**164.5**	**251.5**	**87.0**	**53%**	**164.5**	**287.8**	**123.4**	75%
Total, Employment in Industry Clusters[c]	**366.0**	**539.7**	**173.7**	**47%**	**366.0**	**617.7**	**251.8**	**69%**
Total, All Jobs	**413.5**	**597.6**	**184.1**	**45%**	**413.5**	**731.8**	**318.3**	**77%**

[a] Projections shown are from CCSCE's "Alternative 3" projections (most aggressive projections).
[b] Note that this scenario assumes that the 2040 distribution of jobs by industry would be the same as in CCSCE's Alternative 3 projection.
[c] Excludes self-employment and government jobs.
Source: Center for the Continuing Study of the California Economy (CCSCE), 2015; Strategic Economics, 2015.

Figure A-2. Land Use Distribution Factors

Industry Cluster	Land Use Type										
	Retail (Large)[a]	Retail (Small)	Traditional Office	Creative/ High Tech Office	Traditional Industrial [b]	Light Manufacturing & Construction	High Tech R&D/ Manufacturing	R&D/Life Sciences	Hotel	Institutional/ Other	Total
Driving Industries											
High Tech Manufacturing							100%				100%
Miscellaneous Manufacturing					30%	50%	10%	10%			100%
Software/Information Services[c]	10%			70%			20%				100%
Technical Professional Services			60%	30%			10%				100%
Creative Professional Services				70%			20%	10%			100%
Visitor Services									40%	60%	100%
Business Support Industries											
Construction			10%			90%					100%
Business Services		10%	90%								100%
Financial Services			90%	10%							100%
Transportation/Distribution		10%	10%		80%						100%
Household Support Industries											
Civic/Utilities			15%		35%	35%				15%	100%
Healthcare		10%	40%							50%	100%
Retail and Consumer Services	50%	50%									100%
Education			10%							90%	100%

[a] Retail storefronts 25,000 square feet or larger.
[b] Warehouse, Distribution, Heavy Manufacturing.
[c] Note that this industry cluster includes movie theaters, which are assumed to occupy retail (large) space.
Source: Strategic Economics, 2015.

Figure A-3. Net New Employment by Industry Cluster and Land Use Type: Projection-Based Demand Scenario, 2013-2040 (in Thousands)

Industry Cluster	Land Use Type										
	Retail (Large)[a]	Retail (Small)	Traditional Office	Creative/ High Tech Office	Traditional Industrial [b]	Light Manufacturing & Construction	High Tech R&D/ Manufacturing	R&D/Life Sciences	Hotel	Institutional/ Other	Total
Driving Industries											
High Tech Manufacturing							-4.5				**-4.5**
Miscellaneous Manufacturing					0.4	0.6	0.1	0.1			**1.2**
Software/Information Services	1.0			7.2			2.1				**10.3**
Technical Professional Services			3.4	1.7			0.6				**5.7**
Creative Professional Services				12.3			3.5	1.8			**17.6**
Visitor Services									1.7	2.5	**4.2**
Total	1.0	0.0	3.4	21.2	0.4	0.6	1.8	1.9	1.7	2.5	**34.6**
Business Support Industries											
Construction			1.6			14.0					**15.5**
Business Services		2.5	22.4								**24.8**
Financial Services			5.0	0.6							**5.5**
Transportation/Distribution		0.6	0.6		5.0						**6.2**
Total	0.0	3.1	29.5	0.6	5.0	14.0	0.0	0.0	0.0	0.0	**52.1**
Household Support Industries											
Civic/Infrastructure			1.6		3.7	3.7				1.6	**10.5**
Healthcare		2.6	10.5							13.2	**26.3**
Retail and Consumer Services	18.5	18.5									**36.9**
Education			1.3							11.9	**13.3**
Total	18.5	21.1	13.4	0.0	3.7	3.7	0.0	0.0	0.0	26.7	**87.0**
Total	**19.5**	**24.2**	**46.4**	**21.8**	**9.0**	**18.3**	**1.8**	**1.9**	**1.7**	**29.2**	**173.7**

[a] Retail storefronts 25,000 square feet or larger.
[b] Warehouse, Distribution, Heavy Manufacturing.
[c] Note that this industry cluster includes movie theaters, which are assumed to occupy retail (large) space.
Source: CCSCE, 2015; Strategic Economics, 2015.

Step Two: Translate Employment into Demand for Buildings and Land

Figure A-4 shows the assumptions used to translate employment into demand for buildings and land. The methodology is described below.

- **Estimate total building space required to meet demand.** Total employment for each land use was multiplied by an average employment density (gross square feet per worker) to estimate the total building space required to meet demand. For example, at 300 square feet per worker, the 40,800 net new employees in industries that require traditional office require 12.2 million square feet of office space.
- **Estimate total land area.** Building space was divided by average floor area ratio (FAR) to estimate land area. Floor area ratio (FAR) is the ratio of a building's gross floor area to the land area on which it is built. For example, at an average FAR of 1.5, the 12.2 million square feet of traditional office space require 8.1 million square feet of land, or approximately 187 acres.

The employment density and FAR assumptions shown in Figure A-4 were developed in consultation with San Jose City staff, based on an analysis of recent development projects in the City of San Jose and neighboring Silicon Valley communities. **Figure A-5** shows estimated employment densities for selected employers. **Figure A-6** shows estimated floor area ratios for selected development projects.[42] The average and median values shown in Figures A-5 and A-6 were compared against industry standards in order to arrive at the employment density and FAR assumptions shown in Figure A-4.

Step Three: Estimate the Share of Job Growth Accommodated on Vacant Lands

Some demand for new employment space will be met through development on vacant employment lands; other demand will be met through the redevelopment or intensification of existing uses or though mixed-use development. Based on an analysis of recent development (including planned, under construction, and projects completed between 2009 and 2014), Strategic Economics estimated the percent of development that would occur on vacant land (**Figure A-7**). These factors were multiplied by total demand for each land use type to estimate demand for vacant employment land.

The demand estimate conservatively assumes that other types of development occur primarily on vacant employment lands.

Results

Figure A-8 summarizes the results of the employment lands demand analysis for the Projection-Based Jobs scenario. **Figure A-9** summarizes the results for the Recommended Planned Job Capacity Ratio scenario. For further discussion of the results, see Chapter V.

[42] Note that the City of San Jose typically includes structured parking in building area for the purposes of calculated floor area ratios. Structured parking was excluded from the FAR calculation for the purposes of this analysis for internal consistency within the model (i.e., because estimated building areas are based on employment only, and do not include parking).

Figure A-4. Building and Land Demand by Land Use Type: 2013-2040

Land Use	Net New Employees[a] #	Net New Employees[a] % of Total	Employment Density (Gross Sq. Ft. per Employee)	Building Area (1,000s of Sq. Ft.) #	Building Area (1,000s of Sq. Ft.) % of Total	Floor Area Ratio	Land Area (Acres) #	Land Area (Acres) % of Total	% Development on Vacant Emp. Land	Demand for Vacant Employment Land #	Demand for Vacant Employment Land % of Total
Retail	**63,226**	**25%**		**27,094**	**21%**		**2,073**	**36%**		**1,110**	**29%**
Retail (Large)	28,220	11%	650	18,343	14%	0.3	1,404	24%	60%	842	22%
Retail (Small)	35,007	14%	250	8,752	7%	0.3	670	12%	40%	268	7%
Office	**92,692**	**37%**		**24,241**	**19%**		**371**	**6%**		**186**	**5%**
Traditional Office	64,162	25%	300	19,249	15%	1.5	295	5%	50%	147	4%
Creative/High Tech Office	28,530	11%	175	4,993	4%	1.5	76	1%	50%	38	1%
Warehouse, Distribution, Manufacturing, & Construction	**40,186**	**16%**		**27,503**	**21%**		**1,862**	**32%**		**1,490**	**38%**
Traditional Industrial[b]	14,820	6%	1,000	14,820	11%	0.3	1,134	20%	80%	907	23%
Light Manufacturing & Construction	25,366	10%	500	12,683	10%	0.4	728	13%	80%	582	15%
R&D	**11,910**	**5%**		**3,971**	**3%**		**182**	**3%**		**128**	**3%**
High Tech R&D/Manufacturing	9,258	4%	300	2,777	2%	0.5	128	2%	70%	89	2%
R&D/Life Sciences	2,651	1%	450	1,193	1%	0.5	55	1%	70%	38	1%
Other	**43,768**	**17%**		**46,279**	**36%**		**1,242**	**22%**		**976**	**25%**
Hotel	2,511	1%	2,000	5,022	4%	2.0	58	1%	50%	29	1%
Institutional/Other	41,257	16%	1,000	41,257	32%	0.8	1,184	21%	80%	947	24%
Total Demand	**251,781**	**100%**		**129,088**	**100%**		**5,730**	**100%**		**3,889**	**100%**
Vacant Land Supply[c]							**3,978**				
Core							1,175				
Periphery							2,803				

[a] Alternative 3 employment projection.

[b] Warehouse, Distribution, and Heavy Manufacturing.

[c] Vacant land supply excludes parcels recently constructed or under construction projects on vacant lands.

Sources: CCSCE, 2015; Strategic Economics, 2015.

Figure A-5. Estimated Employment Densities for Selected Employers

Project Name	Location	Gross Sq. Ft per Employee
Retail (large)		
Best Buy	3090 Stevens Creek	649
Home Depot	1855 Hillsdale Ave	646
Orchard Supply Hardware	5651 Cottle Rd	760
Trader Joe's	635 Coleman Ave	543
Walgreens	350 N Capitol Ave	648
	Average	**649**
	Median	**648**
Retail (small)		
Applebee's	5632 Cottle	417
Chipotle	5670 Cottle Rd	240
Wells Fargo	2170 Tully Rd	149
	Average	**268**
	Median	**240**
Office (Traditional or Creative/High/Tech)		
Adobe	Downtown	166
PlayNext	Downtown	307
MapR	North San Jose	322
Facebook	Menlo Park	175
	Average	**243**
	Median	**241**
Warehouse, Distribution, Manufacturing, & Construction		
Anytime Welding, Inc.	645 Horning St	2,786
San Jose Mercury News	750 Ridder Park Dr	1,417
Grandesign Decor,Inc.	1727 N 1ST ST	1,735
	Average	**1,979**
	Median	**1,735**
High Tech R&D/Manufacturing		
Brocade	North San Jose	345
Qualcomm	North San Jose	258
Samsung (new HQ)	North San Jose	340
Supermicro	San Jose	251
Vander Bend Manufacturing	North San Jose	400
Western Digital	multiple	142
Tecan Systems	North San Jose	410
	Average	**307**
	Median	**340**
R&D/Life Sciences		
Genentech	South San Francisco	469
Protein Simple	North San Jose	500
Onyx Pharmaceutricals	South San Francisco	456
	Average	**475**
	Median	**469**

Project Name	Location	Gross Sq. Ft per Employee
Hotel		
Homewood Suites (extended stay)	North San Jose	2,304
Marriott Courtyard (full service)	North San Jose	2,250
Hyatt House (extended stay)	North San Jose	2,275
	Average	**2,276**
	Median	**2,275**
Institutional		
Valley Christian School Arts Conservatory	100 Skyway Dr	193
First United Methodist Church	24 N 5th St	2,213
Vocational Center	780 Commercial St	2,857
Green Waste Recovery	625 Charles St	213
	Average	**1,369**
	Median	**1,213**

Note: Total employment not shown to preserve confidentiality.
Source: Online research; California Economic Development Department, 2014; City of San Jose, 2015; Strategic Economics, 2015.

Figure A-6. Estimated Floor Area Ratio (FAR) for Selected Recent Development Projects

Project Name	Site Size (Acres)	Site Size (Sq. Ft.)	Building Sq. Ft.	Parking Sq. Ft.	FAR (excluding structured parking)
Retail (large)					
Wholefoods on The Alameda	2.19	95,396	33,000	0	0.35
Village Oaks (Hitachi)	24.89	1,084,208	308,000	0	0.28
CIC Retail @ First	8.93	388,991	72,772	0	0.19
Lincoln Office/Retail	2.18	94,961	58,401	60,758	0.62
				Average	***0.36***
				Median	***0.32***
Retail (small)					
7-11 Store	0.34	14,810	4,640	0	0.31
Saratoga/Kiely Retail	0.69	30,056	7,772	0	0.26
Silver Creek Center	0.65	28,314	14,632	0	0.52
				Average	***0.36***
				Median	***0.31***
Office (Traditional or Creative/High/Tech)					
Paloma Square	3.62	157,687	60,000	0	0.38
Heritage Park	0.43	18,731	17,300	0	0.92
Santana Row Office Building	1.01	43,996	76,000	37,169	1.73
Riverpark Towers II	0.65	28,314	309,800	0	10.94
Skyport Plaza	12.48	543,629	555,000	0	1.02
Samsung	9.4	409,464	680,000	575,000	1.66
Brocade (Phase I)	9.73	423,839	591,045	486,810	1.39
Peery Arrillaga	31.09	1,354,280	2,025,000	0	1.50
				Average	***2.44***
				Median	***1.44***

Project Name	Site Size (Acres)	Site Size (Sq. Ft.)	Building Sq. Ft.	Parking Sq. Ft.	FAR (excluding structured parking)
Warehouse, Distribution, Manufacturing, & Construction					
Zero Waste Facility	103.1	4,491,036	283,000	0	0.06
Safetrans	1.87	81,457	8,000	0	0.10
Will Wool Industrials	1.76	76,666	10,200	0	0.13
Green Waste Recovery	6.05	263,538	43,200	0	0.16
Berryessa Industrial Center	5.18	225,641	85,700	0	0.38
				Average	***0.17***
				Median	***0.13***
High Tech R&D/Manufacturing					
SuperMicro	9.22	401,623	182,000	0	0.45
Trammel Crow (Manufacturing Buildings)	35.57	1,549,429	563,760	0	0.36
Sillicon Valley Industrial Center	16.99	740,084	285,340	0	0.39
				Average	***0.40***
				Median	***0.39***
R&D/Life Sciences					
Trammel Crow (R&D and Office Buildings)	21.41	932,620	415,000	0	0.44
Celestica	19.98	870,329	256,500	0	0.29
				Average	***0.37***
				Median	***0.37***
Hotel					
AC Hotel	0.54	23,522	106,053	0	4.51
Hyatt House	0.87	37,897	116,628	0	3.08
Hyatt House/Hyatt Place	5.97	260,053	205,580	0	0.79
				Average	***2.79***
				Median	***3.08***
Institutional					
Samaritan Medical Center	5.4	235,224	190,750	243,675	0.81
Valley Christian School Arts Conservatory	1.51	65,776	50,111	0	0.76
First United Methodist Church	0.4	17,424	24,342	0	1.40
Chinmaya Mission	1.66	72,310	26,000	0	0.36
				Average	***0.83***
				Median	***0.79***

Sources: City of San Jose, 2015; Strategic Economics, 201

Figure A-7. Vacant Land Development Assumptions by Land Use Type

Land Use Type	Percent of Development Occurring on Vacant Employment Lands
Retail (Large) [a]	60%
Retail (Small)	40%
Traditional Office	50%
Creative/High Tech Office	50%
Traditional Industrial[b]	80%
Light Manufacturing	80%
Tech R&D/Manufacturing	70%
R&D/Life Sciences	70%
Hotel	50%
Institutional/Other	80%

[a] Retail storefronts 25,000 square feet or larger.
[b] Warehouse, Distribution, Heavy Manufacturing.
Source: Strategic Economics, 2015.

Figure A-8. Net New Demand for Employment Lands (Acres): Projection-Based Demand Scenario, 2013-2040

Land Use	Net New Demand (Acres) 2013-2025	2025-2040	2013-2040	Percent of Total 2013-2025	2025-2040	2013-2040
Retail	**482**	**285**	**767**	**27%**	**35%**	**29%**
Retail (Large)[a]	364	218	582	20%	27%	22%
Retail (Small)	117	68	185	7%	8%	7%
Office	**88**	**48**	**136**	**5%**	**6%**	**5%**
Traditional Office	70	36	106	4%	4%	4%
Creative/High Tech Office	17	12	29	1%	1%	1%
Warehouse, Distribution, Manufacturing, & Construction	**672**	**300**	**972**	**37%**	**37%**	**37%**
Traditional Industrial[b]	412	142	553	23%	18%	21%
Light Manufacturing & Construction	261	158	419	14%	20%	16%
R&D and High-Tech Manufacturing	**78**	**-33**	**44**	**4%**	**-4%**	**2%**
High Tech R&D/Manufacturing	63	-46	17	3%	-6%	1%
R&D/Life Sciences	15	12	27	1%	2%	1%
Other	**483**	**206**	**690**	**27%**	**26%**	**26%**
Hotel	9	11	19	0%	1%	1%
Institutional/Other	475	195	670	26%	24%	26%
Total Net Demand	**1,803**	**806**	**2,609**	**100%**	**100%**	**100%**

[a] Retail storefronts 25,000 square feet or larger.
[b] Warehouse, Distribution, Heavy Manufacturing.
Source: Strategic Economics, 2015.

Figure A-9. Net New Demand for Employment Lands (Acres): Recommended Planned Job Capacity Ratio, 2013-2040

Land Use	Net New Demand (Acres) 2013-2025	2025-2040	2013-2040	Percent of Total 2013-2025	2025-2040	2013-2040
Retail	**482**	**628**	**1,110**	**27%**	**30%**	**29%**
Retail (Large)[a]	364	478	842	20%	23%	22%
Retail (Small)	117	150	268	7%	7%	7%
Office	**88**	**98**	**186**	**5%**	**5%**	**5%**
Traditional Office	70	77	147	4%	4%	4%
Creative/High Tech Office	17	21	38	1%	1%	1%
Warehouse, Distribution, Manufacturing, & Construction	**672**	**817**	**1,490**	**37%**	**39%**	**38%**
Traditional Industrial[b]	412	496	907	23%	24%	23%
Light Manufacturing & Construction	261	322	582	14%	15%	15%
R&D and High-Tech Manufacturing	**78**	**50**	**128**	**4%**	**2%**	**3%**
High Tech R&D/Manufacturing	63	26	89	3%	1%	2%
R&D/Life Sciences	15	23	38	1%	1%	1%
Other	**483**	**492**	**976**	**27%**	**24%**	**25%**
Hotel	9	20	29	0%	1%	1%
Institutional/Other	475	472	947	26%	23%	24%
Total Net Demand	**1,803**	**2,086**	**3,889**	**100%**	**100%**	**100%**

[a] Retail storefronts 25,000 square feet or larger.
[b] Warehouse, Distribution, Heavy Manufacturing.
Source: Strategic Economics, 2015.

APPENDIX B. MAJOR DEVELOPMENT PROJECTS

The following list includes all of the development projects included in the analysis.

Figure B-1. Major Development Projects, 2009-February 2015

Name	Square Feet	Status	Market Subarea	Growth Area	Growth Area Name
Office/R&D					
101 Tech	666,000	Approved	Northern	Employment Area	Industrial Core Area
237 At First Street	615,000	Approved	Northern	Specific Plan Area	Alviso (Master Plan)
2890 N. 1st Street Office	42,000	Approved	Northern	Employment Area	Industrial Core Area
Brocade (Phase 1)	580,000	Completed	Northern	Employment Area	North San Jose
Brocade (Phase 2)	420,000	Completed	Northern	Employment Area	North San Jose
Coleman Highline Office	683,000	Approved	Northern	Employment Area	Santa Clara/Airport West (FMC)
First/Brokaw Campus	2,025,000	Pending	Northern	Employment Area	Industrial Core Area
Legacy on 101 Office	398,000	Approved	Northern	Employment Area	North San Jose
Midpoint at 237	1,120,000	Pending	Northern	Specific Plan Area	Alviso (Master Plan)
North First Campus	2,350,000	Approved	Northern	Employment Area	Industrial Core Area
North First Campus (Phase 1)	450,000	Approved	Northern	Employment Area	Industrial Core Area
Peery Arrillaga	2,025,000	Approved	Northern	Employment Area	Industrial Core Area
Samsung Semiconductor	680,000	Under Construction	Northern	Employment Area	North San Jose
SuperMicro	182,000	Under Construction	Northern	Employment Area	East Gish
Trammel Crow (R&D and Office Buildings)	415,000	Approved	Northern	Specific Plan Area	Alviso (Master Plan)
Equinix (Phase 1)	125,000	Completed	Southern	Employment Area	Old Edenvale
HGST Greak Oaks Campus	335,000	Approved	Southern	Employment Area	Old Edenvale
Hitachi Campus (Phase 1)	335,000	Approved	Southern	Employment Area	Old Edenvale
Village Oaks (Hitachi)	308,000	Completed	Southern	Urban Village	Blossom Hill Rd/Hitachi
Santana Row (Lot 11)	230,000	Under Construction	Western	Urban Village	Valley Fair/Santana Row
Total	**13,984,000**				
Retail					
Bellarmine (Life Center/Gym)	40,000	Completed	Central	Other Areas	
Orchard Supply Hardware	49,000	Completed	Central	Downtown	Downtown
Whole Foods Market	33,000	Completed	Central	Urban Village	Diridon Plan
The Plaza at Evergreen	200,000	Approved	Eastern	Urban Village	Arcadia/Eastridge
Villa Sport	88,000	Approved	Eastern	Urban Village	N. Capitol Av/Berryessa Rd
Berryessa Crossing Retail (North)	119,000	Approved	Northern	Urban Village	Berryessa BART

Name	Square Feet	Status	Market Subarea	Growth Area	Growth Area Name
Brandon Park Commercial	45,000	Under Construction	Northern	Employment Area	North San Jose
Brokaw Commons	102,000	Completed	Northern	Employment Area	North San Jose
Coleman Landings	245,000	Completed	Northern	Employment Area	Santa Clara/Airport West (FMC)
Pepper Lane Mixed Use	30,000	Approved	Northern	Other Areas	
The Verdant/Latitude Apts	25,000	Completed	Northern	Employment Area	North San Jose
Communications Hill (KB Home)	67,500	Approved	Southern	Specific Plan Area	Communications Hill
iStar Costco	148,000	Pending	Southern	Employment Area	Old Edenvale
Sun Garden Grocery	51,000	Completed	Southern	Employment Area	Monterey Business Corridor
Sun Garden Retail Center	206,000	Under Construction	Southern	Employment Area	Monterey Business Corridor
Almaden Ranch / Bass Pro	377,000	Under Construction	Western	Other Areas	
Foxworthy Retail	25,000	Completed	Western	Urban Village	Almaden Ex/Hillsdale Av
Fruitdale Station (Phase 2)	30,000	Under Construction	Western	Urban Village	Southwest Ex
Lincoln Office/Retail	41,000	Completed	Western	Other Areas	
Oakmont of San Jose	60,000	Approved	Western	Other Areas	
Valley Fair Shopping Center	525,000	Approved	Western	Urban Village	Valley Fair/Santana Row
Total	**2,506,500**				
Warehouse/Industrial					
A-1 Self Storage	84,000	Approved	Central	Other Areas	
Silicon Valley Industrial Center	243,000	Approved	Eastern	Employment Area	New Edenvale
Trammel Crow (Manufacture Buildings)	563,760	Approved	Northern	Specific Plan Area	Alviso (Master Plan)
Zero Waste Facility	283,000	Completed	Northern	Specific Plan Area	Alviso (Master Plan)
A-1 Self Storage	107,000	Under Construction	Southern	Employment Area	Senter Road
Public Storage	123,000	Pending	Southern	Other Areas	
Public Storage	115,000	Completed	Southern	Employment Area	Monterey Business Corridor
Total	**1,518,760**				
Hotel					
Hampton Inn	128,000	Under Construction	Central	Downtown	Downtown
Aloft Hotel	82,000	Under Construction	Northern	Specific Plan Area	Alviso (Master Plan)
Bay 101 Casino / Hotel	245,000	Pending	Northern	Employment Area	Industrial Core Area
Courtyard Marriott @ First	99,000	Completed	Northern	Employment Area	North San Jose
Hampton Inn/Holiday Inn	173,000	Pending	Northern	Employment Area	Industrial Core Area
Homewood Suites Hotel	106,000	Approved	Northern	Specific Plan Area	Alviso (Master Plan)
Hyatt House	116,000	Completed	Northern	Employment Area	North San Jose
Hyatt House/Hyatt Place	206,000	Approved	Northern	Employment Area	Industrial Core Area

Name	Square Feet	Status	Market Subarea	Growth Area	Growth Area Name
M8trix Casino/Hotel (Phase 1)	89,000	Completed	Northern	Urban Village	Rincon South 1
Residence Inn/SpringHill Suites	216,000	Under Construction	Northern	Other Areas	
Skyport Plaza Hotel/Office	350,000	Pending	Northern	Urban Village	Rincon South 2
Total	**1,810,000**				
Other					
Bellarmine (Academic Building)	55,000	Completed	Central	Other Areas	
First United Methodist Church	24,000	Completed	Central	Downtown	Downtown
Chinmaya Mission	26,000	Completed	Eastern	Other Areas	
SBIA Evergreen Center/Mosque	28,000	Completed	Eastern	Other Areas	
Earthquakes Soccer Stadium	219,000	Completed	Northern	Employment Area	Santa Clara/Airport West (FMC)
Kaiser Permanente	558,000	Approved	Northern	Other Areas	
Regional Medical Center (Phase 2A)	161,000	Under Construction	Northern	Other Areas	
San Jose Airport Terminals	278,500	Under Construction	Northern	Other Areas	
Samaritan Court Medical Office	69,000	Pending	Southern	Other Areas	
Samaritan Medical Center	75,000	Completed	Southern	Other Areas	
Valley Christian Schools	50,000	Completed	Southern	Other Areas	
Total	**1,543,500**				

Source: City of San Jose, 2015.