APPENDIX A

Background Conditions Report

VTA'S BART PHASE II TOD CORRIDOR STRATEGIES AND ACCESS PLANNING STUDY

BACKGROUND CONDITIONS REPORT

March 12, 2019

Acknowledgments

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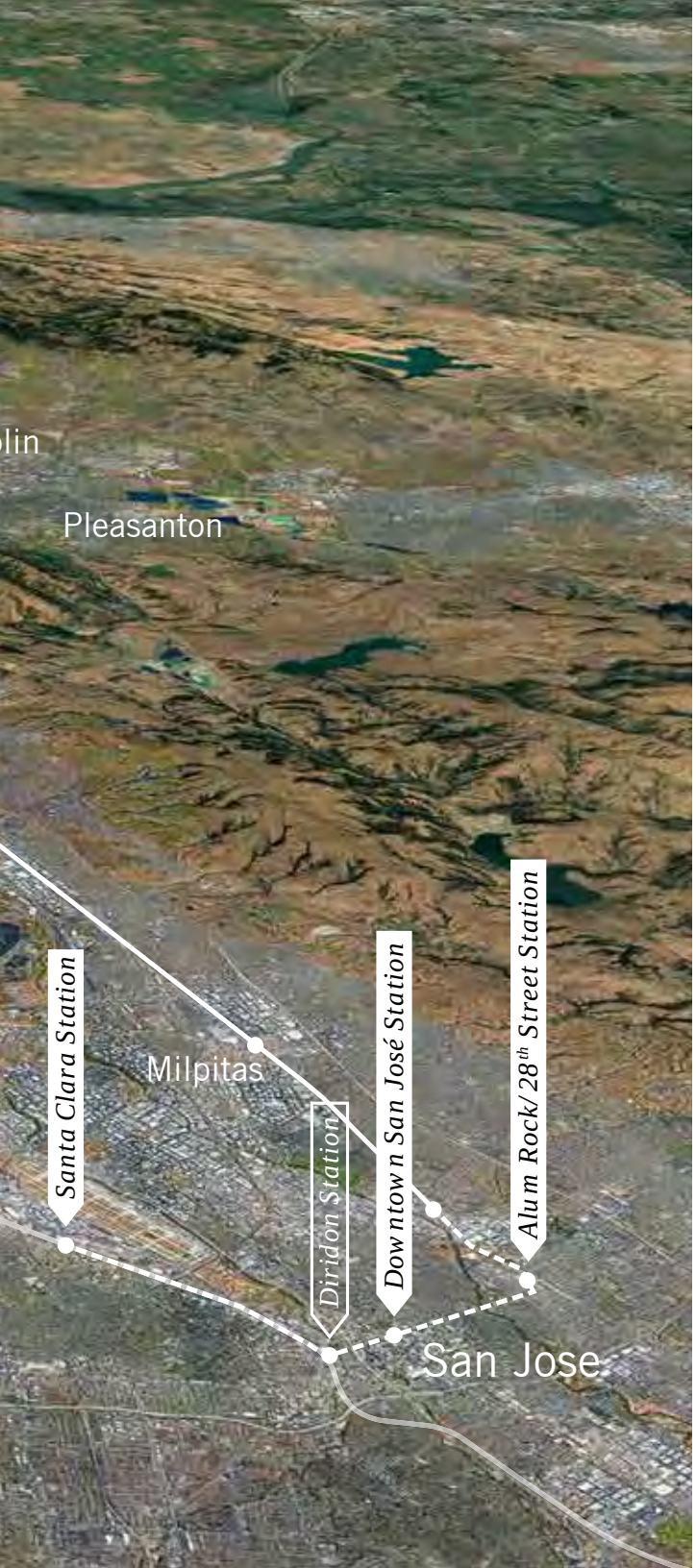
Table of Contents


Richmond
Berkeley
Concord
Pittsburg
Walnut Creek
San Francisco
Oakland
Alameda
Daly City
San Leandro
Dub
South San Francisco
Hayward
Millbrae
San Mateo
Union City
Fremont
Redwood City
Palo Alto
Mountain View
Santa Clara
Cupertino



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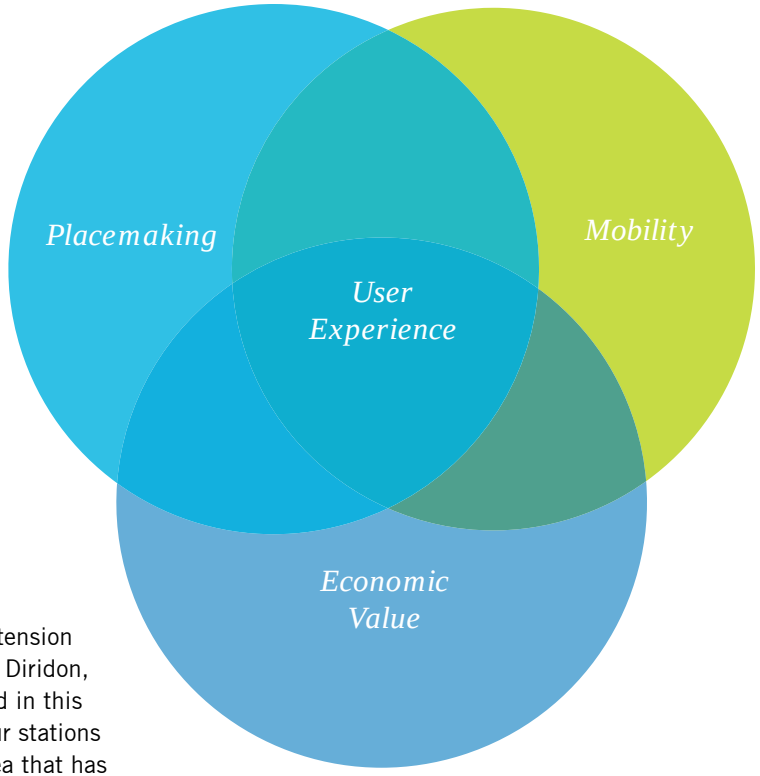
INTRODUCTION

1.1 Background



The Santa Clara Valley Transportation Authority (VTA) is an independent district responsible for bus and light rail operations, congestion management, specific highway improvement projects and countywide transportation planning for Santa Clara County. VTA is delivering a 16-mile extension to the Bay Area Rapid Transit (BART) system into Santa Clara County, known as the VTA/BART Silicon Valley Extension Project.

Phase I of the extension adds two BART stations at Milpitas and Berryessa, which are under construction and undergoing track testing. Phase II will extend the BART system south and west from Berryessa/North San José Station for 6 miles below ground through San José and ending at-grade in Santa Clara adjacent to the Caltrain Station. The four Stations within the Phase II Extension are Alum Rock/28th Street, Downtown San José, Diridon, and Santa Clara (although Diridon is not included in this study). Phase II is unique in that three of the four stations will be underground with station access in an area that has been urban for over a century. These new stations present a strategic opportunity to coordinate urban design along the BART Phase II corridor and to develop walkable station areas with extensive new Transit Oriented Development (TOD) and multi-modal accessibility.

VTA has initiated a corridor-wide study of strategies to maximize potential for TOD throughout the BART Phase II corridor and station areas, with the goal of minimizing ridership.


Santa Clara Station
Diridon Station
Downtown San José Station
28th Street Station
SANTA CLARA
SAN JOSÉ
earth

1.2 Study Overview and Schedule

This study lays the groundwork for sustainable development and redevelopment with three objectives:

- Increasing transit ridership
- Encouraging economic development
- Promoting a dynamic mixed-use, mixed income TOD environment at station areas

Subsequent phases of this study will identify and evaluate opportunities, formulate strategies (including funding) and provide a comprehensive road map and recommendations for TOD to benefit VTA, the cities of San José and Santa Clara, and local neighborhoods.

Stations included in this study are Alum Rock/28th Street, San José Downtown and Santa Clara. Diridon Station is the subject of a separate planning effort between VTA, the City of San José and High Speed Rail of Caltrain.

Through a competitive procurement process, VTA selected the Perkins+Will (P+W) multi-disciplinary consultant team to prepare the TOD Access Strategy Study. The work includes:

1. Reviewing and analyzing various existing and pending visioning, planning and policy documents and describing existing 'background' conditions (this report)
2. Completing an opportunities and constraints analysis for the station areas and the corridor
3. Creating a consistent system-wide integrated approach to urban design that addresses the specific needs of individual station areas

This Background Conditions Report is the first phase of an approximately 17-month study. Major efforts of the project are as follows:

Task 1: January 2018 to May 2019
Project Initiation, coordination, community and stakeholder engagement

Task 2: January 2018 to May 2018
Background Conditions

Task 3: April 2018 to September 2018
TOD Corridor Opportunities and Constraints

Task 4: October 2018 to March 2019
TOD Schematics and Implementation Strategies

Task 5: April 2019 to May 2019
Final Report

Project team kick-off

Community Working Group meeting

1.3 Report Overview and Organization

OVERVIEW

This Background Conditions Report is the first phase of the Phase II TOD Corridor Strategy and Access Planning Study and as such describes the work performed by the consultant team in addressing item 1 of the study overview described on the previous page. It will become the foundation for developing the opportunities and constraints analysis and system-wide integrated TOD strategy.

Data in this report is based on existing sources of material and other background work made available to the consultant team by VTA and the cities of San José and Santa Clara as well as agency and county. Photographs and commentaries on existing physical conditions are based on numerous visits to the study areas by various members of the consultant team, including a formal 'kick-off tour' with VTA and City staff in January 2018.

ORGANIZATION

Section 1: Introduction
Section 1 provides an overview of the report including a summary of the background to the study, the schedule, project goals and objectives, and an outline of the organization of the report.

Section 2: Planning and Physical Context
Section 2 provides a summary of the physical context, land use, built form, open spaces, public services and amenities, site characteristics, known planned developments, and opportunity sites.

Section 3: Policy Context
Section 3 provides a summary of relevant local and regional policies, plans and studies, growth projections, planned development activity, and an overview of the attributes of good TOD.

Section 4: Affordable Housing
Section 4 discusses existing affordable housing stock, policies and strategies.

Section 5: Opportunity Sites
Section 5 introduces the physical limitation to potential development due to known constraints within the study area.

Section 6: Infrastructure
Section 6 provides a summary of the existing utilities and infrastructure within the study area and a commentary on their potential capacity to accommodate future growth.

Section 7: Transportation Demand Management
Section 7 provides a summary of existing transportation demand management (TDM) policies which are applicable to the station areas.

Section 8: Parking
Section 8 provides an overview of existing parking supply and demand.

Appendix
Three appendices provide station area profiles for each of the three station areas. These documents were prepared by Kimley-Horn and are included here for reference.

1.4 Project Goals and Objectives

Attractive, vibrant, affordable, diverse, and economically thriving transit-oriented communities are a foundation for a sustainable urban region. These communities are needed to support both the job and housing growth required to sustain the economic success of Silicon Valley. Each plays an essential role in addressing the area's affordable housing crisis.

In response to the housing crisis, the cities of San José and Santa Clara have made sweeping policy changes and continue to introduce new initiatives to evolve a more livable transit, bike, and pedestrian-oriented pattern of development that prioritizes affordable housing. These new urban centers can accommodate the region's rapid growth while benefitting and protecting existing suburban neighborhoods.

The VTA'S BART Phase II TOD Corridor Strategy and Access Planning Study (TOD/Access Study) will support and provide tools for implementing local community visions for station development and TOD. The City of San José's General Plan Vision for its urban villages and Downtown focuses on TOD as a means to create lively, walkable neighborhoods and complete streets. Recent urban village plans for Five Wounds and East Santa Clara Street, specifically encourage TOD and related street and public space improvements, in conjunction with construction of the Alum Rock/28th and Downtown stations. Similarly, the City of Santa Clara's BART Station Area Plan encourages TOD.

The TOD/Access Study will build on these and other existing plans to advance land use, density, and building form for TOD and station access-related capital improvements.

KEY GOALS

The Study will emphasize strategies for sustainable transit-oriented development with these key goals:

- Provide for an accessible and seamless multi-modal transportation environment that connects surrounding neighborhoods to the new BART stations
- Promote growth in and around station areas that provide a diversity of jobs, a mix of housing types including affordable housing, and measures to reduce displacement
- Improve quality of life by emphasizing investment in urban place-making infrastructure and opportunities that bring local communities together, and provide a range of benefits to existing residents and businesses

KEY OBJECTIVES

The work for the TOD/Access Study recognizes that each of three BART station areas have unique characteristics:

- The Santa Clara station is located between an international airport, light industrial development, a downtown district, and Santa Clara University, and is adjacent to prominent new mixed-use offices, residential, and entertainment
- The Downtown San José station is on a major street in the Central Business District which is already experiencing extensive investment and transformation
- The 28th Streetstation is in a light industrial area, next to a vital community and cultural center, surrounded by residential neighborhoods, and directly adjacent to US Highway 101

Recommendations and strategies for each station area and the connecting corridors will reflect its specific needs and opportunities. Well-designed TOD helps organize a mix of uses and densities tailored to the particular area and helps both complement and enhance the surrounding communities.

STUDY OUTCOMES

The TOD/Access Study will help ensure a comprehensive approach to TOD that supports local planning and project development in a way that complements each station area and connecting TOD corridors. Consistent with existing City of San José and City of Santa Clara policies, the Study will include:

- Station access plans that enhance access to and from existing neighborhoods, with connectivity improvements in station areas that knit local communities together
- A policy framework to guide future transit-oriented development and use it to improve existing neighborhoods for the benefit of current and future residents and businesses
- An economically feasible and financeable implementation strategy plan to establish and facilitate transit-oriented development and the public investment needed to catalyze good TOD and local capital improvements

1.5 TOD Best Practices

The following documents were reviewed to help understand best practices which have been applied to TOD developments elsewhere within the Bay Area and other National programs. A brief summary of each report is included below, followed by a commentary on how these best practices can relate to VTA'S BART Phase II Corridor and stations.

- BART TOD Policy and TOD Guidelines (2017)
- BART Performance Targets (2016)
- Los Angeles Metro Transit Supportive Planning Toolkit (online)
- Creating Successful Transit Oriented Districts in Los Angeles (2010)
- Denver RTD Best Practices (2015) and Fastracks Lessons Learned (2010)
- Seattle Sound Transit TOD Strategic Plan (2011) supplemented by 2014 and 2018 updates for Adopting an Equitable TOD Policy

BART TOD POLICY

Goals:

1. Create Complete Streets: partner with local jurisdictions to ensure BART contributes to neighborhood/district vitality, creating places offering a mix of uses and incomes
2. Sustainable Communities Strategy: lead in the delivery of the region's land use and transportation vision to achieve quality of life, economic and greenhouse gas reduction goals
3. Ridership: increase BART ridership, particularly in location and times when the system has capacity to grow
4. Value Creation and Value Capture: enhance the stability of BART's financial base by capturing the value of transit and reinvesting in the program to maximize TOD goals
5. Transportation Choice: leverage land use and urban design to encourage non-auto transportation choices both on and off BART property, through enhanced walkability, bikeability and seamless transit connectivity
6. Affordability: serve households of all income levels by linking housing affordability with access to opportunity. BART considers this to include the opportunity for transit connections, quality schools, daily needs such as fresh food and middle income jobs

Transit Supportive Land Use Regulations

BART's performance metrics are currently some of the most aggressive in the USA. For BART stations and the surrounding areas BART encourages local governments to adopt transit supportive land use regulations that:

- Enable a minimum net density of 75 units/acre
- Minimum building heights; 12 stories in Regional Centers, 7 stories in Urban Neighborhood/City Centers and5 stories in Neighborhood/Town Centers
- Include no minimum parking requirement
- Help BART achieve its portfolio wide target of 0.9 spaces /residential unit and 1.6 spaces /1000 sq. ft. of office
- Encourage parking management & unbundling
- Support affordable housing
- Assure walkable streets and active transportation improvements
- Encourage a mix of uses that reduce the need to drive

Furthermore, the TOD guidelines establish a strategy for BART only soliciting TOD in areas with locally adopted TOD plans which are consistent with BART's policies and aim for ultimate replacement of surface transit parking with TOD at many of the existing stations.

BART TOD PERFORMANCE TARGETS

While BART has TOD performance targets related to each of the policy areas listed above, the following are targets for 2025 related to density:

- Minimum of 75 DU/acre on BART property
- Maximum 0.9 parking spaces/residential unit (average across all BART development)
- Maximum of 1.6 parking spaces per 1,000 f office/ retail (average across all BART development)

LOS ANGELES METRO TRANSIT SUPPORTIVE PLANNING TOOLKIT

Best Practice Characteristics

1. Compact Design
   - Higher density within ¼ or ½ mile of transit
   - More opportunity to live in close proximity to transit and more mobility choices
   - Reduced travel distances for daily activities when combined with mixed-uses and decreased reliance on vehicles
2. Complete Neighborhoods
   - Safe and convenient access to goods and services
   - Variety of housing options, retail and commercial services, community services
   - Land uses and amenities that are close together, reduce travel times and allow for non-auto trips
   - Within ½ mile of rail, ¼ mile of major bus routes
3. Street Network and Connectivity
   - Bring destinations closer together, reduce travel times, improve pedestrian/bicycle access
   - Measured by intersections per sq. mi, proportion of 4-way stops, percentage of cul-de-sacs, path directness, road density, etc.
4. Site Layout, Parking Layout, and Building Design
   - Locate buildings along edge of streets and public spaces to create walkable environments
   - Buildings should not be located behind parking lots; this isolate pedestrians, requires them to walk further, exposes them to more auto traffic
   - Curb cuts, driveways, service entrances and loading areas disrupt pedestrian access
5. Affordable Housing
   - Affordable housing near transit improves access to employment, healthcare and education
   - Reduced commuting cost for low-income families
   - Housing is affordable when it costs no more than 30% of the monthly household income
   - Transit can increase property values which in turn creates need to preserve affordable housing
   - Low-income residents have lowest rates of car ownership and highest rates of transit ridership
6. Commercial Stabilization, Business Retention and Expansion
   - Increased property values put pressure on existing businesses
   - Need to protect existing small businesses that serve the needs of the neighborhood
   - These businesses benefit from increased pedestrian and transit access
   - These businesses provide goods and services needed by transit riders and reduce need for auto trips
7. Transit Prioritization, Accessibility, and Area Design
   - Ridership improvements through better travel times, speeds and increased service.
   - 'Transit-first' policies that support sustainable transportation
   - Improved station and stop design to increase comfort, convenience and attractiveness of transit
   - Provide amenities and services that create a clean and safe environment
8. Parking Management
   - Affects relative supply, price and regulation of parking facilities within an area
   - Can reduce parking demand, allowing increase in intensity and mix of uses
   - Reduces vehicle ownership and use
9. Transportation Demand Management
   - Encourage greater transportation system efficiency
   - Reduce road and parking congestion and pollution
   - Increase transit ridership and more efficient land uses
10. Pedestrian and Bicycle Circulation
    - Pedestrian and bicycle amenities at transit stations can create a more accessible transit environment and encourage new riders

CREATING SUCCESSFUL TRANSIT ORIENTED DISTRICTS IN LOS ANGELES

Goals:

1. Make housing and transportation affordable
2. Reduce auto-dependence and enhance transit ridership
3. Promote equitable access to transit
4. Support economic development

DENVER RTD BEST PRACTICES

Goal:
TOD Pilot Program; Implement TOD on a small scale to identify the ideal role for RTD in development projects before undertaking a more ambitious TOD program

Best Practice;

1. Develop a strategic plan incorporating the six Federal livability goals that the Department of Transportation (DOT), Department of Housing and Urban Development (HUD) and the Environmental Protection Agency (EPA) announced in 2009;
   - Provide more transportation choices
   - Promote equitable, more affordable housing
   - Enhance economic competitiveness
   - Support existing communities
   - Coordinate and leverage Federal policies
   - Value communities and neighborhoods
2. Identify four projects, chosen with an eye toward their potential for success, supportive partnership opportunities and local municipal support
3. Using property ownership as a key negotiating tool; retain ownership of land until a developer has agreed to a plan that aligns with TOD principles
4. Identify champions within RTD and partner internal point people with point people at the developer, municipality or other interested organizations

DENVER RTD FASTRACKS TOD LESSONS LEARNED

1. TOD Policy/Guidance
   - Policy alone is not enough to facilitate TOD. Leadership and implementation resources are also critical
   - National best practices are evolving rapidly. Recent changes to the FTA New Starts rating process will place greater emphasis on creating linkages between land use and transportation and the importance of encouraging TOD as a sustainable transit solution
   - Policies need to be more visible internally and externally. Successful implementation is dependent on their wide acceptance into everyday practice
2. TOD Outreach and Coordination
   - Partner organizations fulfil an important role in TOD education and outreach by raising the profile, expanding the TOD dialogue and generating citizen interest and participation
   - Internal outreach and external communication must be consistent in understanding the agency's role and its vision for TOD
   - An internal Transit Access Committee is important part of the joint development review process and is the primary group for coordinating with external parties
   - Annual status reports offer the potential to conduct an in-depth analysis of regional development trends
3. TOD Planning
   - Station Area Planning is a critical first step
   - Adoption of transit-supportive rezoning will ensure that development maximizes its proximity to transit and incorporates the station into the development
   - A corridor-level perspective allows the agency, jurisdiction and region to evaluate how stations will relate to each other by highlighting potential overlap in market competition, overall typology and functionality of the corridor and opportunities to benefit from the unique characteristics of each station
   - There is more TOD planned than the market can absorb and not every station can be expected to have short-term success. Agencies should work with jurisdictions to align plans, leadership and resources to guide where best to focus attention
4. TOD Implementation
   - TOD can create policy dilemmas. Jurisdictions and developers see TOD as a city building and development strategy. Transit agencies may see TOD as secondary to their transit mission, a revenue source or even a conflict with transit operations
   - The implementation of TOD spans a long gestation period. Consideration must start early and be carried through all phases of the project
   - Effective TOD strategies must consider the 5 to 10 minute walkable area around the station, requiring extensive coordination with other landowners

- Commuter parking is a policy dilemma. Transit agencies see parking as a primary ridership generator, but parking creates an automobile-oriented environment near the station whereas TOD theory would place pedestrian activity and transit-supportive development. Replacing commuter parking 1:1 in TOD can make the development financially infeasible
- Leadership and guidance is required to understand innovative funding strategies
- Jurisdictions must be responsible for ensuring that station areas are attractive for investment through implementation of necessary infrastructure improvements. Flexible Federal funding sources are available to help with these types of improvements

SEATTLE SOUND TRANSIT TOD STRATEGIC PLAN

Goals:

1. Increase the value and effectiveness of transit by increasing transit ridership
2. Support implementation of state, regional and local growth plans, policies and strategies
3. Foster relationships with local jurisdictions, regional agencies, private developers, local residents, businesses, community groups and other stakeholders to facilitate TOD
4. Encourage convenient, safe, multi-modal access to the transit system, with an emphasis on non-motorized access
5. Support economic development efforts
6. Encourage creation of housing options including market-rate and affordable units
7. Support implementation of other related Sound Transit plans and policies, with an emphasis on the agency's sustainability plan
8. Protect and enhance Sound Transit assets and investments

SEATTLE SOUND TRANSIT 2014 AND 2018 UPDATES FOR ADOPTING AN EQUITABLE TOD POLICY

These updates reflect new State laws and voter-approved transit funding measure ST3 to expand the TOD program and raise it to an Agency priority.

The ST3 system plan addresses TOD at a number of levels:

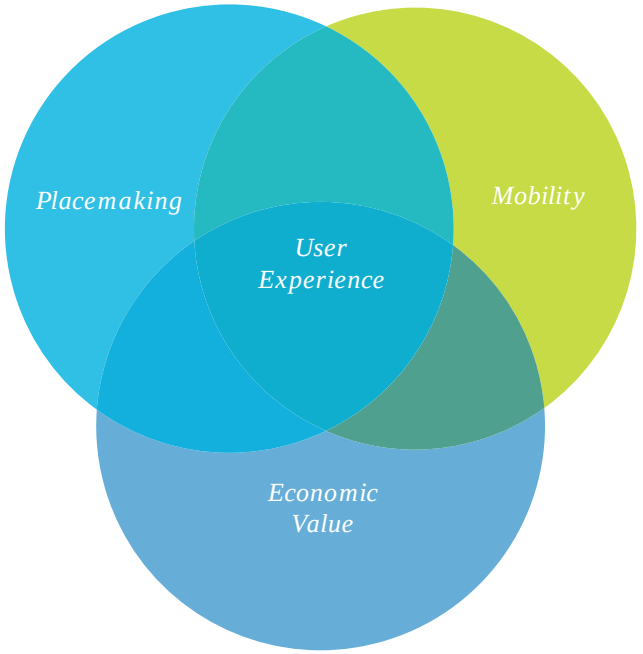
- $20m TOD fund. The Sound Transit 3 Plan includes a TOD fund of $20 million (in 2014 dollars) to incorporate TOD considerations during land acquisition to ensure that, where possible, property that may later become surplus is supportive of its reuse for TOD.
- TOD considered in land acquisition. Incorporating TOD objectives adopted by the Sound Transit Board as part of the selection criteria during land acquisition to ensure that, where possible, property that is necessary to construct or operate the transit facility, but that may later become surplus, is supportive of its reuse for TOD. In other words, Sound Transit may not acquire land specifically for TOD but can use land originally acquired for a transit purpose for TOD.
- Funding TOD activities in capital projects to ensure adequate consideration and planning for development have occurred as a part of capital projects. For example, Sound Transit is creating corridor teams and an Office of Land Use and Urban Design to better incorporate TOD into capital projects.
- Updating policies to require TOD potential and opportunities to be analyzed and incorporated, consistent with law and grant requirements throughout the planning and design process, including the 2018 update to reflect the ST3 mandate.
- Developing station design policies that appropriately facilitate and accommodate TOD on and adjacent to agency-owned properties. This includes planning for station areas designed to evolve over time as the communities.
- 80/80/80 Affordable Housing Mandate in the ST3 legislation obliges Sound Transit to first offer for sale of at least 80% of all surplus land to housing authorities, nonprofit developers and local governments for the development of affordable housing; with at least 80% of the homes being affordable for households earning less than 80% of the county's area median income.

BEST TOD PRACTICES FOR VTA'S BART PHASE II CORRIDOR

The development of successful TOD in VTA's BART Phase II Corridor can be organized around the following four principles of Good TOD:

1. Placemaking - Respond to the existing context
   - Support a diverse and balanced community
   - Establish an engaging and vibrant public realm while protecting renters from displacement
   - Promote more compact and walkable urban environment
2. Mobility - Transit as a gateway to the city
   - Provide access to and from multiple modes of transportation
   - Provide ease of connectivity to, from, and through the TOD
   - Ensure parking is right-sized and appropriately managed on a district scale
3. Economic Value - Transit as an economic catalyst
   - Enable access to and from jobs and other economic opportunities
   - Provide a range of housing options
   - Support existing and cherished neighborhoods
4. User experience - Programming and identity
   - Showcase the culture and identity of local communities
   - Enable a diverse mix of uses and engaging activities
   - Ensure a clear and legible urban environment, particularly for transit users

The following is a summary of best practices and an assessment of relevant policies for each of the four principles, based on best practices from the above referenced national studies and exposure to other transit projects nationally and internationally.



San Pedro Square Market. Photo Credit: SPUR, Sergio Ruiz

San Pedro Square Market. Photo Credit: SPUR, Sergio Ruiz

Placemaking

- Jobs and Housing Balance: ensure a jobs and housing balance that supports vibrant and diverse communities
- Diverse Housing Types: provide a diversity of housing types near transit and ensure investment in existing neighborhoods to build complete, mixed-income communities
- Balanced Mix of Uses: enable a rich mix of uses, services and amenities that supports an active public realm
- Anchor Destinations: provide employment, education, cultural and entertainment opportunities
- Walkable Blocks: promote small blocks for a more compact and walkable development
- Active Ground Floor: locate activities on the ground floor that lend interest and character to the public realm
- Engaging Public Spaces: provide public spaces that offer respite, recreation and support a variety of activities

Mobility

- Transportation Options: provide access to multiple transportation options - walking, biking, public transit, shared mobility and private vehicles
- Complete Streets: enable multiple transportation options within the street right of way
- Curb Management: prioritize efficient pick-up and drop-off along curbs to better serve shared mobility services and private shuttles
- Strategies for Right-Sizing Parking:
  - Typical Minimum Requirements: supply meets average demand, not peak demand; hide all parking costs
  - 'Tailored' Minimum Requirements: share parking between uses; adjust zoning requirements
  - Abolish Minimum Requirements: let the market decide total supply; unbundle parking cost from rent/lease; district-wide approach to parking management
  - Set Maximum Requirements: limit parking to road capacity; unbundle parking from individual buildings on a district-wide scale

San Pedro Square Market. Photo Credit: SPUR, Sergio Ruiz

San Pedro Square Market. Photo Credit: SPUR, Sergio Ruiz

Economic Value

- Economic Competitiveness: TOD helps communities absorb new jobs with less new traffic and parking demand
- Thriving Local Economy: walkable, transit-oriented neighborhoods can help support local retail and services, restaurants and other businesses
- Access to Opportunity: TOD helps workers access jobs and educational opportunities, while spending less money on transportation
- Addressing the Regional Housing Crisis: meet the strong demand for townhomes and multifamily housing located close to transit
- Affordable Housing: construction of market-rate and affordable housing near transit helps meet local and regional housing needs
- Stabilizing Existing Communities: good TOD requires policies to ensure that low- and moderate-income residents can benefit from improved transit access:
  - Expand supply of affordable housing
  - Protect vulnerable residents
  - Preserve existing affordable housing
- Leverage the Value of TOD: good TOD creates value that can be leveraged to support affordable housing and other neighborhood investments

User Experience

- Sense of Arrival and Wayfinding: provide a clear sense of arrival and an intuitive wayfinding to access all modes of transportation
- Eyes on the Street: create an active public realm and clear sight lines to help provide a safe environment
- Cultural Gatherings: provide space for activities that support social interaction
- Art and Identity: encourage cultural expression and local identity

Downtown San José Photo Credit: SPUR, Sergio Ruiz

2

PLANNING + PHYSICAL CONTEXT

2.1 Land Use

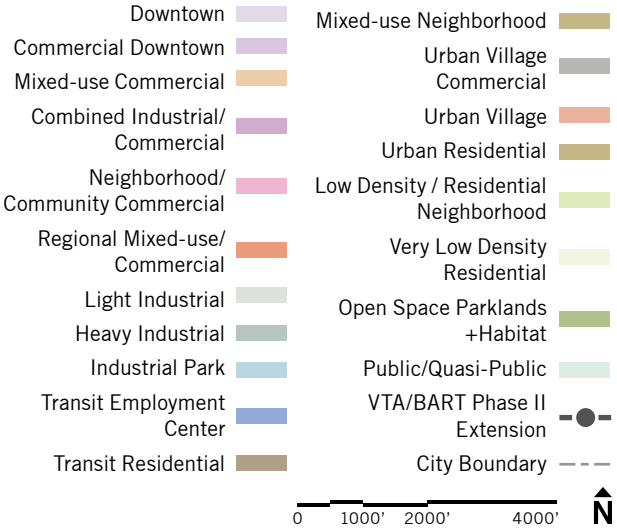
The basis for the planned land use designations for Santa Clara and San José is set forth in each jurisdiction's respective General Plan. Both plans link land uses and transportation planning through identification of focus areas of growth and development that decrease dependence on autos, reduce vehicle miles traveled, and prioritize transit infrastructure.

Generally, the three stations are situated near mixed-use cores and are surrounded by single family home neighborhoods or industrial areas.

Station area planning considerations should balance these uses in accordance with stated land use goals.

Corridor

Between Santa Clara Station and Diridon/Downtown San José Stations, VTA's BART Phase II corridor will run through industrial areas, a transit residential and employment center and San José's Downtown. San José's Downtown supports both employment and housing uses.Between Downtown San José Station and 28th StreetStation, the corridor will run almost exclusively through a series of mixed use Urban Villages. As the corridor extends north towards Berryessa/North San José Station, it will run through industrial areas.



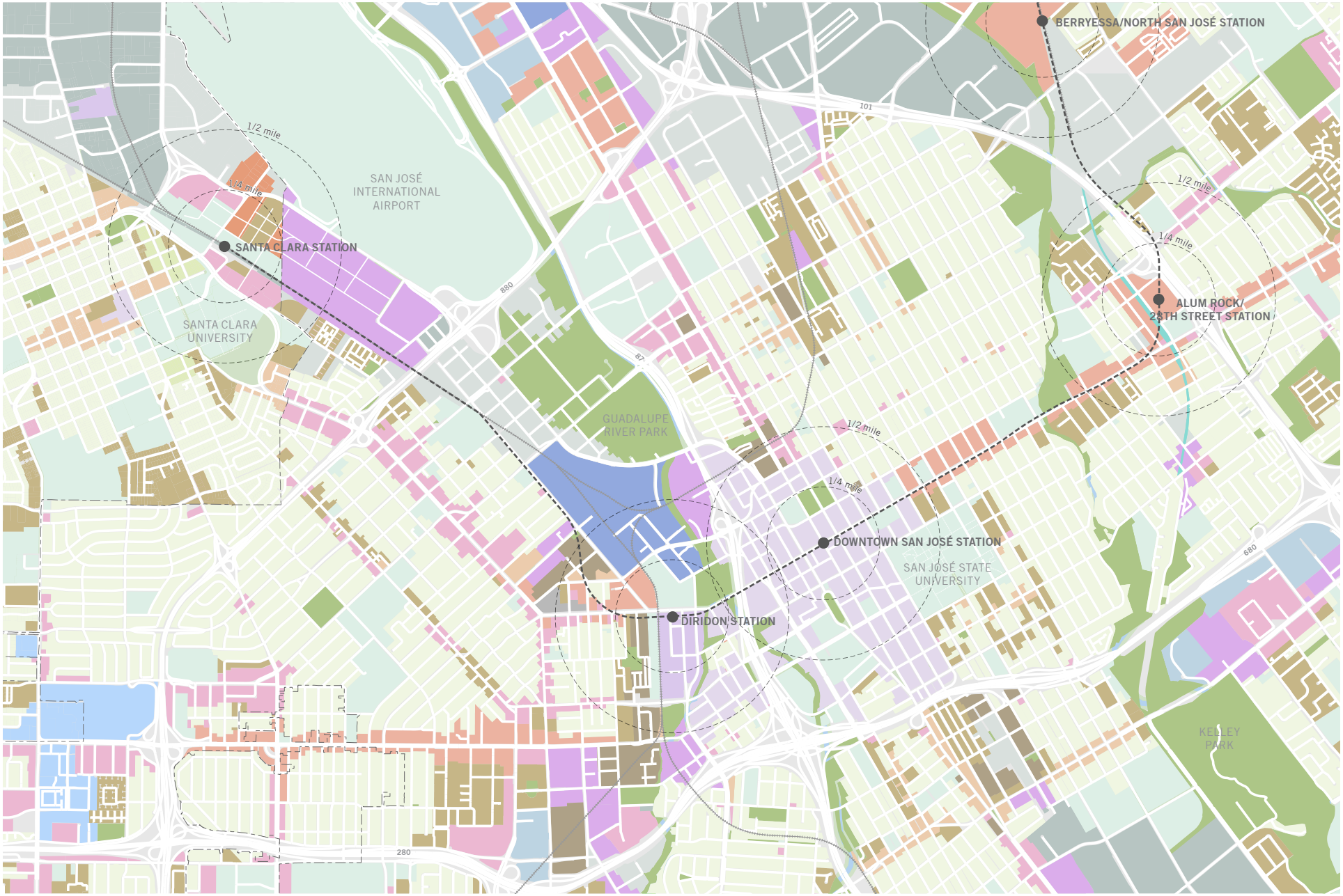
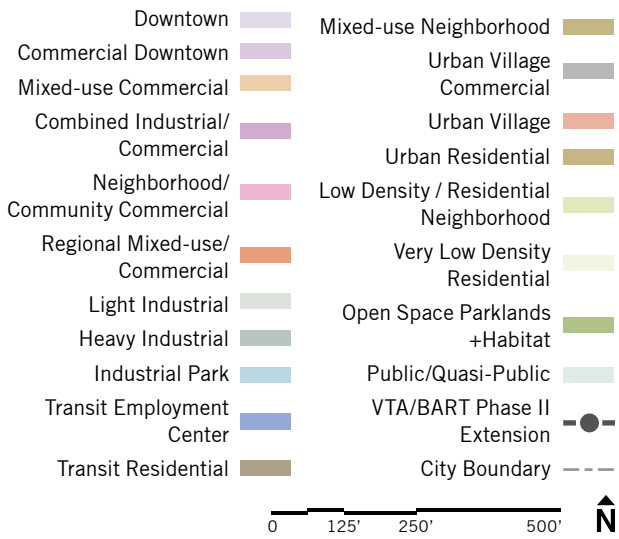


FIGURE 2.1.1 VTA'S BART Phase II Corridor Planned Land Use
Sources: Envision San José 2040 General Plan, 2011; City of Santa Clara 2010-2035 General Plan, 2010

Santa Clara Station

The Santa Clara Station Area is dominated by industrial operations, low-intensity development, underutilized land, and vacant parcels. The area is located in proximity to major transportation corridors and hubs, including the existing Santa Clara Transit Center and historic depot, Interstate 880, U.S. 101, State Route 82, the Normal Y. Mineta San José International Airport, freight and commuter rail corridors, and VTA rail and bus routes. The San José International Airport borders to the east and predominantly industrial uses border to the north. To the west, Santa Clara University, the Old Quad neighborhood, and historic Downtown Santa Clara are in close proximity.

Planned development of the station area includes regional and commercial mixed-uses near the station, capitalizing on regional transit. This includes an emphasis on office, hotel, and residential uses.



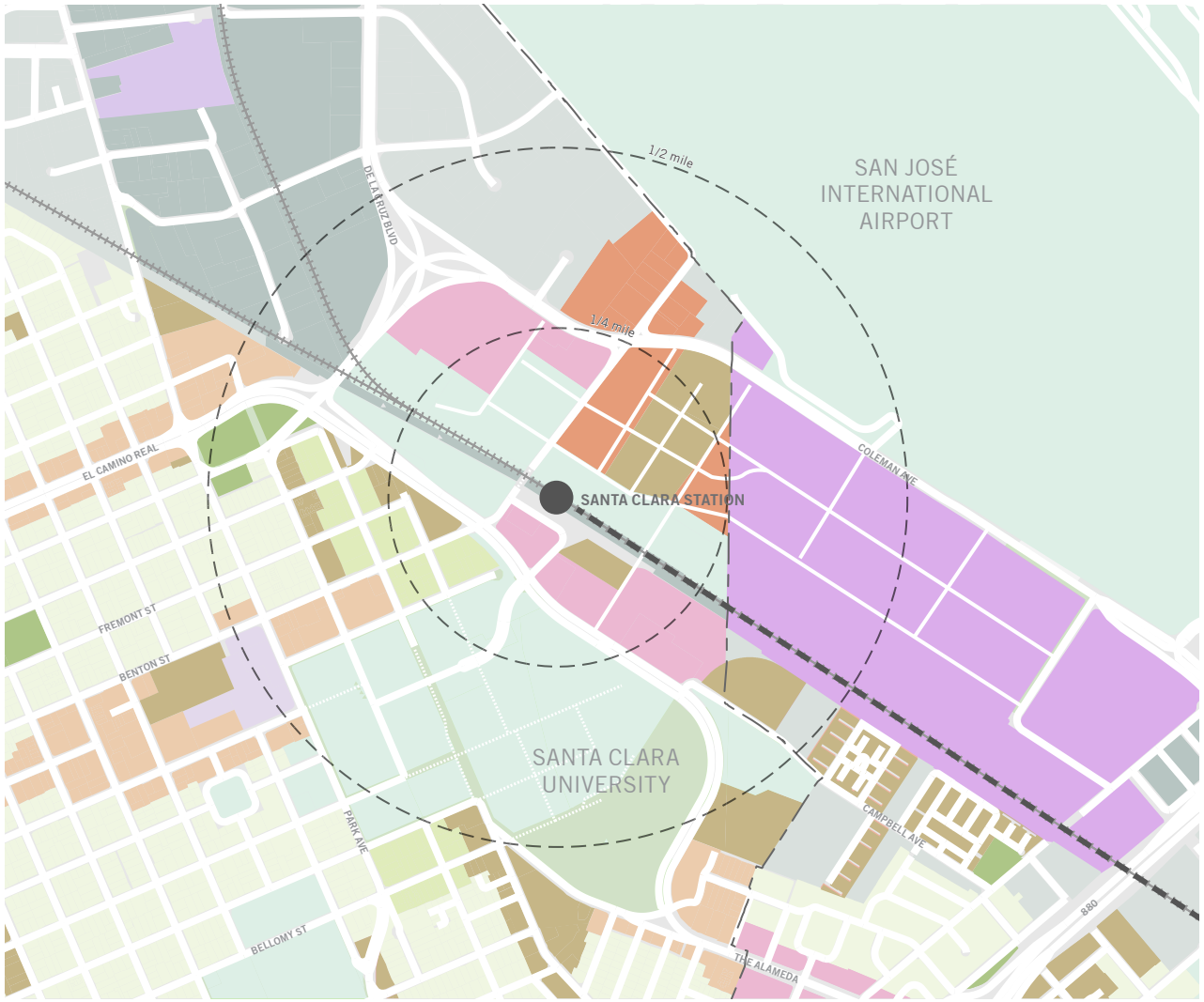


FIGURE 2.1.2 Santa Clara Station Planned Land Use
Sources: Envision San José 2040 General Plan, 2011; City of Santa Clara 2010-2035 General Plan, 2010

Downtown San José Station

The Downtown San José Station Area is characterized by mixed-use development including office, commercial, food and beverage, hotel, residential, and public service uses. Around Plaza de César Chávez, south of East San Fernando Street, the area is predominantly dedicated to cultural and educational activities with the presence of the Children's Discovery Museum, the Tech Museum of Innovation and the San José Convention Center. The urban environment for the Downtown Core is mostly medium to high-density development. Several parcels in this area are not developed to their full potential, with building heights ranging from less than 25 feet to over 140 feet. To the east, development densities decrease along East Santa Clara Street. To the west, CA-87 separates the Downtown and Diridon Station Area. Beyond the downtown core to the north, south, and east is predominantly low-rise residential.

FIGURE 2.1.3 Downtown San José Station Planned Land Use
Source: Envision San José 2040 General Plan, 2011

28th Street Station

The immediate proximity of the 28th Street Station is characterized by industrial uses, mostly along both sides of 28th Street. Beyond this zone, the area is mostly characterized by low-rise residential neighborhoods with some retail and commercial activities along East Santa Clara Street and Julian Street in strip malls mostly on the ground floor of one or two story buildings.

Urban Villages characterize much of the land uses around 28th StreetStation which allows for mixed-use near transit and emphasizes employment and housing. Adjacent uses include neighborhood mixed, commercial, and public. Residential neighborhoods surround the station and industrial uses extend north towards Berryessa/North San José Station.

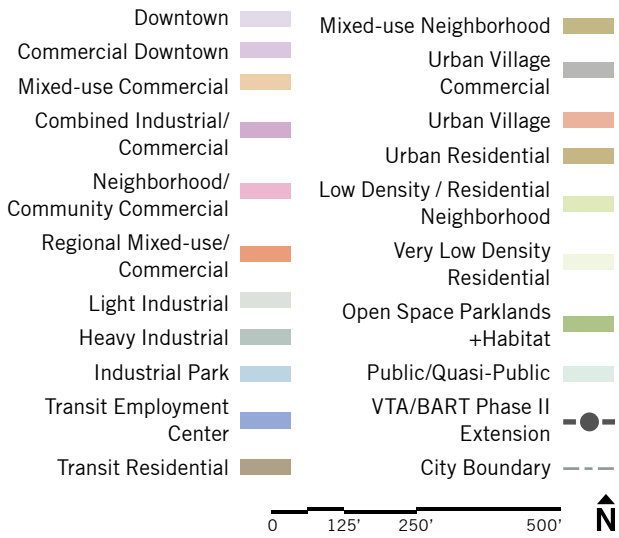


FIGURE 2.1.4 28th StreetStation Planned Land Use
Source: Envision San José 2040 General Plan, 2011

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2.2 Site Character

Santa Clara County is California's 6th most populous county, with a population of over 1.7 million. The county seat and largest city is San José which is the most populous city in the Bay Area with a population of approximately 1.0 million. Santa Clara, which borders to the northwest, is the 9th most populous city in the Bay Area, with a population of approximately 110,000. While Santa Clara County is generally characterized by low-density urban environment, the three station areas are different from each other in terms of urban form, development densities, land uses and activities, vibrancy, and walkability.

In this section, the site character of each station area is analyzed in order to evaluate the overall pedestrian environments. Four main "lenses" are uses to evaluate the station areas:

- Urban Fabric
- Active Uses
- Public Realm
- Historic Resources

Project 180 Streetscape. Photo Credit: OJB

URBAN FABRIC

A walkable and well connected urban environment improves public health by encouraging daily physical activity and reducing motor vehicle dependence. This report uses the Leadership in Energy and Environmental Design for Neighborhood Development (LEED ND) rating system to benchmark and measure walkability using the number of street intersections per square mile. According to LEED ND, urban environments with 300 to 400 intersection per mile have high levels of internal connectivity and are well connected to the larger community. Building heights and public realm characteristics such as sidewalks, landscape, and the number of lanes contribute to the overall site character.

San Pedro Square Market. Photo Credit: SPUR, Sergio Ruiz

ACTIVE USES

Site character is influenced by the density and type of activities. An analysis of active commercial uses provides an understanding of the vibrancy of a place. In this chapter, an active use heat map based on online data reveals the concentration of commercial uses, such as restaurants, cafes, and other retail activities that have the potential to positively impact the urban environment by activating the ground floors and therefore increasing the level of pedestrian activity.

Guadalupe River Trail

PUBLIC REALM

Public realm and open space play important roles in defining the site character. The quality and frequency of use of open spaces in the public realm have been evaluated in this section. The analysis includes online data on athletic activities such as cycling and running. The data were collected from Strava, a website and mobile app used to track athletic activity via satellite navigation. This analysis, even though not representative of the entire population, provides interesting insight into the bicycle and pedestrian activities in streets and open spaces.

Five Wounds Portuguese National Church. Photo Credit: Dave

HISTORIC RESOURCES

Historic resources are an important asset for communities, and can contribute to site character and unique sense of place. Such resources should be preserved accordingly to support local history.

Santa Clara Station

Santa Clara Station Area is mostly characterized by industrial uses and undeveloped or underdeveloped properties in the immediate surroundings. The area is a well-established transit hub that provides access to Caltrain, Altamont Corridor Express, and bus services operated by VTA. Beyond the immediate proximity to the station, the neighborhood is predominantly occupied by low-rise residential neighborhoods and several important landmark destinations such as: Santa Clara University; the historic Santa Clara Downtown; and San José International Airport.

Santa Clara Station Aerial Overview

URBAN FABRIC

Within a half mile radius, the Santa Clara station area has 83 intersections per square mile, including future intersections as proposed in the 2010 Santa Clara Station Area Plan. Walkable urban environments require a higher number of intersections per square mile (LEED ND requires 300 intersections per square mile) in order to minimize vehicle miles traveled and improve public health. The Union Pacific Railroad (UPRR) corridor represents the main obstacle to pedestrian and vehicular movement. Other transit facilities including, bus bays and surface parking, limit overall pedestrian accessibility to the area. To the north, the De La Cruz Boulevard overpass also has a negative impact on the overall walkability of the area by inhibiting pedestrian connectivity at ground level. The area is predominantly characterized by low-rise development with heights ranging between 30 and 35 feet. A few structures above 75 feet are located within the Santa Clara University campus.

Total Intersections: 65

Intersections per square mile: 83

FIGURE 2.2.1 Santa Clara Station Pedestrian Environment

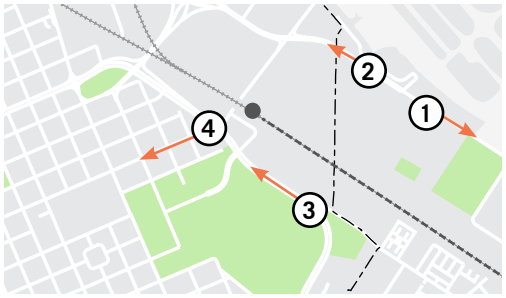
Streets that provide main access to the station area or that are representative of the general pedestrian environment surrounding the station area are analyzed in this section.

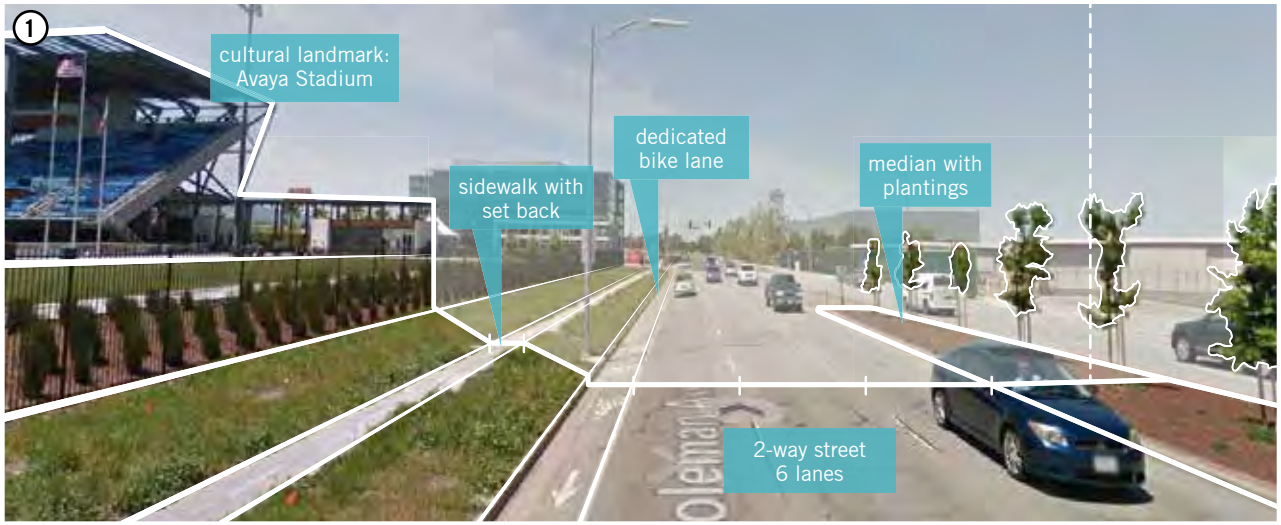
1 Coleman Avenue

Coleman Ave., in proximity to the Avaya Stadium, is six traffic lanes wide plus dedicated bike lanes. Buildings along Coleman Ave. are set back from the street with distances varying from approximately 20 to 80 feet. Surface parking lots, non-developed parcels, landscaped buffer areas, and fences do not provide active and engaging street frontage for pedestrians. Coleman Ave. lacks building frontages along the sidewalks or any type of canopy to provide shade and comfort for pedestrians.

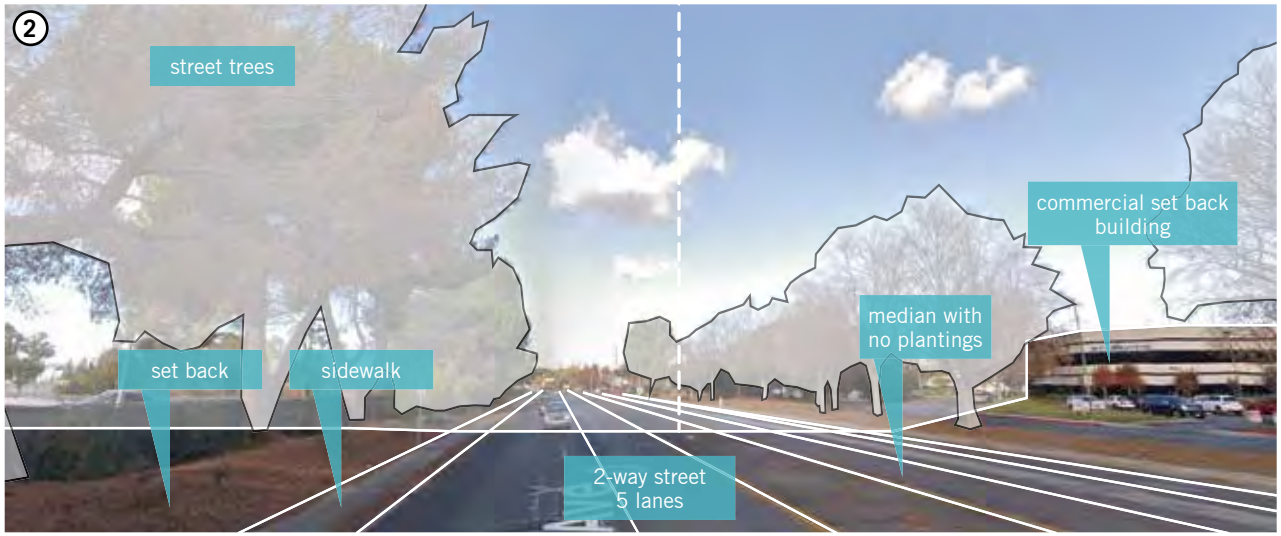
2 Coleman Avenue

Coleman Ave., north of the Avaya Stadium, is five traffic lanes wide with no dedicated bike lanes. In this segment, Coleman Ave. does not have a landscaped median. Tree spacing varies, typically offering limited canopy but in some stretches closer spacing provide shade and comfort for pedestrians.





Coleman Avenue, near Avaya Stadium



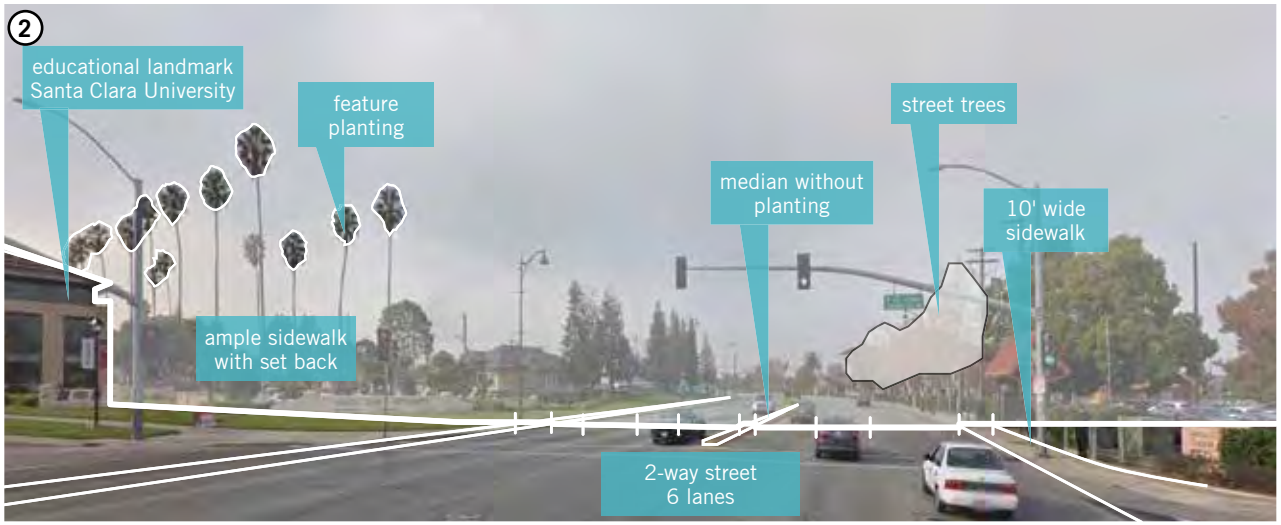
Coleman Avenue, north of Avaya Stadium

③ El Camino Real

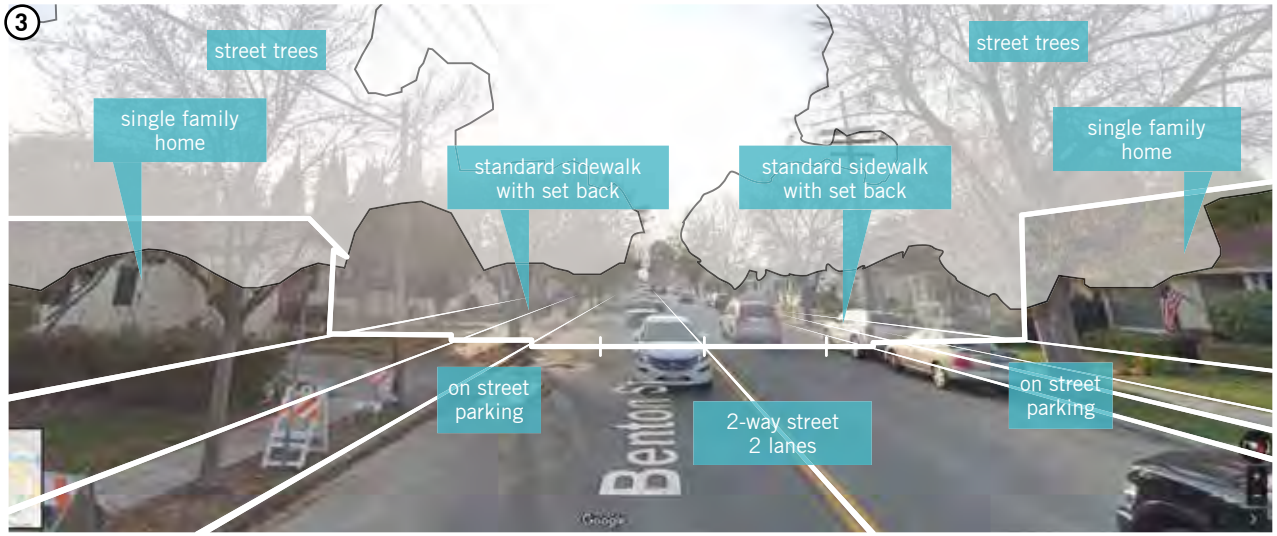
El Camino Real is also six lanes wide, but without any dedicated bike lanes. Buildings along El Camino Real are set back from the street. Properties in close proximity to the station include surface parking lots, landscaped areas, sports fields, and retail activities with no active street frontage. These do not provide an engaging street experience for pedestrians. El Camino Real has a landscaped median and street trees along the sidewalks that provide some shade for pedestrians.

④ Benton Street

Benton Street is a two lane street without dedicated bike lanes. The street character is mostly residential with buildings often set back from the street behind front yards and landscaped buffers. Benton Street is lined with trees that further strengthen the residential character of the street.



El Camino Real, near Santa Clara Station



Benton Street, heading away from Santa Clara Station

ACTIVE USES

Commercial intensities have been evaluated by mapping a 1/8-mile (or 2.5 minute walk) buffer around active ground floor businesses (e.g. cafes, restaurant, and retail). The immediate surroundings of Santa Clara Station have a low level of active uses. There is higher level of active uses in historic Downtown Santa Clara and along The Alameda.

FIGURE 2.2.2 Santa Clara Station Active Uses

PUBLIC REALM

The Santa Clara Station Area is in relatively close proximity to several recreational and sport-focused open spaces, including those within the Santa Clara University campus, Avaya Stadium, The Forge Garden, and the Larry J. Marsalli Park.

The public realm analysis includes user data from Strava. Strava is a website and mobile app used to track athletic activities via satellite navigation and then upload and share such activities. Strava can be used for a number of sporting activities, however cycling and running are the most popular activities tracked using the software. Although not wholly representative of the entire population, this data provides a good insight into pedestrian and bicycle activities. The Strava heat map for the Santa Clara Station shows higher levels of activity along The Alameda and El Camino Real. Bicyclists and runners also use specific pedestrian paths within the Santa Clara University campus in the east-west direction connecting El Camino Real with Homestead Road and in the north-south direction connecting The Alameda to the University Campus. Other highly used streets are Lafayette Street, Market Street, and Benton Street, which provides a direct connection to the Santa Clara Transit Center.

FIGURE 2.2.3 Santa Clara Station Public Realm

HISTORIC RESOURCES

Several historic resources are within or in close proximity to the Santa Clara Station area including the Santa Clara Historic Station, Mission Santa Clara de Asis, and the Women's Club Adobe.

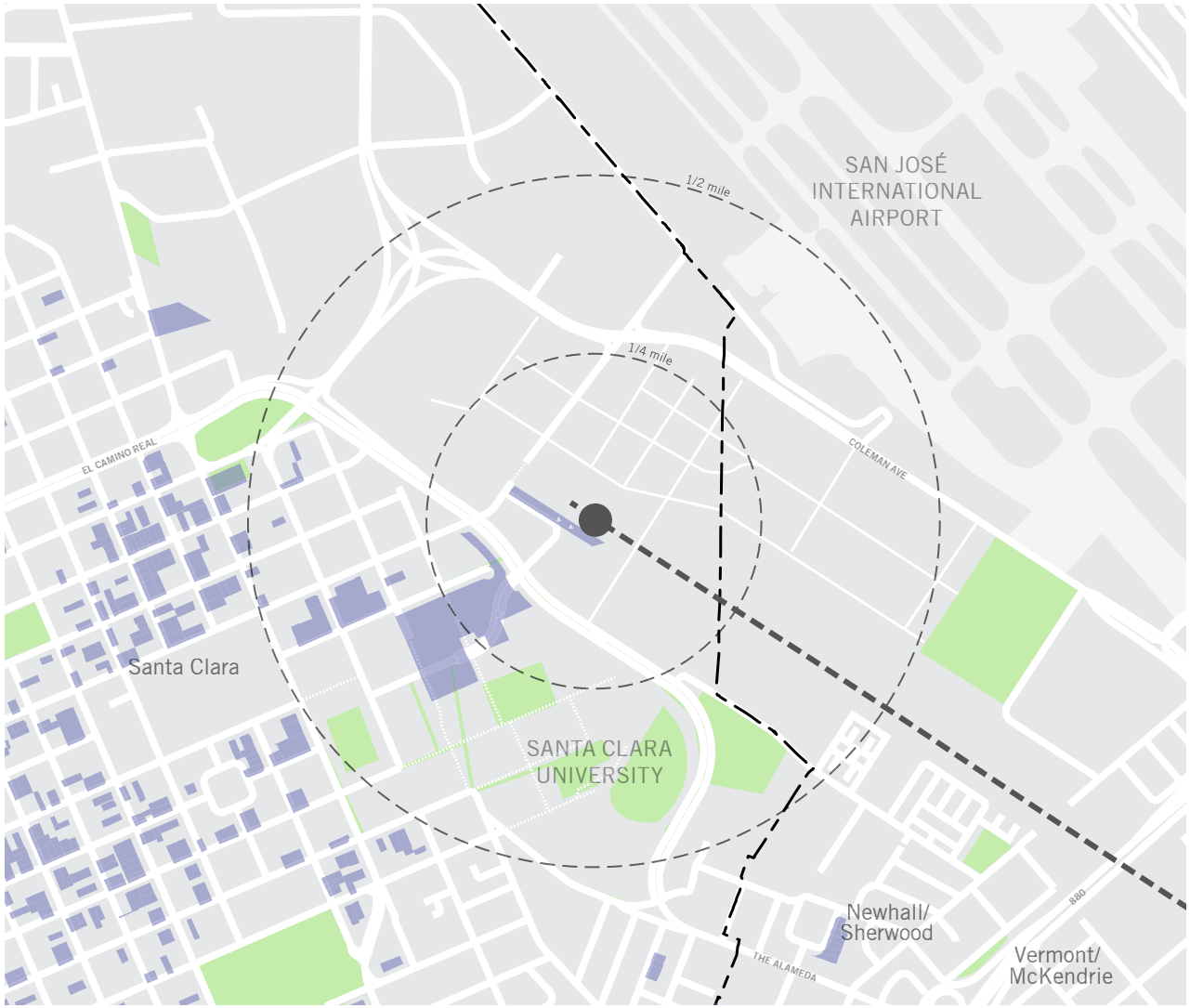


FIGURE 2.2.4 Santa Clara Station Historic Resources

Santa Clara Historic Station

Mission Santa Clara de Asis. Photo Credit: Dick McLeish

Downtown San José Station

The Downtown San José Station Area is located at the heart of Downtown San José. This area provides the region's only traditional Downtown urban environment and it is mostly characterized by mid to high-rise development along with with undeveloped or under-utilized parcels. The Station Area's larger context provides a mix of uses, including office, cultural, commercial, and residential. Important landmark destinations include the San José City Hall, the San José Convention Center, Children's Discovery Museum, the Tech Museum of Innovation, San José University, and San Pedro Square Public Market.

Downtown San José Station Aerial Overview

URBAN FABRIC

Within a half mile radius of the station, the Downtown San José Station area has 132 intersections per square mile. Walkable urban environments require a higher number of intersection per square mile (LEED ND requires 300 intersections per square mile) in order to minimize vehicle miles traveled and improve public health. The CA-87 overpass has a visual impact creating perceived ground level barrier. The area is characterized by a mix of low, medium and high-rise buildings with heights ranging from less than 25 feet to over 140 feet.

Total Intersections: 104

Intersections per square mile: 132

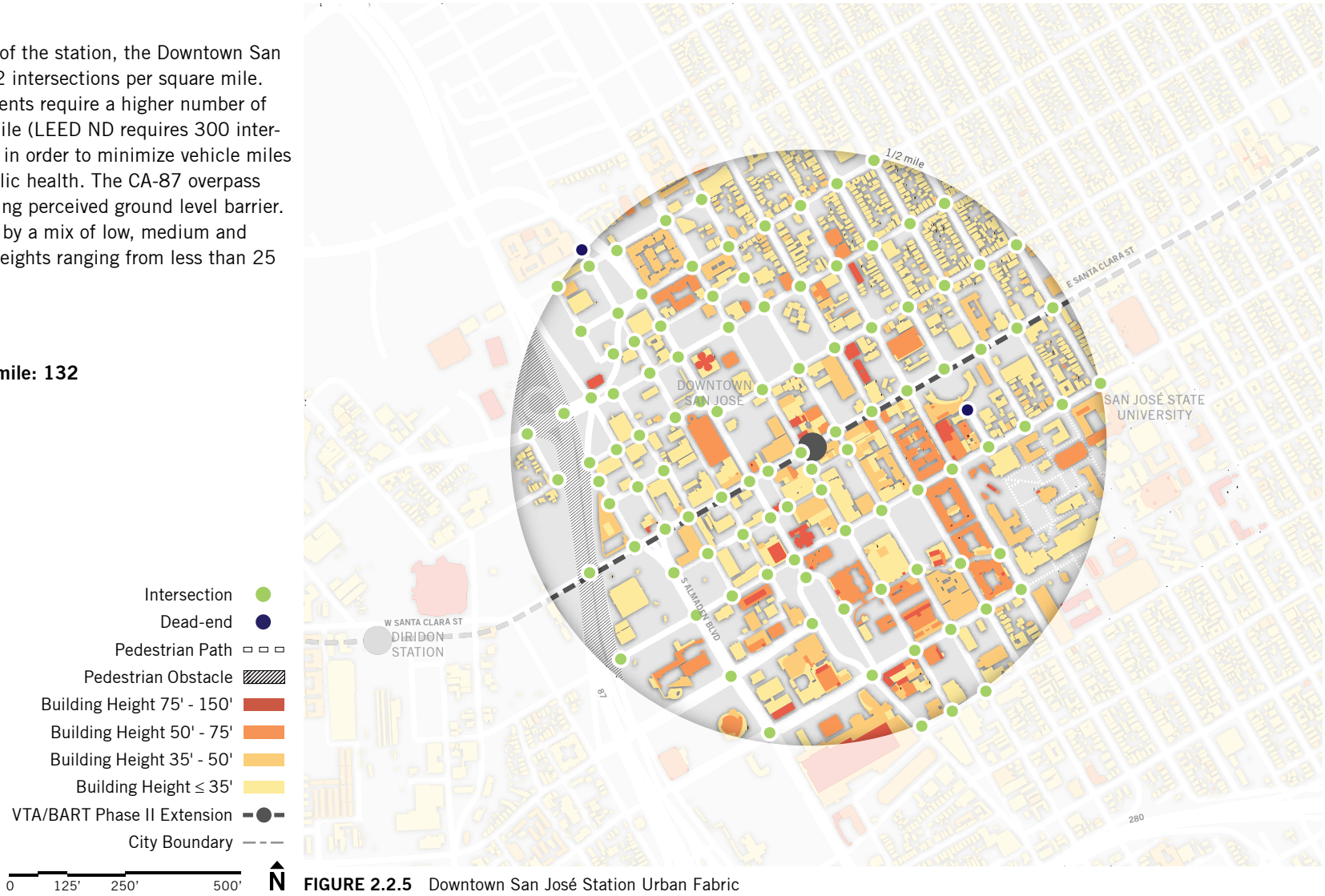


FIGURE 2.2.5 Downtown San José Station Urban Fabric

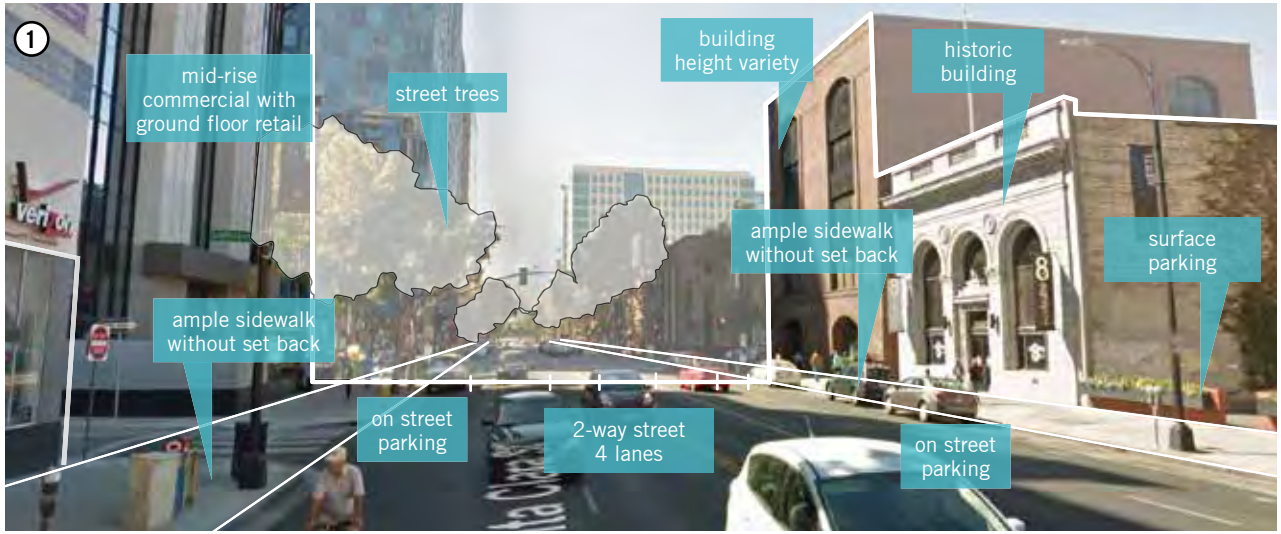
Streets that provide main access to the station area or that are representative of the general pedestrian environment surrounding the station area are analyzed in this section.

① East Santa Clara Street

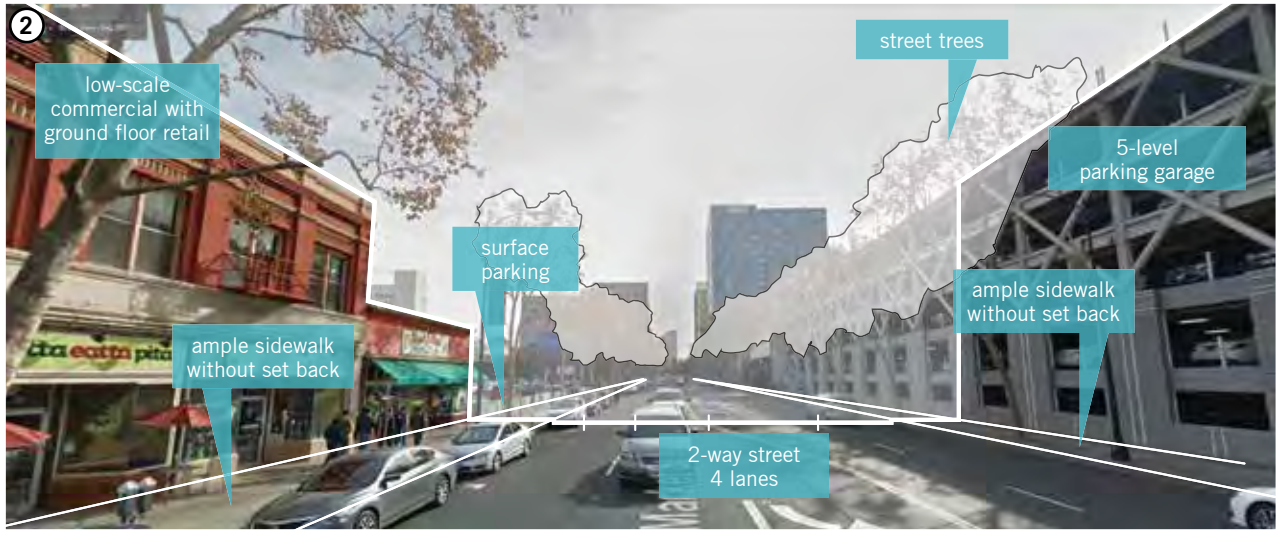
East Santa Clara Street is four lanes wide with ample sidewalks but no dedicated bike lanes. Buildings along East Santa Clara Street are not set back from the street, thus providing some active and engaging street frontage for pedestrians. Cafés, restaurants, and shops are present, but many of the buildings along East Santa Clara Street have no active ground floor uses. Several surface parking and under-developed parcels are present within a one-mile radius from the station. East Santa Clara is a major thoroughfare with high volumes of traffic flowing at a maximum posted speed limit of 25 mph, but the frequency of intersections and stoplights acts as a traffic calming measure. While East Santa Clara Street has street trees that provide shade and comfort for pedestrians, street tree presence is not always continuous.

② North Market Street

North Market Street is a four lanes wide without dedicated bike lanes. Buildings are not set back from the street and even though a few commercial activities are present in close proximity to the station, parking structures, non-developed parcels, and non-active ground floor uses combine to provide a less welcoming pedestrian environment. North Market Street has a fairly continuous alignment of street trees.



East Santa Clara Street at N. Market Street



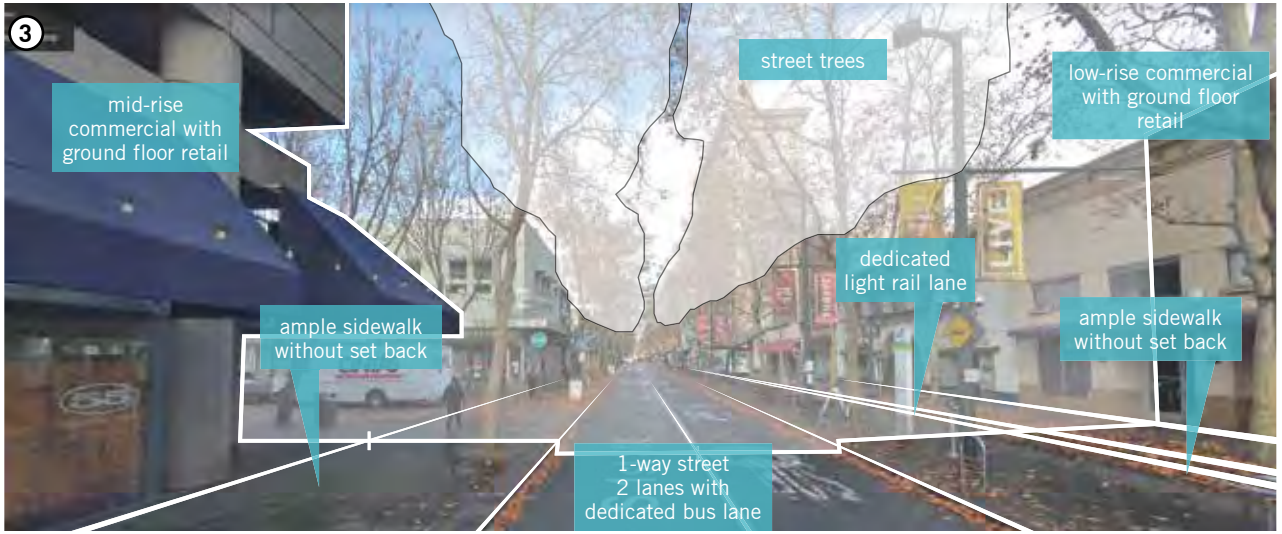
North Market Street between Santa Clara Street and W. St John Street

③ 1st Street

1st Street is a one-way street with a single travel lane for cars, one dedicated bus lane, and one light rail track. In this segment, light rail is separated from vehicular traffic and lays within the pedestrian mall right-of-way. Pedestrians cross the light rail right-of-way freely and cross the parallel bus and cars lanes at designated locations. Buildings along 1st Street are not set back from the street, providing good opportunities for an engaging environment for pedestrians. Retail and commercial uses are present along 1st Street, but not all the building along this street have active and successful ground floor activities. Street trees continuously line both sides of 1st Street.

④ East Julian Street

East Julian Street is a two lane street with dedicated street parking along one side but without dedicated bike lanes. Building set backs are not consistent along this street. The general residential character is supported by wide sidewalks continuously lined with street trees.



North 1st Street at Post Street

East Julian Street at North 1st Street

ACTIVE USES

Commercial intensities have been evaluated by mapping a 1/8-mile (or 2.5 minute walk) buffer around active ground floor businesses (e.g. cafes, restaurant, and retail). The immediate area surrounding the Downtown San José Station shows relative low levels of commercial intensity. There are higher levels of commercial activity around Plaza de César Chávez, West San Carlos Street, South Market Street and 1st Street. To the north, higher levels of activity are recorded on North San Pedro Street and San Pedro Square Market.

FIGURE 2.2.6 Downtown San José Station Active Uses

PUBLIC REALM

St. James Park and Plaza de César Chávez are the two most recognizable public parks in Downtown San José. The Guadalupe River is within walking distance of the station. Its open space and trail system provides an important pedestrian and bicycle route in the north-south direction, that connects to local and regional destinations such as the Children's Discovery Museum, the Center for the Performing Arts, SAP Center, the Guadalupe River Park and the San José International Airport.

The public realm analysis includes user data from Strava. Strava is a website and mobile app used to track athletic activities via satellite navigation and then upload and share such activities. Strava can be used for a number of sporting activities, however cycling and running are the most popular activities tracked using the software. Although not wholly representative of the entire population, this data provides a good insight into pedestrian and bicycle activities. The Strava heat map for the Downtown San José Station area shows higher levels of activity along Market Street, East Santa Clara Street, East San Fernando Street, Park Ave, East San Carlos Street and the Guadalupe River trails.

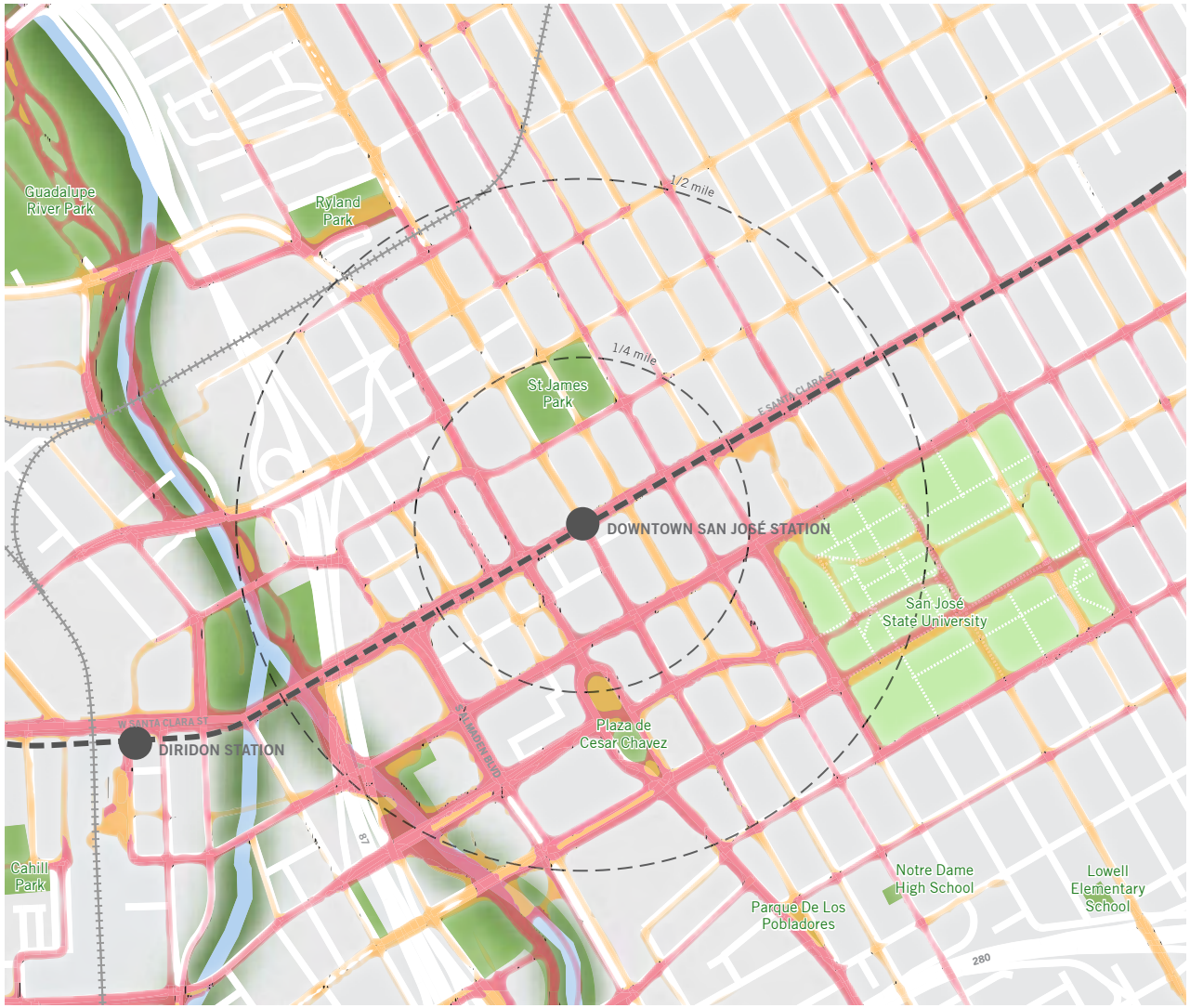
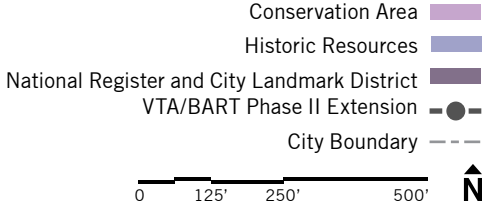


FIGURE 2.2.7 Downtown San José Station Public Realm

HISTORIC RESOURCES

The Downtown San José Station area resides within the original city boundary. Within the half and quarter mile radii from the station there are several historic resources such as Bank of Italy, the San José Building And Loan Association, Saint James Square City Landmark and National Register Historic District, and the Downtown Commercial National Register Historic District.



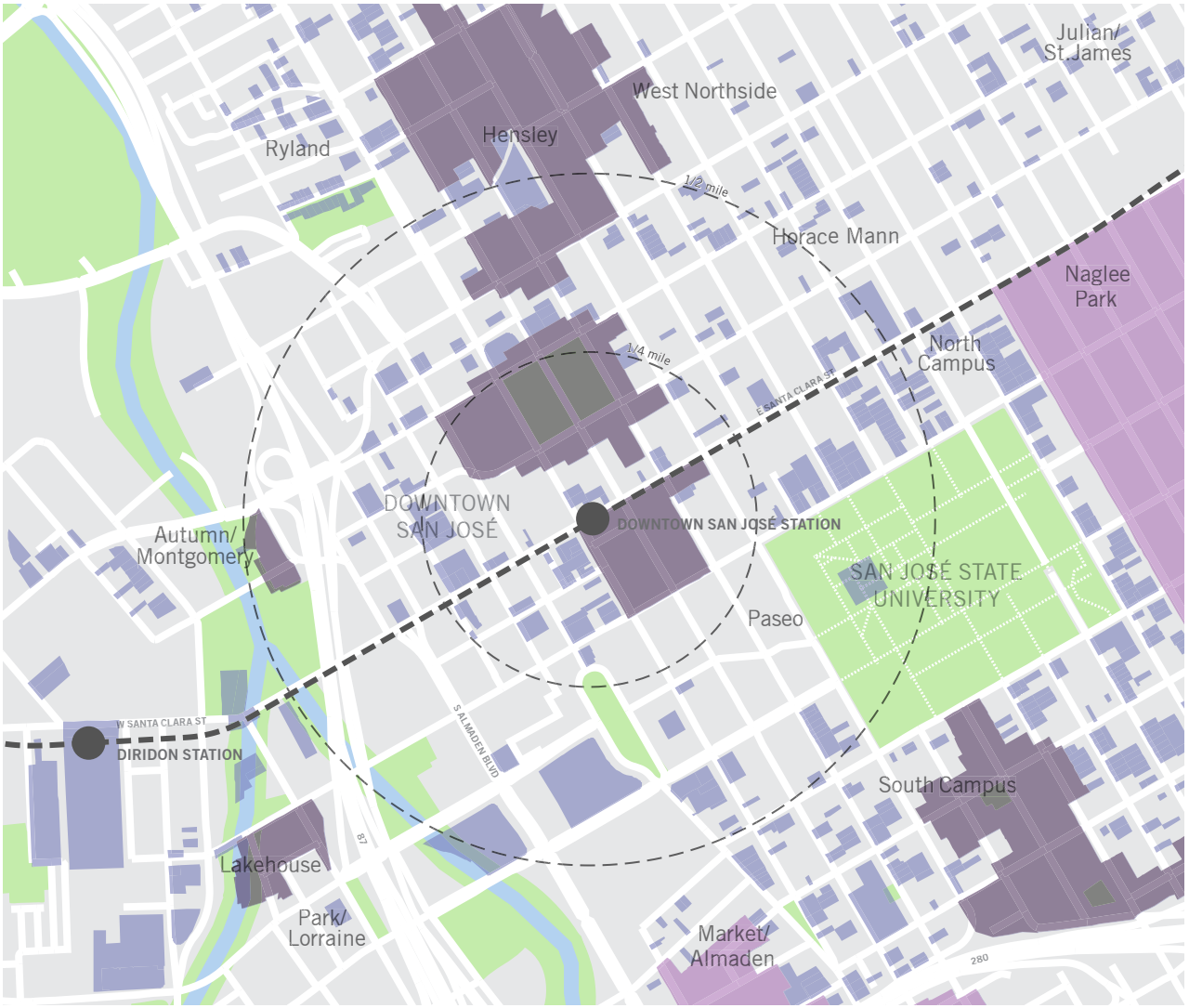


FIGURE 2.2.8 Downtown San José Station Historic Resources

Bank of Italy

San José Building and Loan Association. Photo Credit: SPUR

Cathedral Basilica of St. Joseph. Photo Credit: Procrast8

28th StreetStation

28th Street Station Area is mostly characterized by industrial and low-rise residential uses. The Five Wounds Portuguese National Church is an important cultural landmark for the local and regional community that, together with the Mexican Heritage Plaza to the east, provides important gathering opportunities for the local residents. The Station Area larger context includes other important destinations that serve the local community. Roosevelt Park, Cristo Rey San José Jesuit High School, San José Community Middle and High Schools, and associated sports fields are in close proximity the station. Coyote Creek (to the west), Lower Silver Creek (to the east) and Miguelita Creek (to the north) are also within one mile of the station.

28th Street Station Aerial Overview

URBAN FABRIC

Within a half mile radius of the station, the 28th StreetStation Area has a 120 intersections per square mile. Walkable urban environments require a higher number of intersection per square mile (LEED ND requires 300 intersections per square mile) in order to minimize vehicle miles traveled and improve public health. US-101 has an impact on the pedestrian movement that limits access to and from the station for the communities east of the freeway. The area is mostly characterized by low-rise buildings with heights of 35 feet or less.

Total Intersections: 94

Intersections per square mile: 120

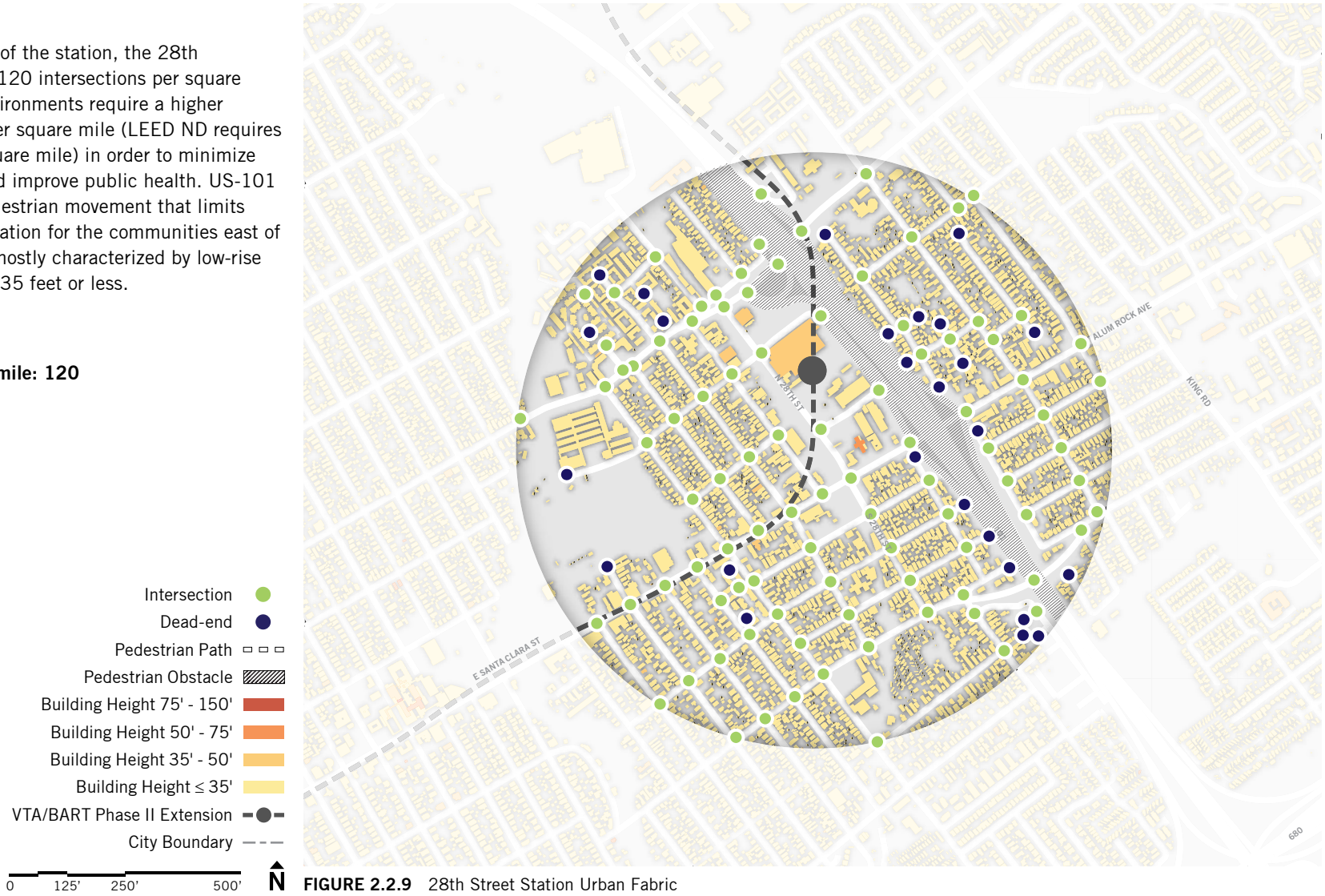


FIGURE 2.2.9 28th Street Station Urban Fabric

Streets that provide main access to the station area or that are representative of the general pedestrian environment surrounding the station area are analyzed in this section.

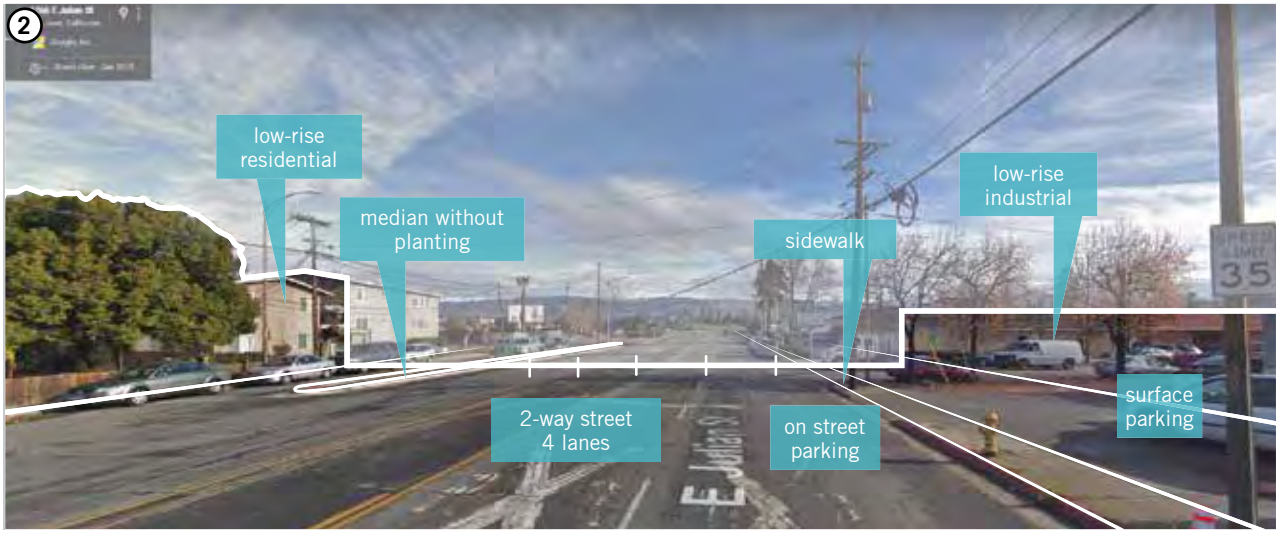
① East Santa Clara Street

East Santa Clara Street is four lanes wide without dedicated bike lanes. Buildings along East Santa Clara Street are often set back from the street behind surface parking lots. In addition, the frequency of underdeveloped parcels contributes to a less engaging experience for pedestrians. Featured plants and trees around the Five Wounds Portuguese National Church provide a clear identity for this portion of East Santa Clara Street.

② East Julian Street

East Julian Street is four lanes wide without dedicated bike lanes. Buildings along East Julian Street are often set back from the street behind surface parking lots. The street is also lined with intermittent underdeveloped parcels, which does not provide an engaging street experience for pedestrians.

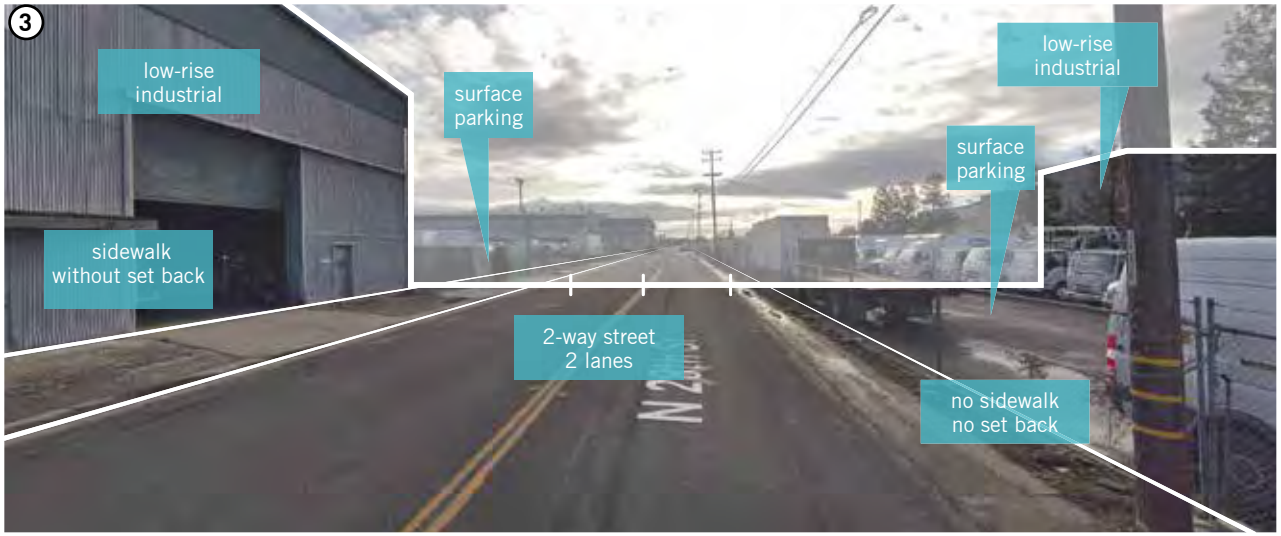
East Santa Clara Street, near bridge over 101



East Julian Street at 28th Street

③ North 28th Street

North 28th Street is two lanes wide without dedicated bike lanes. The street lacks sidewalks and planting. There are no active uses along the street. Surface parking lots and underdeveloped parcels do not provide an active and engaging street frontage for pedestrians.



North 28th Street at future 28th StreetStation site

ACTIVE USES

Commercial intensities have been evaluated by mapping a 1/8-mile (or 2.5 minute walk) buffer around active ground floor businesses (e.g. cafes, restaurant, and retail). There are low levels of commercial activity near the station with a few more active nodes located mostly along East Santa Clara Street on both sides of US 101.

FIGURE 2.2.10 28th StreetStation Active Uses

PUBLIC REALM

Roosevelt Park, Watson Park and Plata Arroyo Park are the three main public open spaces that are within one-mile of the station. Although Coyote Creek, Lower Silver Creek and Miguelita Creek are also within one mile of the station, access is limited.

The public realm analysis includes user data from Strava. Strava is a website and mobile app used to track athletic activities via satellite navigation and then upload and share such activities. Strava can be used for a number of sporting activities, however cycling and running are the most popular activities tracked using the software. Although not wholly representative of the entire population, this data provides a good insight into pedestrian and bicycle activities. The Strava heat map for the 28th Street station area shows higher levels of activity along East Santa Clara Street, East San Antonio Street and 17th Street.

FIGURE 2.2.11 28th Street Station Public Realm

HISTORIC RESOURCES

The Five Wounds Portuguese National Church is the most important historic resource within the 28th StreetStation Area. This is the parish Church of the Latin Rite of the Roman Catholic Church in San José and represents a recognizable historic and cultural landmark for the local community as well as the larger Portuguese community. One other historic property of note is the Mexico Theater on Santa Clara street at 25th street.

FIGURE 2.2.12 28th StreetStation Historic Resources

Five Wounds Portuguese National Church. Photo Credit: Pmapio

Mexico Theatre. Photo Credit: Dave

3

POLICY CONTEXT

San José City Hall. Photo Credit: SPUR, Sergio Ruiz

3.1 Studies, Policies, Plans, and Development Standards

INTRODUCTION

This section summarizes background conditions with findings on current plans and policies at local and regional scales, an overview of known projections and plans for local and regional growth, recent and planned development and existing household, employment and concentrations and building inventories in the three station areas. It also includes a commentary on pending and upcoming studies that are focused on land use and implementation plans and summarizes TOD best practices from BART policies and similar documents from other US metropolitan regions.

The consultant team has studied the following documents in whole or in part to better understand the physical, policy, and economic context for this study. Pertinent sections of specific documents are discussed and/or referenced where most relevant in the following sections and elsewhere within this report.

RECENTLY COMPLETED (OR IN PROGRESS) STUDIES

Land Use

- Adopted Urban Village plans in Project area: Five Wounds, Roosevelt Park, 24th and William, Little Portugal, Alum Rock Urban Village Plans
- Santa Clara Station Area Plan (2040)
- Diridon Station Area Plan (2014)
- Envision San José 2040
- San José Downtown Strategy
- San José Complete Street Design Guidelines
- Vision Zero San José
- Park Paseo: Reimagining San José City Center's Walkable Corridor
- Five Wounds / Brookwood Terrace BART Station Area Community Concept Plan (2010)
- Draft East Santa Clara Urban Village Plan
- Draft City of San José Urban Village Implementation Plan
- City of Santa Clara El Camino Real Specific Plan
- City of Santa Clara Downtown Precise Plan

Transportation

- VTA's BART Silicon Valley Phase II Extension Project Final SEIS/SEIR BART Phase II Extension
- Draft Better Bikeways for Central San José
- San José BART Station Access Planning (2016)

Economics

- 'Assessing the potential development impacts of VTA'S BART Silicon Valley Phase II'
- Downtown San José Retail Strategy
- Draft wayfinding work

Other

- Climate Smart San José

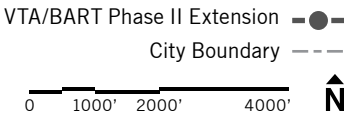
LOCAL POLICIES AND DEVELOPMENT STANDARDS

(City of San José, City of Santa Clara, and County of Santa Clara):

- General Plan land use designations (up to 1-mile radius of station sites, based on boundary to be determined by VTA and P+W team)
- Zoning regulations (height, density, set backs, compatible land uses)
- Density bonuses
- Affordable housing requirements – CIF, IHO
- Parking requirements
- Development impact fees
- Capital improvement program
- San José Municipal Code Sections 14.25 (Park Impact Ordinance) and 19.38 (Parkland Dedication Ordinance) Parkland Dedication/In lieu Park Impact fees

RELEVANT REGIONAL PLANS

- ABAG Plan Bay Area 2040
- Metropolitan Transportation Plan 2035
- Valley Transportation Plan 2008



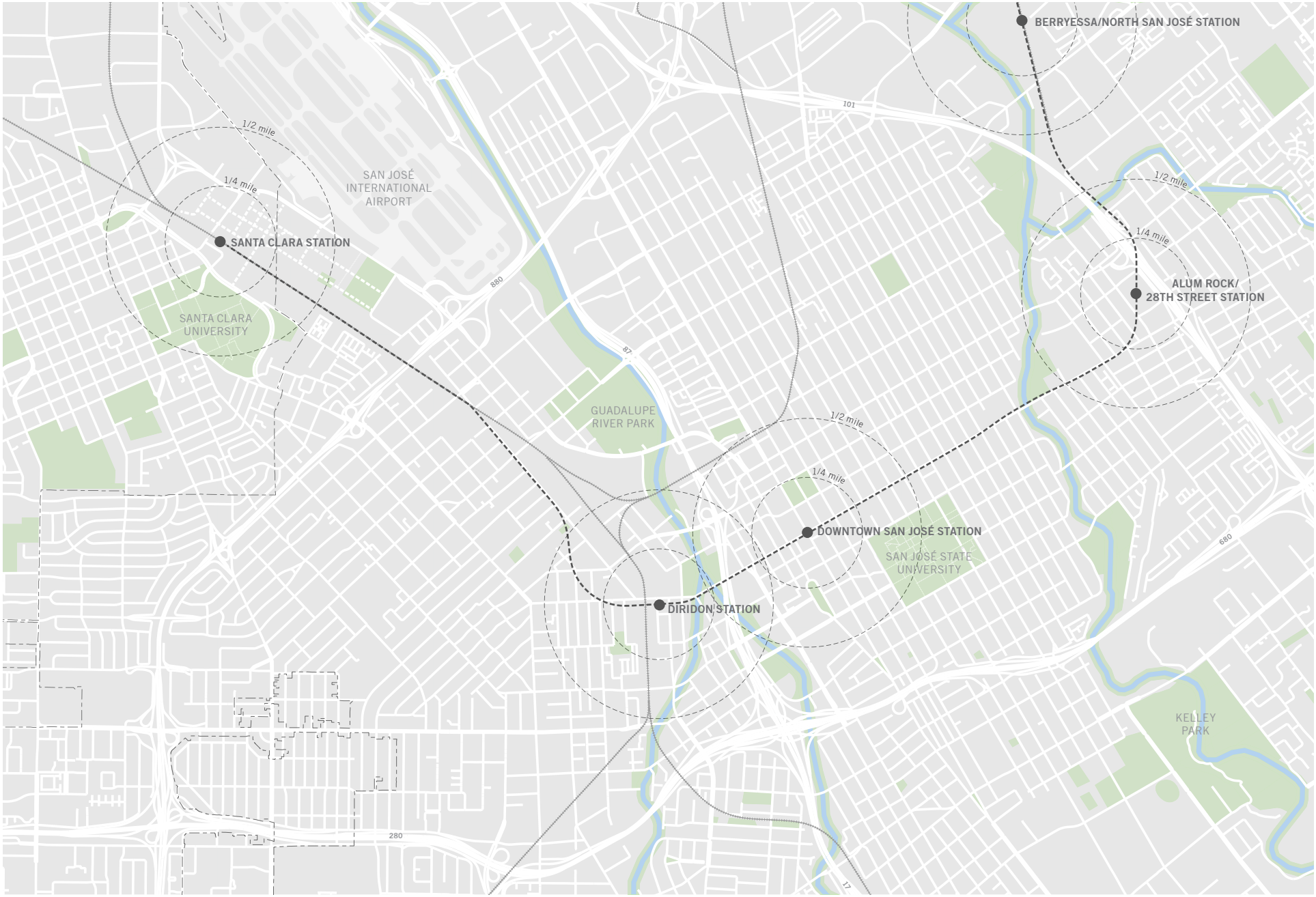


FIGURE 3.1.1 VTA'S BART Phase II Corridor Stations

3.2 Zoning

Santa Clara Station

The downtown and surrounding neighborhood mixed-use and commercial provide intensities of 0.4-0.5 floor area ration (FAR). Further west, the Station Area is adjacent to predominantly low-rise residential neighborhoods with intensities of 10-18 dwelling unit (DU) per acre.[1]

Planned development of the station area includes higher intensities of regional and commercial mixed-uses near the station, stepping down in height and intensity towards the downtown area to respect the existing scale of development.

1 City of Santa Clara 2010-2035 General Plan, 2010

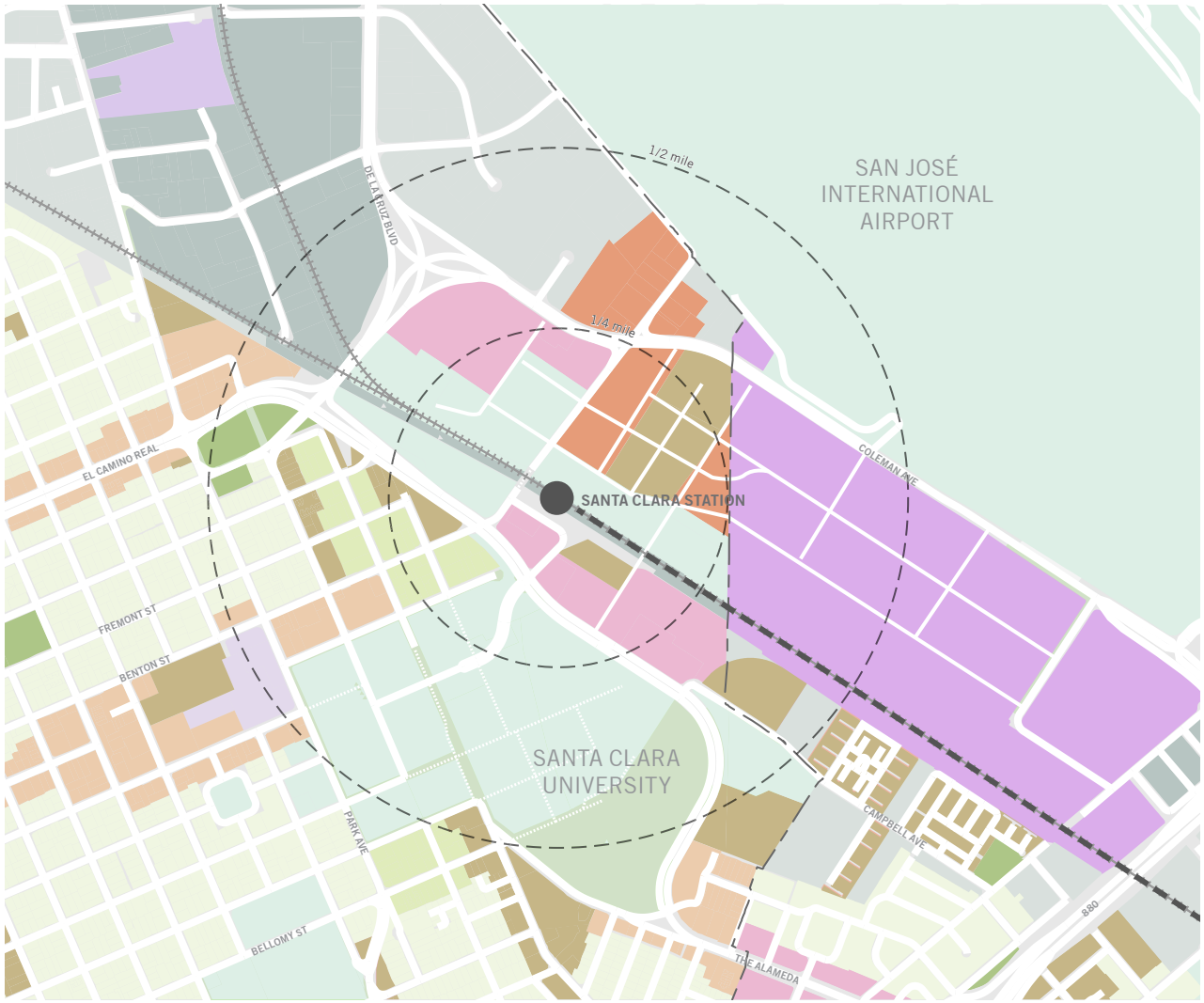


FIGURE 3.1.2 Santa Clara Station Planned Land Use
Sources: Envision San José 2040 General Plan, 2011; City of Santa Clara 2010-2035 General Plan, 2010

SANTA CLARA GENERAL PLAN

Given the limited availability of vacant land, the Santa Clara 2010-2035 General Plan allocates new growth primarily on existing sites that can accommodate higher intensity uses, particularly along El Camino Real and Stevens Creek Boulevard, as well as in the city's employment core north of the Caltrain corridor. Higher densities are meant to result in "more efficient, sustainable use of limited land and resources." Land use polices of the 2010-2035 General Plan that are most relevant for this study are:

- Revitalizing Downtown with a mix of commercial and residential uses;
- Redefining El Camino Real as a vital, pedestrian-oriented corridor, with a greater diversity of uses;
- Maintaining the integrity and character of existing residential neighborhoods with improved pedestrian amenities and local-serving retail;
- Intensifying employment centers for the industrial, research and development uses within the city;
- Taking advantage of the City's accessibility to regional transportation corridors and supporting alternative transportation modes; and
- Maximizing accessibility to parks, trails, retail and commercial centers.

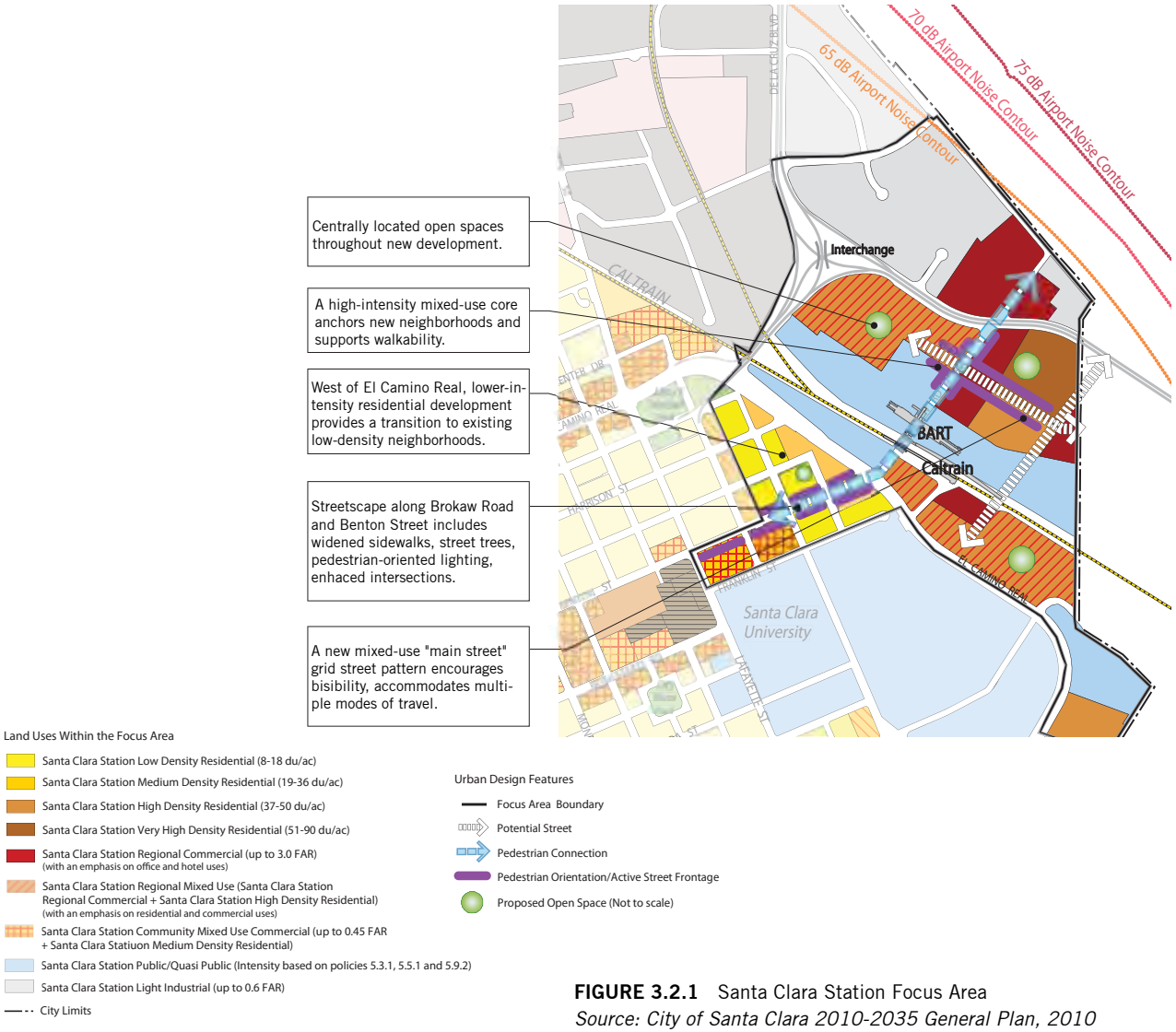


FIGURE 3.2.1 Santa Clara Station Focus Area
Source: City of Santa Clara 2010-2035 General Plan, 2010

Focus Areas
The 2010-2035 General Plan defines nine Focus Areas, these are identified as areas that can:

- Enhance the city's quality of life and foster economic vitality; and
- Allocate higher density growth while limiting the impact on existing neighborhoods.

Santa Clara's Transit Station, Downtown, and El Camino Real are three near-term Focus Areas that are relevant to this study. Each of these areas aim to have a mix of uses, higher intensities, and pedestrian and transit priority. In Downtown and El Camino Real, development should respect the existing scale and character and higher intensities should be concentrated in key areas. At the Transit Station, development should capitalize on transit with high intensity uses such as office, hotel, and residential.

SAN JOSÉ GENERAL PLAN

The San José General Plan designates the area adjacent to Santa Clara Station as Combined Industrial/Commercial. This designation plans for up to 12.0 FAR.

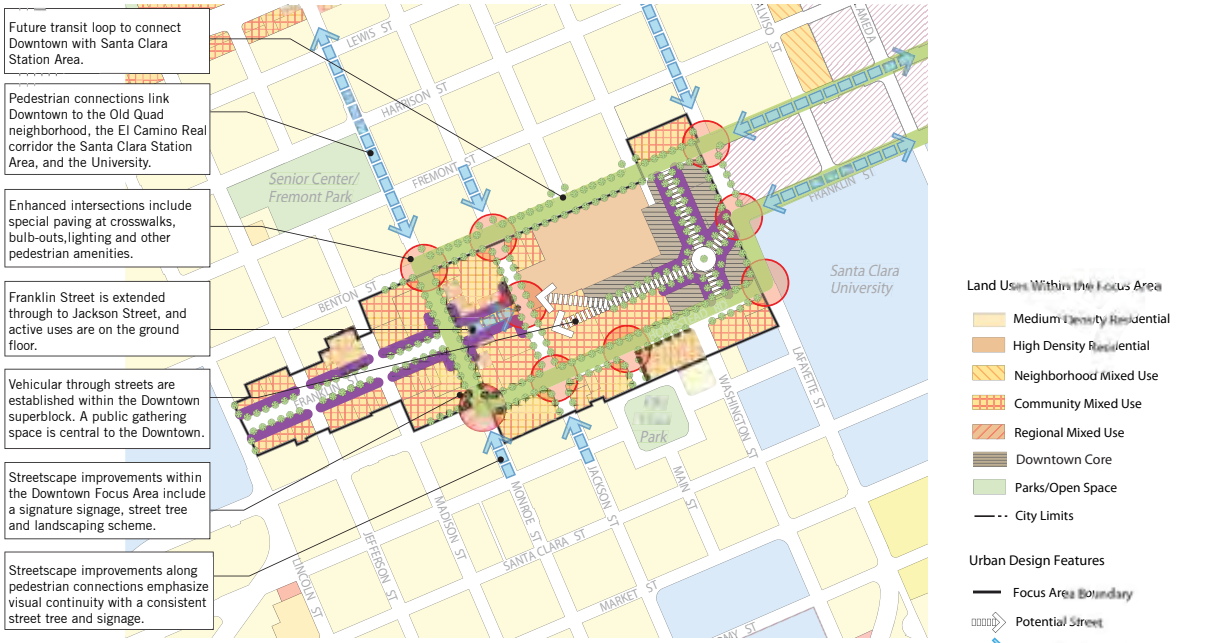


FIGURE 3.2.2 Santa Clara Downtown Focus Area
Source: City of Santa Clara 2010-2035 General Plan, 2010

FIGURE 3.2.3 Santa Clara El Camino Real Focus Area
Source: City of Santa Clara 2010-2035 General Plan, 2010

VTA'S SANTA CLARA STATION AREA PLAN

In 2010, VTA, along with the cities of Santa Clara and San José, developed a station area plan. The guiding principles of the plan include:

- Creating a landmark destination that integrates the old with the new;
- Higher intensity, transit-supportive development;
- Development that respects the scale and character of the surrounding neighborhoods;
- A mix of uses, including residential, east of the Union Pacific RailRoad corridor;
- Improved east-west connectivity;
- A place for connections: a connected place;
- A diversity of transportation modes and parking choices;
- Pedestrian orientation; and
- Synergistic mix of uses and parking.

The proposed land use plan envisions the highest intensities closest to the station with mixed-use office, commercial, and residential FAR of 2.0. Medium to high density housing is in close proximity to the sation. Ground floor retail lines a new mixed-use district near the station and Benton Street, which leads to Downtown Santa Clara. Light industrial is maintained to the north of the station.

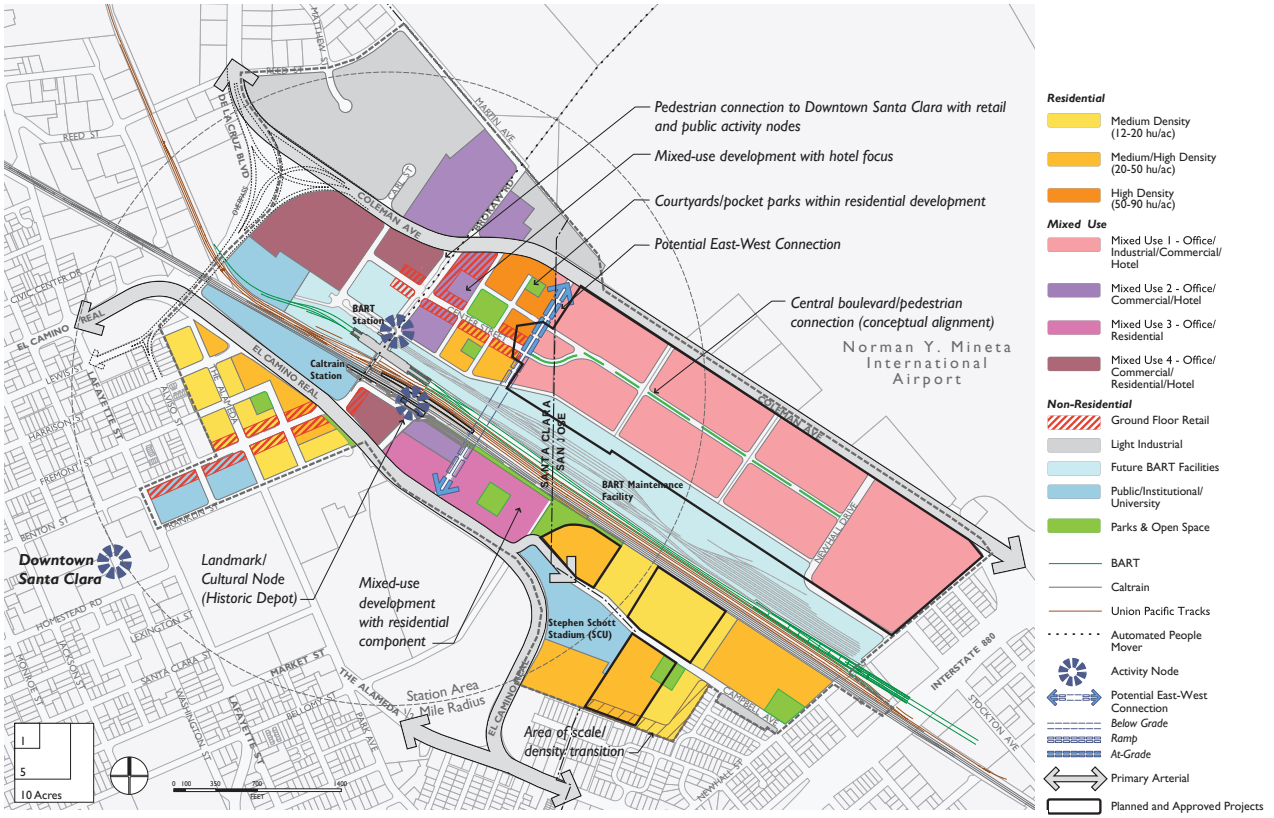


FIGURE 3.2.4 Santa Clara Station Area Plan Land Use Diagram
Source: Santa Clara Station Area Plan, 2011

Downtown San José Station

The General Plan designates the Downtown and Commercial Downtown as special land uses, characterized by higher intensities for commercial, residential, and mixed-uses. The Downtown land use designation accommodates a mix of uses including office, retail, service, residential and entertainment with an intensity of 800 DU/acre and a maximum FAR of 30.0. Public/Quasi-Public uses, including San José State University and civic areas, have varying levels of intensity depending on the potential impacts on surrounding uses. Specific programmatic strategies and actions are identified in the Strategy 2000 for the 12 areas within the Downtown as shown in Figure 3.2.6.

Commercial and mixed-use corridors extend north along 1st Street and east along Santa Clara Street. Beyond these mixed-use areas lie Residential Neighborhood uses, char-

FIGURE 3.2.5 Downtown San José Station Planned Land Use
Source: Envision San José 2040 General Plan, 2011

acterized by single family homes with intensities of 8 DU/ acre and maximum FAR of 0.7.

SAN JOSÉ GENERAL PLAN

The Envision San José 2040 General Plan identifies locations, types, and intensities of land uses and " illustrates the inextricable link between land uses and the transportation network."[1]

Downtown Strategy 2040
Downtown Strategy 2040 is an update to the Downtown Strategy 2000 which identifies strategies and actions for the 12 areas shown in Figure 3.2.6. Downtown Strategy 2040 is currently underway and includes plans to add environmental clearance for:

- 3,000,000 square feet of office space (~10,000 jobs);
- 4,000 residential dwelling units;
- 1,400,000 square feet of retail space; and
- 3,600 guest rooms of hotel space.

The updated strategy will also include an Employment Priority Area Overlay near the new downtown BART station.

CLIMATE SMART SAN JOSÉ

The recently adopted Climate Smart Plan, which has goals for densification and integrated transit, builds on the General Plan." Densification of San José in a way that creates more affordable housing, more transit options, and a higher quality of life accelerates the reduction of absolute carbon dioxide emissions."[2]

1 Envision San José 2040 General Plan, 2011
2 Climate Smart San José

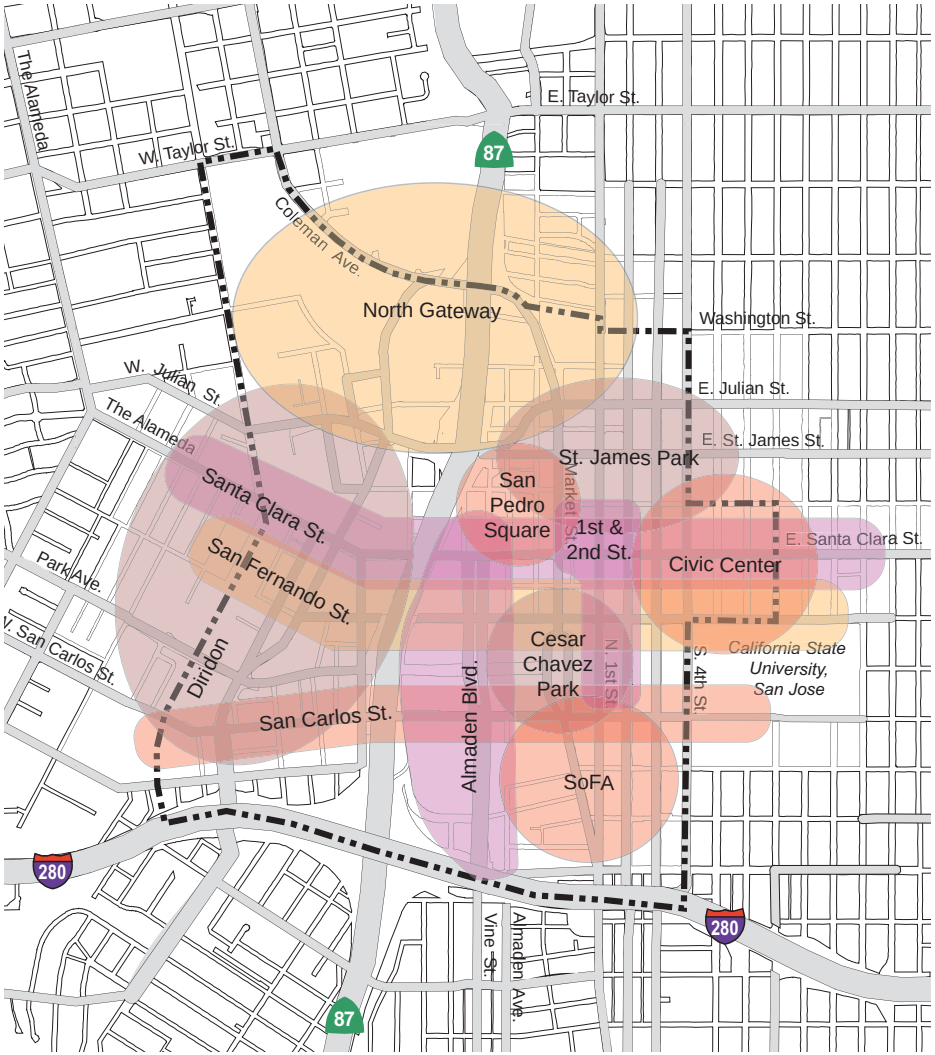


FIGURE 3.2.6 San José Downtown Areas Diagram
Source: San José Downtown Strategy 2000 Plan Final EIR, 2005

28th Street Station

Urban Villages, which characterize much of the land uses around 28th StreetStation, allow for higher density mixed-use near transit, providing intensity of 250 DU/acre and a maximum FAR of 10.0. Adjacent neighborhood mixed, commercial, and public uses provide slightly lower intensities of 50 DU/acre and maximum FAR of 4.5 for Mixed-use Commercial and 30 DU/acre and maximum FAR of 2.0 for Mixed-use Neighborhood. Surrounding Residential Neighborhood uses provide much lower intensity. Low intensity industrial uses extend north towards Barryessa/ North San José Station.

FIGURE 3.2.7 28th StreetStation Planned Land Use
Source: Envision San José 2040 General Plan, 2011

URBAN VILLAGES

Urban Villages are located within Priority Development Areas (PDAs) which are areas:

- Within an existing community
- Within walking distance of frequent transit service
- Designated for more housing in a locally adopted plan or identified by a local government for future planning and potential growth
- Nominated through a resolution adopted by a City Council or County Board of Supervisors.[1]

The Urban Village program, set up by the City of San José, establishes areas that are walkable, bicycle-friendly, and transit-oriented mixed-use that provide both housing and jobs, thus supporting the General Plan's environmental goals.[2]

The Five Wounds, Roosevelt Park, Little Portugal, and 24th and William Urban Village Plans are part of the first group prepared by the City and the community to further the Urban Village strategy of the Envision San José 2040 General Plan.

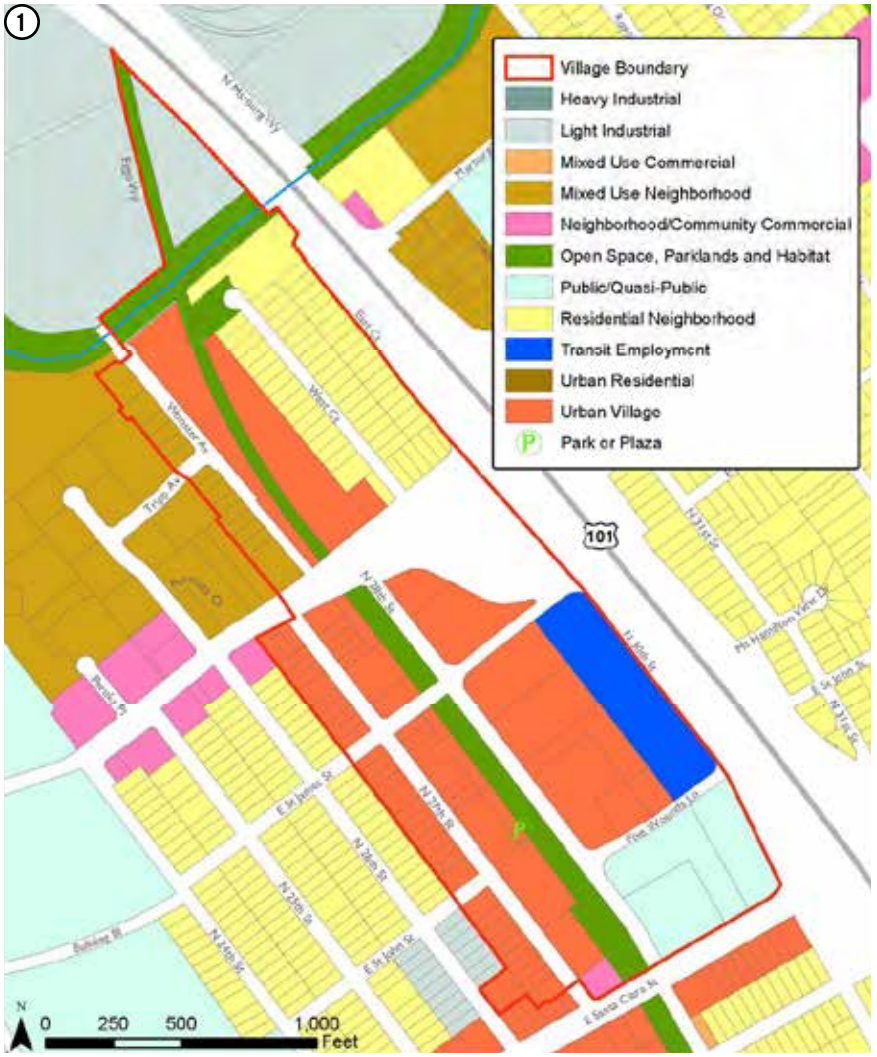


FIGURE 3.2.8 Five Wounds Urban Village
Source: Five Wounds Urban Village Plan, 2013.

1 Association of Bay Area Governments: https://abag.ca.gov/priority/development/
2 City of San José Urban Village Plans: http://sanjoseca.gov/planning/urbanvillages

The Five Wounds Urban Village Plan
The Five Wounds Urban Village Plan envisions a mixed-use, pedestrian-oriented environment which supports the recently implemented BRT project along Santa Clara Street.

The plan places an emphasis on economically vibrant commercial uses which serve the surrounding neighborhoods, including retail shops, services and professional offices. This requires an increase in commercial square footage by 40 percent and higher densities of 0.75 FAR or greater. Mixed-use residential is also encouraged. To achieve this land use, the plan does not allow stand-alone residential projects.

Roosevelt Park Urban Village Plan
The Roosevelt Park Urban Village Plan envisions a pedestrian-oriented, mixed-use environment, including retail sales and services, public facilities, offices, other commercial uses, and high-density housing.

The plan does not allow stand-alone residential but does allow mixed-use projects to be either vertical or horizontal. The plan does not specify maximum FARs or maximum/minimum DU/acres. Instead, development density is limited by parking requirements and maximum height limits which range from 55'-85'. The long term goal for redevelopment and new development of commercial uses is for a minimum FAR of 0.45 in order to achieve the vision for the Urban Village.

Little Portugal Urban Village Plan
The Little Portugal Urban Village plans for a pedestrian-oriented neighborhood with a mix of retail sales and services, public facilities, offices, other commercial uses and high density housing. The plan calls for commercial minimum FAR of 0.24-0.35 and establishes a long term objective of a minimum 2.0 FAR for properties redeveloped with commercial uses.

24th and William Urban Village Plan
The goal of the 24th and William Urban Village Plan is to maintain and enhance the neighborhood as a complete community through commercial, employment, and residential uses. Suitable commercial uses identified in the plan include retail sales and services, professional and general offices, and institutional uses. The plan also advocates for mixed-use residential as opposed to stand-alone residential developments.

The intersection of 24th and William Streets is intended to be a hub for the community through preservation of existing retail and the addition of neighborhood retail and small scale commercial uses.

Key plan for Figures 3.2.9-11

FIGURE 3.2.9 Little Portugal Urban Village
Source: Little Portugal Urban Village Plan, 2013

FIGURE 3.2.11 Roosevelt Park Urban Village
Source: Roosevelt Park Urban Village Plan, 2013

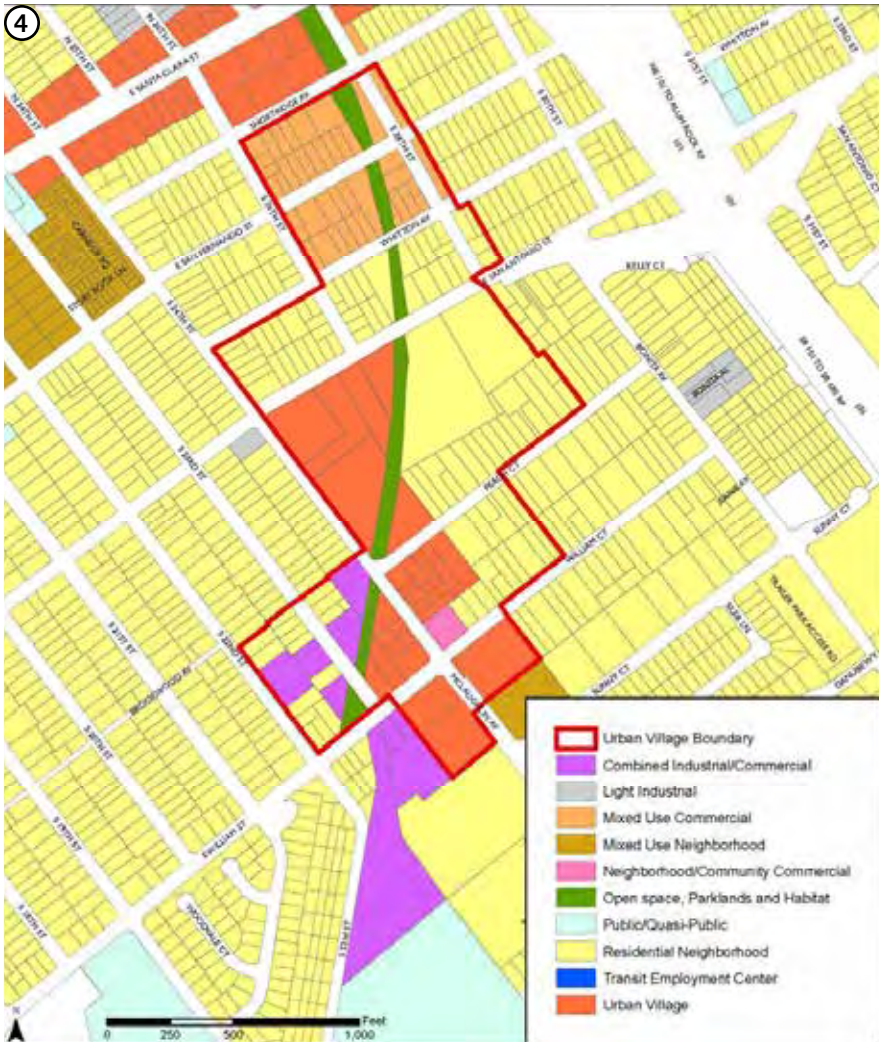


FIGURE 3.2.10 24th and William Urban Village
Source: 24th and William Urban Village Plan, 2013

3.3 Projected and Planned Growth

This section describes the planned growth areas relevant to VTA's BART Phase II stations and summarizes the amount of employment and household growth that is being projected and planned for in the relevant growth areas.

The section is based on a review of Plan Bay Area 2040 and the Cities of San José and Santa Clara's respective General Plans. Plan Bay Area 2040, the region's long-range plan for transportation, land use, and housing, forecasts the amount of growth expected to occur in the nine-county region, each county and city within the region, and locally identified Priority Development Areas (PDAs) within each city. The cities' General Plans both designate "growth" or "focus" areas where the cities are planning to accommodate a specified amount of growth (or planned capacity).

The section is organized into the following sub-sections:

- Overview of growth areas that are relevant to the BART Phase II stations.
- Plan Bay Area 2040 projections.
- San José General Plan growth areas and planned capacity.
- Santa Clara General Plan focus areas and planned capacity.

OVERVIEW OF GROWTH AREAS

Figures 3.3.1, Figure 3.3.2, and Figure 3.3.3 show the growth areas the fall substantially within the one-mile radius around the BART Phase II stations (with Diridon Station shown for reference). The types of growth areas shown include:

- Priority Development Areas (PDAs) designated in Plan Bay Area to accommodate significant new housing, job growth, and/or new investment.
- Growth Areas identified in the San José General Plan, including Urban Villages, Employment Areas, Specific Plan Areas, and the Downtown Growth Area.
- Focus Areas identified in the Santa Clara General Plan.

These designations are described in more detail on the following pages.

Legend for Figure 3.3.1, Figure 3.3.2, and Figure 3.3.3.

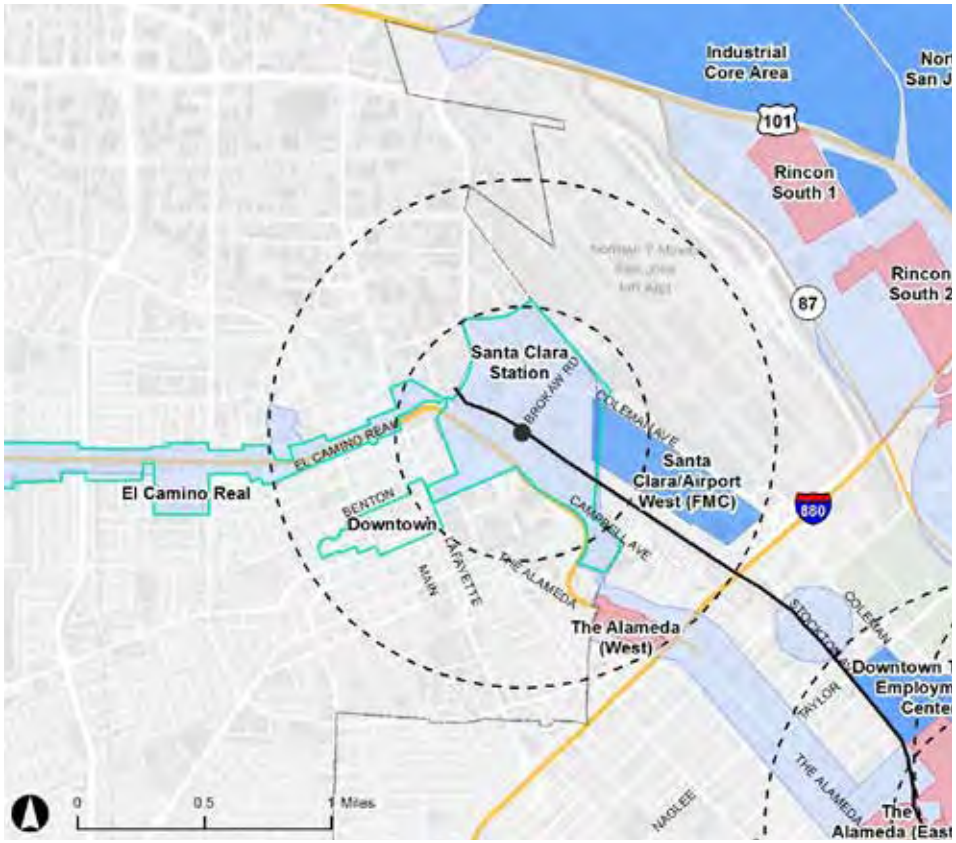


FIGURE 3.3.1 Santa Clara Station Growth Areas
Source: Metropolitan Commission, 2017; City of Santa Clara; City of San José, 2016; VTA 2016.

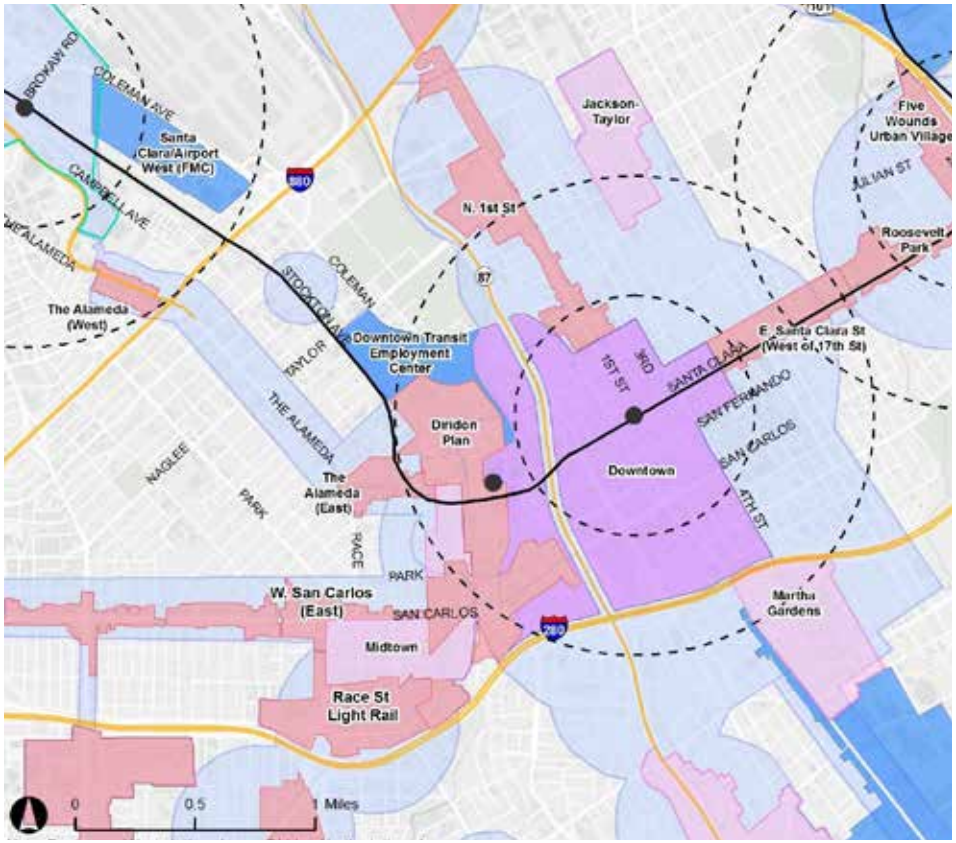


FIGURE 3.3.2 Downtown San José Station Growth Areas
Note: Downtown West station shown, Diridon North station shown.
Source: Metropolitan Commission, 2017; City of San José, 2016; VTA 2016.

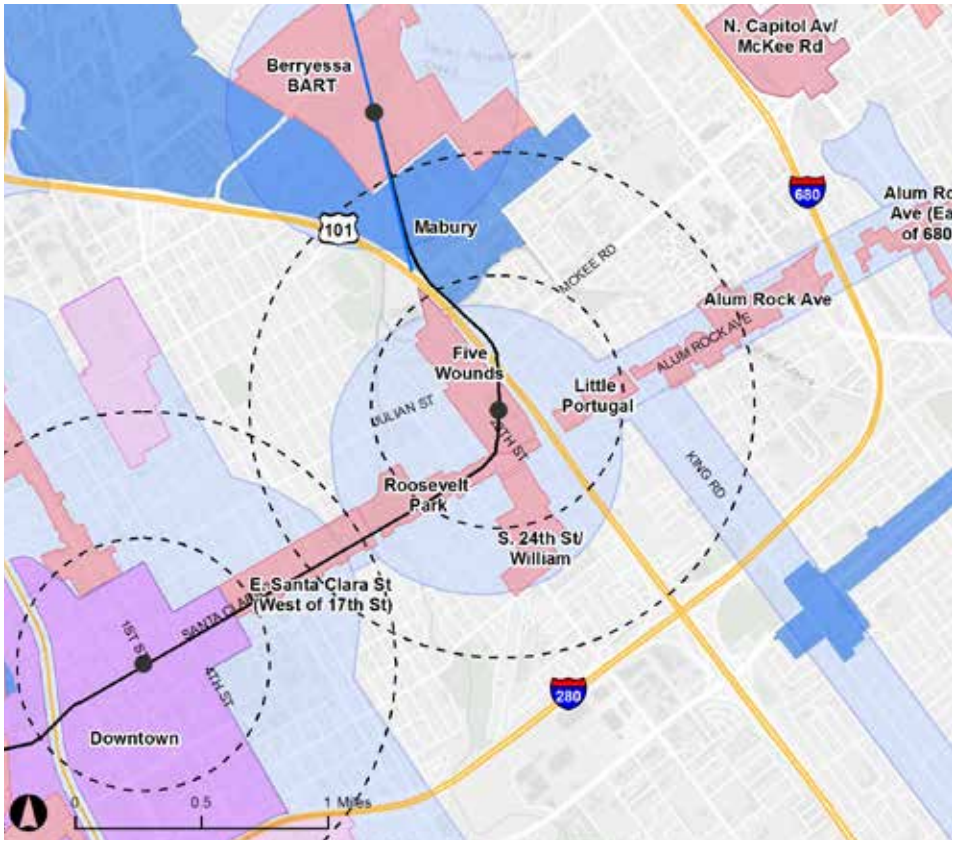


FIGURE 3.3.3 28th StreetStation Growth Areas
Source: Metropolitan Commission, 2017; City of San José, 2016; VTA 2016.

PLAN BAY AREA 2040 GROWTH PROJECTIONS

The Metropolitan Transportation Commission (MTC) and the Association of Bay Area Governments (ABAG) jointly produce Plan Bay Area, which serves as the region's long-range plan for transportation, land use, and housing. The most recent plan, Plan Bay Area 2040, was adopted in 2017[1]. The Plan projects employment, non-residential square footage, and household growth for the period between 2010 and 2040. Projections are provided for the nine-county region, for each county and city within the region, and for locally designated Priority Development Areas within each city.

Priority Development Areas are areas that have been identified by the local jurisdiction to accommodate significant new housing, job growth, and/or new investment. PDAs must be located in proximity to frequent transit service and within an existing community (i.e. they cannot be greenfill development areas). Over 170 PDAs have been designated by cities and counties across the region, including several in proximity to VTA's future BART Phase II stations in the cities of San José and Santa Clara.

San José Figure 3.3.1, Figure 3.3.2, Figure 3.3.3 on the previous pages show the PDAs substantially located within a one-mile radius from the Alum Rock/28th St, Downtown San José, and Santa Clara stations. Tables on the following pages summarize Plan Bay Area's growth projections for employment (Table 3.3.1), non-residential square footage (Table 3.3.2), and households (Table 3.3.3).

1 Plan Bay Area 2040 is an update to Plan Bay Area, which was adopted in 2013.

Geography	Nearest BART Station	2010 Jobs	2040 Jobs	Net New Jobs 2010-2040	% Change 2010-2040
Bay Area Region		3,410,853	4,698,374	1,287,521	38%
Santa Clara County		902,223	1,289,871	387,648	43%
City of San José		381,843	554,874	173,031	45%
City of Santa Clara		105,124	170,575	65,451	62%
Priority Development Areas					
East Santa Clara/Alum Rock Corridor	Alum Rock/28th St	4,151	5,453	1,302	31%
Greater Downtown (a)	Downtown & Diridon	29,585	53,610	24,025	81%
Downtown "Frame" (b)	Downtown & Diridon	24,301	32,496	8,195	34%
Santa Clara Station Focus Area	Santa Clara	4,009	4,015	6	0%
El Camino Real Focus Area (c)	Santa Clara	4,978	6,763	1,785	36%

TABLE 3.3.1 Plan Bay Area 2010-2040 Employment Growth Projections

(a) The Greater Downtown PDA overlaps with both the Downtown San José growth area and the Diridon Station Area Urban Village (see discussion of San José General Plan growth areas below).

(b) The Downtown "Frame" PDA is the ring-shaped PDA that surrounds the Greater Downtown PDA, extending north to West Hedding Street, east to 15th Street, west to Race Street and south to West Alma Avenue.

(c) El Camino Real PDA extends from De La Cruz to the Lawrence Expressway.

Source: MTC, 2017.

Geography	Nearest BART Station	2010 Non-Residential SF	2040 Non-Residential SF	Net New SF 2010-2040	% Change 2010-2040
Bay Area Region		2,041,734,538	2,183,430,765	141,696,226	7%
Santa Clara County		551,183,170	599,915,218	48,732,048	9%
City of San José		236,364,434	268,059,866	31,695,432	13%
City of Santa Clara		70,732,505	77,570,238	6,837,733	10%
Priority Development Areas					
East Santa Clara/Alum Rock Corridor	28th St	2,743,085	2,513,127	-229,958	-8%
Greater Downtown	Downtown & Diridon	14,338,994	21,608,184	7,269,190	51%
Downtown "Frame"	Downtown & Diridon	13,227,778	16,558,691	3,330,913	25%
Santa Clara Station Focus Area	Santa Clara	2,758,564	2,207,154	-551,410	-20%
El Camino Real Focus Area	Santa Clara	3,329,895	2,888,655	-441,240	-13%

TABLE 3.3.2 Plan Bay Area 2010-2040 Non-Residential Growth Projections

(a)The Greater Downtown PDA overlaps with both the Downtown San José growth area and the Diridon Station Area Urban Village (see discussion of San José General Plan growth areas below).

(b)The Downtown "Frame" PDA is the ring-shaped PDA that surrounds the Greater Downtown PDA, extending north to West Hedding Street, east to 15th Street, west to Race Street and south to West Alma Avenue.

(c)El Camino Real PDA extends from De La Cruz to the Lawrence Expressway.

Source: MTC, 2017.

Geography	Nearest BART Station	2010 Households	2040 Households	Net New 2010-2040	% Change 2010-2040
Bay Area Region		2,609,000	3,426,700	817,700	31%
Santa Clara County		612,393	860,808	248,415	41%
City of San José		306,780	448,312	141,532	46%
City of Santa Clara		42,051	57,009	14,958	36%
Priority Development Areas					
East Santa Clara/Alum Rock Corridor	28th St	4,842	10,853	6,011	124%
Greater Downtown	Downtown & Diridon	4,538	11,003	6,465	142%
Downtown "Frame"	Downtown & Diridon	17,658	35,133	17,475	99%
Santa Clara Station Focus Area	Santa Clara	245	2,529	2,284	932%
El Camino Real Focus Area	Santa Clara	686	4,391	3,705	540%

TABLE 3.3.3 Plan Bay Area 2010-2040 Household Growth Projections

(a)The Greater Downtown PDA overlaps with both the Downtown San José growth area and the Diridon Station Area Urban Village (see discussion of San José General Plan growth areas below).

(b)The Downtown "Frame" PDA is the ring-shaped PDA that surrounds the Greater Downtown PDA, extending north to West Hedding Street, east to 15th Street, west to Race Street and south to West Alma Avenue.

(c)El Camino Real PDA extends from De La Cruz to the Lawrence Expressway.

Source: MTC, 2017.

SAN JOSÉ GENERAL PLAN GROWTH AREAS AND PLANNED CAPACITY

The City of San José adopted its General Plan, Envision San José 2040, in 2011. San José's General Plan implements a detailed framework for managing where and when development is permitted. The General Plan focuses new growth capacity in specifically identified "Growth Areas," to advance economic and environmental goals and maximize the use of transit systems.

Citywide, the General Plan sets a goal of adding 382,000new jobs and 120,000 new housing units by 2040. These targets are intended to help rebalance San José's jobs-housing ratio. In 2010, the City of San José had about 0.8 Jobs to Employed Residents (J/ER). The General Plan employment and household growth goals are intended to achieve a citywide J/ER ratio of 1.1.[1]

In addition to setting citywide goals for employment and residential growth, the General Plan designates four main types of "Growth Areas" where future development will be concentrated. These include:

- Urban Villages are planned to accommodate significant new job and housing growth in a compact, walkable urban setting. These neighborhoods have good transit access and other existing infrastructure. About 63 Urban Villages have been designated throughout the city. [2]
- Downtown San José is a unique designation in the General Plan that aligns with the boundaries of the City's Downtown Strategy 2000 (and the proposed Downtown Strategy 2040 update, discussed below). The General Plan aims to "to support regional transit use, continue the development of the Downtown as a regional job center, and to support continued development of high-rise development within the Downtown area." [3]
- Employment Areas are planned to accommodate a large portion of the city's employment growth in a wide variety of industry types and development forms. In general, Employment Areas are strategically located near regional transportation infrastructure and already have significant employment uses. The General Plan aims to intensify the existing employment uses in these areas. Residential development is generally not permitted in the employment areas.[4]
- Specific Plan Areas represent neighborhoods for which a Specific Plan had already been adopted prior to the adoption of Envision San José 2040. In most cases, the General Plan incorporates the land uses as outlined in the Specific Plans, with only limited modifications or increased growth capacity.

Table 3.3.4 shows planned jobs and commercial growth capacity by growth area, for the growth areas that fall substantially within the one-mile radius around the VTA'S BART Phase II stations. Table 3.3.5 shows residential growth capacity for the same growth areas. Note that growth areas within one mile of Diridon Station are included for reference.

New commercial development may occur in any of the growth areas at any time. Residential development may move forward at any time in the Downtown and Specific Plan Areas, up to the amount allocated in the General Plan. However, in the Urban Villages, new residential development may only occur under one of the following conditions:

- The Urban Village has an adopted Urban Village Plan and is in the Current Plan Horizon. The General Plan establishes Plan Horizons that are intended to manage the timing of residential development and ensure that sufficient commercial development is completed before additional residential development proceeds. Each Urban Village is assigned to a Horizon (1, 2, or 3)[5], San José is currently in Horizon 1; a determination by City Council will be required to move to Horizon 2. To date, Urban Village Plans have been adopted in six Horizon 1 Urban Villages (Roosevelt Park, Little Portugal, Alum Rock, West San Carlos, Diridon Station Area[6], and The Alameda). In the Roosevelt Park, Little Portugal, Five Wounds, and 24th and William Street Urban Villages, there is a further requirement that housing may only move forward once implementation plans are in place that comply with the Urban Villages Implementation Framework that the Council approved in May 2018.
- Urban Villages not included within the current Plan Horizon that have an adopted Urban Village Plan

1 These represent the adjusted numbers, as adopted in the General Plan Four-Year Review (2016).

2 Urban Villages are further classified in one of four categories according to their transit connectivity: Regional Transit Urban Villages, Local Transit Urban Villages, Commercial Corridor/Center Urban Villages, and Neighborhood Urban Villages.

3 Envision San José 2040.

4 With the exception of the North San José Employment Area, and already entitled development in the Old Edenvale Area (Bernal) Employment Area.

5 Urban Villages may be re-assigned to a different Horizon at the time of the periodic Four-Year Review process.

6 The Diridon Station Area Plan.

may utilize the Residential Pool policy as specified in the General Plan. One Horizon 2 Urban Village (Five Wounds) and six Horizon 3 Urban Villages (24th and William, South Bascom (North), Stevens Creek Boulevard, Santana Row/Valley Fair, Winchester Boulevard) have been adopted. The Residential Pool (initially established as 5,000 units) may be allocated to allow entitlement of residential properties within Urban Village Areas that are not within the current Plan Horizon. However, note that in the Five Wounds and 24th and William Street Urban Villages, an implementation plan is still required before housing can proceed.

- Affordable housing and residential, mixed-use "Signature" projects may also proceed in any Horizon ahead of preparation of an Urban Village Plan. A Signature project must clearly advance or serve as a catalyst for the full implementation of the Envision San José Urban Village strategy. Residential projects that are 100 percent affordable to extremely low income, very low, and low income households can also proceed within an Urban Village at any time, if the project meets the defined criteria.

In Table 3.3.5, growth areas in which residential development is currently permitted to move forward are denoted with a double asterisk (**). In addition, as described above, "Signature" projects may also proceed in the Urban Villages where no Urban Village Plan has been adopted.

Growth Area	Type	Nearest BART Station	Net New Jobs (a)	Commercial Square Footage (b)			
				Net New	Existing	Total 2040	% Change
City of San José			**382,000**	**n/a**	**n/a**	**n/a**	**n/a**
Roosevelt Park	Urban Village	Alum Rock/28th St	605	181,500	344,500	526,000	53%
Little Portugal	Urban Village	Alum Rock/28th St	100	82,000	118,000	200,000	69%
Alum Rock (5WBT Area)	Urban Village	Alum Rock/28th St	870	n/a	n/a	n/a	n/a
Five Wounds BART	Urban Village	Alum Rock/28th St	4,050	1,215,000	597,594	1,812,594	203%
S 24th St/William	Urban Village	Alum Rock/28th St	100	124,500	167,000	291,500	75%
Mabury	Employment Area	Alum Rock/28th St	2,265	n/a	n/a	n/a	n/a
Downtown San José (c)	Growth Area	Downtown & Diridon	48,500	12,600,000	n/a	n/a	n/a
East Santa Clara (W. of 17th St)	Urban Village	Downtown	795	240,000	500,000	740,000	48%
North 1st St	Urban Village	Downtown	2,520	n/a	n/a	n/a	n/a
Midtown	Specific Plan Area	Diridon	841	1,560,000	545,000	2,105,000	286%
The Alameda (East)	Urban Village	Diridon	1,610	432,900	606,500	1,039,400	71%
Santa Clara/Airport West (FMC)	Employment Area	Santa Clara	1,600	n/a	n/a	n/a	n/a
The Alameda (West)	Urban Village	Santa Clara	200	n/a	n/a	n/a	n/a

TABLE 3.3.4 Planned Jobs and Commercial Growth Capacity by Growth Area: San José Envision 2040 General Plan
n/a: Commercial square footage data are not available for growth areas that do not have local area plans in place.
((a) Planned job capacity found in December 2017 update of Appendix 5 to the Envision San José General Plan.
(b) Commercial square footage found in plan documents.
(c) Includes the Downtown Growth Area and Diridon Station Area Urban Village. Note that the commercial square footage shown is from the Downtown Strategy 2000 Plan and applies only to the Downtown Growth Area (which overlaps largely, but not entirely, with the Diridon Station Area Urban Village); the Downtown Strategy 2040 will increase this amount to 15.6 million square feet (office and retail).
Sources: Strategic Economics' review of City of San José planning documents.

Growth Area	Type	Nearest BART Station	Net New Units			
			Total (a)	Horizon 1	Horizon 2	Horizon 3
City of San José			**120,000***	**47,449**	**24,379**	**24,626**
Roosevelt Park	Urban Village	Alum Rock/28th St	650	650	0	0
Little Portugal	Urban Village	Alum Rock/28th St	310	310	0	0
Alum Rock (5WBT Area)	Urban Village	Alum Rock/28th St	1,010	1,010**	0	0
Five Wounds BART	Urban Village	Alum Rock/28th St	845	0	845	0
S 24th St/William	Urban Village	Alum Rock/28th St	217	0	0	217
Mabury	Employment Area	Alum Rock/28th St	0	0	0	0
Downtown San José (b)	Growth Area	Downtown & Diridon	8,450	8,450**	0	0
East Santa Clara (W. of 17th St)	Urban Village	Downtown	850	850	0	0
North 1st St	Urban Village	Downtown	1,678	0	1,678	0
Downtown Transit Employment Center (c)			n/a	n/a	n/a	n/a
Diridon Station Area (b)	Urban Village	Diridon	2,710	2,710**	0	0
Midtown	Specific Plan Area	Diridon	800	800**	0	0
The Alameda (East)	Urban Village	Diridon	411	411	0	0
Santa Clara/Airport West (FMC)	Employment Area	Santa Clara	0	0	0	0
The Alameda (West)	Urban Village	Santa Clara	400	0	0	400

TABLE 3.3.5 Planned Residential Growth Capacity by Growth Area and Horizon: San José Envision 2040 General Plan

((a) Planned housing unit capacity as reported in December 2017 update of Appendix 5 to the Envision San José General Plan.

(b) Includes the Downtown Growth Area and Diridon Station Area Urban Village. Additional units for the Downtown Growth Area are under study as part of The Downtown Strategy 2040 Environmental Impact Report (EIR) update

**Includes an additional 23,546 units under the North San José Area Development Policy (Phases 2-4); these units subject to a separate phasing plan and are not assigned to a horizon.*

***Growth areas where residential development can proceed, including in the Downtown Growth Area, Specific Plan Areas, and Urban Villages that have an adopted Urban Village plan.*

Sources: Strategic Economics' review of City of San José planning documents.

SANTA CLARA GENERAL PLAN GROWTH AREAS AND PLANNED CAPACITY

The City of Santa Clara adopted its General Plan in 2010. The Plan covers the 2010-2035 planning period. Citywide, the Santa Clara General Plan plans for the addition of up to 16,000 new housing units and 23.5 million square feet of new non-residential development between 2008 and 2035 (2008 was used as the baseline for the development capacity analysis in the Plan).

The General Plan identifies several "Focus Areas" throughout the City in which to concentrate this new development. These Focus Areas include Santa Clara Station Area, Downtown Santa Clara, and El Camino Real. Note that while the El Camino Real Focus Area intersects with the one-mile radius around Santa Clara Station, the Focus Area extends to the City's western boundary (roughly Laurence Expressway).

The Northern Quadrant of Santa Clara is also planned for substantial growth. Examples of ongoing development projects and major plans for new development include City Place Santa Clara, the Tasman East Specific Plan, Patrick Henry Specific Plan, Freedom Circle Specific Plan, and the Kylli development. Overall, close to 20,000 new residential units and several million square feet of office development are planned. Many of these projects are located close to VTA light rail.

Table 3.3.6 and Table 3.3.7 show the amount of growth planned citywide and for the Focus Areas located near Santa Clara Station.

Growth Area Name	Type	Nearest BART Station	Net New Jobs	Commercial Square Footage			
				Net New Commercial SF	Existing Commercial SF 2008	Total Commercial SF 2035	Percent Change
City of Santa Clara			47,620	23,518,500	58,846,000	82,364,500	40%
Focus Areas							
Santa Clara Station	Focus Area	Santa Clara	N/A	2,000,000	N/A	N/A	N/A
Downtown	Focus Area	Santa Clara	N/A	130,000	N/A	N/A	N/A
El Camino Real (a)	Focus Area	Santa Clara	N/A	N/A	N/A	N/A	N/A

TABLE 3.3.6 Planned Jobs and Commercial Growth Capacity by Focus Area: Santa Clara General Plan
N/A: Not available
(a) The planning process for the El Camino Real Focus Area Specific Plan is currently underway. Commercial square footage projections are not yet available.
Sources: Strategic Economics' review of City of Santa Clara planning documents.

Growth Area Name	Type	Nearest BART Station	Total Net New Units
City of Santa Clara			16,179
Santa Clara Station	Focus Area	Santa Clara	1,650
Downtown	Focus Area	Santa Clara	400
El Camino Real	Focus Area	Santa Clara	2,274

TABLE 3.3.7 Planned Residential Growth Capacity by Focus Area: Santa Clara General Plan
Sources: Strategic Economics' review of City of Santa Clara planning documents.

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3.4 Existing Household and Employment Concentrations

Figure 3.4.1 and Figure 3.4.2 show the existing household and employment concentrations in the station areas. Downtown has the greatest existing concentration of households in the corridor, reflecting the higher density housing types in Downtown San José. There are also pockets of higher intensity residential development in the 28th Street area, between a half and one mile from the station; however, these neighborhoods have limited connectivity to the future station location.

Downtown also has the highest employment concentration in the corridor. The Downtown employment concentration stretches north along the North 1st Street corridor, and is served by VTA light rail.

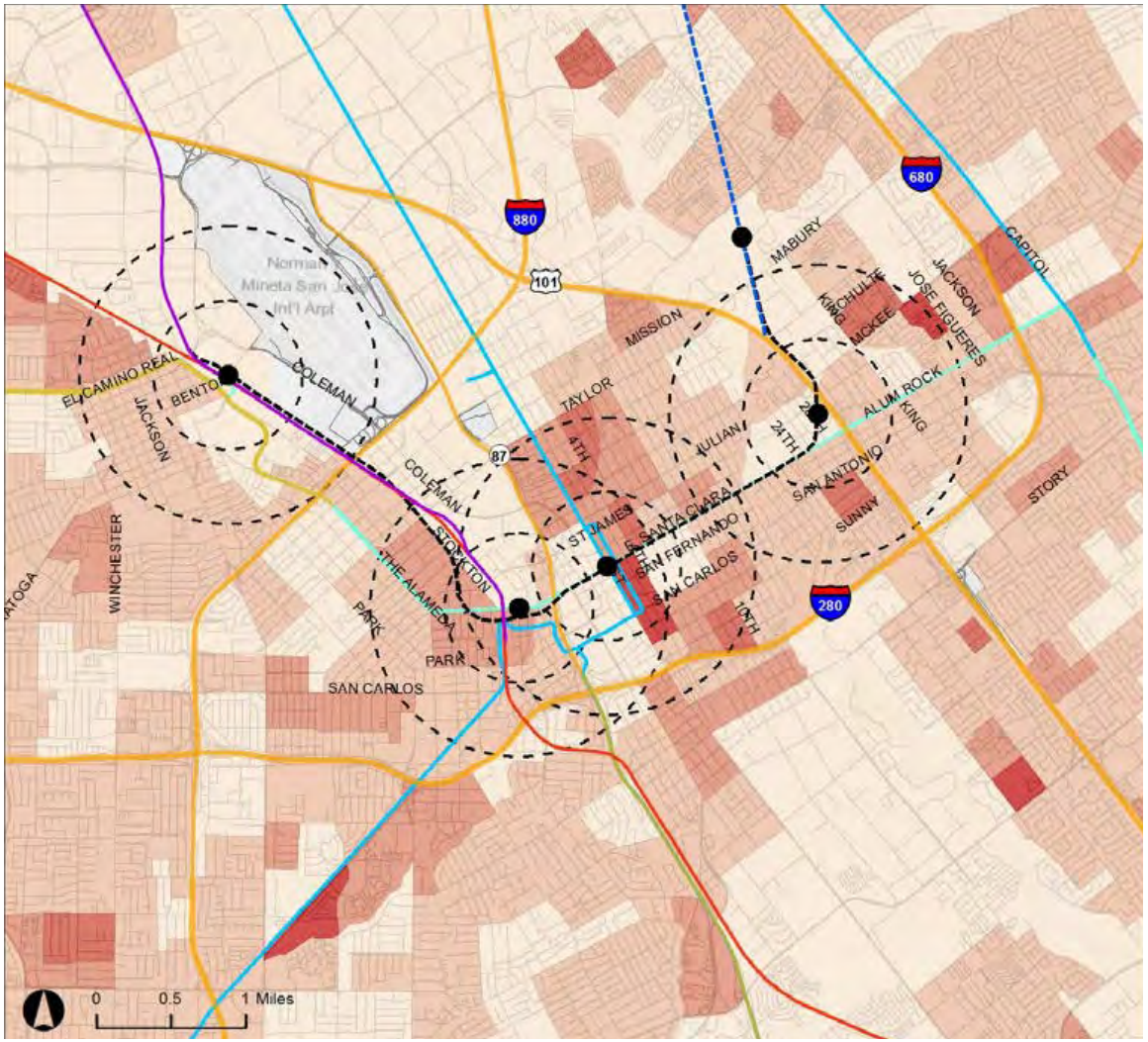

FIGURE 3.4.1 Household Density, 2016
Sources: US American Community Survey (ACS) 5-Year, 2012-2016; Strategic Economics, 2016

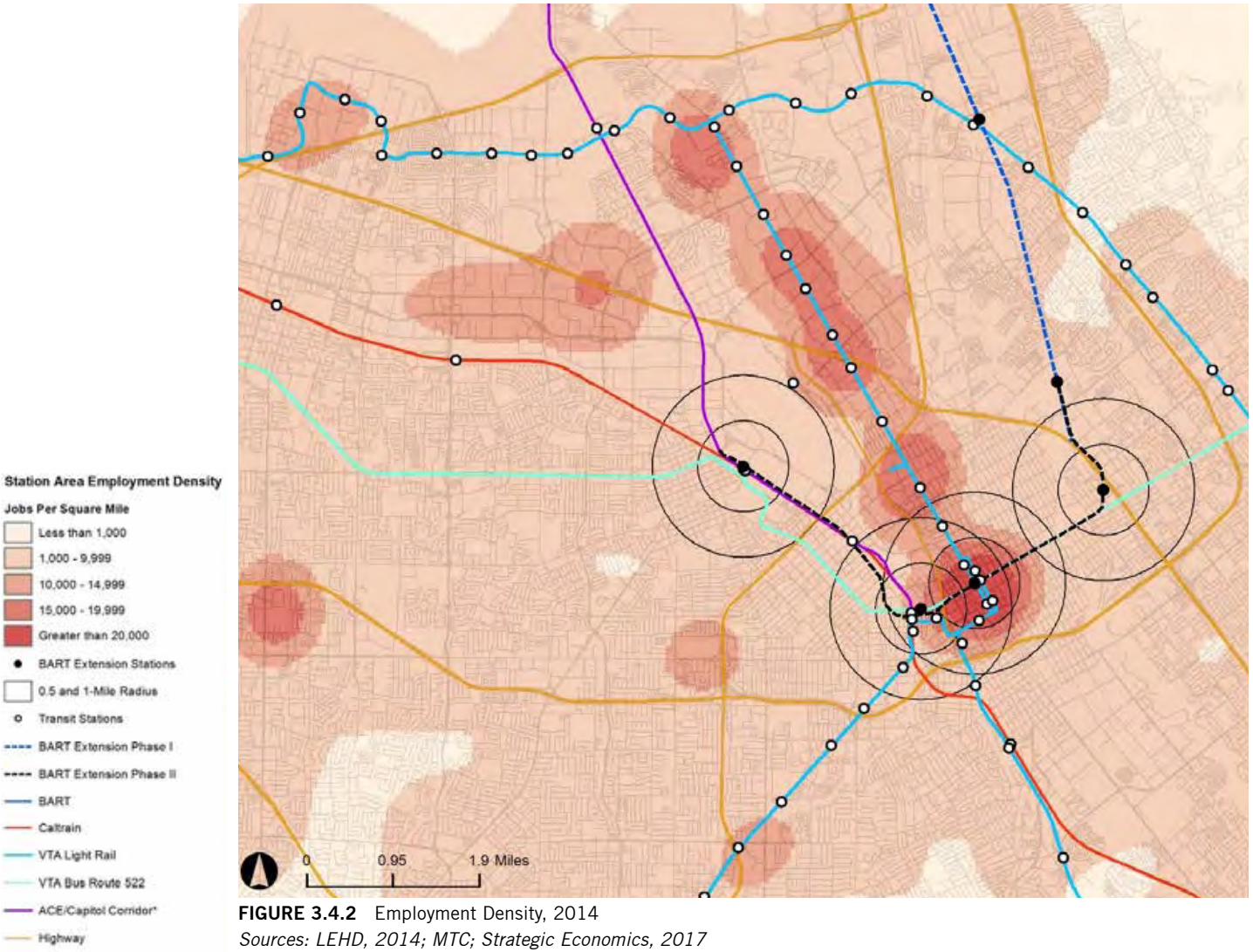

FIGURE 3.4.2 Employment Density, 2014
Sources: LEHD, 2014; MTC; Strategic Economics, 2017
**Altamont Commuter Express (ACE) and Capitol Corridor diverge east of Centerville Station*

3.5 Recent and Planned Development Activity

The cities of San José and Santa Clara are undergoing significant development activity in and around existing and future transit stations. Recent and planned development projects are shown in Figure 3.5.1, Figure 3.5.2, and Figure 3.5.3, by project type and status. Major development projects are discussed below; Task 3 will include a more detailed assessment of development activity occurring within the station area boundaries.

There are several projects planned and underway in and around the Santa Clara station area. The Coleman Highline and Gateway Crossings developments, located to the northeast of the station (and straddling the Santa Clara/San José border), are the largest projects. The Coleman Highline project (on the San José side) will add up to 1.5 million square feet of commercial space in eight buildings. The first phase is currently under construction. Gateway Crossings (in Santa Clara) is currently under review and is proposed to include 1,600 residential units and up to 215,000 square feet of commercial uses (including a 250 room, full-service hotel). In addition to Coleman Highline and Gateway Crossings, there are also several other residential projects proposed for the area around the station. There has also been significant development activity along El Camino Real, stretching west from the station area.

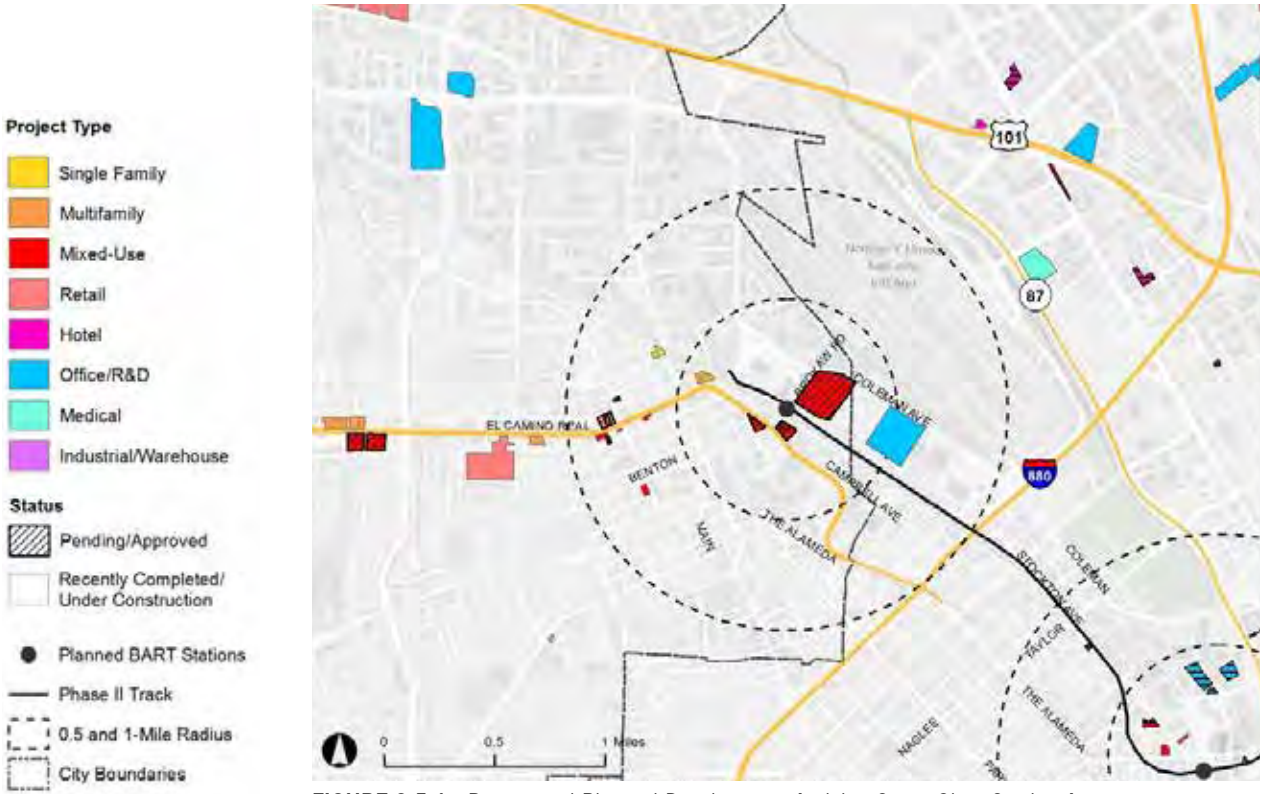

FIGURE 3.5.1 Recent and Planned Development Activity: Santa Clara Station Area

Downtown San José is in the midst of a major development boom. According to the City's own analysis, there are over 2,000 mid-rise and high-rise residential units currently under construction, with more than 5,000 additional residential units entitled or under review. In the Downtown core and Diridon area, there are approximately 1 million square feet of office, 430 hotel rooms, and 220,000 square feet of ground floor commercial under review.[1]

These figures do not include the proposed Google/Trammel Crow transit village at Diridon Station. The proposal is still in early stages, but could include office space for up to 20,000 workers.[2]

Development around the 28th Streetstation is more limited, and includes few industrial/warehouse projects as well

1 Preliminary figures provided by City of San José.

2 George Avalos, "Exclusive: Google adds huge new site to Downtown San José village proposal," April 3, 2018, https://www.mercurynews.com/2018/04/03/google-adds-huge-site-to-downtown-san-jose-village-proposal/

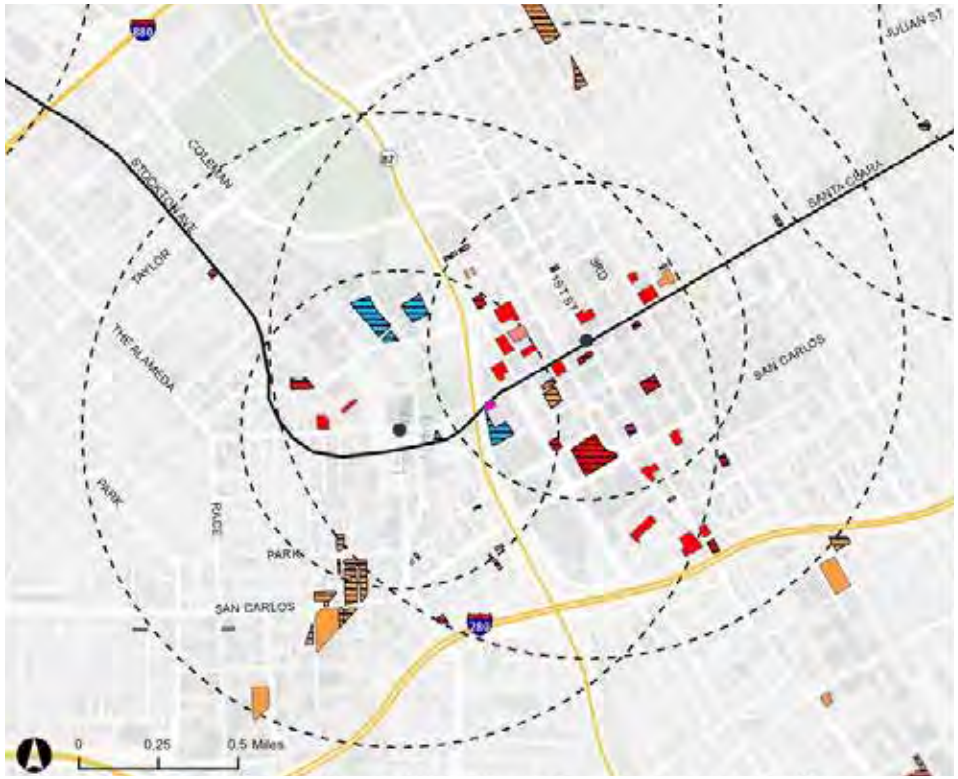

FIGURE 3.5.2 Recent and Planned Development Activity: Downtown/Diridon Station Area

FIGURE 3.5.3 Recent and Planned Development Activity: 28th StreetStation Area

Sources: City of Santa Clara Development Story Map, Mar. '18; City of San José Development Activity Highlights, Feb. '18; Dept. of PBCE, Downtown San José Development Projects, Mar. '18.

as one mixed-use residential development within one mile of the station.[3]

3 Note that the San José projects shown in the figures above are based on the City's Major Development Activity report, which tracks residential projects greater than 50 dwelling units, commercial projects greater than 25,000 SF, and industrial projects greater than 75,000 SF. The City also tracks smaller projects in the Downtown (shown in Figure 3.5.2).

3.6 Building Inventory

Table 3.6.1, Table 3.6.2, Table 3.6.3 provide a preliminary snapshot of the multifamily rental, office, and retail inventory in the half-mile radii around the stations, based on CoStar data. Downtown accounts for the majority of multifamily, office, and retail space, with an estimated 3,500 apartment units, 8.1 million square feet of office, and 1.3 million square feet of existing retail[1]. The half-mile radius around the Santa Clara station includes a significant office and retail inventory (628,000 and 108,500 square feet, respectively), as well as approximately 425 rental units. The 28th StreetStation Area is characterized by more rental units (860) and retail (395,000 sq. ft.), but a limited office inventory.

In general, occupancy rates are high (over 90 percent) for all product types. The Downtown office inventory has a slightly lower occupancy rate (89% overall), especially for Class B space (87%).

1 Note that CoStar typically undercounts retail in mixed-use buildings, e.g., in Downtown San José.

	All Units				Class A				Class B			
Half Mile Station Radii	Units	% of Corridor Units	Occupied Units	Occ. Rate	Units	% of Corridor Units	Occupied Units	Occ. Rate	Units	% of Corridor Units	Occupied Units	Occ. Rate
Santa Clara	423	9%	401	95%	0	0%	N/A	N/A	339	19%	320	95%
Downtown	3,474	73%	3,321	96%	1,415	100%	1,353	96%	1,173	65%	1,120	96%
Alum Rock/28th St	857	18%	830	97%	0	0%	N/A	N/A	281	16%	275	98%
Corridor Total	4,754	100%	4,551	96%	1,415	100%	1,353	96%	1,793	100%	1,715	96%

TABLE 3.6.1 Multifamily Rental Inventory and Occupancy Rates
N/A: Data not available
Station areas defined as half-mile radius around station.
Source: Costar, Q4 2017; Strategic Economics, 2018.

	All Office Space				Class A				Class B			
Half-Mile Station Radii	**Total RBA (SF)**	**% of Corridor RBA**	**Occupied SF**	**Occ. Rate**	**Total RBA (SF)**	**% of Corridor RBA**	**Occupied SF**	**Occ. Rate**	**Total RBA (SF)**	**% of Corridor RBA**	**Occupied SF**	**Occ. Rate**
Santa Clara	628,538	7%	606,539	97%	0	0%	n/a	n/a	583,308	13%	550,059	94%
Downtown	8,103,748	92%	7,179,921	89%	3,490,171	100%	3,183,036	91%	3,786,439	86%	3,309,348	87%
Alum Rock/28th St	108,506	1%	106,770	98%	0	0%	n/a	n/a	40,100	1%	40,100	100%
Corridor Total	8,840,792	100%	7,893,230	89%	3,490,171	100%	3,183,036	91%	4,409,847	100%	3,899,507	88%

TABLE 3.6.2 Office Inventory and Occupancy Rates
RBA: Rentable building area
N/A: Data not available
Station areas defined as half-mile radius around station.
Source: Costar, Q4 2017; Strategic Economics, 2018.

Half-Mile Station Radii	RBA (SF.)	% of Corridor RBA	Occupied SF.	Occupancy Rate
Santa Clara	278,740	14%	274,001	98%
Downtown	1,296,069	66%	1,215,713	94%
Alum Rock/28th St	395,352	20%	390,212	99%
Corridor Total	1,970,161	100%	1,879,927	96%

TABLE 3.6.3 Retail Inventory and Occupancy Rates
RBA: Rentable building area
N/A: Data not available
Station areas defined as half-mile radius around station.
Source: Costar, Q4 2017; Strategic Economics, 2018.

3.7 Pending and Upcoming Studies

The following four studies contain information and projections which are relevant to this study:

- City of San José Urban Village Implementation Plan
- Downtown San José Environmental Impact Report (EIR)
- City of Santa Clara El Camino Real Specific Plan
- City of Santa Clara Downtown Precise Plan

CITY OF SAN JOSÉ URBAN VILLAGE IMPLEMENTATION AND AMENITY FRAMEWORK

As part of the 2013 General Plan Review, City Council gave staff direction that future Urban Village Plans should include an Implementation/Financing Strategy. While a number of Urban Village Plans have been adopted to date, most do not include implementation plans. City Council therefore provided direction to City staff to establish a "simplified, transparent, and predictable financing mechanism for financing Urban Village amenities, and for implementing the Urban Village Plans."

The Urban Village Implementation and Amenity Framework (approved by the City Council in May 2018) establishes a policy whereby residential mixed-use projects will be required to provide defined urban village amenities as a condition of their site development permit. The amount of urban village amenities to be provided would be established based on the value of a proposed project (up to 2% of project value). A developer could pay the full amount or build amenities on-site. To encourage developers to build the amenities as part of their project, a developer would receive more credit for building a given enhancement than the actual cost to construct that enhancement. As part of the permit process, developers would propose which of the amenities their project would provide. All future Urban Village Plans are expected to implement this framework by including a prioritized urban village amenities list and a policy requiring residential mixed-use development to comply with the Framework.

The Implementation and Amenity Framework also outlines a new entitlement process for development in the Urban Villages. The Framework provides staff with direction to develop two new zoning designations: Urban Village Commercial and Urban Village Mixed-Use. Urban Village Commercial would serve as the base zoning district for the Urban Villages; commercial development and 100 percent affordable housing development would be allowed in sites zoned for Urban Village Commercial with a site development permit. Developers who wish to proceed with any other residential development project would need to apply to rezone the property as Urban Village Mixed-Use. As part of the rezoning and development permit process, the urban village amenities contribution would be included as a condition of approval. This proposed process is intended to reduce entitlement times for residential mixed-use development to an estimated three to four months, as opposed to the current six- to 12-month process.[1]

1 Currently, residential mixed-use development in Horizon 1 Urban Villages with Urban Village Plans and implementation plans in place are typically approved as a Planned Development (PD). This is because most Urban Villages are currently zoned General Commercial, Commercial Office, Neighborhood Commercial or Pedestrian Commercial, and these zoning designations are often inconsistent with the Urban Village General Plan land use designation. Note that this process – and the policy outlined in the draft Implementation Plan – applies to mixed-use residential development that moves forward in Horizon 1 Urban Villages with Urban Village Plans and implementation plans in place. This is distinct from the Signature.

SAN JOSÉ DOWNTOWN STRATEGY 2040 ENVIRONMENTAL IMPACT REPORT (EIR)

The City of San José adopted a Downtown Strategy 2000 Plan and Environmental Impact Report (EIR) in 2005. The Downtown Strategy 2000 established a vision, design guidelines, and implementation actions for Downtown. The accompanying EIR cleared up to 11.2 million square feet of office development, 8,500 residential units, 1.4 million square feet of retail development, and 3,600 hotel rooms, in four phases.[2]

The amount of approved and/or constructed residential development in Downtown is now approaching the residential capacities identified in Phase I of the EIR. Accordingly, the City has determined that an update to the Downtown Strategy 2000 EIR is needed to facilitate additional residential development capacity beyond what was envisioned in the General Plan, The proposed Downtown Strategy 2040 update will also add capacity for office, as detailed below.

The City issued a revised Notice of Preparation for the Downtown Strategy 2040 EIR in March 2017. The proposed EIR will:

- Increase the amount of new commercial office by an additional three (3) million square feet (approx. 10,000 jobs) to be transferred from other areas of the City consistent with the General Plan 4-Year Review recommendations. The new total for commercial office development would be 14.2 million square feet by 2040.The residential capacity of Downtown would be increased by up to 4,000 additional units, from

2 These growth capacities, and the Downtown Strategy boundary, were adopted into the Envision San José 2040 in 2011.

10,360 units in the Envision San José 2040 General Plan, up to 14,360 units.

- The residential capacity of Downtown would be increased by up to 4,000 additional units, from 10,360 units in the Envision San José 2040 General Plan, up to 14,360 units.
- The amount of new retail development (1.4 million sq. ft.) and hotel room (3,600 rooms) capacities of the Downtown Strategy 2000 would be maintained.
- Explore other proposed changes to the 2040 General Plan and Downtown Strategy, including:
  - A minor expansion of the Downtown area boundary to include two blocks on the east side of N. 4th Street between Julian Street and St. John Street.
  - The designation of opportunity sites with a new Employment Priority Area Overlay to prioritize more intense commercial and office uses near the proposed Downtown BART station.
  - Other, related General Plan text amendments and land use designation changes to reflect the updated Downtown Strategy.[3]

CITY OF SANTA CLARA EL CAMINO REAL SPECIFIC PLAN

The City of Santa Clara is in the process of developing a Specific Plan for El Camino Real, the City's most visible and identifiable commercial corridor. The Specific Plan will help implement the General Plan's vision of transforming the El Camino Real Focus Area "from a series of automobile-oriented strip malls to a tree-lined, pedestrian and transit-oriented corridor with a mix of residential and retail uses."[4] The City has selected a consultant for the plan and is in the process of conducting community outreach and developing land use and transportation alternatives. The plan is expected to be completed in 2019.

CITY OF SANTA CLARA DOWNTOWN PRECISE PLAN

The City of Santa Clara is in the process of developing a Precise Plan for the Downtown Focus Area. The General Plan envisions this area being revitalized to include 129,300 square feet of new commercial uses, public gathering places, and civic venues, and 396 new residential units, as well as improving multi-modal connectivity to and from the Santa Clara Transit Station and reconnecting streets to increase access to transit and to attract residents and visitors. The City is in the process of selecting a consultant for the Plan who will assist the City with conducting community outreach and developing land use and transportation alternatives. The plan is expected to be completed in 2020.

3 City of San José, "Downtown Strategy 2040," http://www.sanjoseca.gov/index.aspx?NID=4936, accessed March 2018.

4 City of Santa Clara, El Camino Real Specific Plan, http://www.santaclaraca.gov/government/departments/community-development/planning-division/specific-plans/el-camino-real-precise-plan, accessed March 2018.

4

AFFORDABLE HOUSING

Laurel Grove Lane. Photo Credit: SPUR, Sergio Ruiz

4.1 Introduction and Goals

This section describes existing affordable housing plans and documents in San José and Santa Clara County, identifies existing and planned affordable housing units in the BART Phase II corridor[1], and summarizes existing policy documents and strategies to address affordable housing challenges.

The subsequent sections of the memo are as follows:

- Affordable housing goals – A discussion of the Regional Housing Needs Allocation (RHNA) housing production goals for San José and Santa Clara. The state-mandated RHNA process is one of the factors that drives municipal affordable housing policies.
- Housing Elements – A summary of the Housing Elements, which are the principal housing policy documents for each city.
- Housing growth areas – A description of the areas in each city that have been designated for future housing growth, with a focus on the areas located in the BART Phase II corridor.
- Existing inventory of affordable housing – A summary of affordable housing currently available in the corridor, as well as projects in planning and construction stages.
- Policies and strategies – An overview of existing and proposed policies and strategies to address housing affordability at the local, regional, and state level.
- Opportunities and constraints – A summary of the key opportunities and constraints to affordable housing production and preservation in the BART Phase II corridor.

AFFORDABLE HOUSING GOALS

Every eight years, the State of California Department Housing and Community Development (HCD) establishes housing production targets at the state level based on growth forecasts. The housing targets are established for regions, and then allocated to every local jurisdiction in through the Regional Housing Need Allocation (RHNA) process. Cities are required to produce a Housing Element every eight years that defines the jurisdiction's housing needs, and identifies strategies for enabling housing development affordable to households of all types. This section summarizes the RHNA targets and the goals for production identified in the Housing Elements for the cities of San José and Santa Clara.

The RHNA goals for San José and Santa Clara for the 2015-2023 time period are described in Table 4.1.1. The RHNA targets are broken into four income categories:

- Very Low-income (VLI): 50 percent area of area median income (AMI) and below
- Low-income (LI): 51 to 80 percent AMI
- Moderate Income (MOD): 81 to 120 percent AMI
- Above Moderate Income: over 120 percent AMI

For the 2015-23 RHNA cycle, San José's housing target is 35,080 units, and Santa Clara's housing target is 4,093 units. San José's RHNA target accounts for about 60 per-

Income Level	City of San José		City of Santa Clara	
	Number of Units	Percent of Total	Number of Units	Percent of Total
Very Low* (50% AMI and below)	9,233	26%	1,050	26%
Low (51-80% AMI)	5,428	15%	695	17%
Moderate (81-120% AMI)	6,188	18%	755	18%
Above Moderate (over 120% AMI)	14,231	41%	1,593	39%
Total	**35,080**	**100%**	**4,093**	**100%**

TABLE 4.1.1 City of San José 2015-2023 RHNA by Income Level
**Within this category, the City of San José 2015-2023 Housing Element identifies the need for 4,616 extremely low-income units.*
Note: The current area median income in Santa Clara County for a family of four is $125,200, according to HCD.
Source: Association of Bay Area Governments, 2015; California Department of Housing and Community Development, 2017.

1 The corridor includes the 1.5-mile radii around the Alum Rock/28th Street, Downtown San José, Diridon, and Santa Clara stations. While the Diridon Station is not part of VTA's BART Phase II Corridor TOD Study, the station area was included in the analysis because the City of San José's Downtown Growth Area includes much of the Diridon station area.

cent of the total housing allocation for Santa Clara County. The majority of the units allocated to San José and Santa Clara are in the VLI, LI, and MOD categories.

In the 2007-2014 RHNA cycle, San José did not meet its RHNA targets for housing production, especially for lower income categories. The number of housing permits issued is used as a measure for whether or not a jurisdiction has met its housing goal in any given RHNA cycle. The City of San José issued permits for approximately 16,000 units, which corresponded to 45 percent of its total RHNA allocation (Table 4.1.2). For above moderate income categories, San José was able to meet about 85 percent of its RHNA target. However, the city was only able to meet approximately 20 percent of the goal for VLI and LI housing, and two percent of the goal for MOD housing.

Santa Clara exceeded its overall RHNA housing target in the 2007-2014 by producing permits for more than twice as much above moderate income housing units (Table 4.1.3). However, Santa Clara was not able to reach the target for VLI, LI, and MOD units. In Santa Clara, the gap between the RHNA and the number of permits issued was largest for LI units, followed by MOD units.

Income Level	2007-2014 RHNA	Permits Issued	Percent of RHNA Met
Very Low* (VLI)	7,751	1,774	23%
Low (LI)	5,322	1,038	20%
Moderate (MODI)	6,198	144	2%
Above Moderate	15,450	13,073	85%
Total	**34,721**	**16,029**	**46%**

TABLE 4.1.2 City of San José RHNA Progress for the 2007-2014 RHNA Cycle
Source: Association of Bay Area Governments, 2015.

Income Level	2007-2014 RHNA	Permits Issued	Percent of RHNA Met
Very Low* (VLI)	1,293	412	32%
Low (LI)	914	111	12%
Moderate (MODI)	1,002	198	20%
Above Moderate	2,664	5,952	223%
Total	**5,873**	**6,673**	**114%**

TABLE 4.1.3 City of Santa Clara RHNA Progress for the 2007-2014 RHNA Cycle
Source: Association of Bay Area Governments, 2015.

4.2 Housing Elements

Housing Elements are intended to address housing needs and strategies at the citywide scale. To the extent possible, housing needs and strategies that relate specifically to the BART Phase II corridor are included in the summaries below.

SAN JOSÉ

This section summarizes the affordable housing needs and implementation actions identified in the City of San José 2015-2023 Housing Element adopted by the City Council in January 2015.

Housing Needs
The San José Housing Element identifies the following housing needs in the city:

- **Cost-burdened households.** Based on the 2010 Census, 50 percent of homeowners with mortgages and 53 percent of renters in San José are cost burdened, spending more than 30 percent of their income on housing. About half of these households are severely cost burdened, spending 50 percent or more of their income on housing.
- **Extremely low and very low-income housing.** The 2010 Census indicates that San José's population has a bifurcated income distribution: over two thirds of households have moderate or above moderate incomes, while 28 percent have very low (under 50 percent of AMI) or extremely low (under 30 percent of AMI). Within San José, Central and East San José have a relatively higher concentration of very low-income households.
- **Moderate income housing.** As noted in the RHNA progress report for San José, the City has fallen short on meeting its target for VLI, LI, and MOD units. The gap is largest for MOD units because market-rate developers typically build housing that is priced for above-moderate households. At the same time, most sources of subsidy for affordable housing must target lower income levels, and thus are not eligible for MOD housing.
- **Homelessness.** According to a 2017 homeless census and survey, San José had approximately 12,4,770 homeless individuals, an increase of 18 percent from 2011. About 77 percent of homeless persons were unsheltered. (In the 2017 homeless census, approximately 4,350 homeless individuals were counted, an increase of 7% over 2015, with 74% unsheltered.)
- **Senior housing.** Elderly renters are cost burdened at a higher rate than the City's overall population. The Housing Element highlights that there is likely to be a growing need for residential care facilities that provide housing and services to serve the aging population.
- **Large families.** Nearly 20 percent of San José's population consists of large households (defined as five persons or more). The Housing Element reports that half of these large families are renter households, many of whom experience over-crowding and housing cost burden, due to the high rents and limited supply of units with 4 or more bedrooms in San José.
- **Lack of local funding.** Overall, public resources for deed-restricted affordable housing have significantly declined in the last few years. In addition to budget cuts at the federal and state level, the dissolution of redevelopment agencies eliminated approximately $40 million of annual local funding for affordable housing development and preservation.
- **At-risk deed-restricted units.** The Housing Element identified 2,645 units that have one or more affordability restrictions expiring within the next ten years. These units account for 14 percent of all deed-restricted units in the city. While 57 percent (1,503 units) are owned by non-profit owners likely motivated to preserve long-term affordability, approximately 43 percent (1,142 units) are owned by for-profit owners and considered at higher risk of conversion to market-rate housing.

Implementation Actions
The implementation actions in the Housing Element related to affordable housing production and preservation include:

- **Designate locations to accommodate future housing growth.** The Housing Element shows that the units required by RHNA can be accommodated in designated sites and growth areas, including Downtown and Urban Villages in Horizon 1.
- **Facilitate development of ELI and VLI homes.** Over the 2015-2023 period, the City seeks to facilitate the development of 3,405 units, with an emphasis on ELI and VLI units.
- **Preserve assisted rental housing.** The City of San José produces quarterly reports to track projects that are at-risk of conversion to market-rate housing, and uses available funding to rehabilitate units and extend the terms of affordability. In 2018 and 2019, the City expects to take action on at least 17 developments that will result in the preservation of 1,575 affordable apartments citywide. One of the projects that is in the City's pipeline to be preserved within this period

is located within a half mile of the Downtown station (YWCA Third Street).

CITY OF SANTA CLARA

The following summarizes the housing needs and implementation actions identified in the City of Santa Clara 2015-2023 Housing Element.

Housing Needs
The Housing Element highlights the following trends and needs:

- **Cost-burdened households.** About 36 percent of renters and 35 percent of homeowners were overpaying for housing in Santa Clara in 2010. Housing burden was widespread for low-income (54%) and very low-income (75%) households, especially renters.
- **Extremely low and very low income households.** 75 percent of households in the extremely low and low-income categories experienced housing cost burden. The Housing Element identifies the need for additional housing serving this income category, but cites the lack of available local funding as a barrier to large-scale new development.
- **Homelessness.** The number of people experiencing homelessness in Santa Clara increased between 2011 and 2013. At the time of a survey conducted in 2013, Santa Clara had 478 homeless individuals, the second highest homeless population in the county after the City of San José. San José. About half were sheltered in emergency shelters or in transitional or supportive housing, including resources for youth and family shelters.
- **Senior housing.** There will be a growing need for affordable senior housing, given the growing population at or approaching retirement age. The City built additional senior housing during the 2007-2014 period, but likely more needs to be done. Waiting lists have been long, demonstrating that demand far exceeds supply.
- **Large families.** Large families only account for about 11% of the city's households. However, there is a growing population of children, and nearly 2/3 of large family households experience cost burden or overcrowding. Santa Clara has a need for affordable housing units with three or more bedrooms.
- **College Students.** There is a need for more student housing. Santa Clara University is interested in expanding its on-campus housing options (from 2,500 units to 3,500 units, for a student body of 8,000 students).
- **Section 8 Voucher Recipients.** TThere is extremely high demand for Section 8 vouchers in Santa Clara. About 840 households use the vouchers in the City, but there are 900 households on the waitlist, which is now closed.

Housing Element Implementation Actions
The Housing Element describes the following implementation actions related to the production and preservation of housing:

- **Designate locations to accommodate future housing growth.** The City of Santa Clara's General Plan policies include dispersing affordable housing units throughout the city, and encouraging higher density housing on vacant and underutilized sites.
- **Update zoning.** The City is conducting a comprehensive update to its zoning ordinance.
- **Preserve assisted rental housing.** The City monitors at-risk projects and contacts public and nonprofit agencies that could purchase or manage the at-risk units.
- **Acquire multifamily housing.** Santa Clara is exploring opportunities to acquire and rehabilitate deteriorating multifamily housing and convert them into deed-restricted affordable units, working closely with nonprofit organizations.

4.3 Planned Housing Growth Areas

San José and Santa Clara have designated sites and locations to accommodate new housing in their General Plans and Housing Elements. In some cases, the cities have also set targets for the percentage of housing that should be made affordable to VLI, LI, and MOD households. The following is a discussion of the planned housing growth areas, focusing on the areas that are located within the BART Phase II Corridor.

SAN JOSÉ

The San José General Plan allows for the development of 35,117 housing units in the 2015-2023 period, which exceeds the RHNA target of 35,080 units. As described in the Policy Context section of the Background Report , San José's General Plan set up a framework for accommodating future housing and commercial development in designated Growth Areas and Urban Villages, and established planning horizons for housing development in Urban Villages. For the purposes of the 2015 Housing Element, the City demonstrated that the General Plan allows for the development of 35,117 housing units in the 2015-2023 RHNA cycle, as shown in Table 4.3.1. In this estimate, only those Urban Villages in Horizon 1 were included as part of the 2015-2023 RHNA cycle. Urban Villages that are in later planning horizons cannot accommodate housing in the short term. However, even with the exclusion of Urban Villages in Horizons 2 and 3, the General Plan can accommodate more units than are required by the RHNA target. About one third of the target can be met through projects that had already been entitled as of 2014. Another 28 percent of the units could be met through housing development in the Downtown.

Five Urban Villages fall substantially within a mile of the 28th Streetstation; together these Urban Villages are planned for approximately 3,000 housing units. About 2,000 units are in Growth Horizon 1, which could be developed in the short term (Table 4.3.2). However, 845 units planned for the Five Wounds BART Urban Village are in Growth Horizon 2, and another 217 units in the South 24th Street/Williams St. Urban Village are in Growth Horizon 3. In general, housing development at those Urban Villages is not permitted until the commercial development planned for these areas is completed (although exceptions may be requested for individual projects).[1] In total, only 160 of the units permitted in the five Urban Villages had been entitled as of December 2017.

The General Plan allows for approximately 11,000 new units in the Downtown Core, with no constraints on the timing of the housing development. The General Plan allows for 11,160 new housing units in the broader Downtown area (including the Diridon Station Area Urban Village), of which 10,460 are in the Downtown Core.[2] The Downtown Strategy 2040 EIR that is currently underway would allow for the development of another 4,000 units, for a total of 16,460 units allowed in the Downtown Core. Of these, 8,333 units were already entitled as of December 2017, and approximately 2,500 additional units are currently proposed and under review. Assuming all of the units that are currently under review are entitled, this would leave approximately 3,500 additional units to be allocated if the EIR were completed today.

In addition to the Diridon Station Area Urban Village, there are two other Urban Villages located near the Downtown station. East Santa Clara (W. of 17th Street) allows for 850 units in Growth Horizon 1, of which 86 have been entitled. North First Street allows for 1,678 units in Horizon 2, of which 333 units have been entitled.

The General Plan established a citywide goal that 15 percent of new housing development would be affordable to VLI, LI, and MOD, a target of 25 percent affordable housing in all Urban Villages with 15 percent of the 25 targeting ELI housing, and 20 percent in the Downtown

General Plan Growth Area/ Status	Planned Housing Units	Percent of Total
Already Entitled as of 2014	11,474	33%
Downtown	9,701	28%
Planned Communities	7,547	21%
Urban Villages (Horizon 1 Only)	2,666	8%
Vacant Land in Other Areas	2,125	6%
North San José	n/a*	0%
"Pool" Allocation	500	1%
Underutilized Redevelopable Parcels	1,104	3%
Total City	**35,117**	**100%**

TABLE 4.3.1 Planned Housing by Growth Area, 2015-2023
At the time the Housing Element was adopted, the Vision North San José Development Policy limited the amount of residential development that could occur in the 2015-2023 time period, until more non-residential space was built.
Source: City of San José 2015-2023 Housing Element.

1 Projects may be eligible to apply as a Signature Project, which allows them to move forward ahead of Horizons and/or adopted plans. One hundred percent affordable housing projects may also be expedited ahead of these requirements. In each case, specific criteria must be met.

2 The Downtown Core includes the Downtown Growth Area; the Downtown Transit Employment Center; and the portion of the Diridon Station Area Urban Village located east of Stockton Avenue and the Caltrain tracks, and south of West Santa Clara Street.

Growth Area	General Plan Designation	Already Entitled as of December 2017 (a)	Net New Units				Affordable Housing Target
			Total	Horizon 1	Horizon 2	Horizon 3	
Alum Rock/28th Street							
Roosevelt Park	Urban Village	650	0	650	0	0	25%
Little Portugal	Urban Village	310	0	310	0	0	25%
Alum Rock (5WBT Area)	Urban Village	1,010	93	917	0	0	25%
Five Wounds BART	Urban Village	845	0	0	845	0	25%
S 24th St/William	Urban Village	217	67	0	0	150	25%
Downtown							
Downtown San José (b)	Growth Area	11,160	8,333	11,160	0	0	20%
East Santa Clara (W. of 17th St)	Urban Village	850	86	764	0	0	25%
North 1st St	Urban Village	1,678	333	0	1,345	0	25%

TABLE 4.3.2 Planned Housing Growth in San José that fall within a mile of the Stations
(a) As reported in December 2017 update of Appendix 5 to the Envision San José General Plan.
(b) Includes the Downtown Growth Area and Diridon Station Area Urban Village. Additional units for the Downtown Growth Area are under study as part of The Downtown Strategy 2040 Environmental Impact Report (EIR) update
Sources: Strategic Economics' review of City of San José planning documents.

Growth Area	Type	Total Net New Units	Affordable Housing Target
Santa Clara Station	Focus Area	1,650	10%
Downtown	Focus Area	400	15%
El Camino Real	Focus Area	2,274	n/a

TABLE 4.3.3 Planned Housing Growth in Santa Clara by Focus Area
Sources: Strategic Economics' review of City of Santa Clara planning documents; interviews with City Staff

Growth Area. In addition, the General Plan allows projects that are 100% affordable to ELI, VLI, and LI households to proceed within an Urban Village ahead of a Growth Horizon. However, the project must meet the following conditions:

- The project does not result in more than 25 percent of the total residential capacity in the Urban Village.
- The project is consistent with the Urban Village Plan.
- Demolished existing commercial space should be replaced to a substantial degree.
- Projects are not located on key employment opportunity sites (generally 2 acres or larger, at major intersections, with demand for commercial uses within the next 10 to 15 years).

SANTA CLARA

The Santa Clara Housing Element shows that the City can exceed the RHNA target for 2014-2022 by redeveloping underutilized sites to accommodate higher density housing. The City plans to accommodate its RHNA target primarily in three Focus Areas: El Camino Real, Lawrence Station, and Tasman East, which allow for up to 6,077 units. In addition, as of the adoption of the 2015 Housing Element, there were 1,827 housing units in the pipeline that counted towards meeting the RHNA target.

The Downtown Santa Clara, El Camino Real, and the Santa Clara Station Focus Areas are all within the BART Phase II corridor. Based on the General Plan, the Downtown, Santa Clara Station, and El Camino Real Focus Areas are planned to accommodate approximately 4,300 new housing units at buildout (Figure 6). In the Housing Element, the units in the Downtown Santa Clara and Santa Clara Station Focus Areas are not included towards the 2014-2022 RHNA. It is assumed that these station areas will be developed in a later phase, and the units will likely be counted in the next RHNA cycle.

The Santa Clara Station and Downtown Area Focus Areas have established affordable housing goals for new development. While it is not a requirement, the Santa Clara Station Area Plan set an expectation that 10 percent of housing units in the Plan Area are provided at prices and rents affordable to lower income households. In the Downtown Focus Area, the expectation is for 15 percent of new housing units to be affordable. A Specific Plan for the El Camino Real focus area is currently underway, which will establish an affordable housing target for that area.

4.4 Existing Affordable Housing in the Corridor

This section describes the current inventory of affordable housing within the BART Phase II corridor. For the purposes of this report, the corridor is defined as the area within a 1.5-mile radius of the Phase II stations, including Alum Rock/28th Street, Downtown San José, Diridon, and Santa Clara. The section also includes analysis of the affordable housing located within a half-mile radius of the four stations.

The inventory of affordable housing units includes subsidized, income-restricted rental units and shelters (transitional/supportive housing). It is based on available data from the City of San José and the City of Santa Clara.

Figure 4.4.1shows the location of existing and planned affordable housing projects in the corridor[1].

1 Proposed projects with funding sources already committed are included in this analysis.

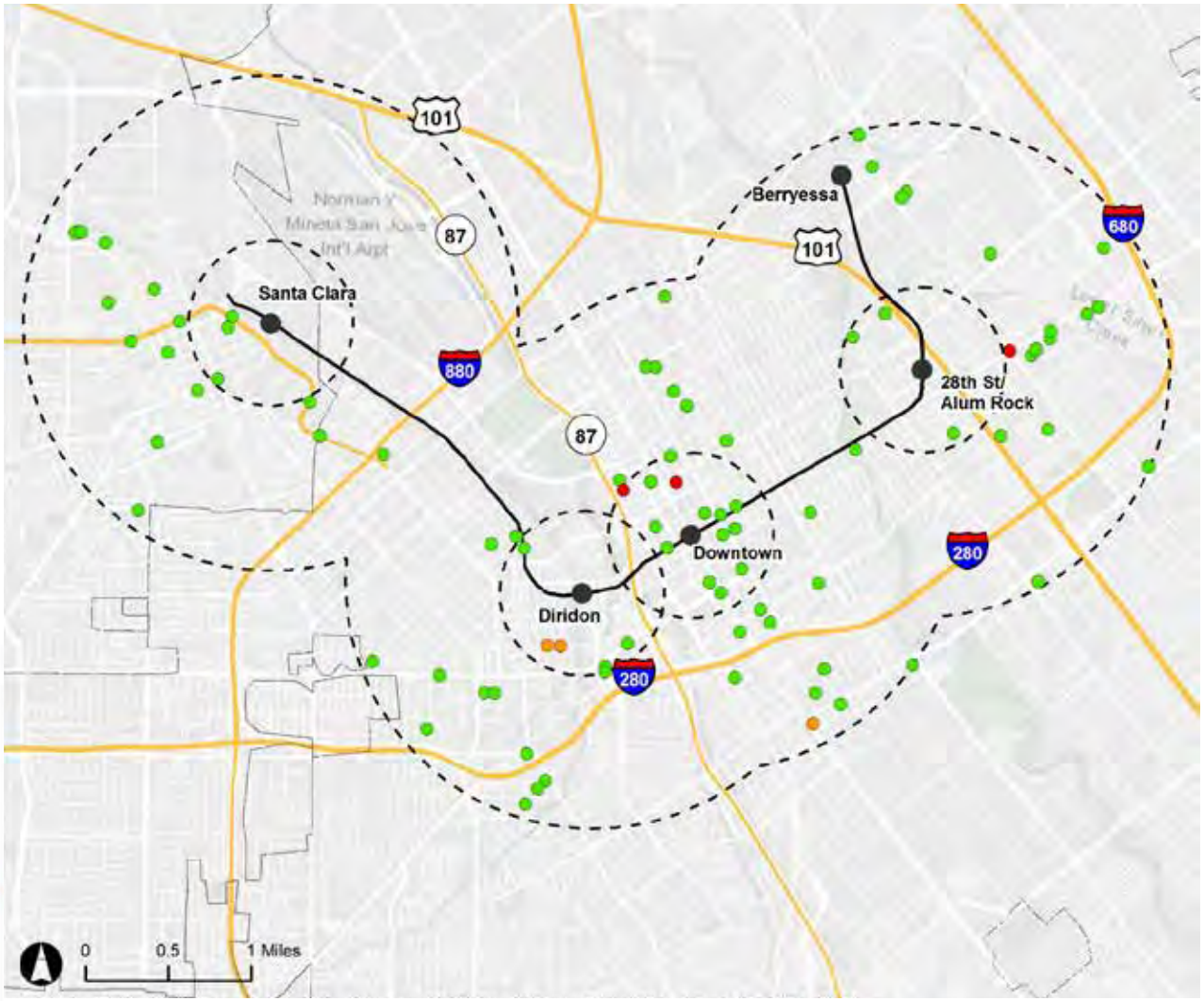

FIGURE 4.4.1 Location of Existing and Planned Affordable Housing Projects in the Corridor
Sources: Metropolitan Transportation Commission, 2017; City of Santa Clara; City of San José

The 1.5-mile corridor contains about 6,650 affordable units. As shown in Figure 4.4.2, 87 percent of the units have been completed, but there are also 314 units under construction, and 532 proposed units with funding commitments in place.

The corridor contains about 30 percent of the affordable housing stock in the cities of San José and Santa Clara. In San José, about 34 percent of all the city's affordable housing units are located within the 1.5-mile corridor. In Santa Clara, 28 percent of the city's affordable housing stock is on the corridor (Figure 4.4.3).

	Affordable Units	Percent of Target
Completed	5,810	87%
Under Construction	314	5%
Proposed*	532	2%
Total 1.5-Mile Corridor	**6,656**	**100%**

FIGURE 4.4.2 Affordable Housing Units in the 1.5-Mile Corridor, by Status
**Proposed projects with funding commitments in place.*
Source: City of San José, Q4 2017; City of Santa Clara, 2018.

	Affordable Units in City	Affordable Units in 1.5-Mile Corridor	% of Affordable Units in 1.5-Mile Corridor
San José	18,542	6,229	34%
Santa Clara	1,519	427	28%

FIGURE 4.4.3 Share of Citywide Affordable Housing Located in 1.5-Mile Corridor
Note: Unit counts include completed, under construction, and proposed projects with funding commitments in place.
Source: City of San José, Q4 2017; City of Santa Clara, 2018.

About 80 percent of the affordable units in the corridor serve VLI and LI households (households with incomes between 30 percent and 80 percent of the area median). As shown in Figure 4.4.4, 15 percent of the affordable units are set aside for ELI households (under 30 percent of the area median income), and a smaller fraction (four percent) is affordable for MOD households (between 80 and 120 percent of area median income).

There are about 2,300 affordable housing units within a half-mile radius of the stations, with the greatest concentration in Downtown San José and Diridon. Downtown San José has more than 1,000 affordable units, and Diridon has nearly 800 units (about 30 percent of these are currently under construction), as shown in Figure 4.4.5.

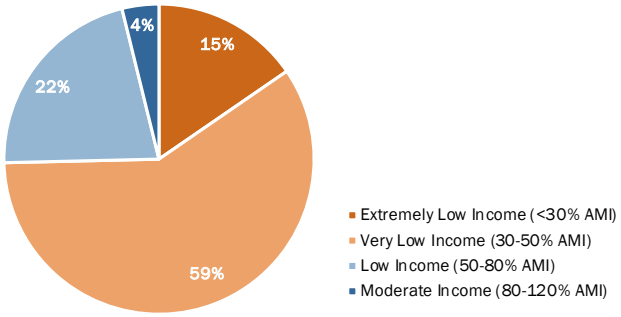

FIGURE 4.4.4 Affordable Housing Units in the 1.5-Mile Corridor by Income Level Served
Source: City of San José, Q4 2017; City of Santa Clara, 2018.

	Total Affordable Units*	Percent of Target
Alum Rock/28th St	312	14%
Downtown San José	1,097	48%
Diridon	789	34%
Santa Clara	92	4%
Total 0.5-Mile Area*	**2,290**	**100%**
Percent of Total	**100%**	

FIGURE 4.4.5 Existing Affordable Housing in the 0.5-Mile Radii Around Station Area
**Includes Completed, Under Construction, and Committed projects.*
Source: City of San José, Q4 2017; City of Santa Clara, 2018.

Project Name	Affordability Restriction Expiration Date	Total Deed-Restricted Units	Very Low Income (30-50% AMI)	Low Income (50-80% AMI)	Moderate Income (80-120% AMI)
Downtown San José Station Area					
101 Fernando	2028	65	65	0	0
Colonnade	2028	16	0	16	0
Giovanni	2028	24	24	0	0
Masson Building Rehabilitation Project	2027	4	0	4	0
Villa Torino	2025	85	0	0	85
YWCA Third Street	2023	62	62	0	0
Santa Clara Station Area					
Runaway Youth Shelter	2023	20	20	0	0
Total Units Expiring		**276**	**171**	**20**	**85**

TABLE 4.4.1 Expiring Deed-Restricted Affordable Units within a half mile of the stations
Source: City of San José, 2018; City of Santa Clara, 2018.

There are 312 affordable units within a half mile of the 28th Streetstation, and 92 within a half mile of Santa Clara station.

In the half mile radii around the stations, the majority of affordable units serve ELI and VLI households (below 50 percent of area median income). There is a substantial concentration of VLI and LI units within a half mile of the Downtown San José and Diridon stations, as well as a smaller number of MOD units (Figure 4.4.6). There are three shelters serving youth and families within a half mile of the Santa Clara station, and three projects serving VLI and LI families and seniors within a half mile of the 28th Streetstation.

Within the half mile radii around the stations, there are 276 deed-restricted units at risk of losing their affordability restrictions within the next ten years. As shown in Table 4.4.1, they are mostly located within the half-mile radius around the Downtown San José station, which contains 256 expiring units. There are 20 units near the Santa Clara station expiring in 2023.

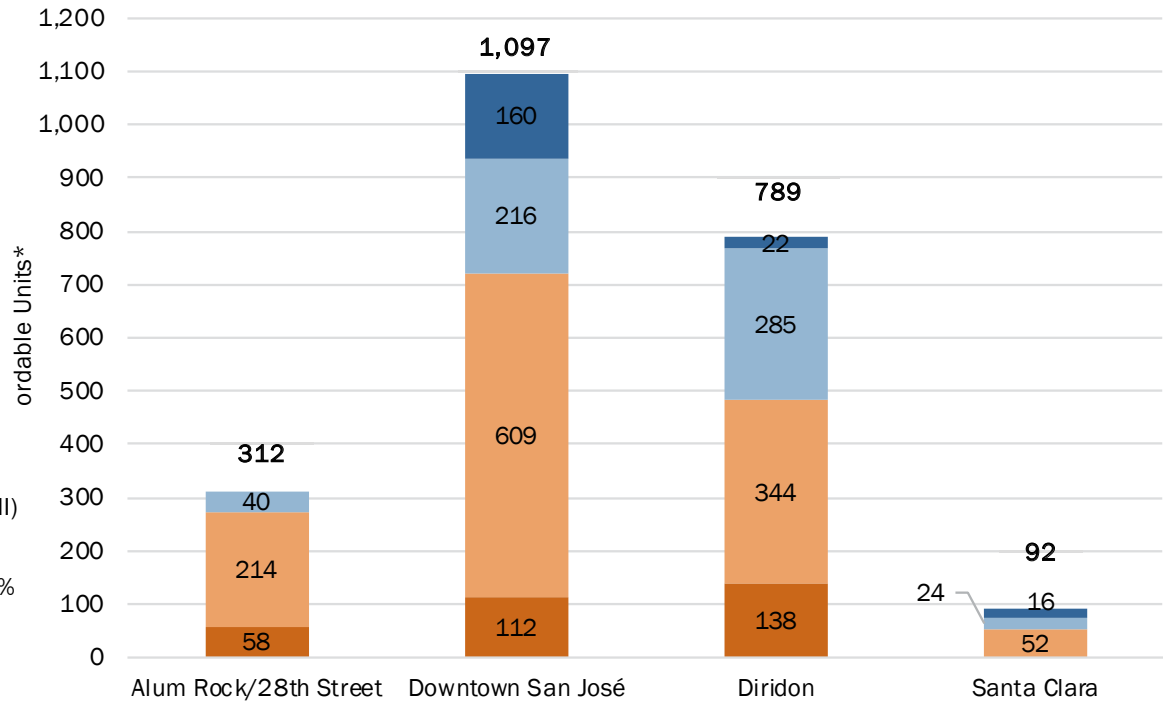

FIGURE 4.4.6 Affordable Housing in Station Areas by Income Level
**Includes Completed, Under Construction, and Committed projects. Unknown/Manager units not shown.*
Source: City of San José, Q4 2017; City of Santa Clara, 2018.

4.5 Existing Housing Policies and Strategies

This section summarizes local, regional, and state policies that could have an impact on affordable housing development along the BART Phase II corridor, and on efforts to help stabilize neighborhoods and mitigate tenant displacement. The policies described below are based on a review of existing city ordinances and plans, VTA's Joint Development Policy, county measures, and new state legislation. Because most of the policies, programs, and funding sources related to affordable housing production are new, there is little data on how effective they have been. The following discussion incorporates the limited data on unit production that is available, as well as City staff's observations about how they expect the new policies will be used.

Alternative	Requirement Affordable %	For-Sale Target Income	Rental Target Income
On-Site	15%	Purchasers must be at or below 120% AMI	9% Moderate (80% AMI) 6% VLI (50% AMI)
On-Site	20%	Purchasers must be at or below 120% AMI	12% Moderate (60% AMI) 8% VLI (50% AMI)
In-Lieu Fee	20%	Current fee is $153,426 per inclusionary unit	Current fee is $125,000 per inclusionary unit

TABLE 4.5.1 Inclusionary Housing Program in San José
Source: City of San José Housing Department

CITY OF SAN JOSÉ

Inclusionary Housing Ordinance and Affordable Housing Impact Fee

In December 2017, the City of San José issued new guidelines for its Inclusionary Housing Ordinance (IHO) to apply to rental residential developments and initiated a transition from its Affordable Housing Impact Fee (AHIF) programs. These changes were made in light of the passage of California AB 1505, which restored the ability of local governments to require affordable units in new rental housing developments. Effective January 2018, all residential development projects (for-sale and rental) with 20 or more units are required to provide at least 15 percent of the units on-site to very low and moderate income buyers or renters. For-sale developments must provide units affordable to households at 120 percent of area median income. Rental developments are required to provide 6 percent of units affordable for very low-income (50 percent of AMI) and 9 percent to moderate income (80 percent AMI) households.

For-sale and rental residential developers have the option of providing units off-site, but the affordable housing requirement is income to 20 percent, and target renter income is lowered from Moderate to Low-income, and more Very Low-income is required. There are other alternative means of compliance, including payment of an in-lieu fees and land dedication. In recent years, developers have chosen to pay the in-lieu fees rather than provide units on-site or off-site. Table 4.5.1 summarizes the inclusionary housing ordinance's requirements.

The development of an inclusionary housing ordinance for projects with less than 20 units is still under consideration. In the meantime, for Fiscal Year 2017/2018, small rental housing projects with between three and 19 units remain subject to the AHIF, which is currently $17.41 per square foot of market-rate rental units. The AHIF increases by 2.4% each year, effective annually on July 1st. For-sale projects with less than 20 units must submit an application for an exemption or waiver from the inclusionary requirement.

There are important exemptions and waivers to San José's affordable housing programs. Downtown high-rise rental developments (ten stories or more) can apply for a waiver from AHIF, provided that project applications are submitted by June 30, 2018, and the final certificates of occupancy are received by June 30, 2021. The San José City Council is in the process of considering allowing this same Downtown High-Rise exemption to be mirrored in the IHO. In addition, apartments with 100% affordable units and projects of fewer than three units are exempt from both affordable housing requirements of the AHIF and IHO.

Due to an implementation grace period and recent changes due to AB 1505, there is no data available on how many units may be generated.

Incentives for Affordable Housing Production

In addition to the Inclusionary Housing Ordinance, the City of San José offers incentives to encourage the production of affordable housing. These include the following:

- **Reduced park impact fees for affordable housing.** The City's Park Impact Fee (PIO) and Parkland Dedication Ordinance (PDO) require new development projects to contribute to the city's parks and recreational facilities. Deed-restricted affordable housing units at or below 80 percent AMI are eligible for a 50 percent credit towards the PDO/PIO fees.[1]
- **City Density Bonus Ordinance and State Density Bonus Law.** The City of San José has updated its zoning code to implement the California State Housing Density Bonus and Incentives Law and provide affordable housing incentives consistent with the Envision San José 2040 General Plan.[2] The state law requires that local jurisdictions provide density bonuses and other incentives or concessions to projects that provide five percent of the units to very low households, or 10 percent of the units to low-income households, or if the project serves seniors.[3]
- **Accessory Dwelling Unit (ADU) Ordinance, in compliance with State law.** The City of San José amended its ADU Ordinance in November 2016 to encourage the development of secondary units, in accordance with new state legislation[4]. The revised ordinance loosens requirements related to minimum lot size, minimum unit size, parking, and set backs, thus making it easier to build ADUs. All regulations are described in Section 20.30.200 of the City's Zoning Ordinance. Additional revisions to the Ordinance 2018 to further encourage ADU production are anticipated in June 2018.[5] Analysis by the Terner Center at U.C. Berkeley found that ADU applications are steadily increasing in San José, from 28 in 2015, to 45 in 2016, to 166 in 2017.[6]

RENT STABILIZATION AND EVICTION PROTECTIONS

The City of San José has policies in place that stabilize rents for tenants of certain multifamily apartments and mobilehomes and provide tenants with protection from eviction. These policies are summarized below.

- **Apartment Rent Ordinance.** The City of San José's Apartment Rent Ordinance, which applies to rental units built before 1979, limits rent increases for existing tenants to no more than 5 percent a year. Under a policy known as "vacancy decontrol" (and as required by state law), the landlord has full discretion to set the initial rent when a new tenancy begins.[7]
- **Mobilehome Rent Ordinance.** Annual rent increases for mobilehomes and mobilehome lots are limited to 75 percent of the San Francisco-Oakland All Urban Consumers CPI, with a minimum of 3 percent and a maximum of 7 percent a year. Park owners must request a formal administrative hearing before exceeding this limit. With some exceptions, rents may not be increased when the mobilehome is sold or transferred.[8]
- **Tenant Protection Ordinance.** Under the Tenant Protection Ordinance, landlords of multifamily dwellings, guesthouses, and unpermitted uses can only terminate tenancies under one of 13 listed "just cause" reasons. For causes based on landlord decisions, the landlord is required to provide relocation benefits. The ordinance also lays out a process for landlords to notify tenants and the City of terminations.[9]
- **Other Tenant Protections:** In conformance with state law, the City's Ellis Act Ordinance allows a property owner to evict existing tenants from a rental unit if the property owner plans to demolish or permanently withdraw the unit from the rental housing market. .The ordinance also creates protections for tenants, including: requiring landlords to provide tenants with notification and relocation benefits; establishing a "right to return" for tenants if the apartments are returned to the rental market within 10 years; and subjecting to the City's Apartment Rent Ordinance the greater of the original number of rent stabilized apartments or 50% of newly built apartments.[10] The City also has Residential Condominium and Community Apartment Regulation in place that governs the conversion of multifamily buildings to residential condominiums, including requirements for a conditional use permit, tenant notification, and a first right of refusal for existing tenants to purchase converted units.[11]
- **Legal Representation.** The City of San José also uses a portion of its annual federal entitlement funds

1 City of San José, Park Impact and Parkland Dedication Ordinances. http://www.sanjoseca.gov/index.aspx?NID=562
2 City of San José, Zoning Ordinance Pending and Future Amendments. http://www.sanjoseca.gov/index.aspx?NID=2107
3 California Government Code 65915-65918
4 California Government Code Title 7. Planning and Land Use, Division 1, Chapter 4, Article 2. 65852.2.
5 City of San José, Zoning Ordinance Pending and Future Amendments. http://www.sanjoseca.gov/index.aspx?NID=2107
6 David Garcia, "ADU Update: Early Lessons and Impacts of California's State and Local Policy Changes," http://ternercenter.berkeley.edu/uploads/ADU_Update_Brief_December_2017_.pdf, Terner Center for Housing Innovation, U.C. Berkeley, December 2017.
7 City of San José, "Apartment Rent Ordinance," http://www.sanjoseca.gov/index.aspx?nid=1355, accessed March 2018.
8 City of San José, "Mobilehome Rent Ordinance," http://www.sanjoseca.gov/index.aspx?NID=2675
9 City of San José, "Tenant Protection Ordinance," http://www.sanjoseca.gov/index.aspx?nid=5518.
10 City of San José, "Ellis Act Ordinance," http://www.sanjoseca.gov/index.aspx?NID=5517.
11 San José Municipal Code Section 20.170.420.

from the U.S. Department of Housing and Urban Development for fair housing services and for legal counsel and representation of those at risk of evictions.

The City of San José, in partnership with community leaders, has recently been selected to join nine other cities the All-in Cities Anti-Displacement Policy Network led by PolicyLink. Over the next year, the cities will work together to learn from each other and develop strategies to fight displacement and build more equitable communities.

CITY OF SANTA CLARA

Inclusionary Housing Requirement and Jobs-Housing Linkage Fee

The City of Santa Clara approved a new affordable housing ordinance in January 2018 that requires residential projects (rental and for-sale) with ten or more units to provide at least 15 percent of the units at prices or rents that are affordable to lower income households. The average affordability target is 100 percent of area median income (AMI) for for-sale and rental projects. The City Council can authorize developers to provide a lower percentage of affordable units if the units are restricted to extremely low, very low, or low-income households through a Development Agreement.

The ordinance allows for alternative means of compliance, including dedication of land for affordable housing, development of affordable units at an off-site location, or some combination thereof, with approval from City Council through a Development Agreement.

Smaller residential projects with fewer than ten units must provide one affordable unit for a household earning up to 100% of AMI, or may pay an in-lieu fee. Based on the results of a 2017 nexus study, the in-lieu fee has been established at $20 per square feet for for-sale condominiums and rental housing units, $25 per square foot for for-sale townhomes, and $30 per square foot for for-sale single-family homes.[12]

In addition to the inclusionary housing requirement and in-lieu fees, the affordable housing ordinance also imposes a new jobs-housing linkage fee on new commercial development. The fees apply to new hotel, office, and industrial development. The linkage fee also applies to new retail development projects of more than 5,000 square feet. Retail, hotel, and low density industrial uses are subject to fees ranging from $2 to $5 per square foot, while light industrial and office buildings are charged a fee of $10 to $20 per square foot, depending on the type and size of the project.

The requirements of the affordable housing ordinance are phased in over time, and only apply to projects that receive planning approval after July 2018. City staff expect that the new ordinance, which strongly encourages developers to build units on-site, will help Santa Clara meet its RHNA allocation for moderate income units.

Incentives for Affordable Housing Production

Like San José, the City of Santa Clara also offers incentives to developers of affordable housing, including:

- **Residential Density Bonus.** In accordance with the State Density Bonus Law, The City offers a density bonus that allows up to a 35 percent increase in project density and/or a variety of other incentives (includes minimum parking requirements and waiving of other development standards), depending on the type and amount of affordable housing units provided. This density bonus ordinance may be revised as part of an upcoming citywide zoning update. According to City staff, the current density bonus ordinance is rarely if ever used.
- **City Accessory Dwelling Unit Ordinance.** The City of Santa Clara enacted an ordinance facilitating the review and approval of ADUs, in accordance with state bills.

Additional incentives for affordable housing include reduced parking standards for affordable housing developments[13] and General Plan policies allowing for increased density for residential projects that provide at least 50 percent of the units for lower income housing.[14] According to City staff, the density bonuses for affordable housing have not been used, although developers have taken advantage of other incentives (for example, for locating near transit or incorporating sustainability features).

TENANT SERVICES AND PROTECTIONS

The City of Santa Clara does not have rent stabilization or "just cause" eviction policies in place, but provides funding for voluntary dispute resolution for tenants and landlords as well as tenant protections in the case of con-

12 City of Santa Clara (2018), Affordable Housing Ordinance (Ordinance No. 1974), http://santaclaraca.gov/home/showdocument?id=56670, and Affordable Housing Resolution and Fee Schedule (Resolution No. 17-8482), http://santaclaraca.gov/home/showdocument?id=56672

13 City of Santa Clara, General Plan Chapter 5, Section 5.8.6 (p. 70): "Allow alternate parking standards for mixeduse development, development that meets specified transportation demand management criteria, and senior/group and affordable housing developments, as well as in the Downtown and areas within one-quarter mile of transit centers and stops."

14 City of Santa Clara, General Plan Chapter 5, Section 5.5.1 (p. 47): "For residential development providing greater than 50 percent of the total number of units for affordable housing on residentially designated properties, allow development at any residential density provided that the increased density is compatible with planned uses on neighboring properties and consistent with other applicable General Plan policies."

dominium conversions. These programs and policies are briefly summarized below.

- **Project Sentinel.** The City of Santa Clara provides funding to Project Sentinel, a non-profit organization, to provide dispute resolution services for tenants, landlords, and roommates. The organization provides information, counseling, resource referrals, and voluntary conciliation and mediation services to help resolve disputes involving deposits, rent increases, nonpayment of rent, and other issues.[15]
- **Community Ownership Conversion Tenant Protections.** The Santa Clara City Code Section 18.54.090 establishes protections for tenants that apply to conversion of a residential rental project to a community ownership project (e.g., to condominiums). Tenants must be given 180 days' written notice prior to termination of tenancy, and a right of first refusal to buy and/or lease their units. The City is currently considering amendments to the ordinance that would extend additional protections to tenants of affordable housing units.[16]

VTA

Joint Development Policy

In 2016, VTA adopted its Joint Development (JD) Policy, which requires that development projects on VTA-owned sites include affordable housing units.[17] VTA's affordable housing goals are generally more stringent than the local targets set by either San José or Santa Clara. For its entire JD portfolio, the target for affordable housing is 35 percent, at no more than 60 percent of area median income (AMI). Individual JD projects must provide a minimum of 20 percent affordable units at no more than 60 percent of AMI. The policy also requires at least half of affordable units to be targeted to extremely low and very low-income households (50 percent of AMI or less).

SANTA CLARA COUNTY

In November 2016, Santa Clara County voters approved Measure A, a new countywide affordable housing general obligation bond. The measure allows the County to borrow up to $950 million in bonds to create and/or preserve affordable housing. The County has established guidelines for the use of Measure A funds. The County's guidelines for the use of funds allocate $700 million in bonds to assist extremely low income households, and $100 million for VLI households. A smaller share of the bond proceeds – up to $150 million – may be used to assist moderate income households.[18]

CALIFORNIA LEGISLATION

In 2017, the California Legislature passed a comprehensive housing package. Two bills create new statewide funding sources for affordable housing. SB 2 is expected to raise $250 million annually through a $75 real estate transaction fee on refinancing and other real estate transactions (excluding new home and commercial property sales). SB 3 authorizes a $4 billion bond measure for low-income housing, which will be on the statewide ballot in November 2018. If it is approved, SB 3 would provide $3 billion to finance existing housing programs and state matching grants for infrastructure and affordable housing, with another $1 billion designated to provide assistance to veterans.

Other relevant bills that were passed in 2017 and may have an impact on the production of affordable housing in the VTA'S BART Phase II corridor are highlighted below.

- **Streamlining approvals for housing.** SB 35 (Weiner) expedites the approvals process for projects in cities that have not met their RHNA targets. Projects must be located on an infill site, consistent with existing zoning, and pay prevailing wage. Given that the cities of San José and Santa Clara have faced challenges meeting their RHNA targets, they are likely to be subject to SB 35's requirement to streamline the approvals process for development projects that include at least 50 percent affordable units.[19] Only a few projects around the state have used SB 35 to date, so it is unclear how broad the impacts of the bill will be. However, it is possible that the City could be required to approve some mixed-income developments in Urban Villages ahead of their designated Growth Horizon. Other bills that streamline housing development include AB 73 (Chiu) and SB 540 (Roth). These are opt-in programs for jurisdictions wishing to establish streamlined zoning overlay districts in transit-oriented areas.
- **Meeting RHNA requirements.** Another set of bills signed in 2017 focus on increasing cities' and coun-

15 City of Santa Clara, "Project Sentinel," http://santaclaraca.gov/government/departments/community-development/housing-community-services-division/project-sentinel, accessed March 2018.

16 Communication with City staff, March 2018.

17 Santa Clara Valley Transportation Authority, 2016. Joint Development Policy. http://vtaorgcontent.s3-us-west-1.amazonaws.com/Site_Content/VTA%20Joint%20Development%20Policy.pdf

18 County of Santa Clara, Santa Clara County Affordable Housing Bond Measure A, https://www.sccgov.org/sites/scc/Pages/Affordable-Housing-Bond-Measure-A.aspx, and County of Santa Clara Office of Supportive Housing, Measure A Affordable Housing Bond Implementation Report #3, https://www.sccgov.org/sites/osh/HousingandCommunityDevelopment/AffordableHousingBond/Documents/Housing%20Bond%20Reports/Housing%20Bond%20Report%20No.%203%208.15.17.pdf

19 Different requirements apply to jurisdictions based on their progress towards RHNA targets. California Department of Housing and Community Development, SB 35 Statewide Determination Summary, January 2018. http://www.hcd.ca.gov/community-development/housinglement/docs/SB35_StatewideDeterminationSummary01312018.pdf

4.6 Proposed Housing Strategies and Legislation

ties' accountability for meeting the housing needs in their communities. These bills strengthen and enforce the state-mandated housing element requirements, and generally make it more difficult to deny housing projects without a reasonable basis.[20]

SAN JOSÉ'S MAYOR 15-POINT PLAN

In September 2017, the San José's Mayor Liccardo published a 15-point plan outlining actions the city could take to help address the housing crisis. The plan sets an ambitious goal for constructing 25,000 new homes over the next five years – including at least 10,000 affordable homes.[21] Many of the points would require changes in the General Plan and other policy documents. Some of the elements of the plan directly relate to supporting TOD in the BART Phase II corridor:

- **Double-Down on Downtown:** The City should remove zoning and land use barriers to high density housing in the core of San José.
- **Move Urban Villages with existing transit to the front of the line:** The time frame for developing housing in Urban Villages served by light-rail and BRT should be accelerated.
- **Better identify housing sites to prospective developers:** The City should develop user-friendly on-line tools to help small scale developers find potential housing sites.
- **Protect residents from displacement:** City Staff should identify policies to preserve existing residential communities and prioritize redevelopment of parcels in a manner that does not displacement tenants.
- **Expand housing for students, faculty, and staff at SJSU:** The City should partner with San José University to identify opportunities to accommodate more housing for students, staff, and the community.

The Mayor's plan also includes ideas about funding and financing models and incentives for development, including:

- Develop a private-public financing mechanism for rent-restricted housing for moderate and middle-income workers
- Explore the potential to enact a parcel fee on empty homes and parcels similar to Vancouver, British Columbia
- Reevaluate development fees to encourage housing construction
- Encourage secondary units through loosened regulations

In April 2018, City of San José's Housing Department released a proposed FY 2017/18 – FY 2021/22 Affordable Housing Investment Plan (AHIP), which summarizes how the City intends to invest its existing affordable housing resources. The AHIP estimates that the City will fund 3,506 new affordable units by the end of FY 2021/22 (including 1,099 units currently funded or under construction). An additional 2,162 are expected to be funded from non-City sources, for a total of 5,668 units that are expected to be funded or built from all sources during the next five years. These projections assume that market-rate residential construction proceeds in the near future at approximately the same rate as the present, generating Inclusionary Housing In-Lieu Fee payments. Based on this estimate, the AHIP projects a significant shortfall in meeting the affordable housing production goal of 10,000 units established by the Mayor and City Council, and identifies potential strategies that could be explored to meet the shortfall. Strategies include potential new funding

20 These bills include AB 678 (Bocanegra) and SB 167 (Skinner) Strengthen the Housing Accountability Act; AB 1515 (Daly) Reasonable Person Standard; SB 166 (Skinner) No Net Loss; AB 1397 (Low) Adequate Housing Element Sites, and SB 879 (Grayson).

21 Mayor Sam Liccardo's website, October 2017. https://www.samliccardo.com/2017/10/03/366/

sources; modification of land use regulations, such as enabling mixed-income development to proceed within an Urban Village ahead of a Growth Horizon; land acquisition strategies; and administrative options.

SPUR'S ROOM FOR MORE REPORT

The *Room for More* report published by SPUR in 2017 describes the South Bay's housing shortage, and discusses actions that San José (and other cities in Santa Clara County) can take to address housing needs. The steps would require changes in land use and planning policies by the City of San José.

- **The City should allow more housing in walkable neighborhoods and neighborhoods near transit.** The paper recommends that the City of San José allow housing to move forward in Urban Villages in a timely manner, regardless of the "growth horizons", as long as a plan has been adopted and the development project conforms with the plan.
- **The City should encourage "affordable by design" strategies to reduce the cost of housing development.** Cities can lower the cost of housing construction by reducing parking requirements, and facilitating the construction of accessory dwelling units, micro-units, and modular housing.
- **The City should revise land use plans and zoning codes to create mixed-use neighborhoods.** SPUR recommends that the City of San José require "sufficient residential densities" in locations served by transit.
- **The City should simplify the entitlements process to remove barriers.** SPUR offers recommendations on how to simplify development approvals processes in San José to accelerate housing construction.
- **The City should create more funding sources for affordable housing.** SPUR recommends that the City of San José explore a local affordable housing funding source (such as a bond) for acquisition, construction, and rehabilitation of affordable housing.

4.7 Opportunities and Constraints

Based on the analysis of data, plans and documents as presented above, the following is a summary the key opportunities and constraints to affordable housing development and preservation in the BART Phase II corridor.

OPPORTUNITIES

- **There is a strong commitment from the State of California to produce more housing and provide funding for affordable housing.** New legislation encourages the construction of housing in transit-oriented areas, and provides critical new funding sources for affordable housing.
- **San José's Downtown Strategy and General Plan emphasize the importance of high density housing Downtown.** The Downtown Strategy enables approximately 10,000 units of new housing in the core of the city. This could be augmented by another 4,000 units with the approval of a new EIR. There are no constraints on when housing in the Downtown can occur, and the Diridon and East Santa Clara (West of 17th Street) Urban Villages are both in Horizon 1.
- **There is a significant concentration of existing affordable housing stock in the Corridor, housing ELI, VLI, LI and MODI households.** TThere are approximately 6,500 affordable units in the corridor, which represent about 30 percent of the total affordable housing stock in the cities of San José and Santa Clara.
- **The cities of San José and Santa Clara and VTA have adopted new policies to ensure that new residential development projects include affordable units.** The cities of San José and Santa Clara have adopted inclusionary housing ordinances that require 15 percent of units to be affordable. The cities have also set affordable housing targets of between 10 and 25 percent that apply to the corridor. Furthermore, VTA's Joint Development Policy requires that individual joint development projects include 20 percent affordability.
- **The Mayor of San José has proposed a plan to expedite housing development in areas near transit and Urban Villages.** The 15-Point Plan calls for the acceleration of housing development in Urban Villages, to enable projects to proceed regardless of the Growth Horizon. This policy change, if implemented, would enable more housing units to be constructed near the 28th Streetstation in the short term.
- **There may be opportunities to develop more student housing at Santa Clara Station.** The City is working with Santa Clara University to explore potential development options for student housing.

CONSTRAINTS

- **The amount of federal funding available for affordable housing has been drastically reduced.** Since 2011, the funding from the federal government to assist with affordable housing development has declined steeply. In addition, the federal tax reform bill effectively lowers the value of Low-income Housing Tax Credits, thereby reducing the amount of subsidy available for low-income housing projects.
- **The Urban Village framework limits the amount of new market-rate and affordable housing development that can occur in the 28th Streetarea in the short term.** . Because two of the Urban Villages in the 28th Streetarea are in Growth Horizon 2 and 3, they cannot accommodate new housing in the short term. While there are exceptions for 100 percent affordable housing projects, the conditions imposed could be significant barriers for many potential affordable housing projects.
- **Most of the existing residential development capacity in Downtown has already been allocated.** Of the 10,350 housing units currently allowed in the Downtown Core, 8,333 are already entitled. The new EIR would allow for an additional 4,000 units. However, assuming all of the units that are currently under review are eventually entitled, this would leave only around 3,500 additional units to be allocated if the EIR were completed today.
- **High land and construction costs make it increasingly challenging for market-rate developers to deliver new housing projects that also include affordable units.** Similarly, affordable housing developers face a growing financing gap as costs escalate.
- **Rising rents are placing pressure on existing households, potentially increasing the risk of displacement.** The City of San José anticipates that Urban Villages and other locations near transit will become increasingly attractive to households, which could cause further price/rent increases, and potentially displace lower income households. These potential risks and best practices for preventing displacement will be explored in more detail in a future report.

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N San Pedro St
Santa Clara St
San Pedro St
lease
today
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5

OPPORTUNITY SITES

Santa Clara and San Pedro Avenues. Photo Credit: SPUR, Sergio Ruiz

5.1 Areas of Influence

Tailored approach was used to define the stations' areas of influence. Ease of accessibility is the first and foremost criteria. Working with the Station Access team, the extent of each station's areas of influence was determined by site-specific physical analysis of the actual walk and bike sheds (not as the crow flies) covering the 1/4, 1/2 and 1.0 mile distances from each station.

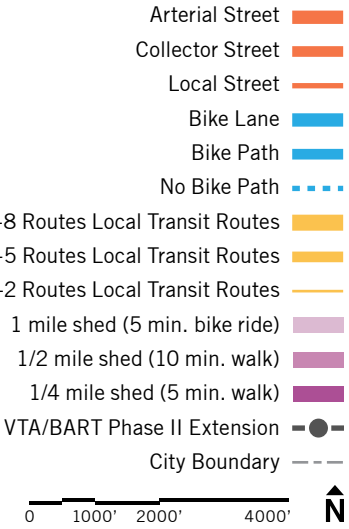
Similarly, based on an understanding of the surrounding urban fabric, proximity of the stations to each other, and existing local transit services, a set of preferred routes are highlighted which play a role in shaping the corridor areas.

This general framework focuses the opportunity sites on parcels or blocks that are contained within the walk and bike sheds as well as those that are along major corridor routes.

Figure 5.1.1shows a composite image of:

- 5 min. walking shed
- 10 min. walking shed
- 5 min. biking shed
- Major corridor streets
- Major corridor bicycle routes
- Major corridor transit routes

This analysis is based on the understanding of how the different modes of transportation perform within the TOD and TOD Corridor.



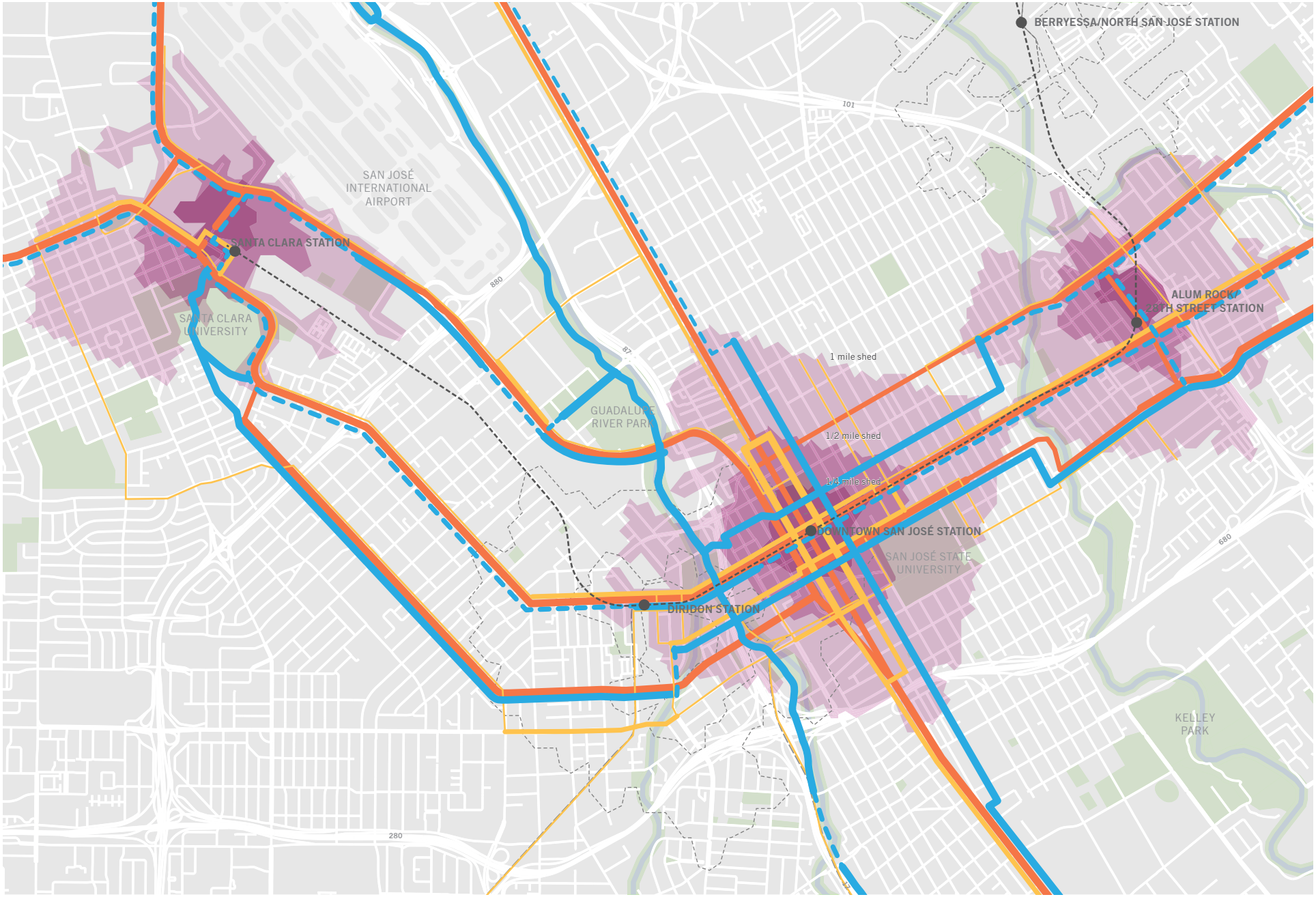


FIGURE 5.1.1 VTA'S BART Phase II Walksheds and Corridor

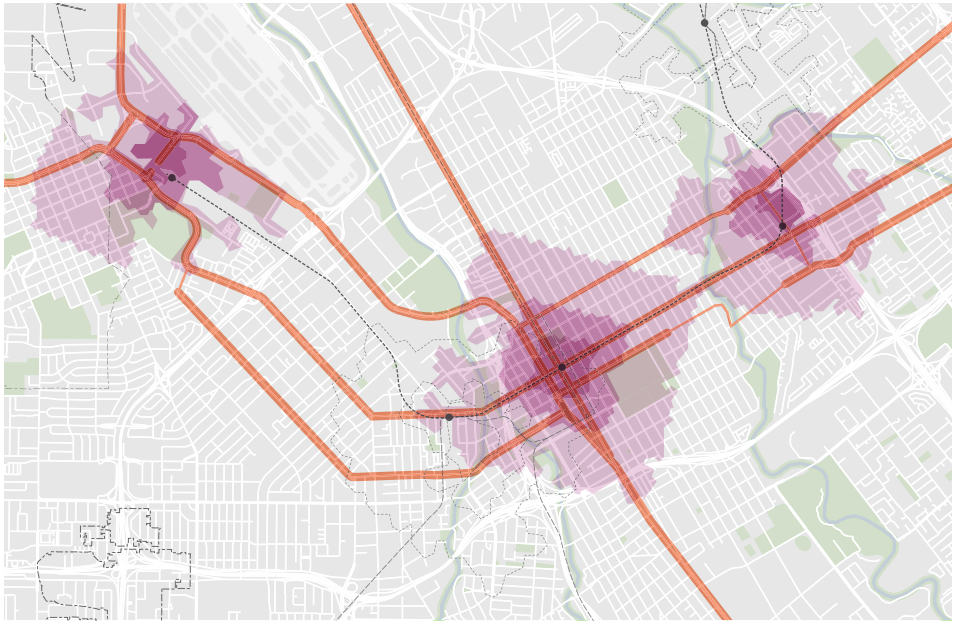


FIGURE 5.1.2 Major corridor streets

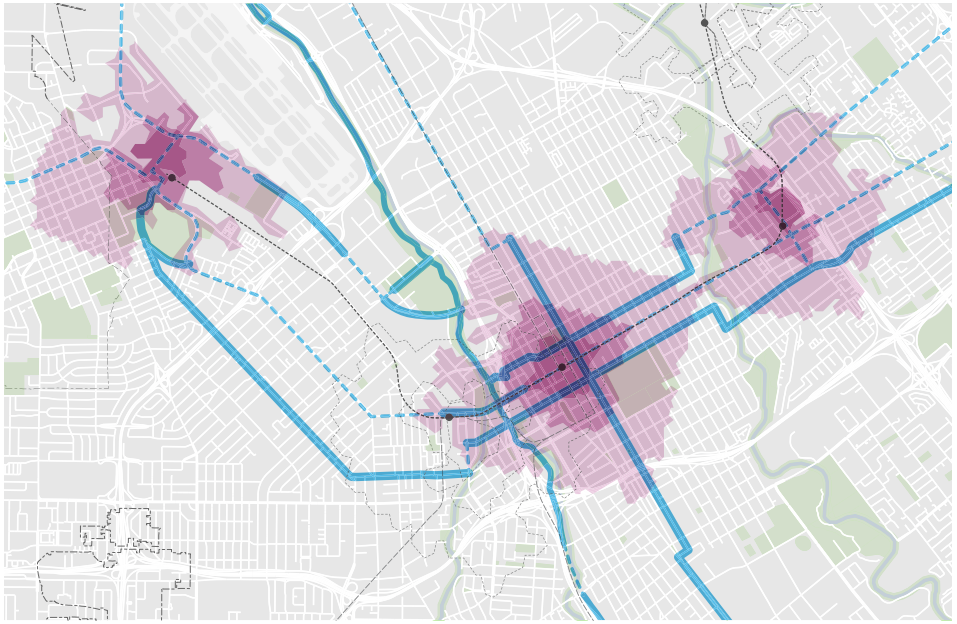


FIGURE 5.1.3 Major corridor bicycle routes

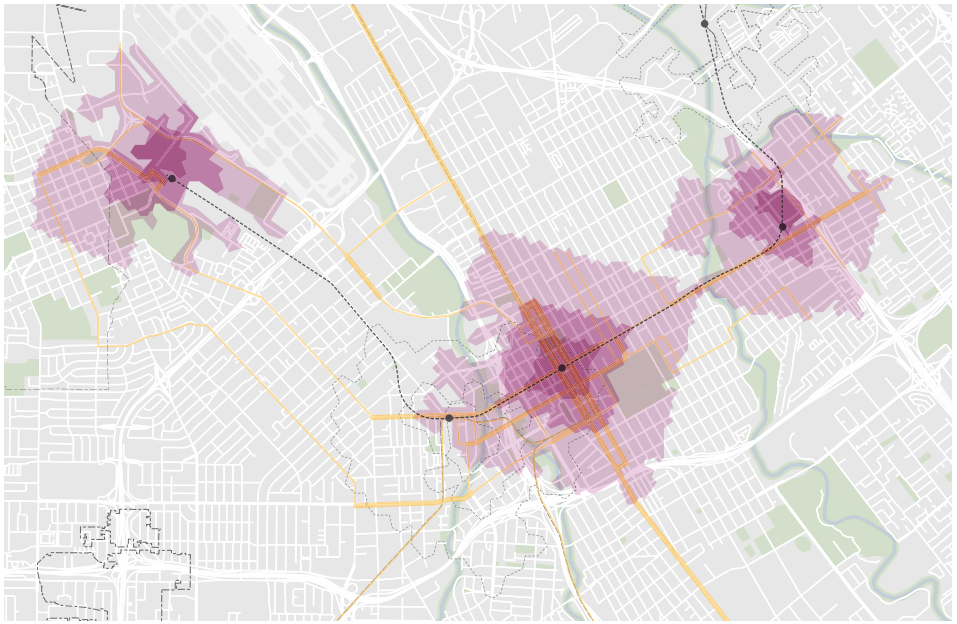


FIGURE 5.1.4 Major corridor transit routes

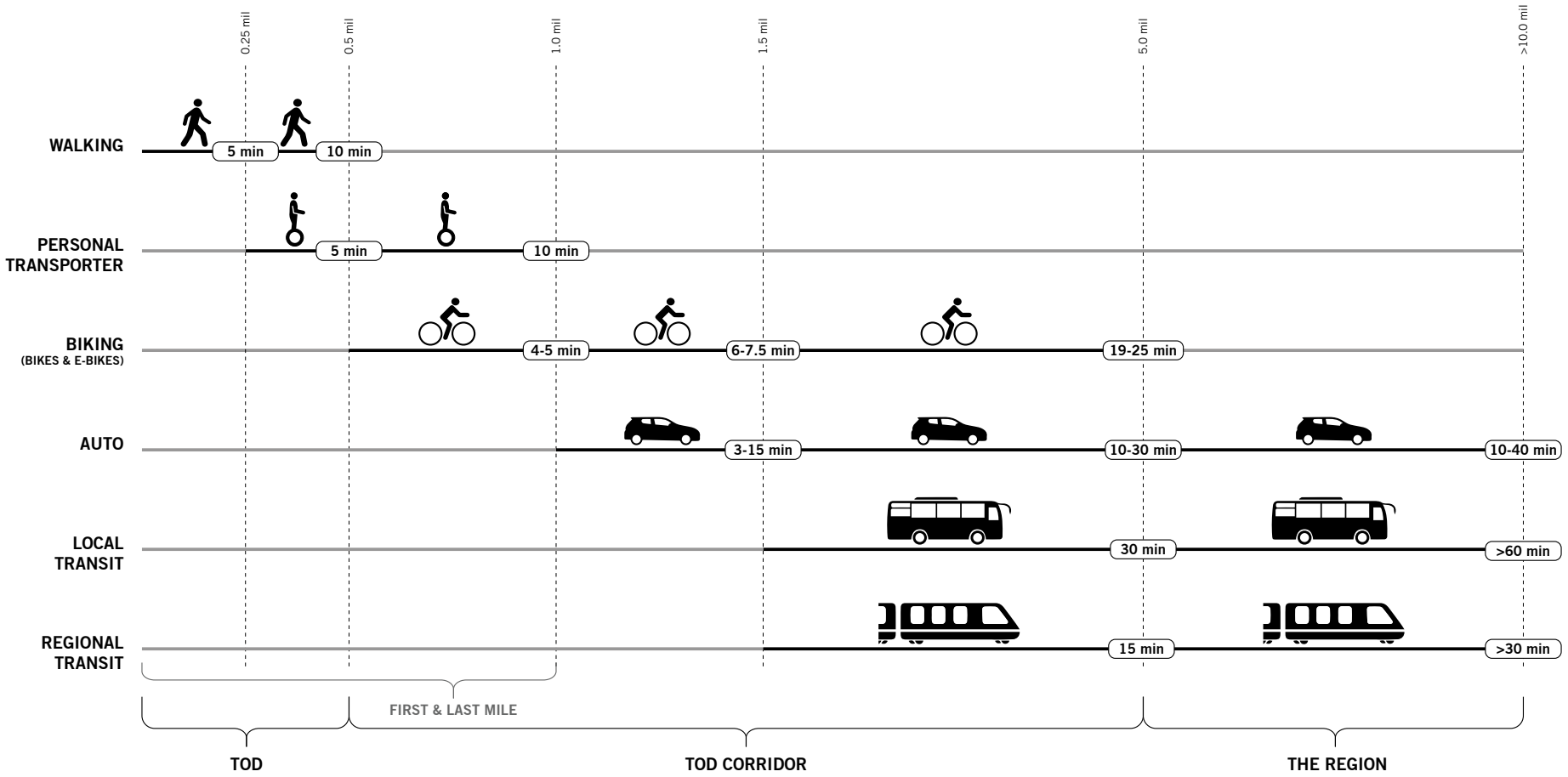


FIGURE 5.1.5 Effective Modes of Transportation within the TOD, TOD Corridor and Regional Area

Figure 5.1.5 compares the different modes of transportation in terms of distance traveled and speed. For example, within one mile of the station, walking, personal transporters, and bicycles are the most effective modes of transportation. As the distances increase, private vehicles, local transit, and regional transit emerge as the most practical modes of transportation.

5.2 Vacant and Underdeveloped Parcels

As a starting point for the definition of the opportunity sites, physical attributes of the properties within the areas of influence were evaluated, such as:

- Vacant parcels
- Surface parking lots
- Parcels currently zoned as commercial and mixed-use with existing structures of 30 feet height or less (generally assumed to be one or two stories max.)
- Parcels currently zoned as industrial

The result of this analysis is shown in Figures 5.2.1-4 and it is intended to produce a preliminary assessment of parcels that have a higher probability of being redeveloped and will contribute to the identification of opportunity sites in the next phase of the project. The parcels identified in these diagrams are represented for analytical purposes only and are meant to represent the potential scale of opportunity at each of the station areas. There are many additional factors that affect when and to what extent sites are redeveloped. It is not intended that all of the sites shown here are to be redeveloped. Additionally, some sites not shown here may be redeveloped.

**Parcels with built structures of 30 feet height or less are considered underdeveloped parcels.*

A 12' floor to floor height is assumed.

Underdeveloped Commercial Mixed-Use
Industrial
Surface Parking
Vacant Parcels
VTA/BART Phase II Extension
City Boundary

0 1000' 2000' 4000' N

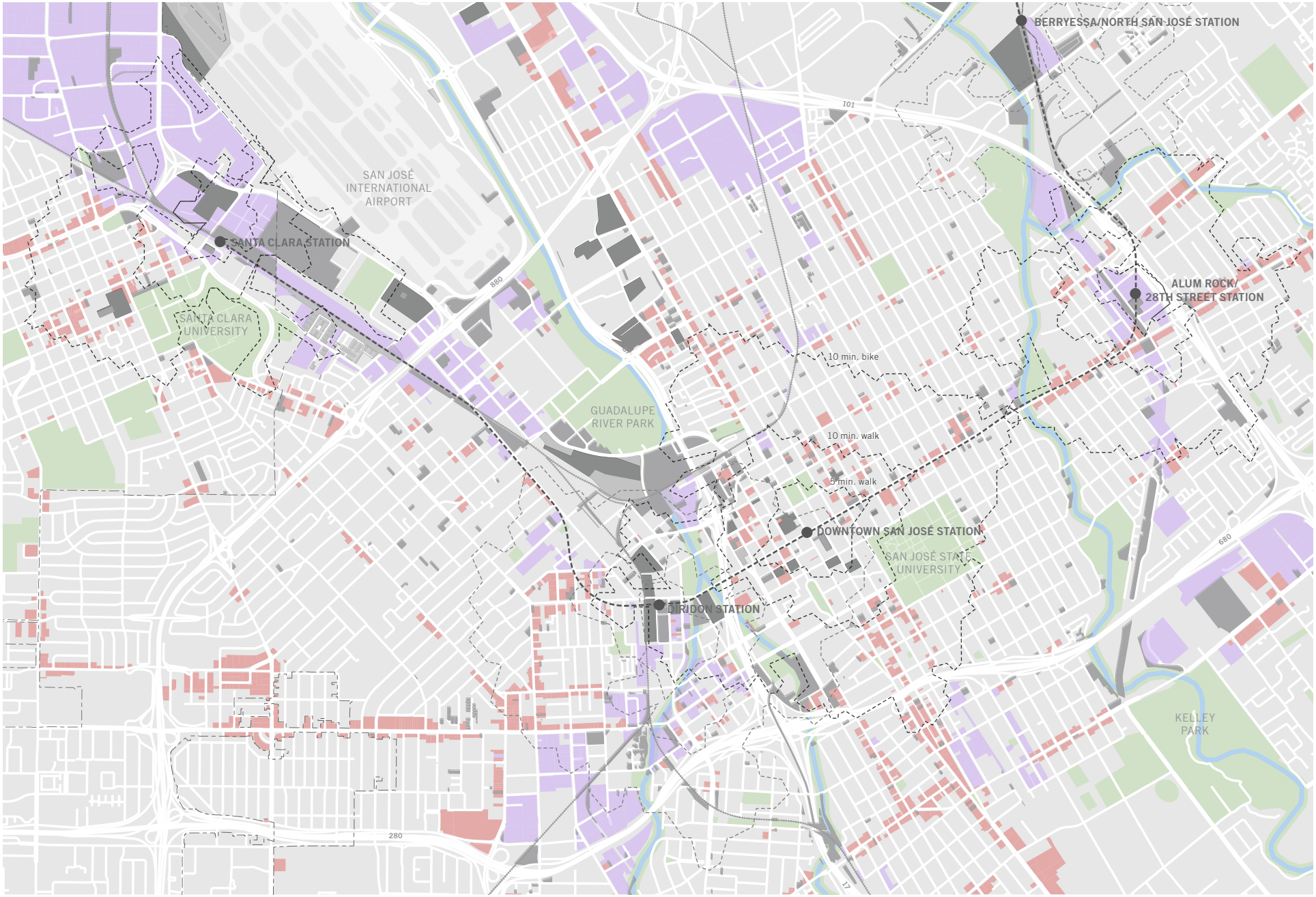


FIGURE 5.2.1 VTA'S BART Phase II Corridor Vacant and Underdeveloped Parcels

Santa Clara Station

**Parcels with built structures of 30 feet height or less are considered underdeveloped parcels.*

A 12' floor to floor height is assumed.

Underdeveloped Commercial Mixed-Use
Industrial
Surface Parking
Vacant Parcels
VTA/BART Phase II Extension
City Boundary

0 125' 250' 500'

N

FIGURE 5.2.2 Santa Clara Station Vacant and Underdeveloped Parcels

Downtown San José Station

**Parcels with built structures of 30 feet height or less are considered underdeveloped parcels.*

A 12' floor to floor height is assumed.

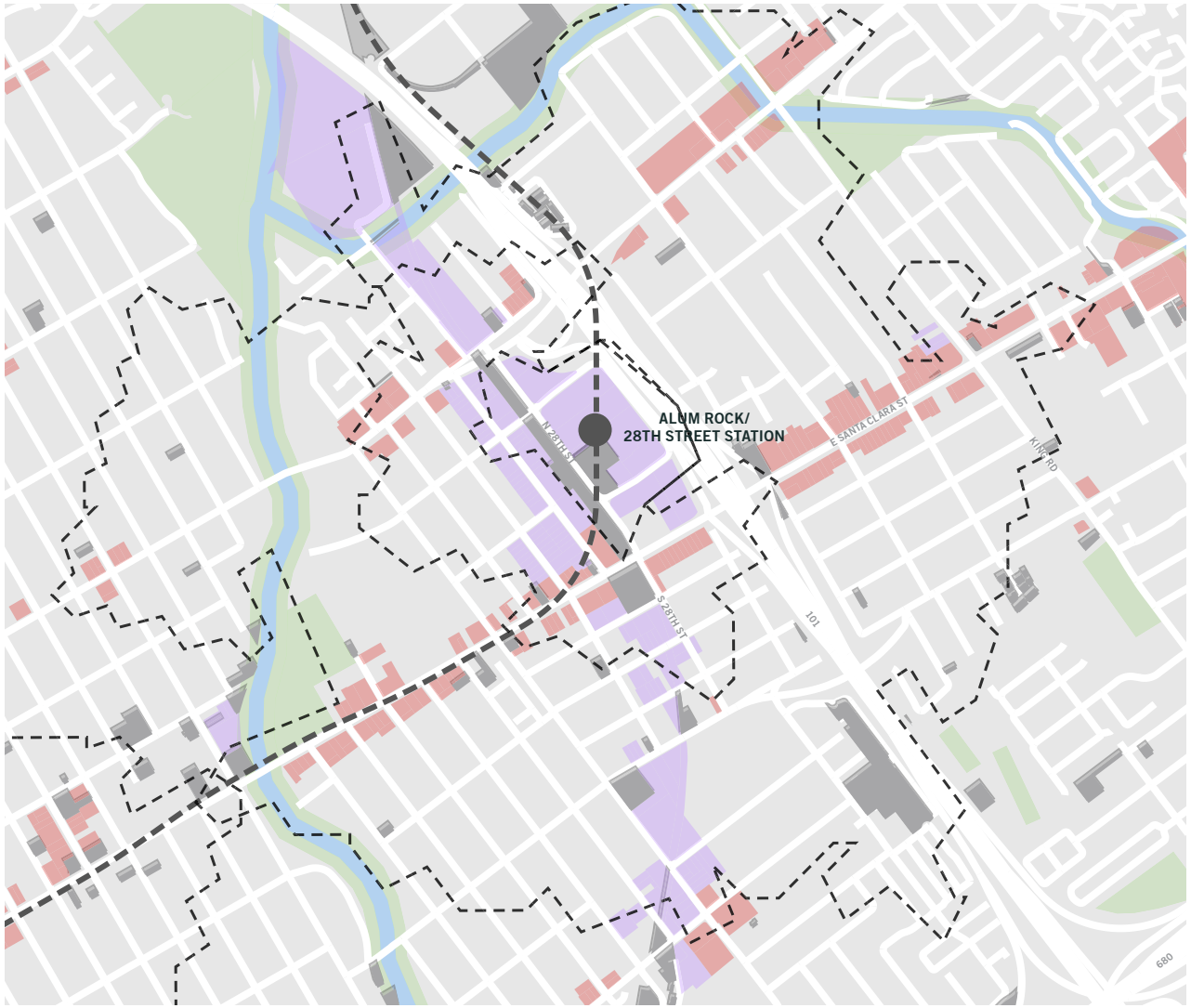
Underdeveloped Commercial Mixed-Use
Industrial
Surface Parking
Vacant Parcels
VTA/BART Phase II Extension

0 125' 250' 500'

N

FIGURE 5.2.3 Downtown San José Vacant and Underdeveloped Parcels

28th Street Station



**Parcels with built structures of 30 feet height or less are considered underdeveloped parcels.*

A 12' floor to floor height is assumed.

Underdeveloped Commercial Mixed-Use
Industrial
Surface Parking
Vacant Parcels
VTA/BART Phase II Extension

0 125' 250' 500'

N

FIGURE 5.2.4 28th StreetStation Vacant and Underutilized Parcels

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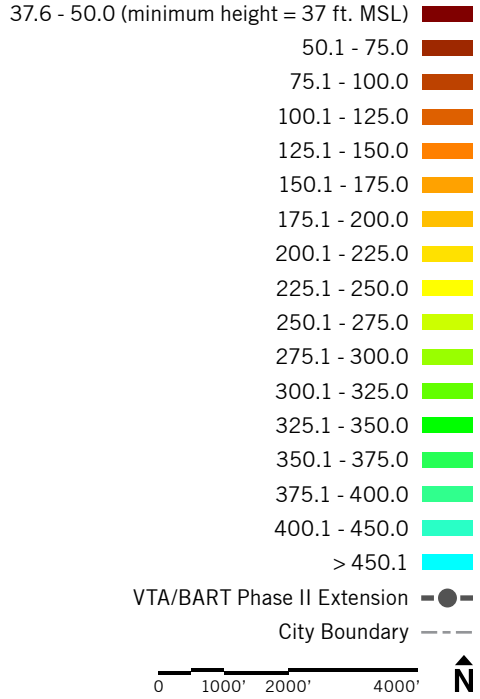
5.3 Height Limit

Airspace protection around the San José International Airport has increasingly become a challenge as additional high-rise development in Downtown San José is encouraged and implemented. In January 2006, the City of San José commissioned a study with the objective of preparing a database of obstacle clearance surfaces within a 3-mile radius of the airport in order to identify potential building height limits of new development, particularly in downtown San José. The study examined three sets of obstacle clearance surfaces (OCSs) in the airspace surrounding the airport:

- "Part 77" surfaces – Civil airport imaginary surfaces, as described in Part 77 of the Code of Federal Regulations, Title 14, Objects Affecting Navigable Airspace. The Federal Aviation Administration (FAA) uses these surfaces to identify potential airport obstructions, but not necessarily hazards that would constrain use of the airspace around the airport.
- "TERPS" surfaces – Obstacle clearance surfaces described in FAA Order 8260.3B, United States Standard for Terminal Instrument Procedures. The FAA uses these surfaces to determine whether potential structures would be hazards that would constrain use of the airspace around the airport and therefore should not be built.
- "OEI" surfaces – One-engine inoperative (OEI) aircraft climb gradient surfaces, associated with aircraft certification criteria described in Part 25 of the Code of Federal Regulations, Title 14. The City of San José, through its development review process, limits building heights to these airline emergency procedure surfaces to protect the air service capability of the airport.

The following figures show approximate maximum allowable building elevations in the airport vicinity (in feet above mean sea level or MSL) based on a composite of the TERPS and OEI surfaces (whichever is more restrictive). In the Diridon Station area and in the western portion of the Downtown San José Station area, the OEI surfaces tend to be more restrictive than TERPS. The Santa Clara Station area, the eastern portion of the Downtown San José Station area, and the 28th StreetStation area are outside the OEI ZONE, so the TERPS surfaces represent the maximum allowable heights. Around all four stations, the Part 77 surfaces are lower than both OEI and TERPS surfaces, but the FAA typically allows the Part 77 surfaces to be exceeded if subject to obstruction lighting or similar mitigation. Note: Ground elevation in the airport vicinity generally increases in a northwest to southeast direction, so would need to be subtracted from the MSL elevations to determine maximum allowable height above ground level at any specific site.[1]



1 Draft Documentation Report San José International Airport Obstruction Clearance Study

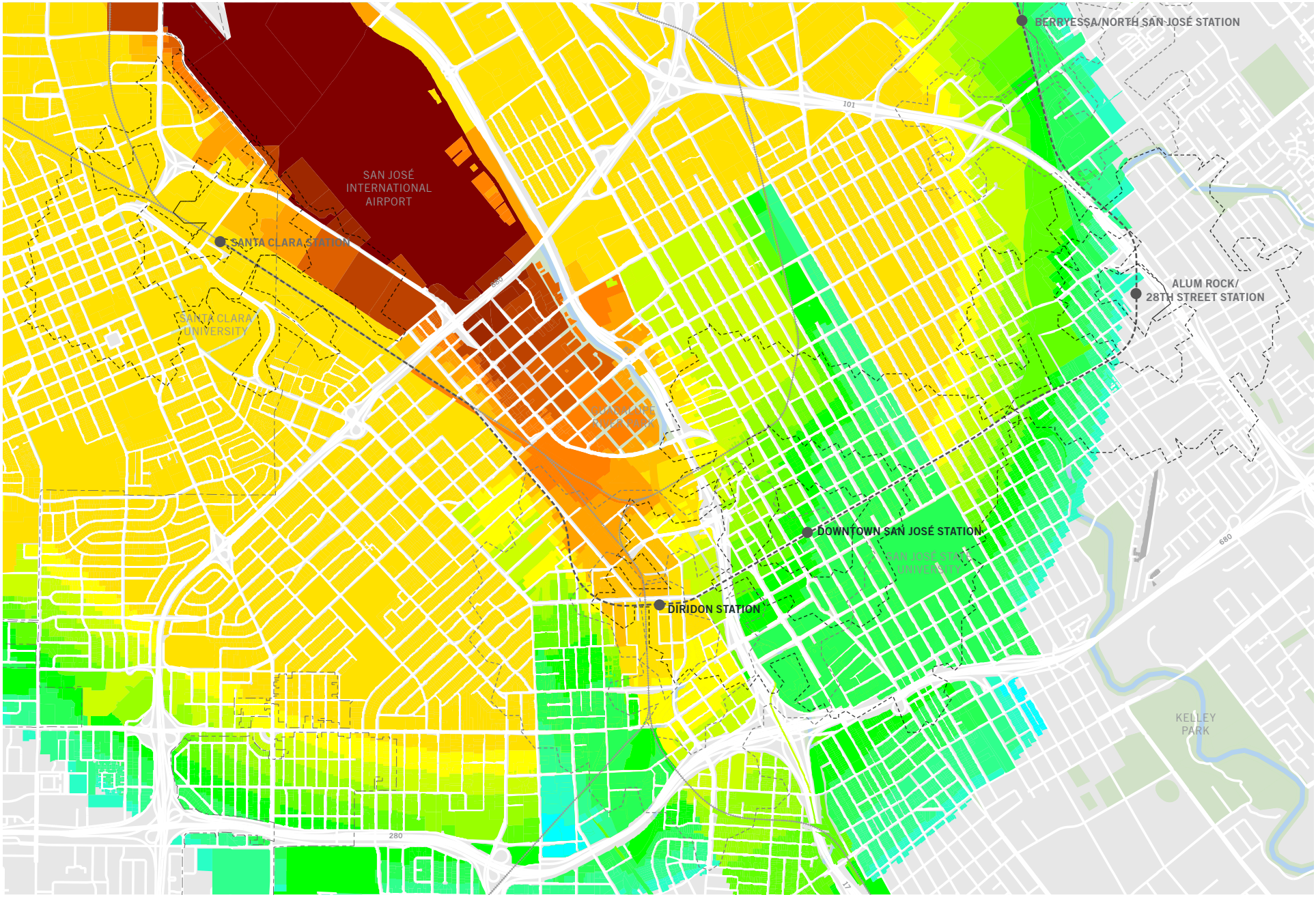


FIGURE 5.3.1 VTA'S BART Phase II Corridor Height Limitation

Santa Clara Station

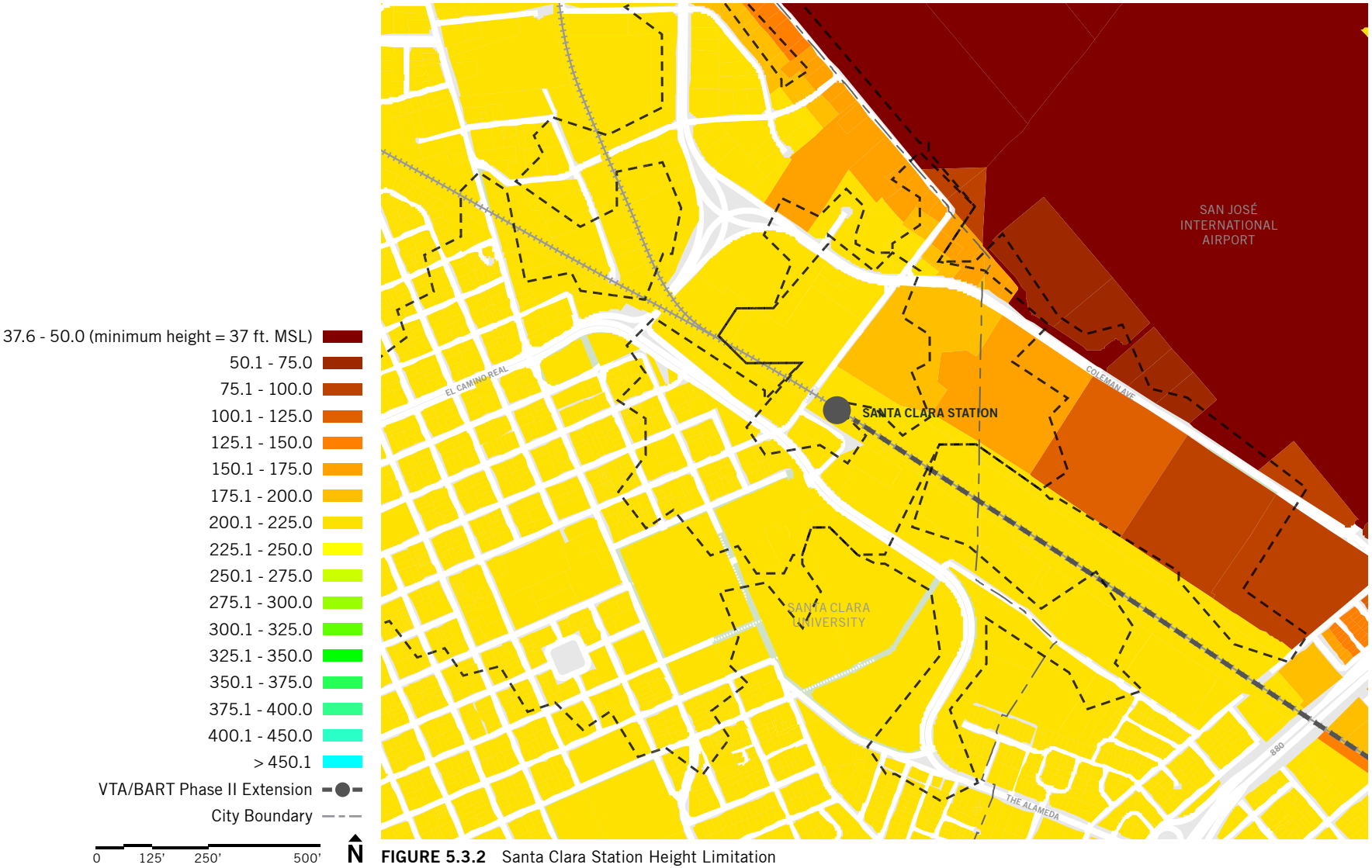


FIGURE 5.3.2 Santa Clara Station Height Limitation

Downtown San José Station

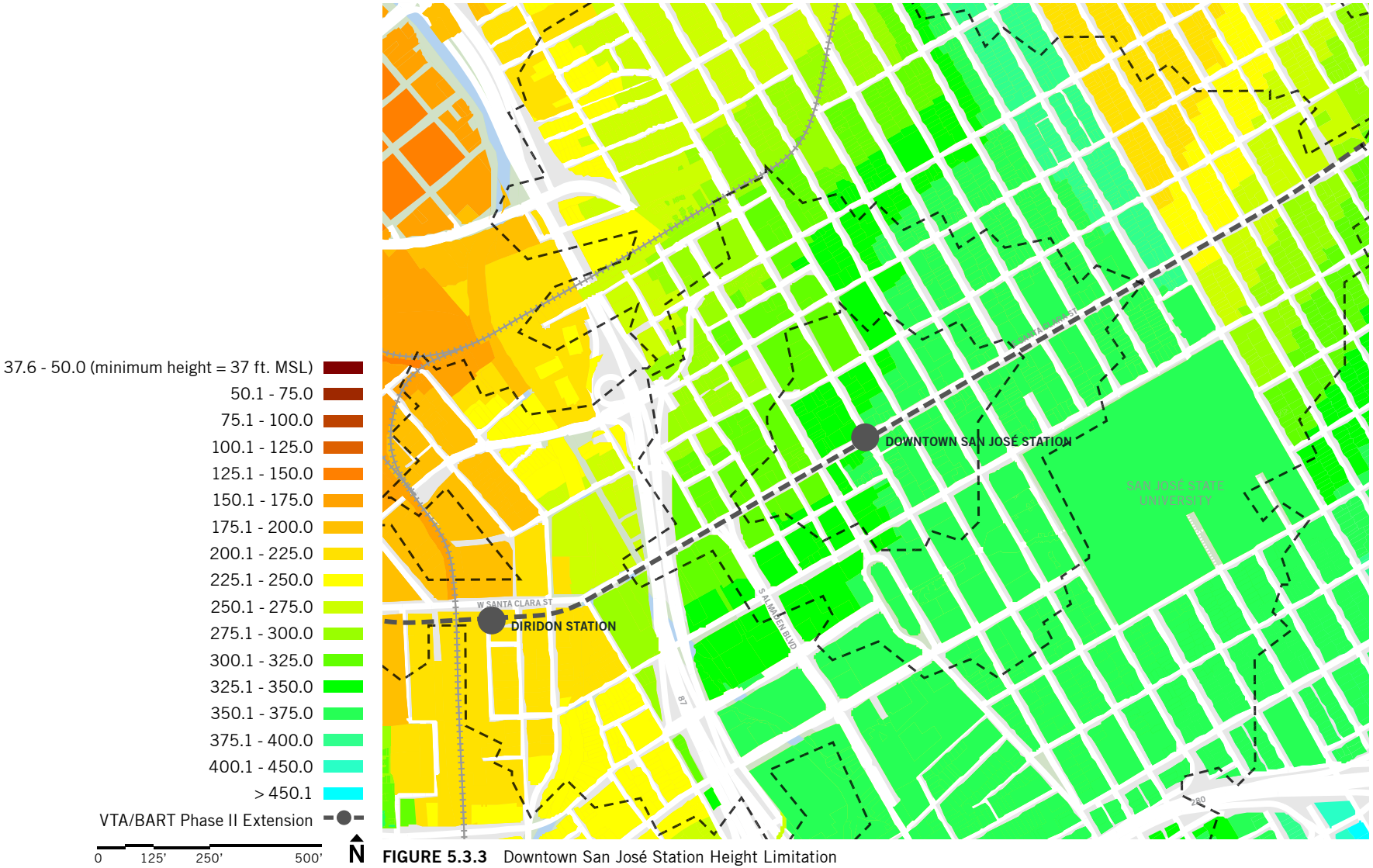


FIGURE 5.3.3 Downtown San José Station Height Limitation

28th Street Station

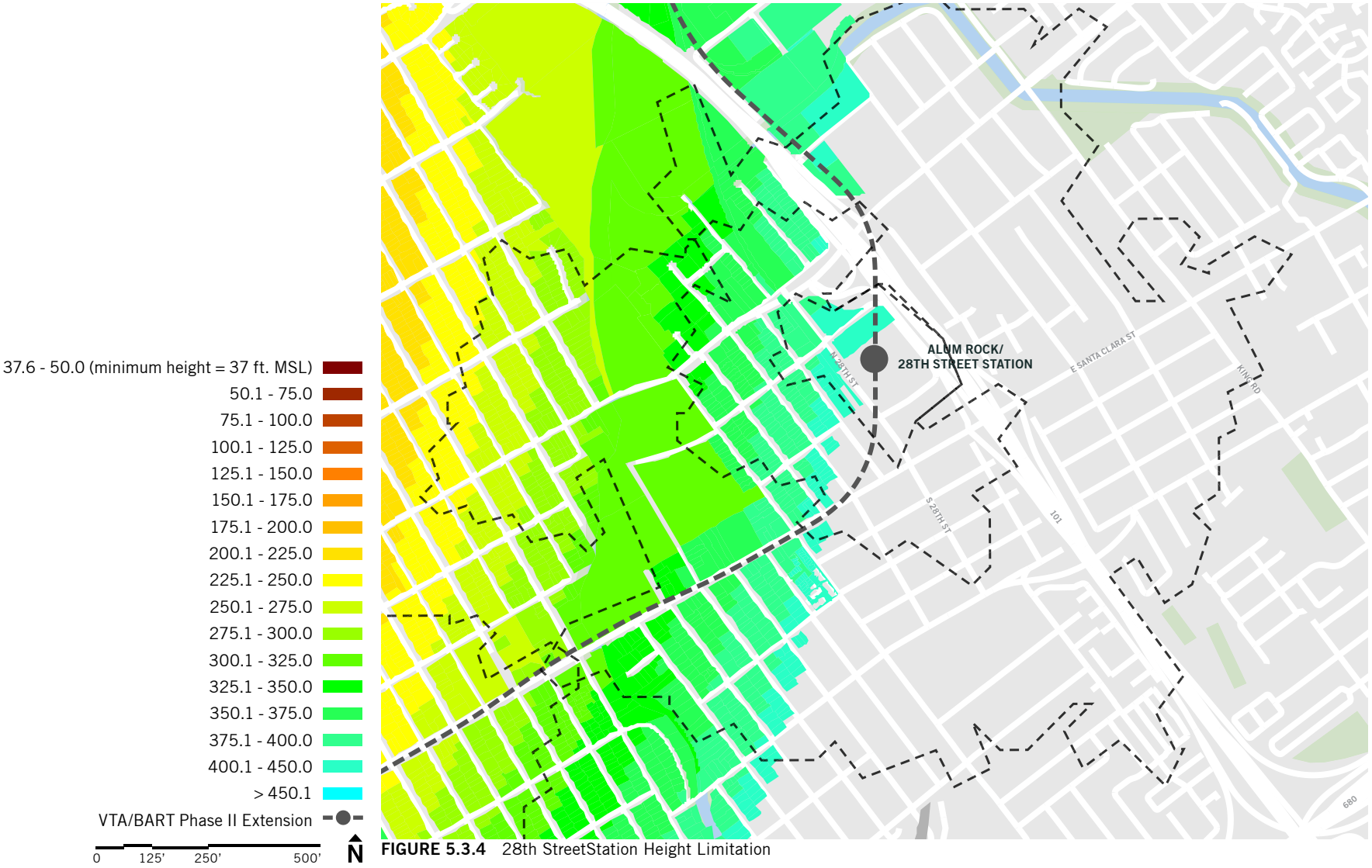


FIGURE 5.3.4 28th StreetStation Height Limitation

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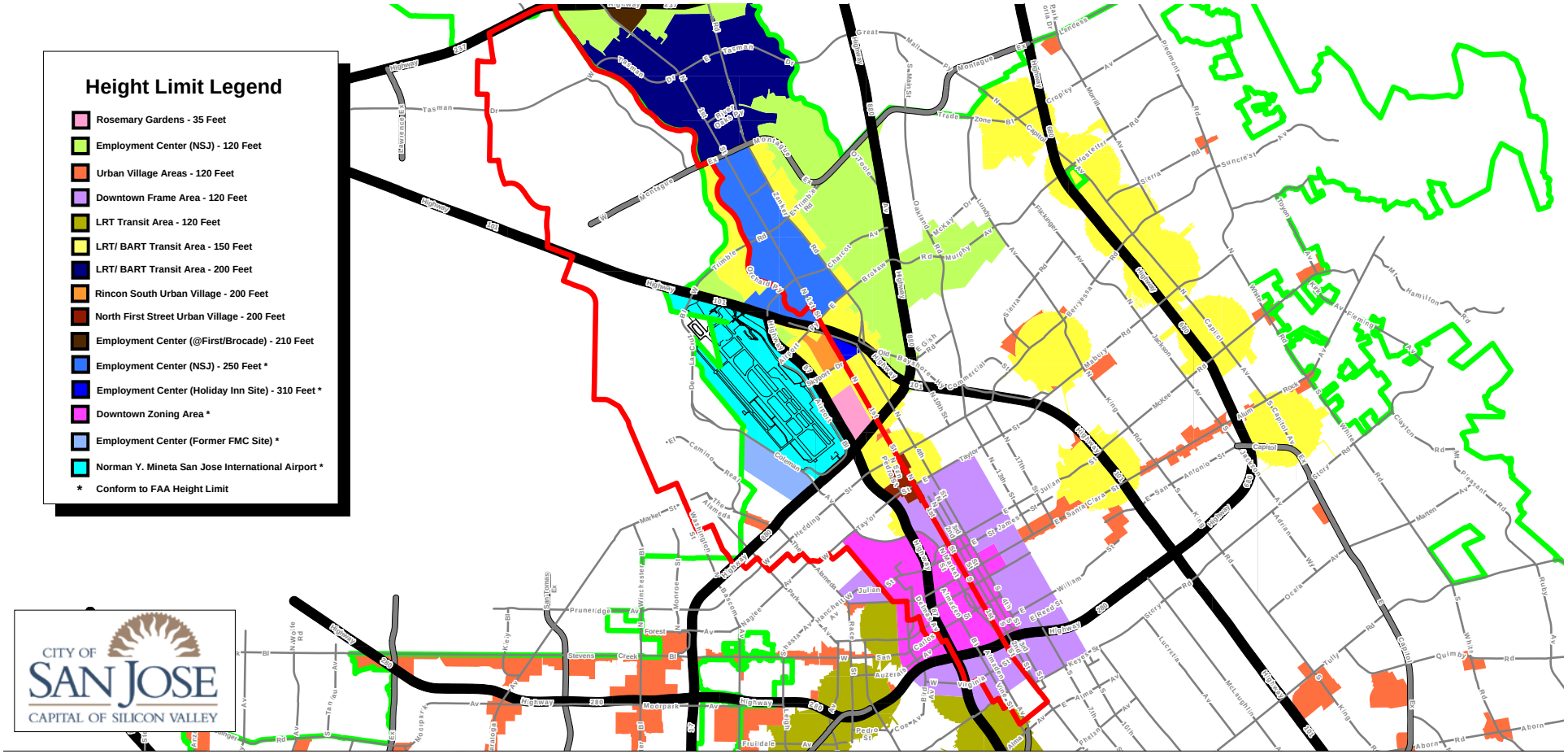
SAN JOSÉ HEIGHT LIMIT AREAS

The Envision San José 2040 General Plan removed specific height limitations and exceptions from the General Plan and re-established these regulations in the City's Zoning Ordinance (Title 20 of the San José Municipal Code).

In February 2012, an ordinance became effective that added a new Zoning Code chapter to incorporate height regulations for specific geographic areas and specific types of development. Then, in November 2012 and August 2013, after coordination with the County of Santa Clara's Airport Land Use Commission (ALUC), two other ordinances were approved that addressed geographic areas within the Norman Y. Mineta San José International Airport Influence Area (AIA)[1].

The San José Planning department provides Specific Height Limitation Areas as shown in Figure 5.3.5.

1 City of San José Planning Division



Map Prepared by: City of San Jose, Planning Division, September 2013

FIGURE 5.3.5 City of San José Specific Height Limitation Areas
Source: City of San José Planning Division

5.4 Seismic Hazard & Flooding Zones

LIQUEFACTION

Figure 5.4.1 shows the likelihood of liquefaction in Northern Santa Clara County. The map predicts the approximate probability that shallow wet sands will liquefy and cause surface manifestations of liquefaction such as sand boils and ground cracking.

Liquefaction is a phenomenon that is caused by earthquake shaking. Wet sand can become liquid-like when strongly shaken. The liquefied sand may flow and the ground may move and crack, causing damage to surface structures and underground utilities.[1]

FLOODING ZONES

Flood zones are geographic areas that the FEMA has defined according to varying levels of flood risk. These zones are depicted on a community's Flood Insurance Rate Map (FIRM) or Flood Hazard Boundary Map. Each zone reflects the severity or type of flooding in the area.

The station areas and their larger context falls under the following FEMA's Flood Zone Designations:

- Zone A: Areas with a 1% annual chance of flooding and a 26% chance of flooding over the life of a 30-year mortgage. Because detailed analyses are not performed for such areas; no depths or base flood elevations are shown within these zones.
- Zone AE: The base floodplain where base flood elevations are provided. AE Zones are now used on new format FIRMs instead of A1-A30 Zones.
- Zone AH: Areas with a 1% annual chance of shallow flooding, usually in the form of a pond, with an average depth ranging from 1 to 3 feet. These areas have a 26% chance of flooding over the life of a 30-year mortgage. Base flood elevations derived from detailed analyses are shown at selected intervals within these zones.
- Zone AO: River or stream flood hazard areas, and areas with a 1% or greater chance of shallow flooding each year, usually in the form of sheet flow, with an average depth ranging from 1 to 3 feet. These areas have a 26% chance of flooding over the life of a 30-year mortgage. Average flood depths derived from detailed analyses are shown within these zones.

FEMA's Flood Zone A
FEMA's Flood Zone AE
FEMA's Flood Zone AH
FEMA's Flood Zone AO
Areas with potential for Liquefaction (LQ)
VTA/BART Phase II Extension
City Boundary

0 1000' 2000' 4000' N

1 Seismological Society of America

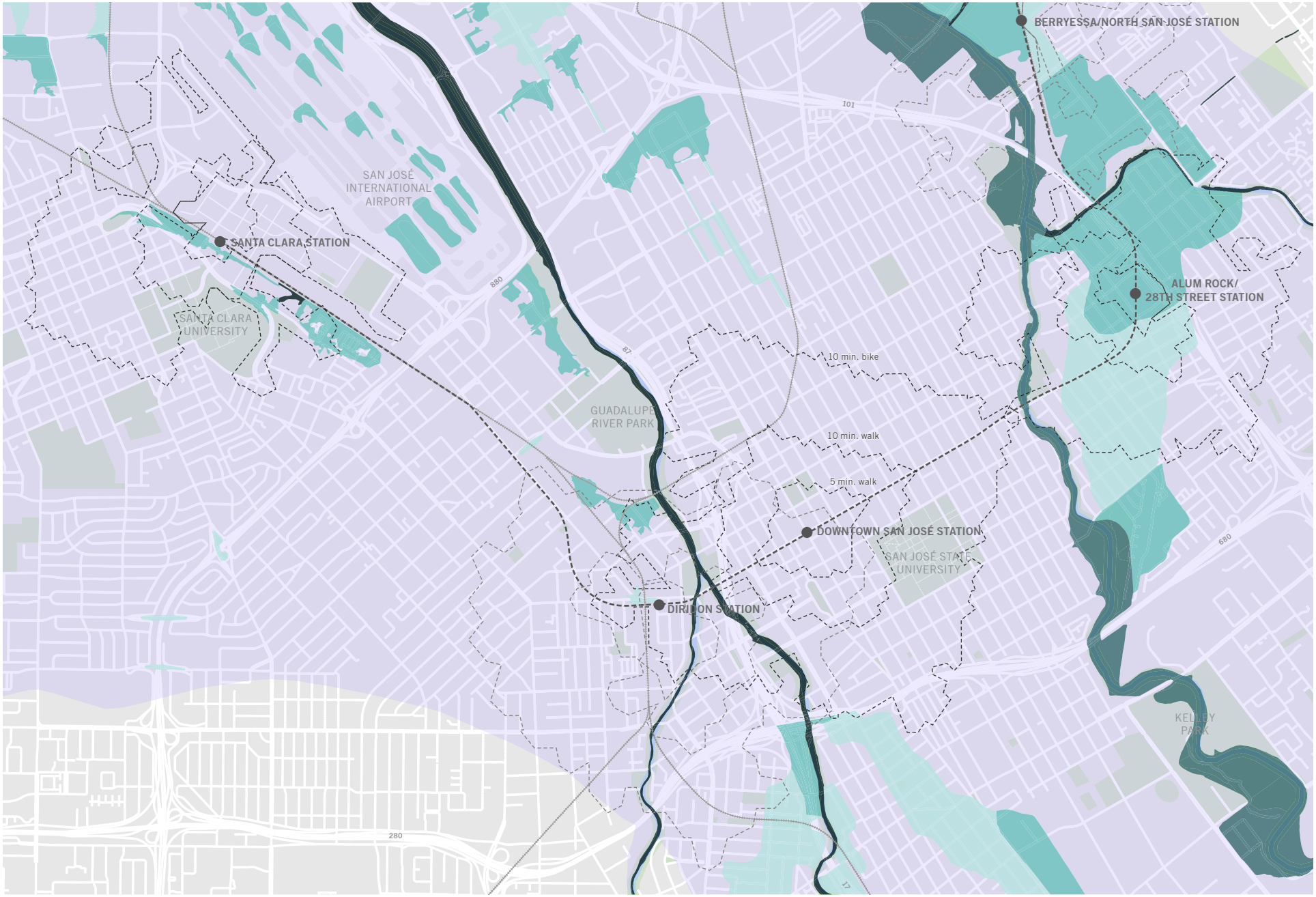


FIGURE 5.4.1 VTA'S BART Phase II Corridor Seismic Hazard and Flooding Zones

Santa Clara Station

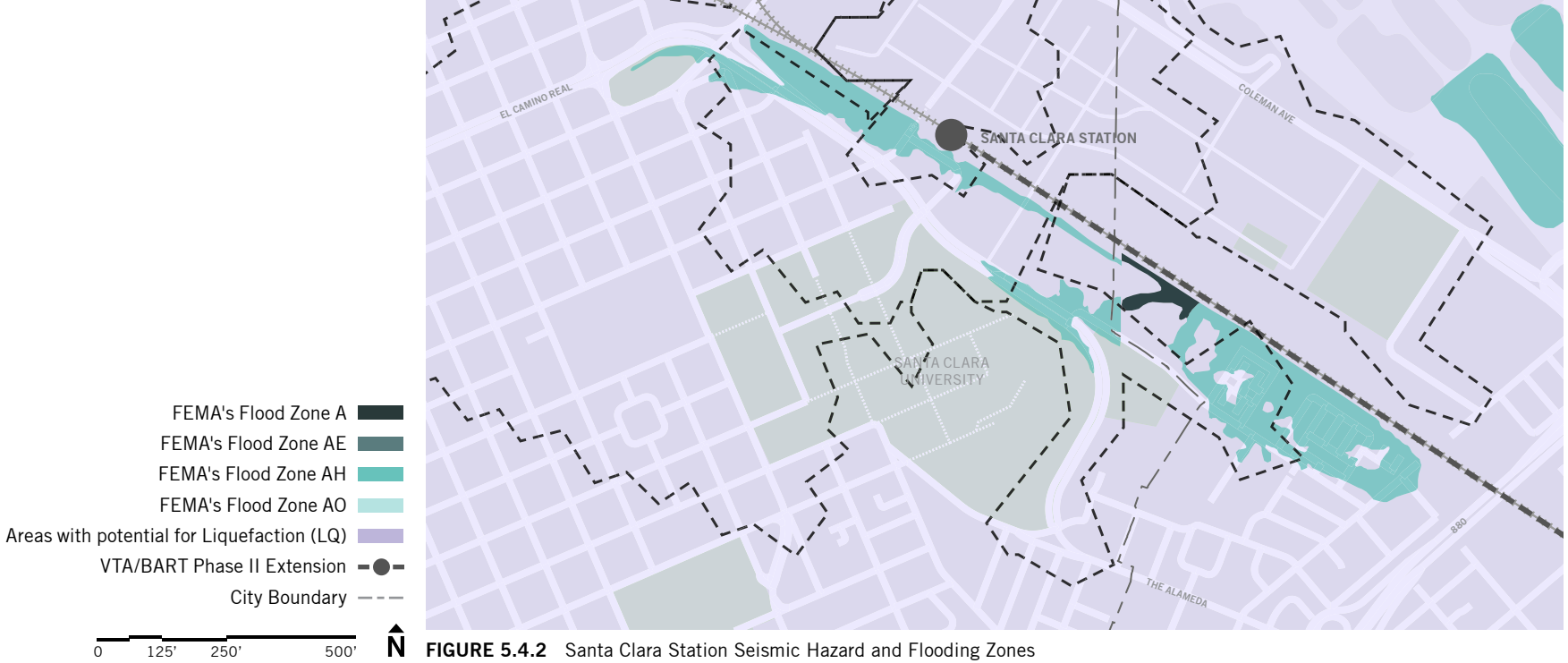


FIGURE 5.4.2 Santa Clara Station Seismic Hazard and Flooding Zones

Downtown San José Station

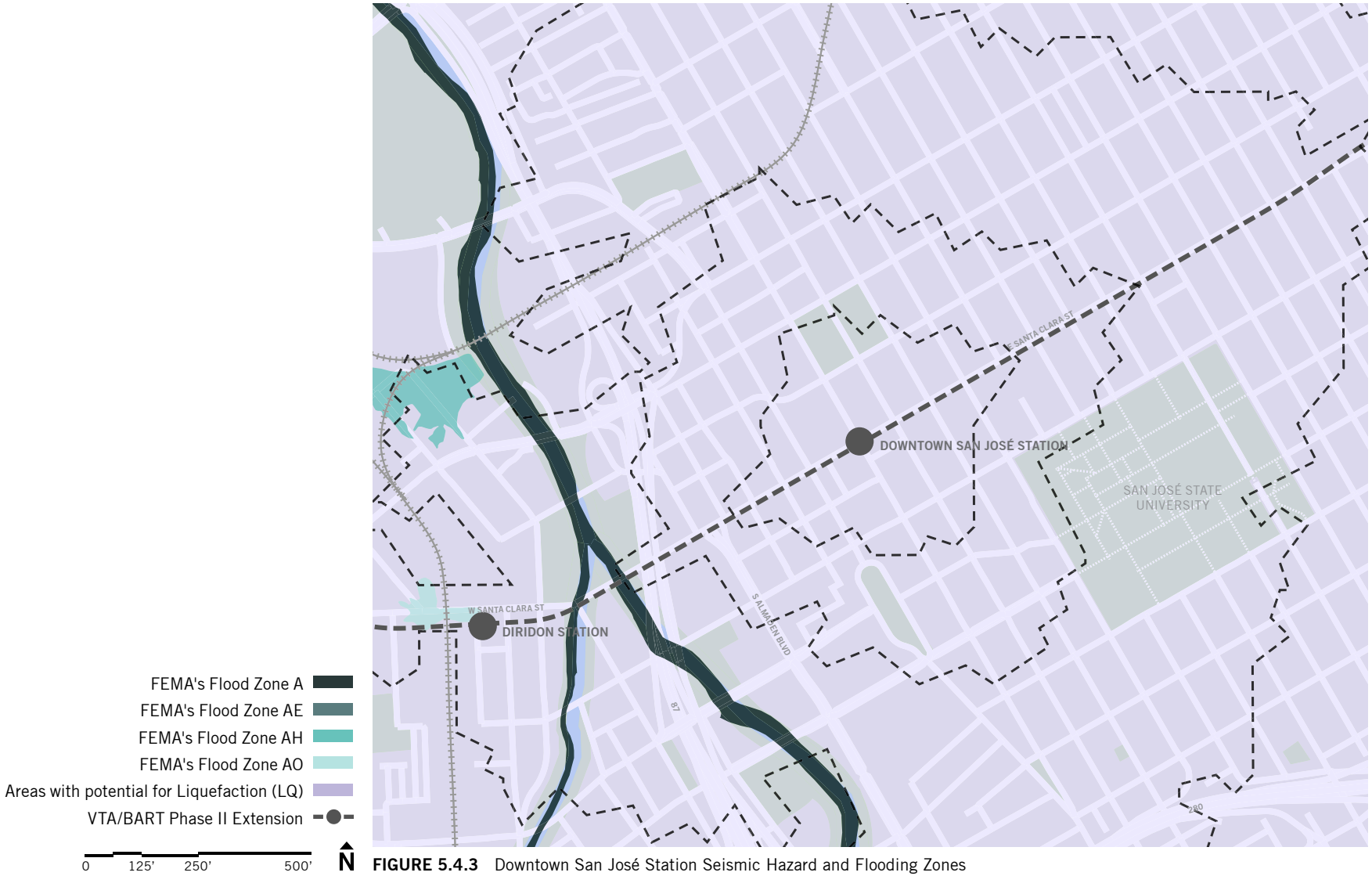


FIGURE 5.4.3 Downtown San José Station Seismic Hazard and Flooding Zones

28th StreetStation

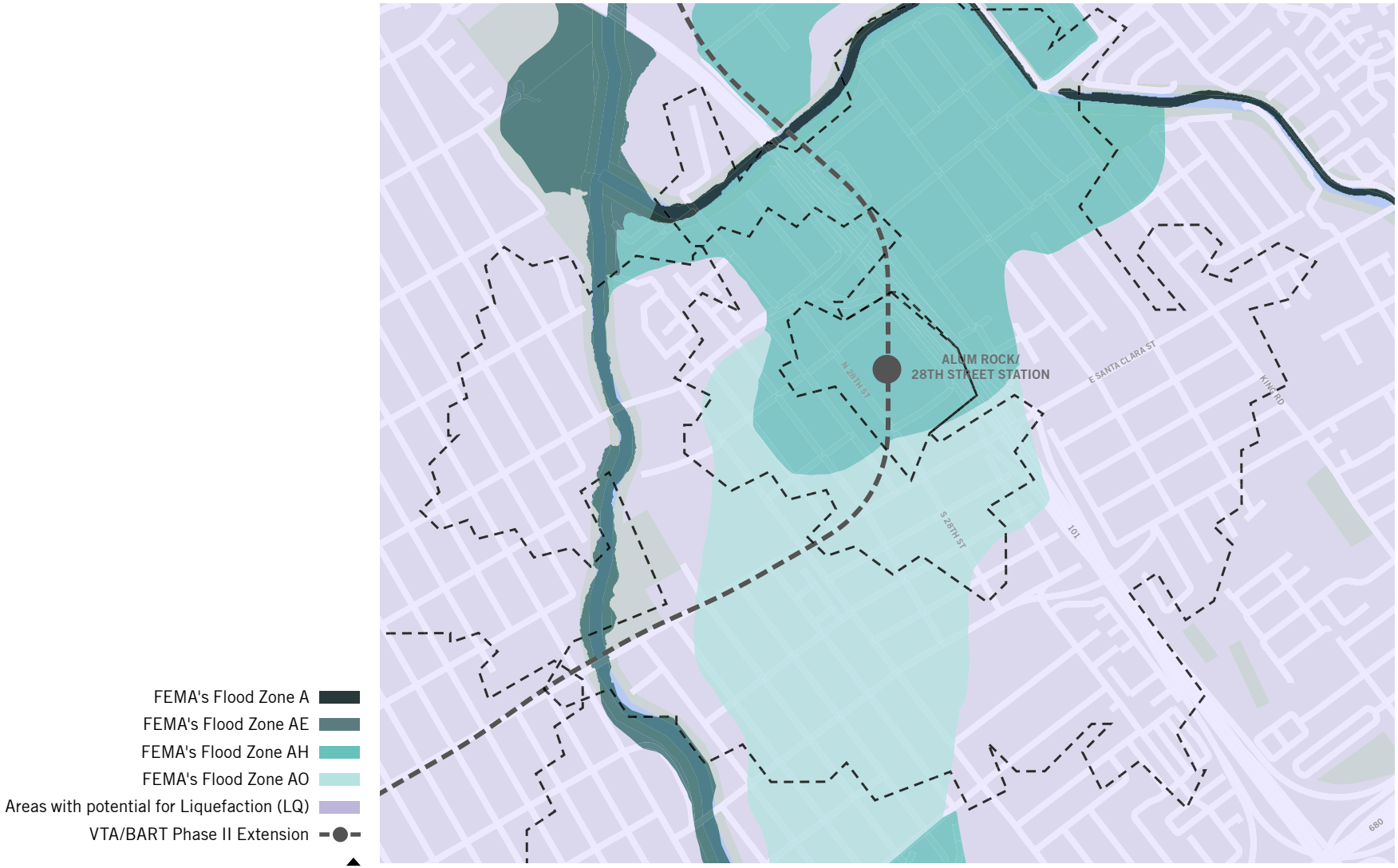


FIGURE 5.4.4 28th StreetStation Seismic Hazard and Flooding Zones

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Guadalupe River. Photo Credit: Branden Frederick

6

INFRASTRUCTURE

INTRODUCTION

Based on information provided by the City of Santa Clara, City of San José, and Utility Companies, this section analyzes the storm drain, sanitary sewer, domestic/fire water and recycled water systems within the three Station Study Areas: Santa Clara, Downtown San José, Alum Rock/28th Street. Analysis of the utility systems includes exploration of the existing utility framework that serves the study areas, along with a programmatic analysis of the perceived deficiencies and recommendations for reuse, augmentation or reconstruction to facilitate short and long term infrastructure needs. This section also discusses recent and future capacity improvements and potential system extensions.

6.1 Storm Drain

Local storm drainage facilities near the proposed stations are owned and maintained by the City of San José or the City of Santa Clara. These local systems discharge into a regional system, under the jurisdiction of the Santa Clara Valley Water District (SCVWD), which conveys storm run-off to the San Francisco Bay.

Proposed drainage improvements within San José or Santa Clara will be required to conform to the parameters set forth by the city of jurisdiction. San José and Santa Clara development policies address storm drain pipe design for capacity and quality. Storm drains in San José are to be sized and evaluated per the San José Drainage Manual approved in 1993. Storm drains in Santa Clara are to be sized and evaluated per the Santa Clara Design Criteria approved in 2010. In both jurisdictions, storm drain lines are required to accommodate a 10-year design storm at a minimum and new developments must mitigate impacts on the existing storm drain system.

In terms of flood plain management, the potential site areas contain various hazard zones that may have significant costs for flood protection efforts and flood insurance. Flood plain delineations are set by the Federal Emergency Management Agency (FEMA) and will dictate whether protection is required and whether subsequent analysis will be required to confirm the protections will not negatively affect the surrounding properties.

Santa Clara Station

The Santa Clara Station area projects will have to mitigate increases in storm drainage that cause surcharge in the existing storm drain system by upgrading or supplementing the existing system. The design storm to evaluate the capacity for the City of Santa Clara (City) is as follows: storm drains are required to accommodate a 10-year design storm and storm drains near storm drain pump stations are required to convey the 100-year design storm. The City standards also dictate that new developments must mitigate increases in storm drainage that breach the discharge capacity limit of an existing pump station by upgrading or supplementing the existing pump station.

Problem areas that may require more extensive and exhaustive mitigation measures are identified in the Santa Clara Storm Drain Master Plan (prepared by Schaaf & Wheeler Consulting Civil Engineers, dated December 2015). This Master Plan provides hydraulic calculations, delineates inundation areas, and specifies future improvement projects throughout the City. The effects of this analysis will be discussed in greater detail later in this section.

Federal Emergency Management Agency (FEMA) current Flood Insurance Rate Map (FIRM) numbers 06085C0227H and 06085C0231H, dated May 18, 2009, identify portions of the plan area as potential Flood Hazard Zones and subject to localized flooding. Approximately 5% of the plan area (excluding San José International Airport) is in Zone AH, which indicate areas subject to inundation by the 1 percent annual chance event. The FIRMs, whereby the Base Flood Elevation (BFE) was derived from detailed hydraulic analyses, defines this event as having shallow flooding with average depths of between 1-foot and 3-feet.

Mandatory flood insurance purchase requirements and floodplain management standards apply to areas within these zones. These areas of flooding occur mostly near Santa Clara University between El Camino Real and the Caltrain railway. See Figure 6.1.1 for FEMA flood zone delineations.

Projects proposed within these zones will require the raising of grades, most likely by importing fill material to elevate the building floor and mechanical features above the Base Flood Elevation per city policy on construction within Flood Zones. A regional study and Conditional Letter of Map Revision by Fill (CLOMR-F) will likely be required to ensure that fill within the existing flood plain does not adversely affect other properties.

Roughly another 40% of plan area (excluding San José International Airport) is designated as Zone X with probable ponding depths up to 1-foot during the 0.2-percent annual chance event. This area of flooding occurs along southwest region to the San Tomas Expressway. The remaining plan area is generally free from inundation during the 100-year and 500-year storm events.

The City of Santa Clara further refined the 100-year event water levels analyses as part of their Storm Drain Master Plan. This Master Plan provides calculations that delineate a larger inundation area, significantly greater than indicated by the FEMA FIRM maps. See Figure 6.1.2 for the flood inundation for the 100-year storm.

Inundation is sporadic and widely distributed, but indicates a greater concentration of flooding along the Santa Clara and San José boundary. Inundation greater than 1-foot is noted along the northern reaches near the Caltrain railway, along the Santa Clara and San José boundary, as well as pockets through the area.

The Master Plan indicates a cluster of high priority improvement projects on the southern side of Santa Clara

University due to existing deficiencies. Additional high priority plans to address existing deficiencies occur at De La Cruz Boulevard near San José International Airport and near Shulman Avenue (just north of where Lafayette Street meets the Caltrain tracks). In these areas, the City storm drain system isn't able to convey the 2-year storm event without flooding. Locating the Santa Clara station in these areas will likely involve further-reaching and more extensive storm drain mitigation efforts until such improvements are underway.

The City of Santa Clara has a total of six pump stations in the plan area. Three of those pump stations are in the immediate area of the Santa Clara Caltrain Station. Storm drain contributions to these pump stations may require a much greater design capacity for the City system and may require improvements to the pump stations themselves. Storm drains located near storm drain pump stations are required to convey the 100-year design storm. Although none of the pump stations were noted as hydraulically deficient in the Master Plan, project flows to these pump stations may require greater mitigation efforts by the project.

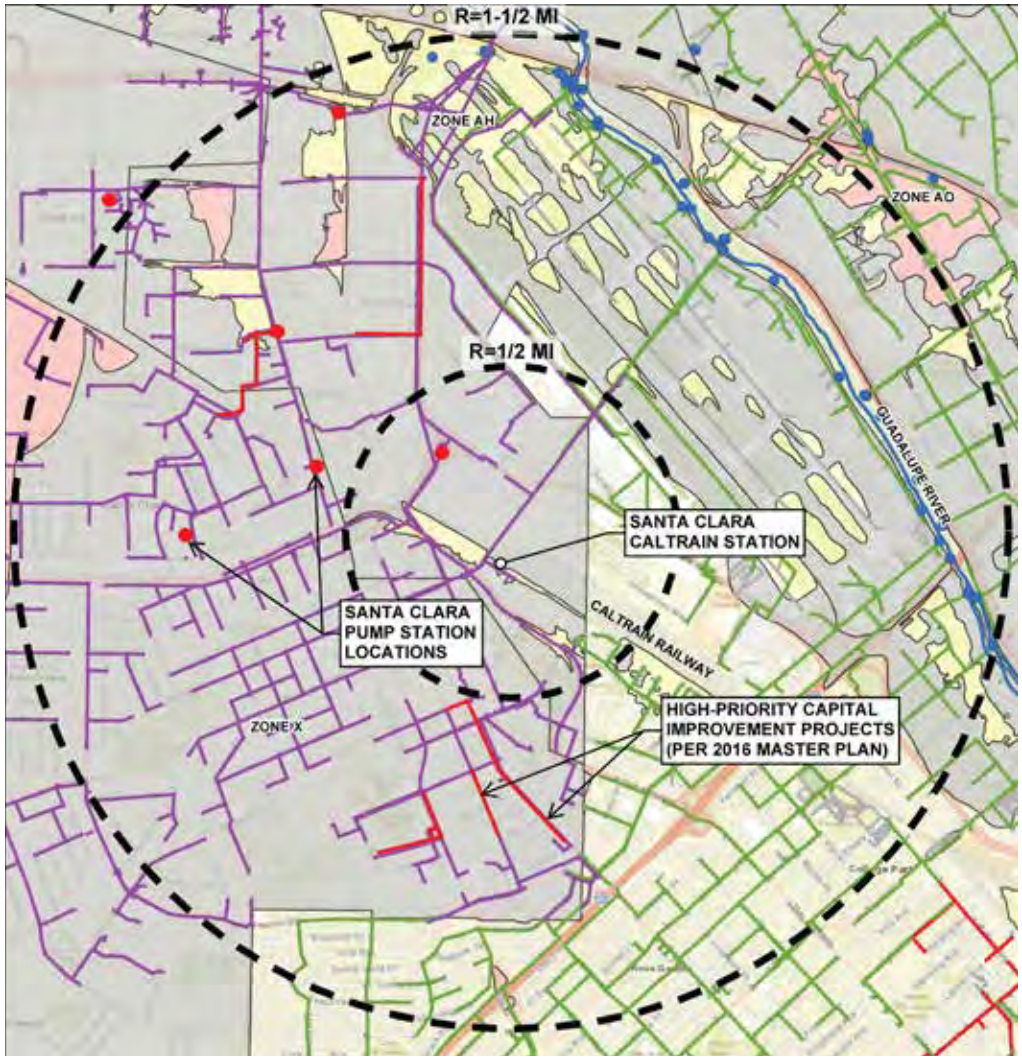

FIGURE 6.1.1 Existing Storm Drainage & FEMA Flood Zones - Santa Clara Station

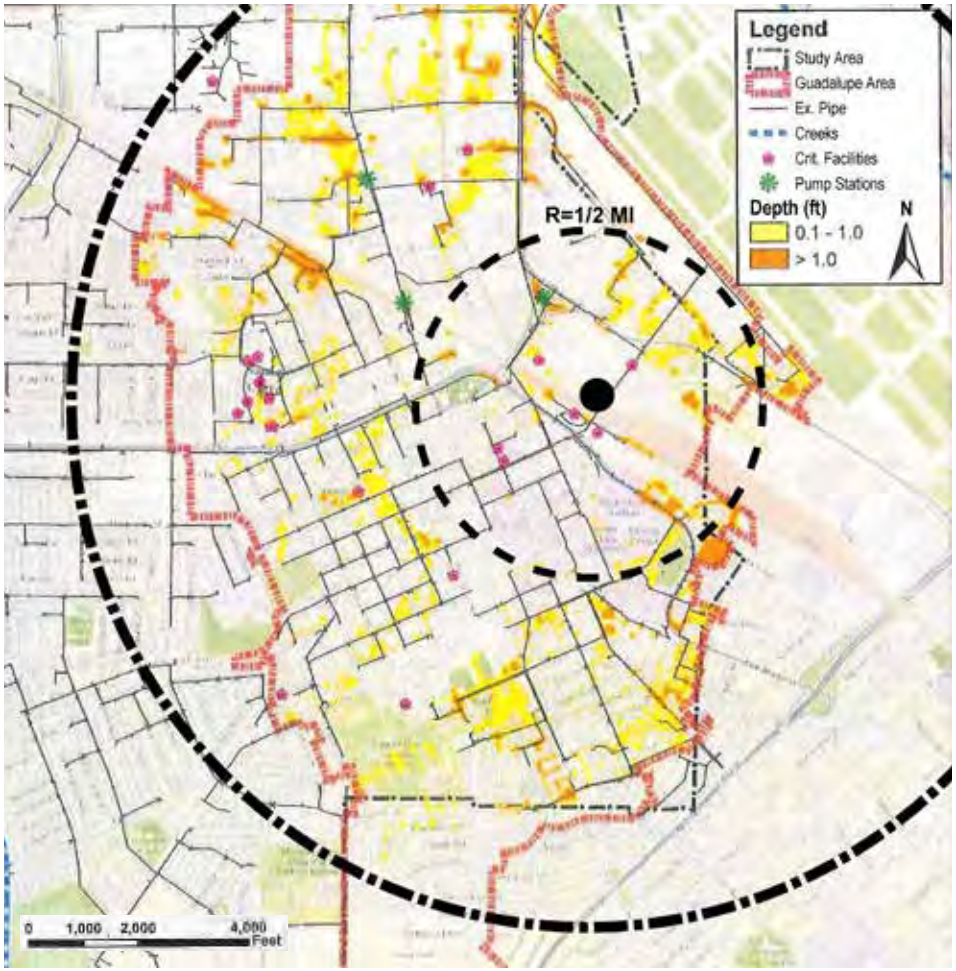

FIGURE 6.1.2 Existing 100-Year Flooding in Southern Guadalupe Drainage Area
Source: City of Santa Clara Storm Drainage Master Plan by Schaaf & Wheeler, December 2015

Downtown San José Station

The Downtown San José Station Area projects will have to mitigate their impact on the existing storm drain system adjacent to, and downstream of, the development site, which is considered on a project-by-project basis by the City of San José (City). Currently, there is no adopted storm drain master plan for the City. The City is in the process of compiling noted deficiencies on the way to laying out a plan for capital improvement projects in a comprehensive master plan.

The City modeling indicates that there are many storm drain mains that are undersized and can't convey the 10-year design storm. Figure 6.1.3 shows the City pipes that are deficient. Development in these areas will likely involve further-reaching and more extensive storm drain mitigation efforts.

FEMA current Flood Insurance Rate Map (FIRM) number 06085C0234H, dated May 18, 2009, identifies major portions of the plan area as potential Flood Hazard Zones and subject to localized flooding. Approximately 20% of the Plan area is in Zone AH or Zone AO, which indicate areas subject to inundation by the 1 percent annual chance event. The FIRM, whereby the BFE was derived from detailed hydraulic analyses, defines this event as having shallow flooding with average depths of between 1-foot and 3-feet.

Mandatory flood insurance purchase requirements and floodplain management standards apply to areas within these zones. These areas of flooding occur mostly to the south along the upstream portions of the Guadalupe River

and the Guadalupe-Washington neighborhood. See Figure 6.1.3 for FEMA flood zone delineations.

Projects proposed within these zones will require the raising of grades, most likely by importing fill material to elevate the building floor and mechanical features above the Base Flood Elevation per city policy on construction within Flood Zones. A regional study and Conditional Letter of Map Revision by Fill (CLOMR-F) will likely be required to ensure that fill within the existing flood plain does not adversely affect other properties.

Roughly another 20% of Plan area is designated as Zone X with probable ponding depths up to 1-foot during the 0.2-percent annual chance event. This area of flooding occurs along the remaining segment of the Guadalupe River near Downtown and US-101. Areas a few blocks away from the Guadalupe River are generally free from inundation during the 100-year and 500-year storm events.

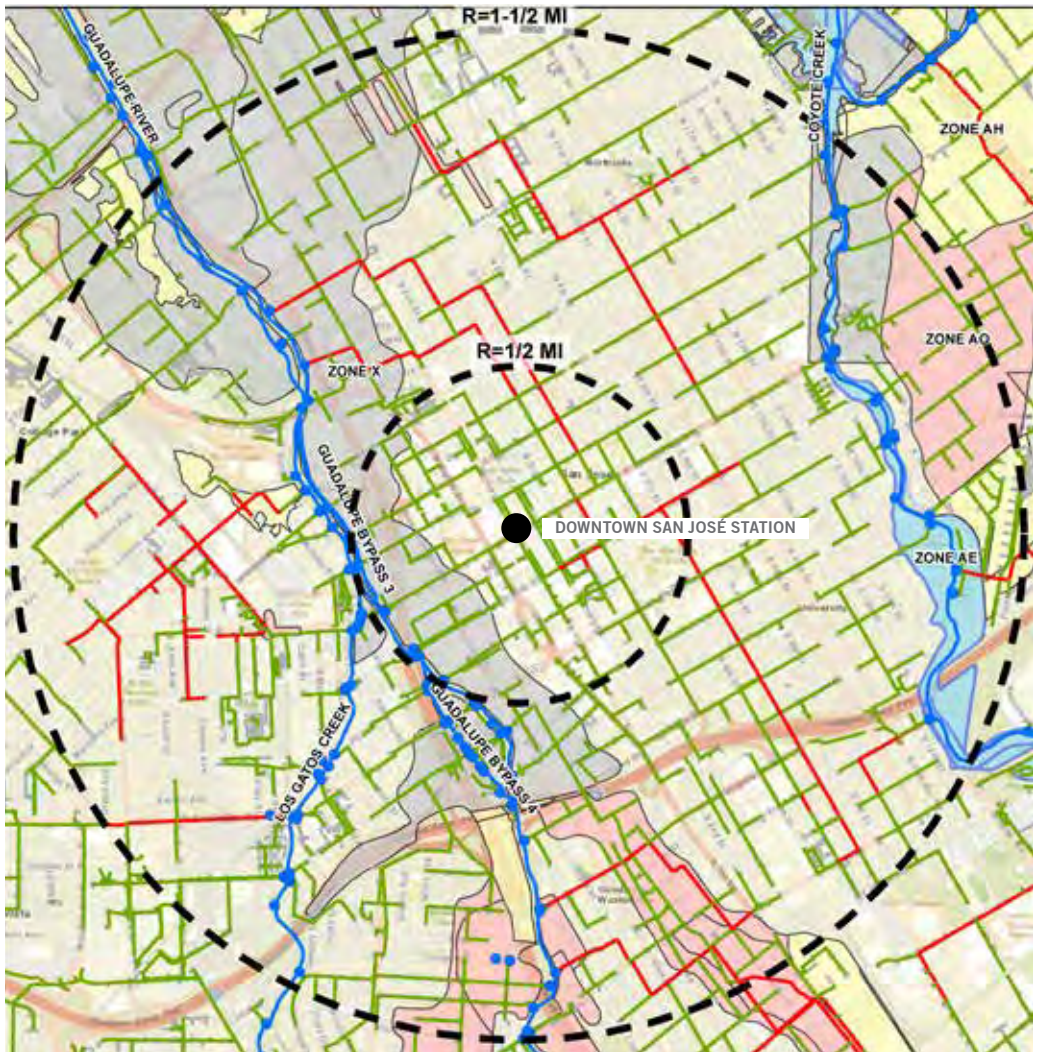

FIGURE 6.1.3 Existing Storm Drainage & FEMA Flood Zones - Downtown San José Station

28th Street Station

The 28th StreetStation area projects will have to mitigate their impact on the existing storm drain system adjacent to, and downstream of, the development site, which is considered on a project-by-project basis by the City of San José (City). Currently, there is no adopted storm drain master plan for the City. The City is in the process of compiling noted deficiencies on the way to laying out a plan for capital improvement projects in a comprehensive master plan.

The City modeling indicates that there are many storm drain mains that are undersized and can't convey the 10-year design storm. Figure 6.1.4 shows the City pipes that are deficient. Development in these areas will likely involve further-reaching and more extensive storm drain mitigation efforts.

FEMA current Flood Insurance Rate Map (FIRM) numbers 06085C0251J and 06085C0253H (dated February 19, 2014 and May 18, 2009, respectively) identify major portions of the plan area as potential Flood Hazard Zones

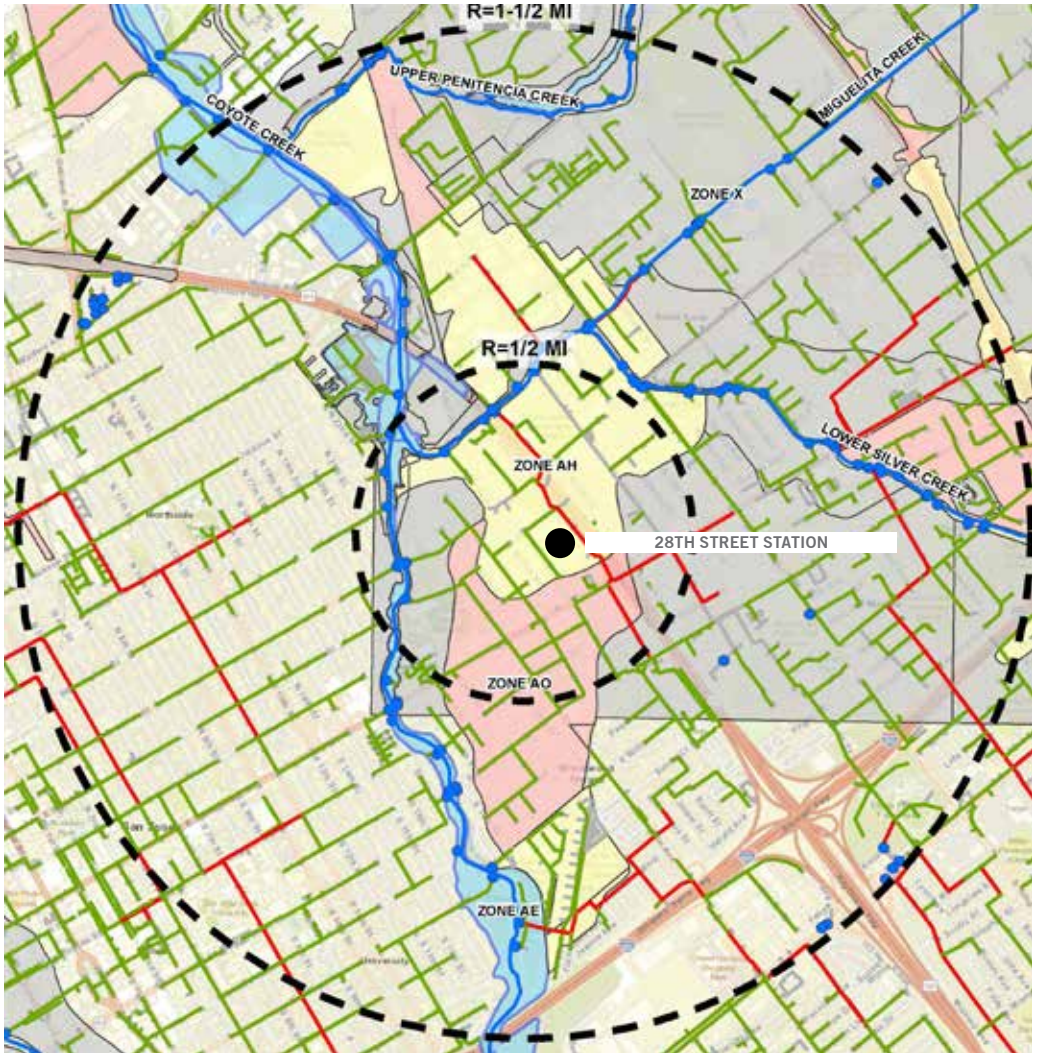

FIGURE 6.1.4 Existing Storm Drainage & FEMA Flood Zones - Alum Rock/28th St Station
Source: BKF

and subject to localized flooding. Approximately 25% of the plan area is in Zone AH or Zone AO, which indicate areas subject to inundation by the 1 percent annual chance event. The FIRMs, whereby the BFE was derived from detailed hydraulic analyses, defines this event as having shallow flooding with average depths of between 1-foot and 3-feet.

Mandatory flood insurance purchase requirements and floodplain management standards apply to areas within Zones AH and AO. These areas of flooding occur along the east side of the Coyote Creek, near the confluence of Coyote Creek and Lower Silver Creek, and along the upstream portions of Lower Silver Creek. See Figure 6.1.4 for FEMA flood zone delineations.

Projects proposed within these zones will require the raising of grades, most likely by importing fill material to elevate the building floor and mechanical features above the Base Flood Elevation per city policy on construction within Flood Zones. A regional study and Conditional Letter of Map Revision by Fill (CLOMR-F) will likely be required to ensure that fill within the existing flood plain does not adversely affect other properties.

Roughly another 10% of plan area is designated as Zone X with probable ponding depths up to 1-foot during the 0.2-percent annual chance event. This area of flooding occurs along the remaining segment of the Lower Silver Creek. Areas near the US-101 and I-280 intersection and to the south of I-280 and I-680 are generally free from inundation during the 100-year and 500 year storm events.

6.2 Sanitary Sewer

Santa Clara Station

Wastewater Treatment
Wastewater from the Santa Clara Station will be conveyed through the City of Santa Clara's wastewater collection system to the San José/Santa Clara Regional Wastewater Facility (SJ/SC RWF), discussed in previous sections.

Wastewater Conveyance
Wastewater conveyance facilities within the study area are owned and maintained by the City of Santa Clara Department of Water and Utilities (SCDW&U). The facilities consist mostly of gravity pipe up to 12-inches in diameter that primarily convey flows to two City of Santa Clara trunk lines. The two 24-inch trunk mains convey sewer flows along De La Cruz Boulevard to a shared City of San José connection at the San José International Airport. A 33-inch City of San José sewer line continues through the airport property and connects to a City of San José Interceptor line along Zanker Road that ultimately discharges at the SJ/SC RWF on the north side of Highway 237. Figure 6.2.1 shows the layout of the existing sewer system in the study area.

Wastewater Generation Rates
In April 2016, RMC Water and Environment prepared the City's Sanitary Sewer Master Plan to guide improvements to the City's wastewater system to accommodate current and future development. The study used future (based on Phase III Development of the 2035 General Plan) Peak Wet Weather Flow (PWWF) assumptions to analyze the system. The 2035 General Plan includes anticipated development and redevelopment associated with the future BART station. The anticipated development includes very-high density residential, mixed-use commercial, commercial,

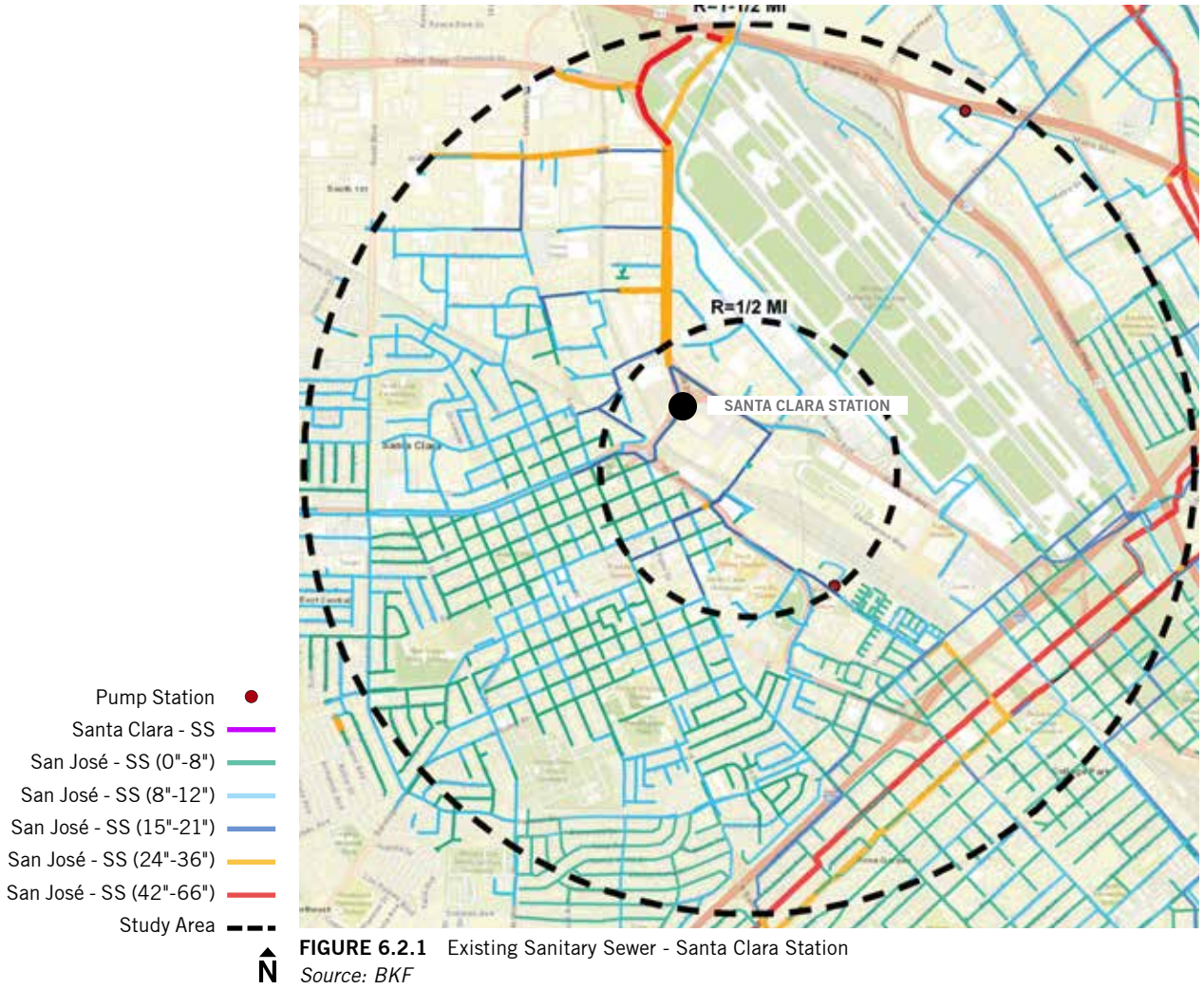

FIGURE 6.2.1 Existing Sanitary Sewer - Santa Clara Station
Source: BKF

public space, and various other land uses. Figure 6.2.2 for capacity improvements.

Wastewater System Capacity

The Master Plan investigated for each of the planning scenarios and projected dry and wet weather flows were simulated in the hydraulic model. The model was calibrated to flow monitoring data to ensure that it represents a reasonably accurate depiction of system conditions. The model integrates various dry and wet weather flow parameters to determine system capacity under different flow and planning scenarios. Key flow components incorporated into the model included: base (dry weather) wastewater flow (BWF), estimated based on winter water use data; groundwater infiltration (GWI), which occurs when water seeps into pipes under the ground through cracks and pipe joints; and rainfall-dependent infiltration and inflow (RDI/I) during storm events.

The Sewer Master Plan indicates that the sewer lines within the plan area will operate effectively during future PWWF conditions with one exception. A 12-inch line serving a relatively small area between the San José International Airport and the Santa Clara Caltrain Station is noted as deficient with surcharge conditions due to backwater effects.

The Master Plan does not indicate any other elements of the conveyance system between the plan area and the SJ/SC RWF that are anticipated to need upgrades before 2035. In the event that more station development occurs than is anticipated by the 2035 General Plan, the City system may require mitigations to the existing system to meet the demand.

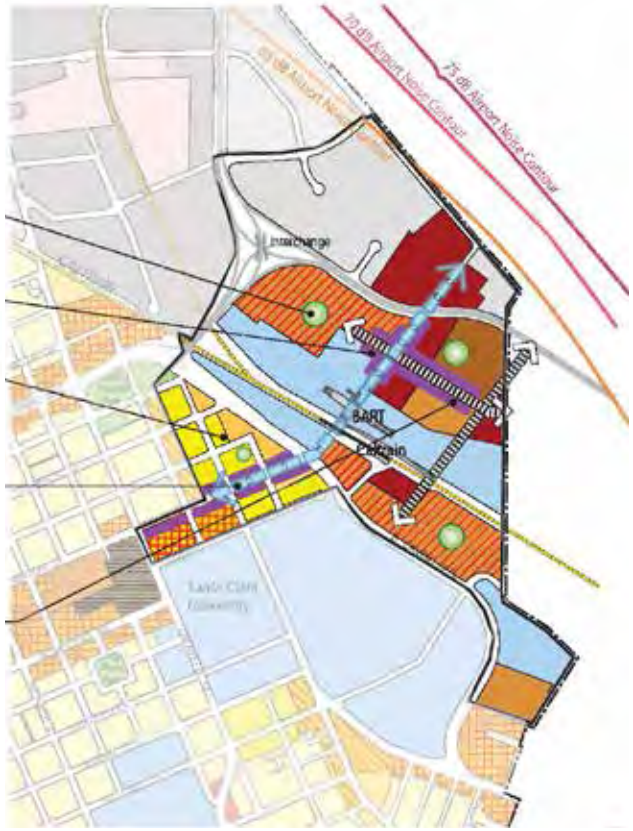

FIGURE 6.2.2 Santa Clara Capacity Improvements - Santa Clara Station

Source: City of Santa Clara 2010-2035 General Plan, November 2010

Due to the location of the future station in the 2035 General Plan, the Master Plan analysis likely included the future station flows at the 18-inch trunk line at Brokaw Road.

Downtown San José Station

Wastewater Treatment
Wastewater from the Downtown San José Station Study Area will be conveyed through the City of San José's wastewater collection system to the SJ/SC RWF, as discussed in previous sections.

Wastewater Conveyance
Wastewater conveyance facilities within the study area are owned and maintained by the City of San José Department of Environmental Services. The conveyance system consists of mostly gravity pipe up to 24-inches in diameter that primarily convey flows to three 48-inch lines that head east to the central interceptor and then north to the City of San José's four major interceptors on Zanker Road that ultimately discharges at the SJ/SC RWF on the north side of Highway 237. There are also two pump stations within the study area, which are shown in Figure 6.2.3.

Wastewater Generation Rates
In April 2013, RMC Water and Environment prepared the City of San José's Sanitary Sewer Master Plan to guide improvements to the City's wastewater system to accommodate current and future development. The Long-Term Future Scenario has a planning horizon of approximately 2040 and is consistent with the City's new General Plan, Envision San José 2040 (Envision 2040). A key strategy of Envision 2040 is to focus new growth capacity in specifically identified Growth Areas, such as Downtown, North San José, Specific Plan areas, Employment Lands, Transit Corridors & Villages, Commercial Centers, and Neighborhood Villages.

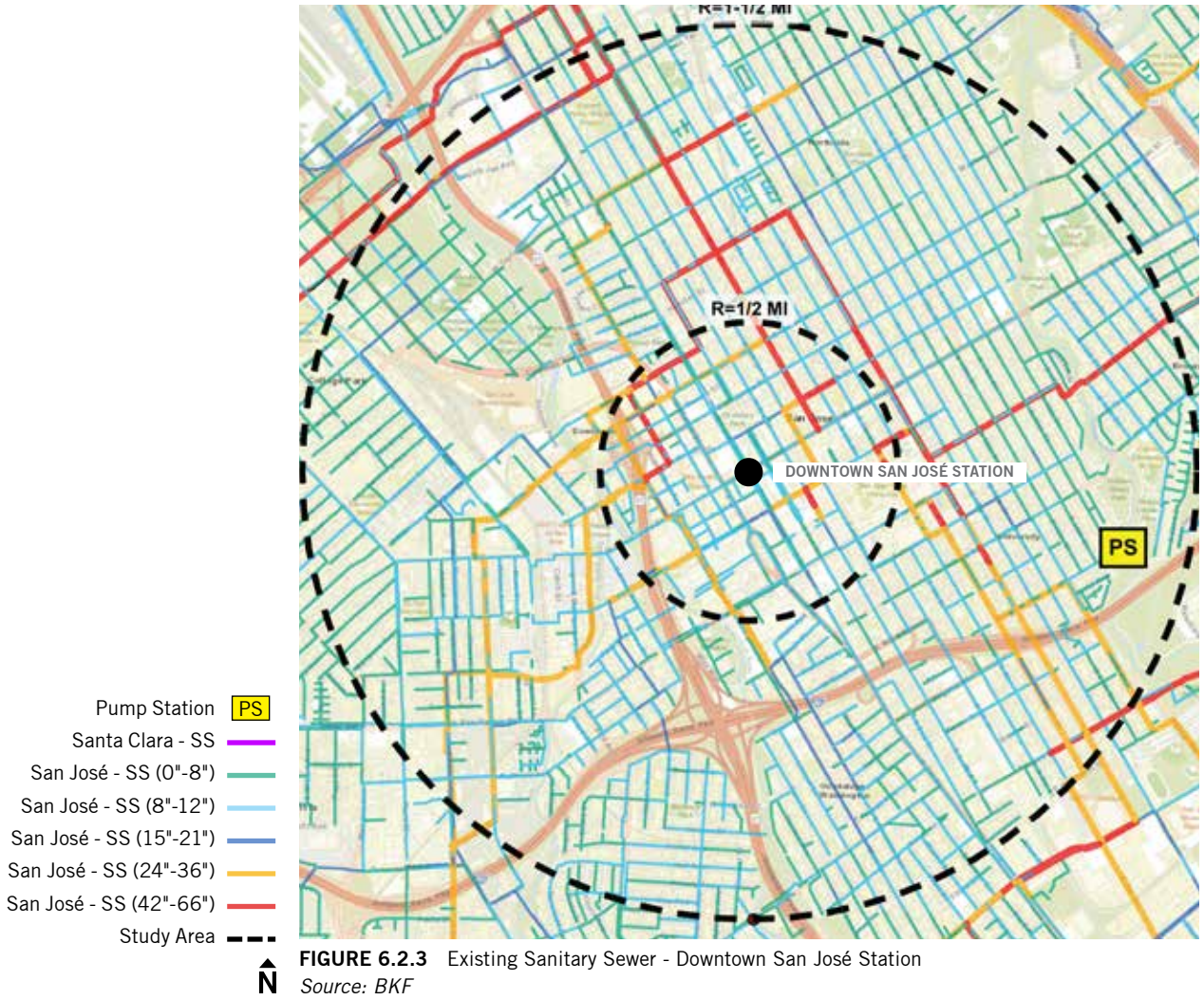

FIGURE 6.2.3 Existing Sanitary Sewer - Downtown San José Station
Source: BKF

See Figure 6.2.4 for development elements included in the Envision 2040 and included in the City's hydraulic analysis.

Wastewater System Capacity

The Master Plan indicates improvements in the study area and in between study area and the treatment plant, shown in Figure 6.2.5. There are five Priority 1 projects within the study area and in the proximity to the treatment plant:

- JLS-11 - Install new junction structure at Lincoln/ Savaker intersection to simplify pipe configuration and allow better control of flow routing.
- FSR-17 - Replace 1,560 feet of existing 10- and 12-inch pipe with 15-inch pipe. Connect new 15-inch pipe to new manhole on existing 30-inch pipe in W Hedding St, instead of current connection point on existing 8-inch pipe in W Hedding St.
- BKW-7 - Replace 8,110 feet of existing 15- to 18-inch pipe with new 21-inch pipe.
- CTI-3 - Replace 2,890 feet of existing 15-inch pipe with 27-inch pipe.
- NTI-2 - Replace 1,640 feet of existing 10 to 12-inch pipe with 15-inch pipe. It should be noted that this line is being replaced with a 15-inch pipe as part of a current development project – Crescent Park project 3- 05723 (08-004816 IP).

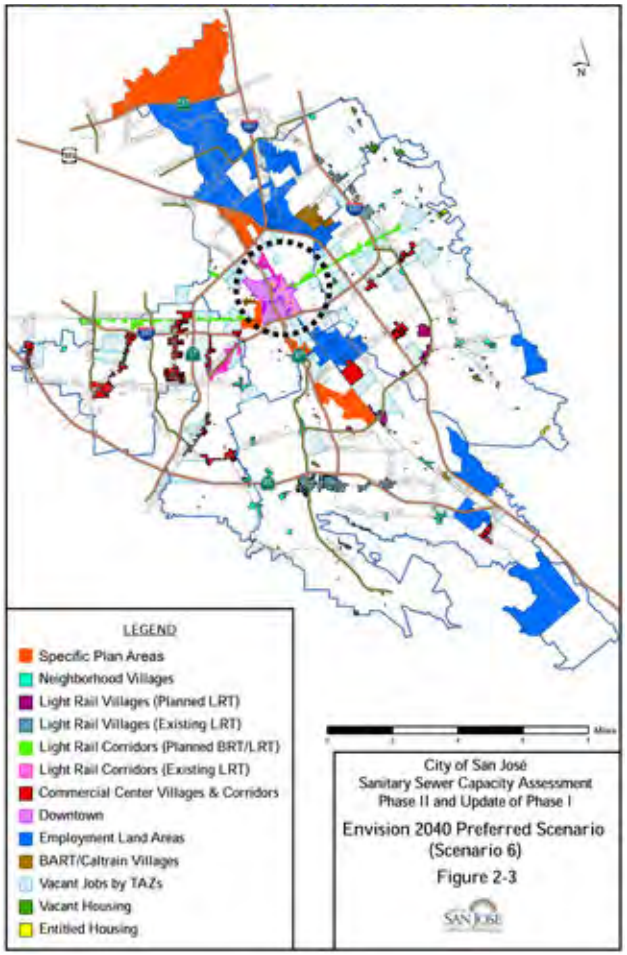

FIGURE 6.2.4 San José Sanitary Sewer Master Plan Capacity Assessment
Source: San José General Plan

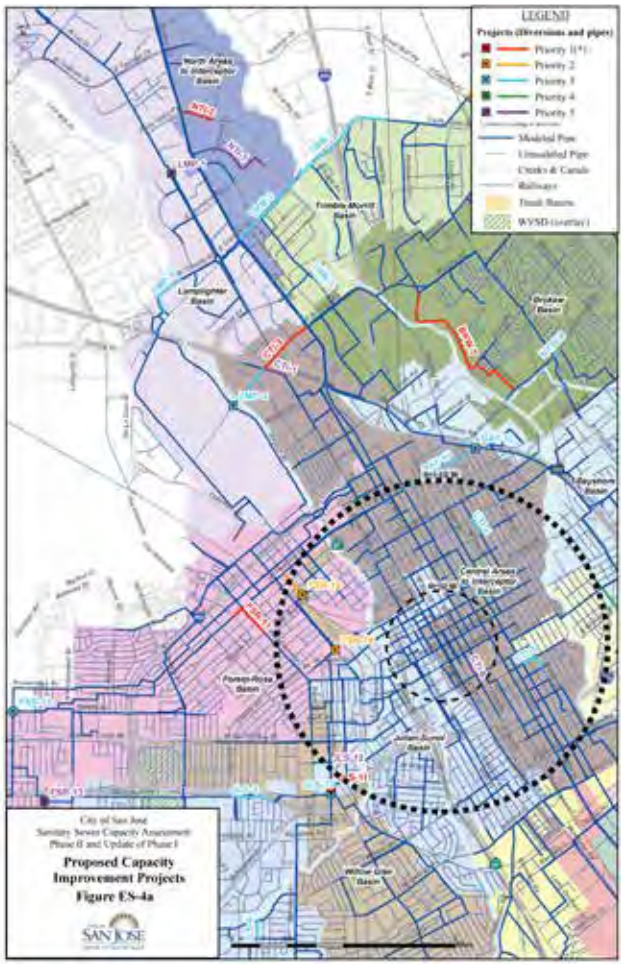

FIGURE 6.2.5 San José Capacity Improvements - Downtown San José Station
Source: City of San José Sanitary Sewer Masterplan Capacity Assessment, April 2013

28th Street Station

Wastewater Treatment

Wastewater from the 28th StreetStation Study Area will be conveyed through the City of San José's wastewater collection system to the San José/Santa Clara Regional Wastewater Facility (SJ/SC RWF), which is approximately two miles to the northeast in the Alviso area of San José. The SJ/SC RWF Plant provides wastewater treatment for the cities of San José, Santa Clara, Milpitas, Campbell, Cupertino, Los Gatos, Saratoga, and Monte Sereno.

The SJ/SC RWF has an existing capacity to treat 167 million gallons per day (MGD), however the National Pollution Discharge Elimination System (NPDES) permitting program limits the amount of treated wastewater that can be discharged to the San Francisco Bay to 120 MGD for average dry weather flow. This is due to potential impacts of additional freshwater discharges to saltwater marsh habitat, as well as pollutant loading to the San Francisco Bay. The NPDES permit contains a trigger that, if the 120 MGD average dry weather effluent flow is exceeded, additional mitigation activities are required. Currently, discharges are averaging 110 MGD.[1]

Wastewater Conveyance

Wastewater conveyance facilities within the study area are owned and maintained by the City of San José Department of Environmental Services. The conveyance system consists of mostly gravity pipe up to 24-inches in diameter that primarily convey flows to two 42-inch lines that head west to the central interceptors and then north to the City of San José's four major interceptors on Zanker Road that ultimately discharges at the SJ/SC RWF on the north side

1 City Place Santa Clara Project, Draft Environmental Impact Report, October 2015

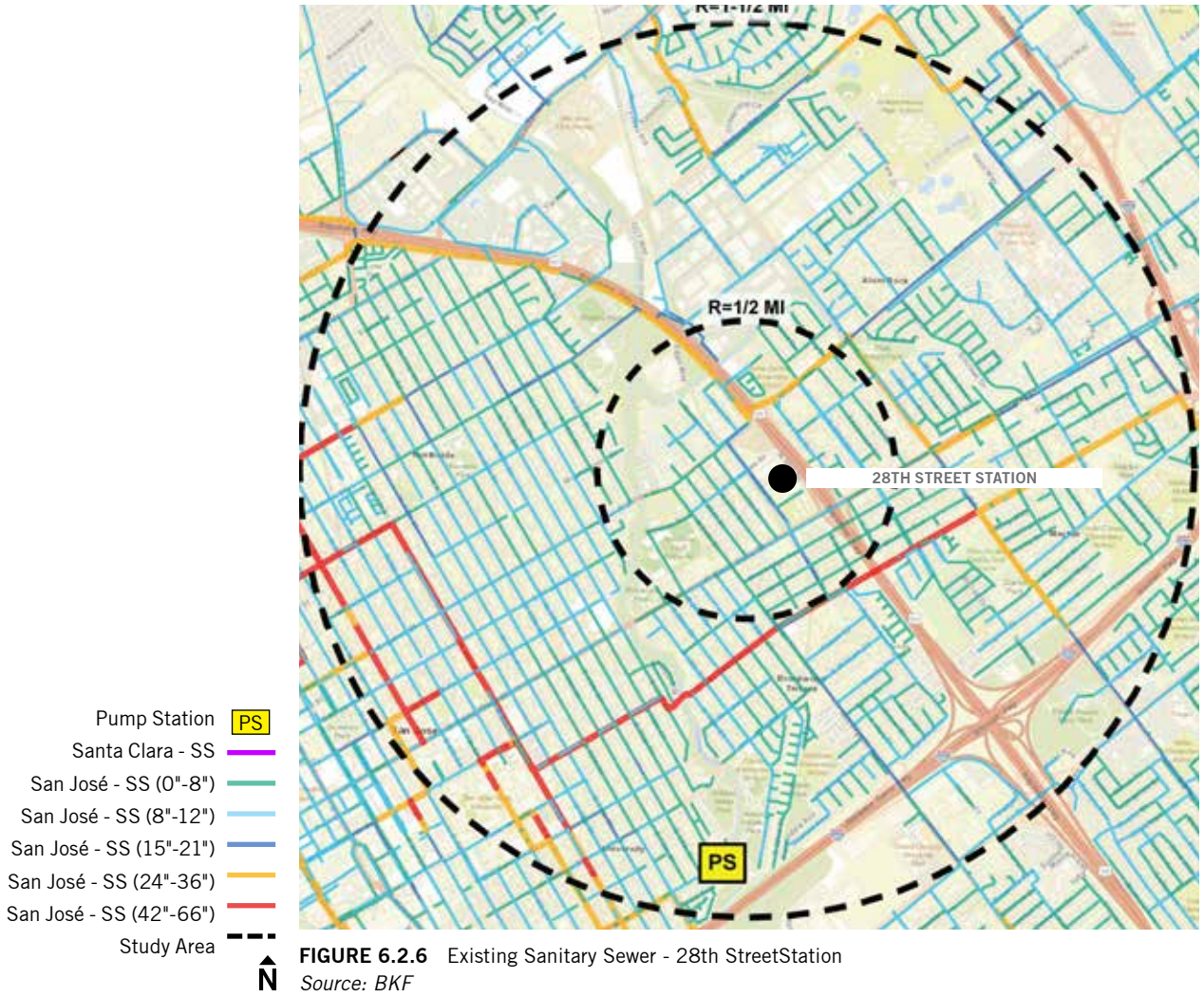

FIGURE 6.2.6 Existing Sanitary Sewer - 28th StreetStation
Source: BKF

of Highway 237. There are also three local lift stations within the study area. Figure 6.2.6 shows the layout of the existing sewer system.

Wastewater Generation Rates

In April 2013, RMC Water and Environment prepared the City of San José's Sanitary Sewer Master Plan to guide improvements to the City's wastewater system to accommodate current and future development. The Long-Term Future Scenario has a planning horizon of approximately 2040 and is consistent with the City's new General Plan, Envision San José 2040 (Envision 2040). A key strategy of Envision 2040 is to focus new growth capacity in specifically identified Growth Areas, such as Downtown, North San José, Specific Plan areas, Employment Lands, Transit Corridors & Villages, Commercial Centers, and Neighborhood Villages.

Wastewater System Capacity

The Master Plan indicates improvements needed in the study area and in between the study area and the treatment plant. There is only one Priority 1 project within the Study Area. Project BAY-7 consists of removing 100 feet of existing 6-inch pipe and 1,070 feet of existing 8-inch pipe and installing 1,230 feet of new 10-inch pipe and 980 feet of new 12-inch pipe and replacing 350 feet of existing 10-inch pipe with 12-inch pipe. Figure 6.2.7 displays the project priority relating to Project BAY-7.

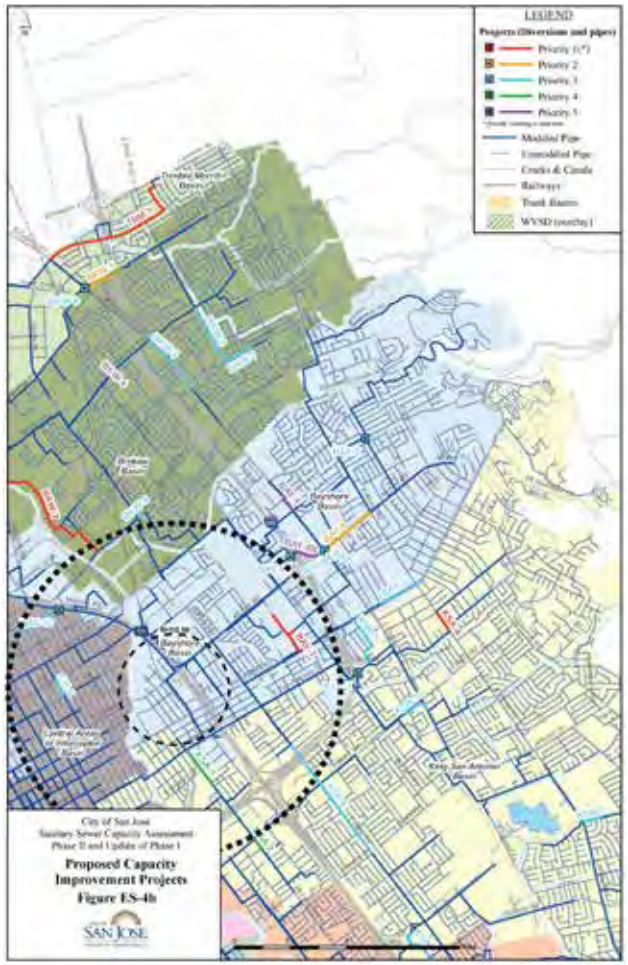

FIGURE 6.2.7 San José Capacity Improvements - 28th StreetStation
Source: City of San José Sanitary Sewer Masterplan Capacity Assessment, April 2013

6.3 Domestic Fire/Water Utilities

Santa Clara Station

Water Supply and Demand

The Santa Clara BART Study Area falls in both the City of San José and City of Santa Clara. The portion within the City of San José is served by the San José Water Company (SJWC), with the City of Santa Clara providing service in the City of Santa Clara.

The San José portion of the Study Area is served predominantly by groundwater.

The City of Santa Clara has three sources of potable water. These sources include two treated water sources, and groundwater. Treated water sources include SCVWD and the San Francisco Public Utilities Commission (SFPUC). Sixty percent of the 7.6 billion gallons of water that flows to Santa Clara customers each year is obtained from the City's own wells[1]. In the study area, the Santa Clara portion of the Study area is served by groundwater.

The SFPUC is in the final stages of a multi-billion dollar capital improvement program to improve seismic reliability. A similar review of the District's potable and raw water delivery systems indicates the potential for a 30-day interruption of potable treated water deliveries to the City. Current planned projects include major capital improvements to both regional water systems for increased reliability. The reliability of the District's imported supplies (State and Federal water projects) is also threatened by possible failure of the Sacramento delta's levee systems, with interruptions possible for several months. Regional power supplies could also be interrupted, however the City has sufficient back-up power generation capacity to pro-

1 2015 Urban Water Management Plan, City of Santa Clara Water and Sewer Utilities (Section 3)

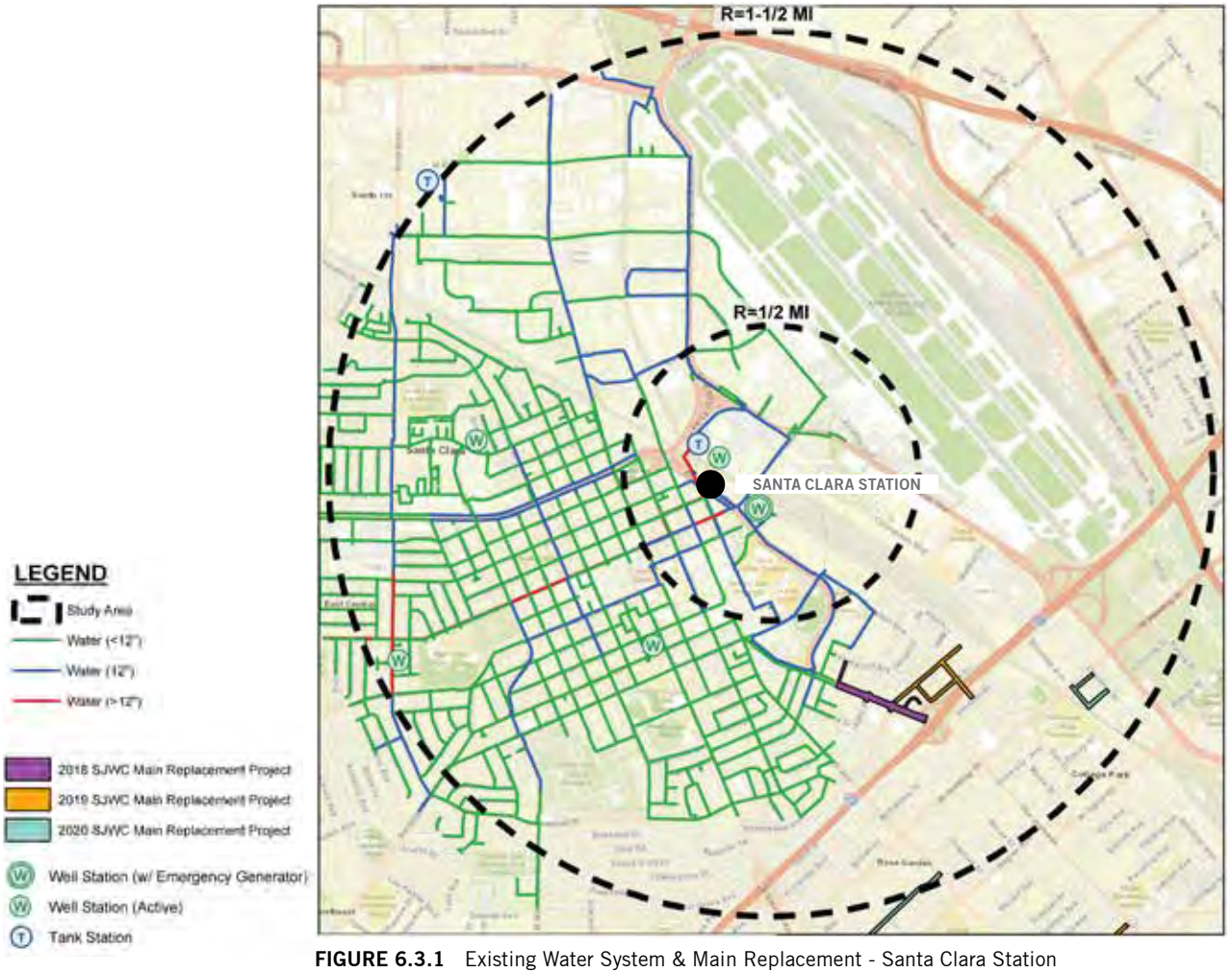

FIGURE 6.3.1 Existing Water System & Main Replacement - Santa Clara Station

vide the expected potable water demand from City-owned wells and water storage tanks. This groundwater source can sustain the entire City's water demand for several months.

Water Distribution
In the Santa Clara BART Study Area, the water distribution system is owned and operated by the City of Santa Clara Water and Sewer Utilities and SJWC. The distribution system consists of a pipe network, ranging between 4 to 14 inches in size, which lie predominantly beneath the traveled roadways, in the public street rights-of-way. There are four active well stations, with one tank and booster pump station within this study area. Figure 6.3.1 shows the layout of the existing water system in the Santa Clara Station Area.

Downtown San José Station

Water Supply and Demand
The Downtown San José BART study area falls within the SJWC's service area. In the Downtown San José BART Study area, water is provided predominantly by groundwater.

Water Distribution
In the Downtown San José BART Study Area the distribution systems consists of a pipe network, ranging between 4 to 12 inches in size, which lies predominantly beneath the traveled roadways in the public street rights-of-way. Most of the pipelines in the 28th Street Station Study Area are cast iron pipes with some ductile iron, welded steel and asbestos cement pipes. Figure 6.3.2 shows the layout of the existing water system for the Downtown San José station and planned main replacement projects.

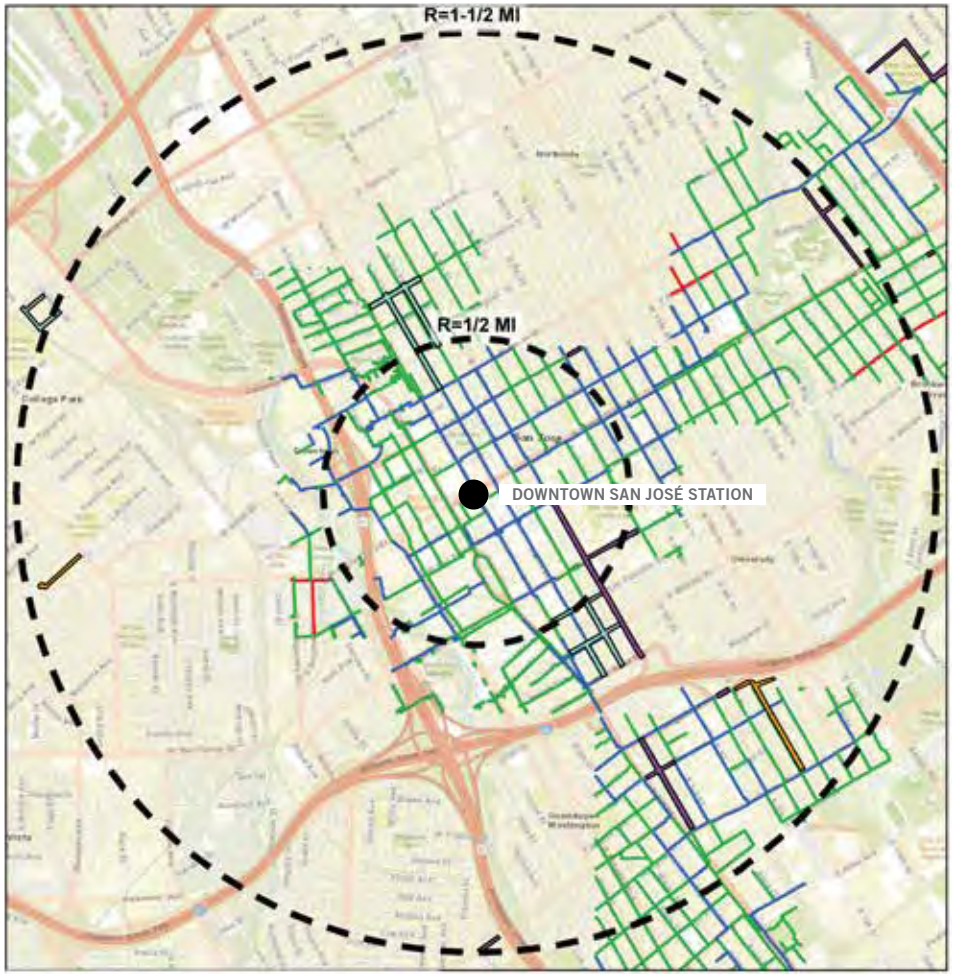

FIGURE 6.3.2 Existing Water System & Main Replacement - Downtown San José Station

28th StreetStation

Water Supply and Demand

Potable water in this part of San José is served by SJWC. SCWC's potable water comes from three sources:

- Groundwater pumped from over 100 wells from the Santa Clara Groundwater Basin. Groundwater accounts for approximately 40% of SJWC's supply.
- Imported Surface Water provided by Santa Clara Valley Water District (SCVWD). Imported surface water accounts for approximately 50% of SJWC's water supply.
- Local Mountain Surface Water collected from local watersheds in Santa Cruz Mountains and treated at SJWC's two water treatment plants. Local surface water accounts for approximately 10% of SJWC's water supply.

In the 28th StreetStation Study Area water is provided predominantly by groundwater. SJWC anticipates adequate supplies for years 2020 to 2040 to meet system demand under average year conditions. SCVWD's "Ensure Sustainability" water supply strategy has three key elements: 1) secure existing supplies and facilities, 2) optimize the use of existing supplies and facilities, and 3) expand water use efficiency efforts. Projects to be considered will include interagency interties[1] and pipelines; treatment plant improvements and expansion; groundwater management and recharge; potable reuse; desalination; and water transfers. While no specific capacity or supply has been identified, this program may result in the addition of future supplies that would benefit

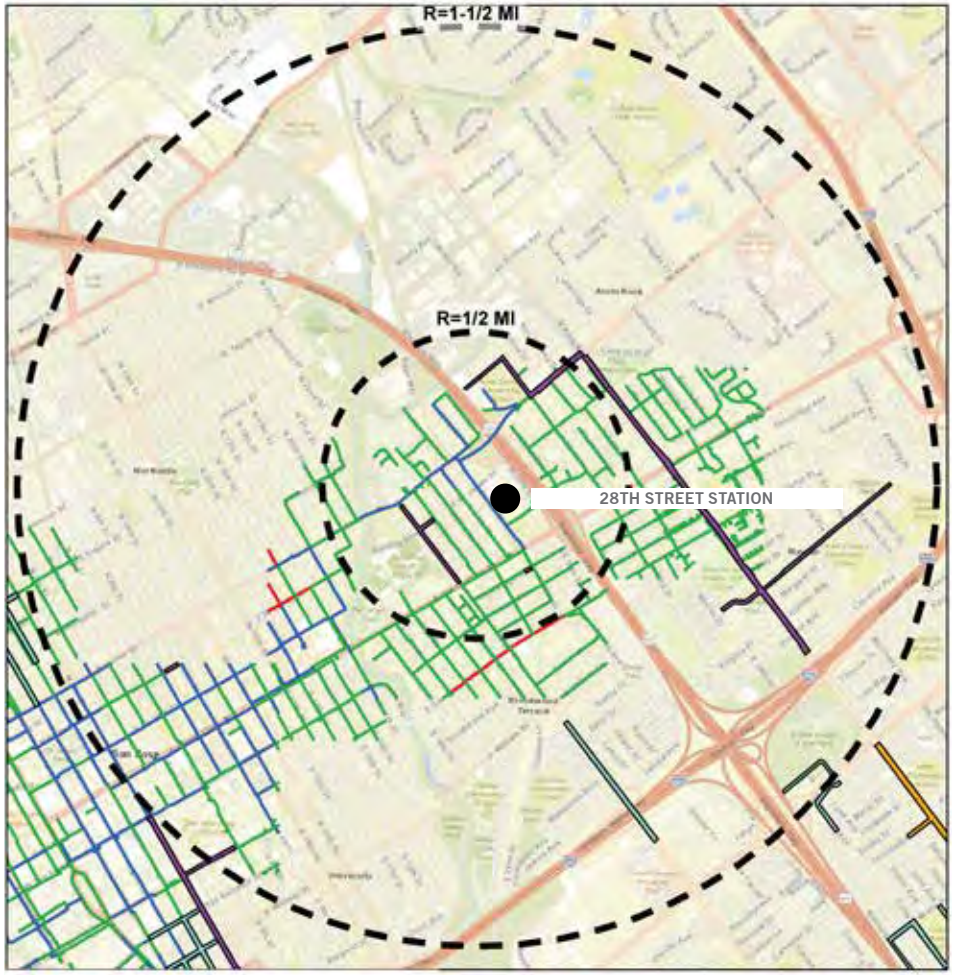

FIGURE 6.3.3 Existing Water System & Main Replacement - 28th StreetStation

1 Intertie is a connection between governing agencies

Santa Clara County.[2] Figure 6.3.3 shows the location of SJWC's planned main replacement projects from 2018 and 2020.

Water Distribution

The water distribution system is owned and operated by SJWC and in the 28th StreetStation Study Area. The distribution system consists of a pipe network, ranging between 6 to 16 inches in size, which lie predominantly beneath the traveled roadways in the public street rights-of-way. Most of the pipelines in the 28th StreetStation Study Area are ductile iron pipes, with some welded steel and cast iron pipes. Figure 6.3.3 shows the layout of the existing water system for the 28th StreetStation.

2 2015 Draft Urban Water Management Plan, San José Water Company (Section 7)

6.4 Recycled Water Utilities

Recycled water (RW) is wastewater that has been processed and treated to a suitable quality for non-potable use and can be appropriate for developments with large non-potable water demands, such as irrigation and toilet flushing. City of Santa Clara and San José Water Company (SJWC) currently distribute recycled water from South Bay Water Recycling (SBWR) and have facilities within the three Station Study Areas: Alum Rock/28th Street, Downtown San José, and Santa Clara.

SBRW has Near-Term (2015-2020) and Long-Term (beyond 2020) strategic plans for the expansion of their recycled water system. Strategies to increase RW demand include conversion from potable water to recycled water where feasible along existing alignments, requirements for new developments to use recycled water, and addition of new recycled water pipelines. As shown in Figures 6.4.1-3, some of the proposed RW alignments extends into the Station Study Areas. Per the SBWR Strategic and Master Plan, SBRW has a contractual commitment to increase recycled water demands from extensions of recycled water infrastructure and anticipates adding to the system as soon as funding is approved.

Santa Clara Station

Santa Clara Station Study Area is served by City of Santa Clara and San José Water Company. There are existing recycled water pipelines, within half of a mile of the proposed station location, along Coleman Ave, De La Cruz Blvd, and Fremont Street. As shown in Figure 6.4.1, proposed Alignment K branches along the southern edge and Alignment R along the east side of the study area. Both alignments are part of the Near-Term strategic plan. Figure

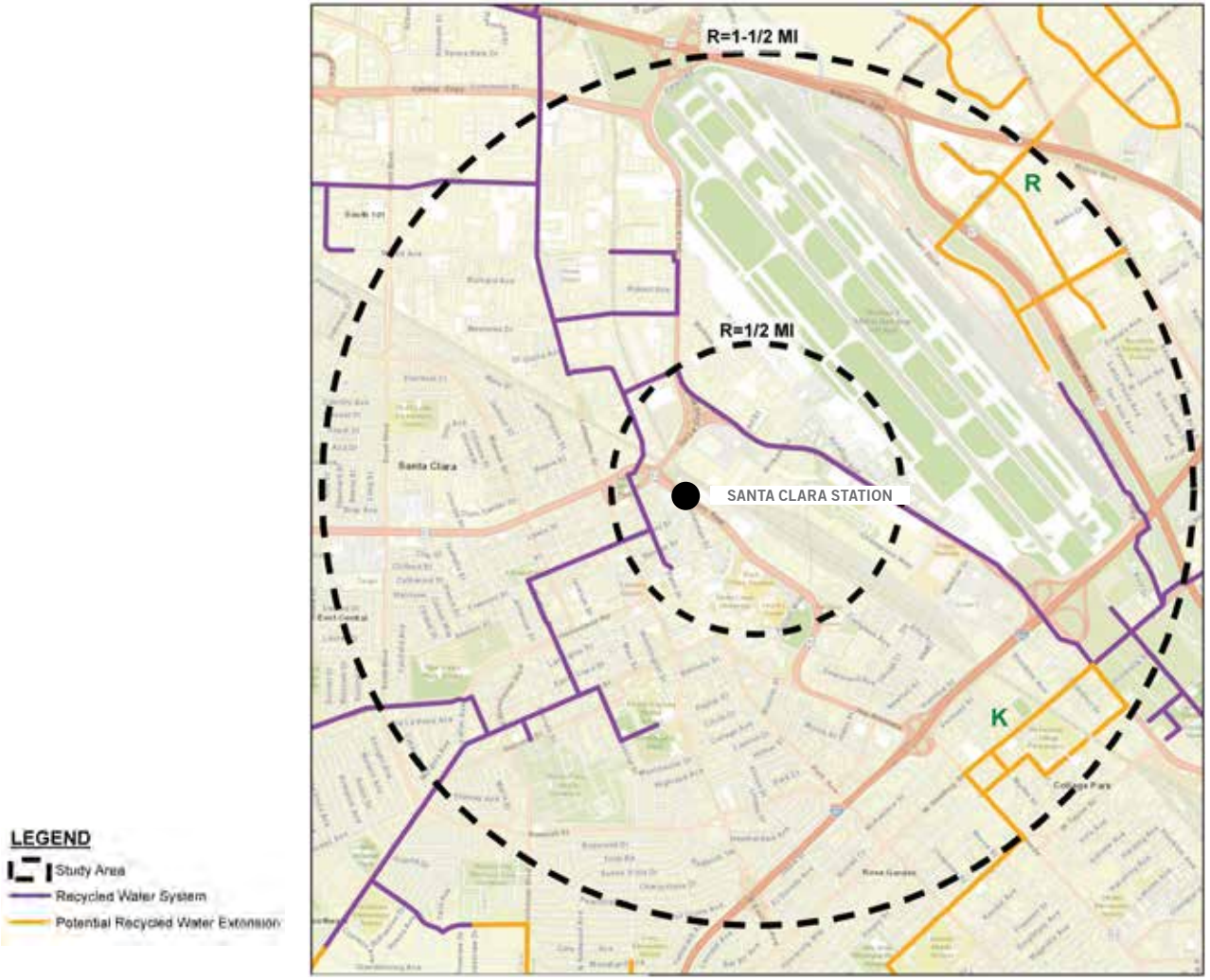

FIGURE 6.4.1 Existing Recycled Water System & Potential Extensions - Santa Clara Station

6.4.1 shows the layout of the existing recycled water system and proposed extensions for the Santa Clara station.

Downtown San José Station

Downtown San José Station Study Area is also served by San José Water Company and has recycled water facilities within half of a mile of the proposed station location. There are pipelines branching from the north and west, but there are no proposed RW system extensions within this study area. However, there are plans to make improvements to Pump Station #5, which is located in the southeast portion of this study area. The closest existing pipeline to the Downtown San José station location runs along E. San Fernando Street from 12th Street and ends at 4th Street. The E. San Fernando RW alignment presents an opportunity for any future potential extensions. Figure 6.4.2 shows the layout of the existing recycled water system and proposed extensions for the Downtown San José City station.

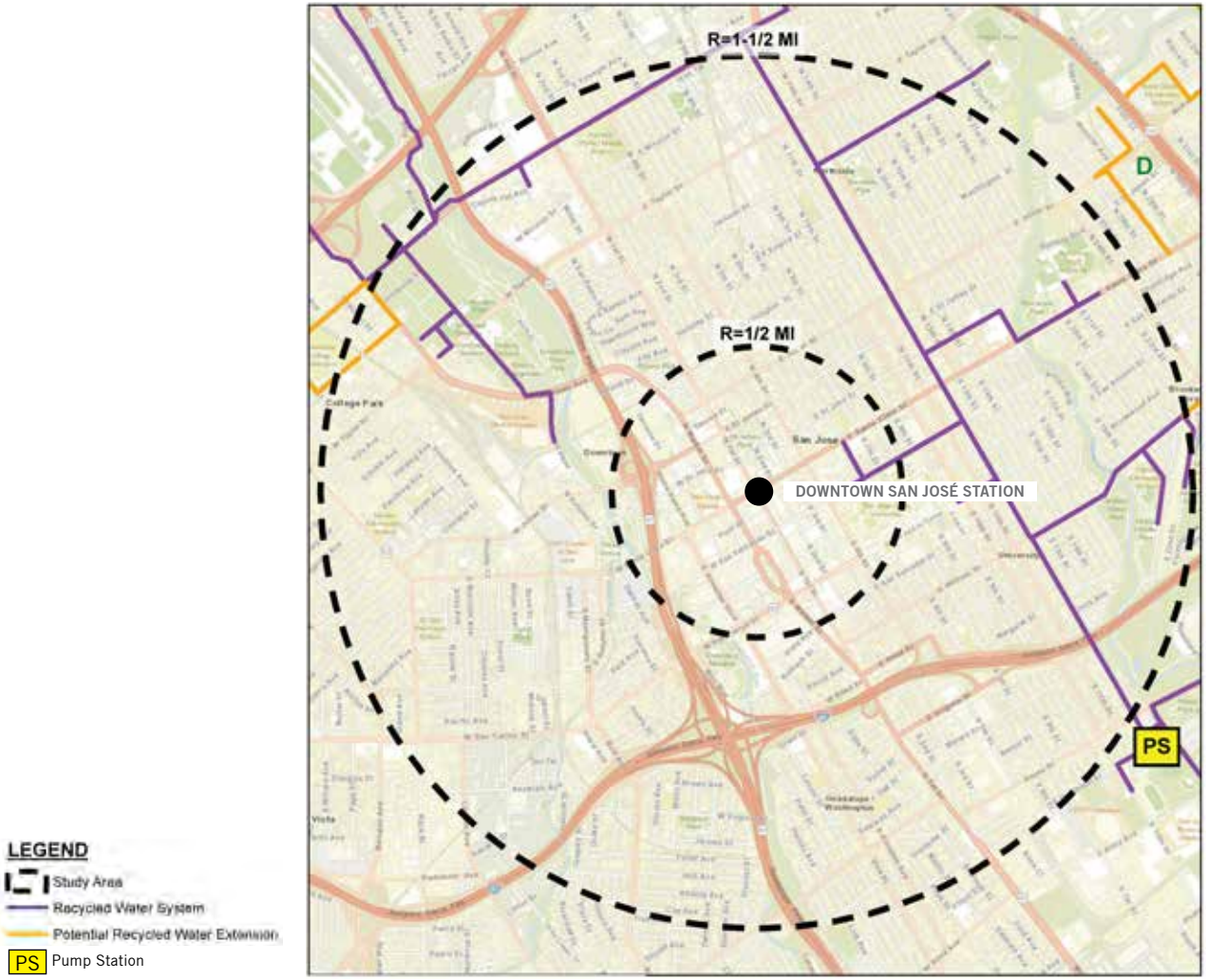

FIGURE 6.4.2 Existing Recycled Water System & Potential Extensions - Santa Clara Station

28th Street Station

28th StreetStation Study Area is served by San José Water Company and has recycled water facilities to the west and within half of a mile of the proposed station location. The closest existing pipeline runs along E. Santa Clara Street As shown in Figure 6.4.3, proposed alignments D and G extends to the east through the 28th StreetStation Study Area, providing additional recycled water use opportunities. Alignment D and G are part of the Near-Term Strategic Plan and Alignment G was constructed in 2011/2012. Figure 6.4.3 shows the layout of the existing recycled water system and proposed extensions for the 28th StreetStation.

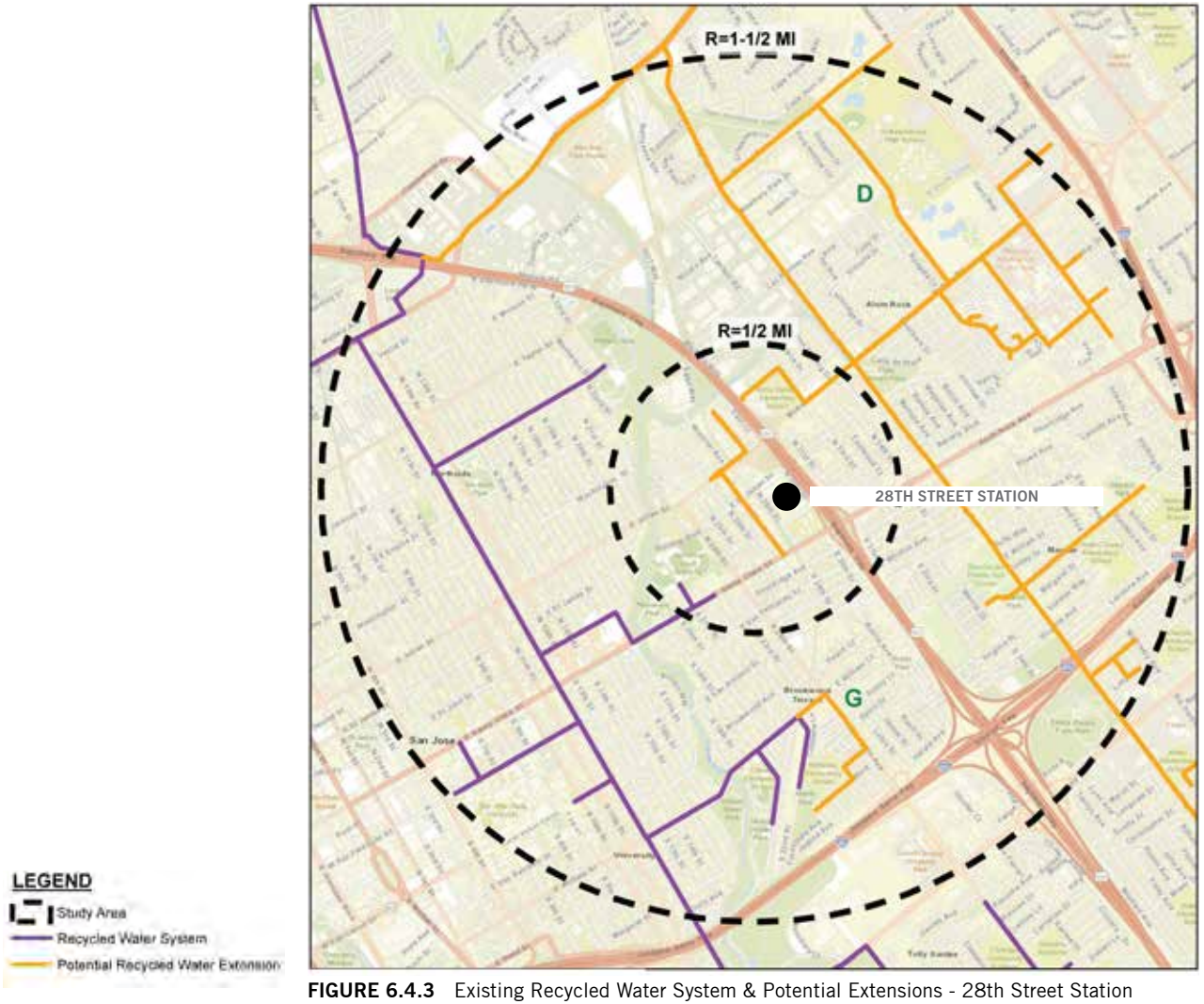

FIGURE 6.4.3 Existing Recycled Water System & Potential Extensions - 28th Street Station

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STOP

7

TRANSPORTATION NETWORK

1st Street and Paseo de San Antonio. Photo Credit: SPUR, Sergio Ruiz

7.1 Transportation Demand Management

Introduction
This section provides an overview of the transportation demand management (TDM) policies and programs which are applicable to station areas along the VTA BART Phase II Extension. TDM programs and policies in a built environment with substantial transportation options can fuel a reduction in the demand for single-occupancy vehicle parking, especially at high-capacity transit stations.

Table 7.1.1 summarizes existing TDM programs and policies applicable to each station and the entity responsible for enacting them.

Program/Policy	Responsible Entity	Santa Clara Station	Diridon Station	Downtown San José Station	28th StreetStation
Bay Area Commuter Benefits Program	Bay Area Air Quality Management District (BAAQMD)	X	X	X	X
511 RideMatch Service	Metropolitan Transportation Commission (MTC)	X	X	X	X
Initial Carpool Subsidy	Metropolitan Transportation Commission (MTC)	X	X	X	X
SmartPass (with Guaranteed Ride Home for employee participants)	Santa Clara Valley Transportation Authority (VTA)	X	X	X	X
Go Pass	Caltrain	X	X		
Emergency Ride Home	Altamont Commuter Express (ACE)	X	X		
Reduction in Required Parking	City of San José		X	X	X
Business Improvement District	City of San José; City of Santa Clara	X		X	
Off-Site Parking	City of Santa Clara; County of Santa Clara	X	X	X	X
Shared Parking	County of Santa Clara	X	X	X	X
Free Shuttles	Various	X	X	X	

TABLE 7.1.1 Summary of Existing TDM Programs and Policies

PROGRAMS AND POLICIES

Regional Programs and Policies

Under the Bay Area Commuter Benefits Program,[1] all employers in the Bay Area with at least 50 full-time employees are required to designate a commuter benefits coordinator and provide at least one of four commuter benefit options to all employees. Benefits can include excluding transit or vanpool costs from taxable income, a subsidy for the use of transit or a vanpool, a shuttle service provided by the employer, or commuter benefits that will be as effective as the other options.

Additional regional programs include a carpool match program through the 511 RideMatch Service (https://www.ridematch.511.org/), an online carpool, vanpool, and ride-matching service run by the Metropolitan Transportation Commission (MTC), which allows and incentivizes individuals to share their commute with others.

As of January 2018, MTC is subsidizing carpools – particularly the first carpool ride taken and/or a new carpool driver bonus -- through Scoop, a carpool matching mobile app. The app, which connects drivers and passengers sharing similar origins and destinations, can make matches for a ride within hours of the initial request.

Transit Agency Programs and Policies

The principle of annual transit pass programs (such as SmartPass and Go Pass below) is similar to that of group insurance plans – transit agencies offer deep bulk discounts when selling passes to a large group, with universal enrollment, on the basis that not all those offered the pass will actually use them regularly. Free transit passes are often an extremely effective means to reduce the number of car trips in an area, and with an annual transit agency pass, an employee or resident gets unlimited access to that agency's network. By removing any cost barrier to using transit, including the need to pay "out of pocket" and search for spare change for each trip, people become much more inclined to take transit to work. Even if one does not commute with transit for work, they may be inclined to use the pass for non-commute trips (such as a Saturday visit to San Francisco).[2]

Employers in Santa Clara County may participate in VTA's SmartPass (formerly Eco-Pass) program, which provides employer subsidized transit passes for all fulltime employees working in the county (with other classes, such as contractors, as optional). Passes are valid on all VTA service including regular bus and light rail service, with express buses as an optional add-on for cost. For every employee participant, SmartPass also includes provisions for a limited number of Guaranteed Ride Home taxi or ride-share vouchers in the case of an emergency. Colleges/universities and residential communities may also participate provided that all enrolled students (employee coverage optional) and residents ages 5 and older, respectively, are covered.[3]

The Caltrain Go Pass also sells annual passes at a deeply discounted rate for all members of a specified group of people within a development. Examples include all of a firm's employees (working at least 20 hours), all of an educational institution's students, or all of the residents of an apartment complex.

Altamont Corridor Express offers its riders who hold monthly passes or 20-trip ticket books with an emergency ride home from destination station back to their origin station between 6:00 AM and 3:00 PM. This service is offered for recognized emergencies (illness or accident of a passenger or family member, or a home emergency such as fire or theft) and is intended to compensate for the fact that ACE only provides peak directional service (and therefore cannot directly provide a hypothetical "ride home" before the afternoon peak service begins).

Municipal Programs and Policies

The TDM programs as defined by the municipal codes of Cities of San José and Santa Clara defer to the implementation guidelines set by the Bay Area Air Quality Management District[4], which are the same requirements set by the aforementioned Bay Area Commuter Benefits Program.

In the City of San José, a reduction in required parking[5] (by up to 50% in Urban Villages and 100% in Downtown) may be authorized if the development or use is in accordance with several measures and provisions, including, but not limited to:

- Location within 2,000 feet of a rail station, bus rapid transit station, or location within a neighborhood business district of urban village;
- Provision of a certain amount of bicycle parking spaces; and

1 Established by Air District Regulation 14 (Rule 1), Senate Bill 1339, and renewed by Senate Bill 1128

2 According to Transit Cooperative Research Program (TCRP) Report 107, "up to 35% of transit benefits recipients reported increasing their use of transit." This significant increase applied to both commute and non-commute trips, and included both riders who were new to transit, and riders who used transit prior to receiving benefits.

3 https://vtaorgcontent.s3-us-west-1.amazonaws.com/Site_Content/SmartPass%20Terms%20and%20Conditions.pdf

4 Santa Clara Municipal Code, § 10.15.020; San José Municipal Code § 11.105.020

5 San Josée Municipal Code § 20.90.220

- Implementation of a TDM program (with specified programs pertaining to carpools, car sharing, transit passes, end-of-trip facilities, etc.).

A TDM program is required for any parking reduction greater than 20%.

In 2007, the City of San José formed a special benefit assessment district known as the Downtown San José Property-Based Business Improvement District (PBID). This district funds and enables the Groundwerx program, which cleans and beautifies Downtown San José streetscapes, maintains street trees, and contracts with VTA to clean tracks and stations along the Transit Mall. The Downtown San José PBID also hires ambassadors who provide information for visitors and businesses.[1] Business improvement districts are typically empowered to improve the condition of transportation facilities in a neighborhood, including sidewalks, sidewalk amenities (including lighting, benches, and trees), short-term bicycle parking, and information. They may also be advocates for transportation service such as shuttles or bicycle share station coverage. All of these elements, as part of an active TDM strategy combined with expansions in transit service, may contribute to reductions in urban and suburban vehicle-miles travelled (VMT) made by a development or community.[2]

In the City of Santa Clara, "any commercial-downtown zoning district land use on any lot or parcel of land within the central business area" may construct off-site required parking (including anywhere within the commercial downtown zoning district, within a 500-foot walk of the main entrance, or on any streets fronting the zone boundary).

In 1999, the City of Santa Clara established a Business Improvement District[3] encapsulating eligible parcels around Lafayette Street, Benton Street, Lincoln Street, and Homestead Road (approximately a half-mile walk from the current Santa Clara Station). Assessments are to fund "improvements and activities" which are flexibly defined. They may include "promotion of tourism within the area; and activities which benefit businesses located and operating in the area, including but not limited to commercial shopping and promotional programs." The City, however, may not diminish regular maintenance and services in this district. As noted above, the provision of improvements tailored towards easing access to transit by foot or bicycle, when paired with an expansion in transit service and an active TDM program, may reduce VMT.

County Programs and Policies

Santa Clara County allows shared parking[4] across multiple land uses and operators as an alternative to constructing the combined minimum number of parking spaces across the sum of shared land uses. This is allowed, provided users enter a contracted agreement and a parking study is conducted. Off-site parking is also allowed, provided that it is located within 300 feet from the building served and "in the same possession" as the building served (via lease, deed, or easement).

Free Shuttles

Caltrain provides a free shuttle in peak directions (on weekdays only) providing connecting service between Santa Clara Station and the office parks near the intersection of Bowers and Walsh Avenue (including direct service to NVIDIA and Qualcomm).

VTA provides a free shuttle (7 days a week from approximately 5:00 am to 11:30 pm) connecting Santa Clara Station with both terminals of San José International Airport, as well as the VTA Metro/Airport Light Rail Station along First Street. In the approved Fiscal Year 2018-2019 VTA Transit Service Plan (implementation date pending), this shuttle would allow free boardings at airport terminals only[5].

VTA also provides a free shuttle (on weekdays approximately 6:30 am to 9:30 pm) looping around Downtown San José between Diridon Station and San José State University. The Downtown Area Shuttle (DASH) stops at the southern end of the proposed Downtown San José BART station location at San Fernando Street between First and Second Streets. In the approved Fiscal Year 2018-2019 VTA Transit Service Plan (implementation date pending), the DASH shuttle would become a new VTA "Rapid" bus line, and would no longer be free. However, VTA service would remain free to participants of VTA SmartPass, Caltrain riders with a two-zone or higher pass, and ACE riders with a monthly pass[6].

1 https://sjdowntown.com/wp_2016/wp-content/uploads/2018/01/Groundwerx-Digital.pdf
2 See LUT-8, TST-2, and TRT-5 http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf
3 Santa Clara City Ordinance No. 1740
4 Santa Clara County Board of Supervisors § 4.30.050
5 https://static1.squarespace.com/static/56c7a8e68a65e2903b636e0a/t/58e80510cd0f68da6036e556/1491600659310/Attachment+E+-+Changes+from+Draft+Plan+to+Final+Plan.pdf
6 Ibid

7.2 Station Profiles

As part of the Background Conditions Report, station profiles for each of the Station Areas have been prepared and are included in Appendix XX (A-C?).

The station profiles summarize the background conditions of the transportation environment in each Station Area, including Alum Rock/28th Street, Downtown San José, and Santa Clara Stations. Specifically, the station profile documents summarize the transportation characteristics of each Station Area, such as existing and planned pedestrian, bicycle, auto, and transit networks. The station profiles also identify forecasted travel mode for access/egress at each Station Area, current and proposed facilities, gaps in connectivity, and primary access pathways to the stations for all travel modes. Additionally, the station profiles identify previous planning efforts and influences, as well as concepts to guide future station design and development efforts.

As the Study progresses, the station profiles will be expanded upon to reflect access improvements and multimodal facility requirements identified for each station. A brief summary of key considerations identified for each Station Area are included below, with detailed information provided in Appendix XX (A-C?).

Santa Clara Station Area

Creating new roadway connections in coordination with planned developments, expanding pedestrian and bicycle connections across key barriers, and providing connections to station facilities for a variety of travel modes.

Downtown San José Station Area:

Developing curb management best practices, providing strong pathways between station entrances and nearby transit stations, and enhancing wayfinding for all travel modes.

28th StreetStation Area

Enhancing bicycle and pedestrian connections across US-101, closing bicycle gaps and improving connections across major roadways, and providing a strong connection between the BART Station and the East Santa Clara/Alum Rock BRT.


ROTARY
INTERNATIONAL
FLAMES

8

PARKING

Fourth Street Garage. Photo Credit: SPUR, Sergio Ruiz

8.1 Parking Supply and Precedent Studies

SURVEY

A parking survey was conducted at two locations in San José during a midday period (12 pm) and again during the evening (9 pm). The primary purpose of the parking study is to determine parking demand, recommend changes to parking requirements, and develop parking management strategies for the future TODs and businesses within a quarter-mile radius of the proposed Downtown San José and 28th StreetStations, in support

of the VTA's TOD strategy for the BART Silicon Valley Phase II Extension. This section is an important component of the overall study to establish the parking inventories and parking utilization patterns throughout two key station areas. The study area locations are presented on Figure 8.1-1. The survey data collection included counts of marked parking spaces, unmarked parking spac- es, color-curb designated parking spaces, parking restrictions associated with each on-street parking space, and counts of vehicles occupying the on-street parking spaces. For purposes of this study, unmarked parking spaces were inventoried at one parking space per 20 feet. It should be noted that off-street parking occupancy was not collected, however data was obtained from Kimley Horn Associates.

A parking survey for the Santa Clara Station Area was not conducted, primarily because there are no residential areas within a quarter mile of the Santa Clara station. Similarly, there are also a limited small number of on-street parking spaces within the one-quarter mile area of the station. Consequently, neither of these two conditions would be anticipated to support future parking needs associated with future TOD at this station.

Supply

Parking supply at the downtown station, as described above, was 807 and 905 spaces, at 12 pm and 9 pm, respectively. At 12 pm, there are freight-loading restrictions at various curb locations within the area of the downtown station that prevent parking during business hours. After 6 pm, these spaces are available for parking, hence the higher total parking supply at 9 pm compared to 12 pm. The off-street parking supply was analyzed at four (4) City-operated garages proximate to the downtown San José station, totaling 3,308 spaces. The total parking supply within the area surrounding the downtown station is 4,115 and 4,215 spaces, at 12 pm and 9 pm, respectively; and consists of a majority of off-street supply.

Parking supply at the 28th StreetStation, as described above, was 1,403 spaces. The area surrounding the 28th StreetStation is not characterized by parking that is sometimes utilized for freight-loading areas; therefore the parking supply is the same throughout the entire day.

Precedent Studies

Several past studies have addressed parking issues from a TOD perspective and context within the specific station areas. Within the BART TOD Guidelines (Version 2.0, May 1, 2017), BART states as a goal that transit-oriented development would have lowered parking requirements of less than 1 parking space per unit on average, as well as

1.6 spaces per 1,000 square feet of office space. Also indicated were goals to provide incentives for taking transit, biking, and walking. The same report stated that BART will seek to replace park and ride lots with TOD, accompanied by station area access improvements, guided by BART's Station Access Policy. The above form a conceptual framework for the parking to be proposed for TOD, which will pivot off the existing parking conditions of both supply and demand.

Preliminary work conducted in the past, for the Downtown San José and 28th StreetStations, generated forecast parking demand for future conditions, and did not indicate parking supply or parking utilization estimates under existing conditions.

FIGURE 8.1.1 Parking Study Area Locations

8.2 Parking Demand

This section presents parking demand at the Downtown San José Station area and the 28th StreetStation area. The on-street parking survey results are presented for each station area, with additional parking demand data presented for off-street facilities in the area surrounding the Downtown San José station. The raw survey data are included in Appendix 1.

Downtown San José Station

The parking supply and occupancy results for all streets in the Downtown San José Station Area are summarized in Table 8.2.1. The Downtown San José Station Area has approximately 807 on-street parking spaces available during the day with an estimated additional 98 on-street parking spaces becoming available after 6 pm (due to yellow freight loading zones no longer being in effect) for a total of 905 on-street parking spaces. Of these spaces, approximately 6 percent (52 spaces) are green-curb designated spaces with parking time restrictions between 12 minutes and two hours in duration; and 3 percent (21 spaces) are blue-curb designated spaces reserved for handicap parking. During the mid-day study period (12 pm), 571 of the 807 on-street parking spaces were occupied (71 percent). During the evening study period, 497 of the 905 on-street parking spaces were occupied (55 percent). According to the City of San José, approximately 100 on-street parking spaces in downtown will be physically removed with the implementation of the Better Bikeways for San José program.

The off-street parking supply and occupancy results for four city-operated garages in the Downtown San José Station Area, which reflect weekday average peak occupancies in September 2017, are summarized in Table 8.2.2. The Downtown San José station area has an estimated 3,308 garage parking spaces supplied within City-operated garages during the day and evening. During the mid-day period (12 pm), 2,564 of the 3,308 garage spaces were occupied (approximately 77 percent). Permit parking accounts for 1,894 of the 2,564 occupied garage spaces (approximately 74 percent). This mid-day percentage occupancy of 77 percent is slightly higher than the on-street overall percentage occupancy of 71 percent. During the evening period of 9 pm, 1,124 of the 3,308 garage spaces were occupied (34 percent). A total of 300 of the 1,124 occupied spaces (approximately 27 percent) were by permit. This evening percentage occupancy of 34 percent is significantly lower than the on-street overall percentage occupancy of 55 percent.

Garage	Supply	# Occupied		% Occupancy	
		Noon	9PM	Noon	9PM
MARKET / SAN PEDRO	1,334	1,045	642	78%	48%
THIRD STREET	726	599	95	82%	13%
SECOND/SAN CARLOS	503	363	201	72%	40%
FOURTH/SAN FERNANDO	745	557	186	75%	25%
Total	**3,308**	**2,564**	**1,124**	**77%**	**34%**

Note: Data represents September 2017, monthly average weekday.

TABLE 8.2.2 Summary of Downtown San José Station City-operated Off-Street Parking Occupancy

Street	From	To	AM Supply	PM Supply	# Occupied		% Occupancy	
					Noon	9PM	Noon	9PM
Notre Dame Ave	W. Saint John St.	W. Santa Clara St.	45	45	28	32	62%	71%
Terraine St	W St James St.	W St. John St.	0	0	0	0	NA	NA
Almaden Ave	W. Saint John St.	W. San Fernando St	62	74	39	59	63%	79%
San Pedro St	W St James St.	W. San Fernando	43	51	32	29	74%	57%
Market St	W. St James St.	E. San Fernando	154	165	112	99	73%	60%
Lightston Alley	W. Santa Clara St.	Post St.	5	10	3	7	57%	68%
1St St	W. St James St.	E. San Carlos	0	0	0	0	NA	NA
2nd St	W. St James	E. San Carlos	0	0	0	0	NA	NA
3rd St	E. St. James	E. San Carlos	113	131	82	85	73%	65%
4th St	E. St John	E. San Fernando	41	43	23	20	56%	46%
Saint James St	N. San Pedro St.	N. 2nd St.	44	48	33	4	75%	8%
Saint John St	Notre Dame Ave	N. 4th St.	113	117	90	49	80%	42%
Carlysle St	Notre Dame Ave.	N. Almaden Blvd.	14	16	11	10	79%	63%
Santa Clara St	Notre Dame Ave.	S. 5th St	101	118	69	68	68%	57%
Post St	S. Almaden Blvd	S. 1st St.	25	30	12	0	49%	0%
San Fernando St	S. Almaden Blvd.	S. 4th St.	47	57	37	35	79%	62%
		Total	**807**	**905**	**571**	**497**	**71%**	**55%**

Note: Data was collected on Tuesday March 6, 2018.

TABLE 8.2.1 Summary of Downtown San José Station On-Street Parking Occupancy

28th StreetStation

The parking supply and occupancy results for all streets in the 28th StreetStation Area are summarized in Table 8.2.3. The 28th StreetStation area has an estimated 1,403 on-street parking spaces, with less than one percent (6 spaces) of green-curb spaces (associated parking time restrictions) and less than one percent (3 spaces) of blue-curb spaces reserved for handi- cap parking. The total weekday parking occupancy rate

for the 28th StreetStation area during the midday survey period (12 pm) was approximately 61 percent and during the evening survey period (9 pm) was approximately 56 percent.

Also shown in Table 8.2.3 are the parking occupancy rates on individual streets, ranging from 0 percent to 96 percent during the 12 pm observation period, and from 0 percent to 126 percent during the 9 pm observation period. Parking occupancy above 100 percent was observed on Wooster Avenue, with a significant number of illegally parked vehicles. The Wooster Avenue segment, adjacent to a Rocketship school, residences, and terminating at a manufacturing plant, is situated at the northwest edge of the quarter-mile radius surrounding the future 28th StreetStation. Much of the Wooster Avenue curb space indicates prohibited parking, resulting in a low supply of parking spaces; however vehicles are routinely parked on the street within the unpaved sidewalk right-ofway.

Street	From	To	Supply	# Occupied		% Occupancy	
				Noon	9PM	Noon	9PM
N 24th St	E Juilan St.	E Santa Clara St.	48	25	38	51%	80%
N 25th St	E St James St.	E St John St.	107	64	95	60%	88%
26th St	Tripp Ave	E San Fernando St.	214	151	184	71%	86%
Wooster	E Juilan St.	End of Street	30	23	38	75%	**126%**
N 27th St	E St James St.	E Santa Clara St.	106	102	72	**96%**	68%
28th St	E Juilan St.	Shortridge Ave.	104	42	24	40%	23%
W Court	E Juilan St.	End of Street	65	53	66	81%	**101%**
E Court	E Julian St.	Dead End	76	47	14	62%	19%
30th St	E St. James St.	Shortridge Ave	60	38	10	64%	17%
E Julian St	N 28th St.	N 28th St.	72	51	47	71%	66%
E Saint James St	N 30th St.	N 26th St.	244	85	53	35%	22%
E Saint John St	N 24th St.	N 27th St.	52	43	46	83%	88%
5 Wounds Ln	N 28th St.	N 30th St.	38	0	0	0%	0%
E Santa Clara St	101 on/off ramp	N 24th St.	74	34	12	46%	16%
Shortridge Ave	N 26 St.	Dead End	113	104	82	**92%**	73%
			1,403	**860**	**783**	**61%**	**56%**

Note: Data was collected on Tuesday March 6, 2018.

TABLE 8.2.3 Summary of 28th StreetStation On-Street Parking Occupancy

8.3 Parking Analysis

Downtown San José Station

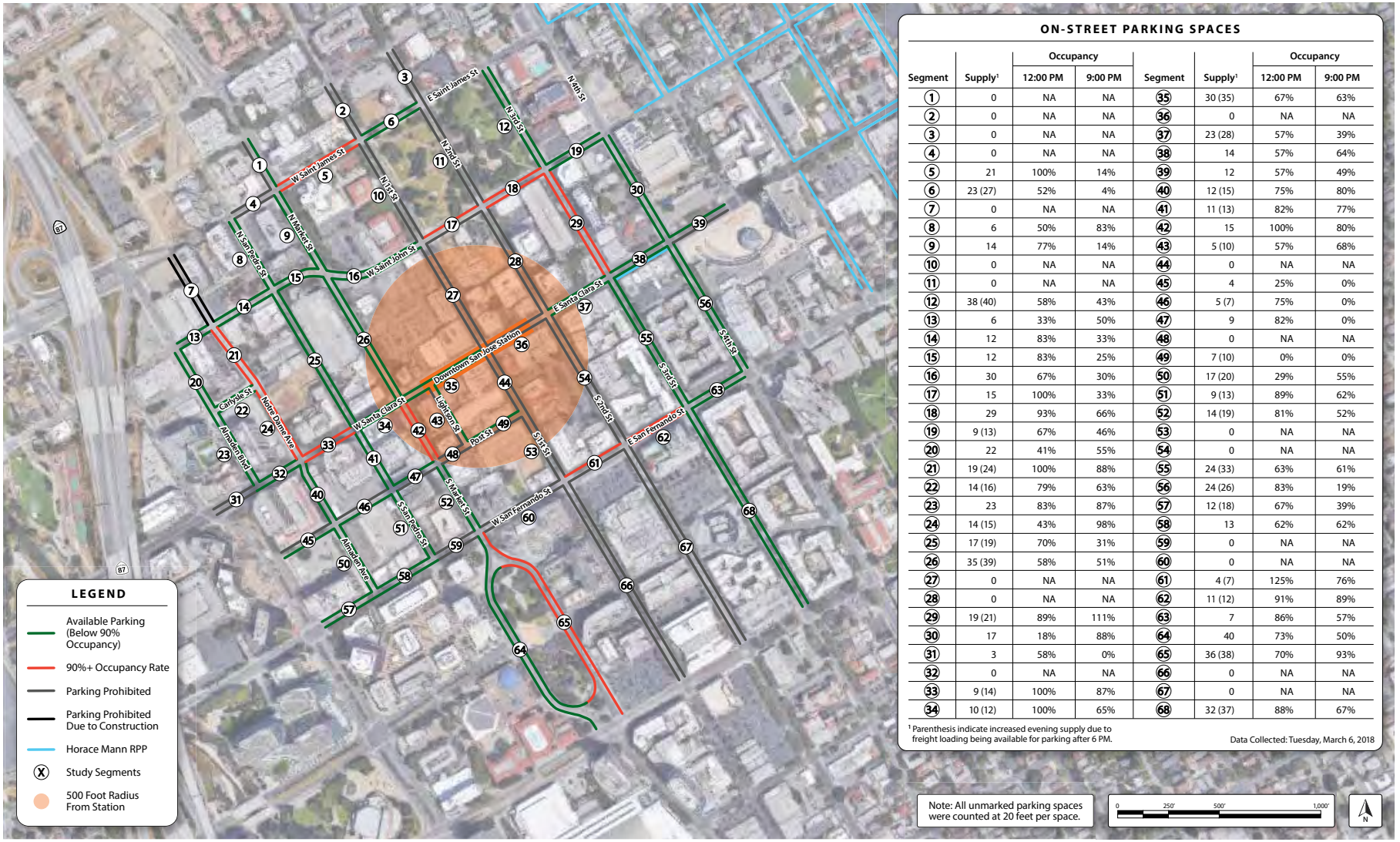
The average parking occupancy rate measured within the Downtown San José Station Area was higher during midday (12 pm) than during the evening survey period (9 pm), as shown previously in Table 8.2.1. This was consistent with perceived parking demand levels, given that downtown San José has relatively high levels of commercial office compared to residential. While the overall parking occupancy rate is moderate and indicates available on-street parking within the area overall, the midday (12 pm) parking occupancy rate is fairly high on several side streets along the Santa Clara Street corridor in the vicinity of First Street and Market Street. During the evening (9 pm), the overall parking occupancy rate is significantly lower, and shows relatively higher rates of parking occupancy along Almaden Avenue (between W Saint John Street and W San Fernando Street). The parking occupancy decreases at 9 pm compared to 12 pm by the largest margin on Saint James Street between N. San Pedro Street and N. 2nd street (from 75 percent occupancy at 12 pm to 8 percent occupancy at 9 pm).

The majority of streets in the Downtown San José Station Area are metered or time restricted, and meters are in effect between the hours of 9 am and 6 pm. San José uses a color curb program to identify on-street parking restrictions with red painted curbs signifying parking prohibited, green painted curbs for time restricted parking, yellow painted curbs for freight loading zones, white painted curbs for passenger loading zones, and blue painted curbs for handicap parking. As previously mentioned, it is noted that the yellow-painted freight loading (only) zones become available for public unrestricted parking after 6 pm throughout most of the study area. Residential streets just outside of the Downtown San José Station Area are within a Residential Permit Parking (RPP) zone with various park- ing time restrictions. The south side of East Santa Clara Street between 4th Street and 3rd Street is part of the Horace Mann RPP zone. The area of overlap between the Horace Mann RPP zone and the Downtown San José Station area is illustrated on Figure 8.3.1. Residential parking permits are available to eligible households along posted streets and require a $35 annual fee for each permit (per vehicle) within the Horace Mann RPP zone.

Parking is currently prohibited at all times along the following roadway segments:

- 1st Street, between Devine Street and E San Carlos Street;
- 2nd Street, between Devine Street and E San Carlos Street;
- W San Fernando Street, between S San Pedro Street and S 1st Street;
- The south side of San Fernando Street, between S 1st Street and S 2nd Street;
- Santa Clara Street, between N 1st Street and N 2nd Street and between Notre Dame Avenue/S Almaden Boulevard and Almaden Boulevard;
- The north side of Post Street, between Almaden Boulevard and S San Pedro Street and along the south side of Post Street, between S San Pedro Street and S 1st Street;
- The west side of Lightston Alley, between W Santa Clara Street and Post Street;
- The south side of E Santa Clara Street between S 4th Street and S 5th Street; and
- W Saint James Street, between N San Pedro Street and N Market Street.

Additionally, during the parking survey (Tuesday, March 6, 2018) both sides of Terraine Street prohibited parking temporarily due to construction activities. The percentage occupancies by street segments for the Downtown San José Station study area are also shown on Figure 8.3.1. The streets of Notre Dame Ave (north of Santa Clara Street) and West Saint John Street (between 1st and 3rd Streets) are characterized by many blocks in which parking occupancy exceeds 90 percent. Also in excess of 90 percent occupancy are 3rd Street (between Santa Clara and W. Saint John Streets), San Fernando Street (between 1st and 3rd Streets), and Market Street (between San Fernando Street and the southern boundary of the study area). Detailed parking occupancy observations, with detailed numbers of occupied spaces by street segment are included within the appendix 1.



ON-STREET PARKING SPACES

Segment	Supply[1]	Occupancy 12:00 PM	Occupancy 9:00 PM	Segment	Supply[1]	Occupancy 12:00 PM	Occupancy 9:00 PM
1	0	NA	NA	35	30 (35)	67%	63%
2	0	NA	NA	36	0	NA	NA
3	0	NA	NA	37	23 (28)	57%	39%
4	0	NA	NA	38	14	57%	64%
5	21	100%	14%	39	12	57%	49%
6	23 (27)	52%	4%	40	12 (15)	75%	80%
7	0	NA	NA	41	11 (13)	82%	77%
8	6	50%	83%	42	15	100%	80%
9	14	77%	14%	43	5 (10)	57%	68%
10	0	NA	NA	44	0	NA	NA
11	0	NA	NA	45	4	25%	0%
12	38 (40)	58%	43%	46	5 (7)	75%	0%
13	6	33%	50%	47	9	82%	0%
14	12	83%	33%	48	0	NA	NA
15	12	83%	25%	49	7 (10)	0%	0%
16	30	67%	30%	50	17 (20)	29%	55%
17	15	100%	33%	51	9 (13)	89%	62%
18	29	93%	66%	52	14 (19)	81%	52%
19	9 (13)	67%	46%	53	0	NA	NA
20	22	41%	55%	54	0	NA	NA
21	19 (24)	100%	88%	55	24 (33)	63%	61%
22	14 (16)	79%	63%	56	24 (26)	83%	19%
23	23	83%	87%	57	12 (18)	67%	39%
24	14 (15)	43%	98%	58	13	62%	62%
25	17 (19)	70%	31%	59	0	NA	NA
26	35 (39)	58%	51%	60	0	NA	NA
27	0	NA	NA	61	4 (7)	125%	76%
28	0	NA	NA	62	11 (12)	91%	89%
29	19 (21)	89%	111%	63	7	86%	57%
30	17	18%	88%	64	40	73%	50%
31	3	58%	0%	65	36 (38)	70%	93%
32	0	NA	NA	66	0	NA	NA
33	9 (14)	100%	87%	67	0	NA	NA
34	10 (12)	100%	65%	68	32 (37)	88%	67%

[1] Parenthesis indicate increased evening supply due to freight loading being available for parking after 6 PM.

Data Collected: Tuesday, March 6, 2018

FIGURE 8.3.1 Downtown San José Station Parking Occupancy

28th StreetStation

The 28th StreetStation Area is defined as an area within a rough quarter-mile radius of the proposed BART station (midblock along 28th Street, between Saint James Street and Five Wounds Lane), bounded by Julian Street to the north, N 24th Street to the west, E San Fernando Street to the south, and Highway 101 (Bayshore Freeway) to the east. As previously described, the study area is in an urban setting with a mixture of low to medium-density land uses including light-industrial, retail strip malls, single-family and medium-density multifamily residential and fast-food restaurants.

The majority of on-street parking spaces in the 28th StreetStation area are not metered or time restricted. Similar to the Downtown San José Station Area, within the 28th StreetStation Area is a color curb program used to identify on-street parking restrictions: Residential streets within the 28th StreetStation Area are not subject to Residential Permit Parking (RPP) zones. Restricted parking in the study area is mostly limited to various 3-hour No-Parking restrictions for street sweeping activities once per month.

Parking is prohibited at all times along the following roadway segments:

- The west side of N 24th Street, between E Julian Street and E Santa Clara Street;
- The north side of E Julian Street, between N 24th Street and N 25th Street and between N 27th Street and N 28th Street;
- The east side of N 30th Street, between E Saint James Street and Five Wounds Lane; and
- The north side of E Santa Clara Street, between N 28th Street and S 30th Street.

The average parking occupancy rate within the 28th StreetStation Area during midday (12 pm) was observed to be approximately 5 percent higher than during the evening (9 pm), as previously shown in Table 8.2.3. Although the overall parking occupancy is only slightly higher at midday than at 9 pm, there are several locations in which the observed midday occupancy was significantly higher than at 9 pm. Notably, along N 28th and N 30th Streets, which front various light industrial businesses in close proximity of the proposed BART station, as well as East Santa Clara Street with primarily retail and some light industrial uses. However, the average peak occupancy observed on these streets was 40 percent, 64 percent, and 40 percent respectively. The street with the highest observed midday occupancy with respect to absolute numbers was 26th Street, followed by Shortridge Avenue, N 27th Street, and Court Street. The observed midday occupancies on these streets was 151 spaces (71 percent), 104 spaces (92 percent), 102 space (96 percent), and 85 spaces (35 percent), respectively.

During the evening (9 pm), the overall parking occupancy rate is slightly lower with parking around light-industrial land uses showing patterns of relatively low occupancy, while parking along residential land uses indicates relatively higher occupancies. The percentage occupancies for all street segments in the 28th StreetStation study area are illustrated on Figure 8.3.2. Detailed parking occupancy observations, with numbers of occupied spaces by street segment are included within the appendix.

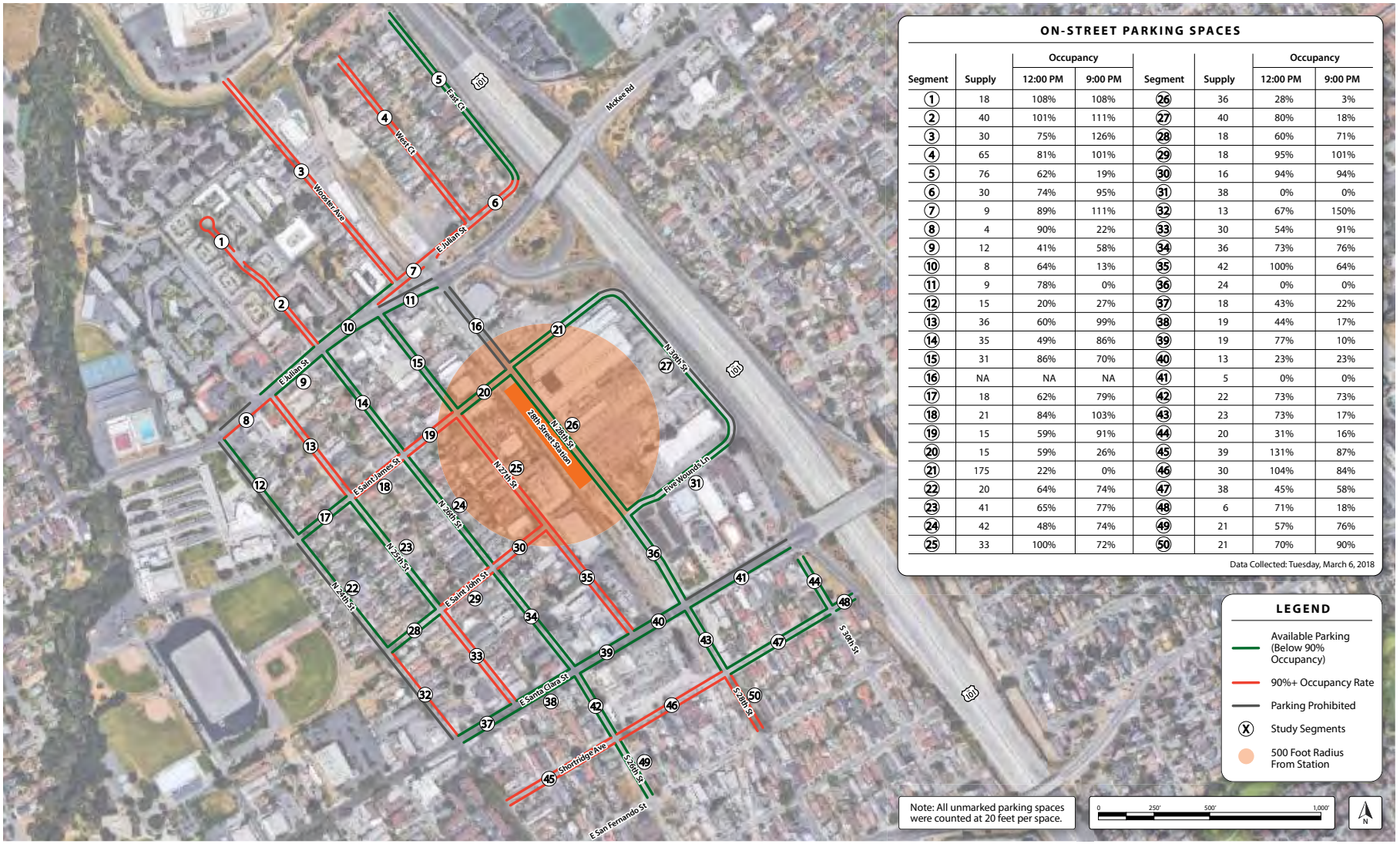


FIGURE 8.3.2 Alum Rock/28th St Station Parking Occupancy

Appendix 1

Affordable Housing Development Projects in the 1.5-Mile Station Radii

Project Name	Project Status	Address	City	Nearest Station	Distance to Nearest Station	Target Population	Total Affordable Units	Extremely Low Income (<30% AMI)	Very Low Income (30-50% AMI)	Low Income (50-80% AMI)	Moderate Income (80-120% AMI)	Unknown / Manager Unit
Brookwood Terrace Family Apartments	Completed	1346 E San Antonio St	San Jose	28th St/Alum Rock	< 0.5 mi	Family	83	21	62	0	0	0
Hacienda Creek Senior	Completed	399 East Court	San Jose	28th St/Alum Rock	< 0.5 mi	Seniors	79	20	59	0	0	0
Parkside Terrace	Completed	463 Wooster Ave	San Jose	28th St/Alum Rock	< 0.5 mi	Family	40	0	40	0	0	0
El Rancho Verde	Completed	300 Checkers Drive	San Jose	28th St/Alum Rock	0.5 to 1 mi	Family	696	0	557	139	0	0
Fairways at San Antonio	Completed	305 San Antonio Court	San Jose	28th St/Alum Rock	0.5 to 1 mi	Family	86	26	42	16	0	2
Girasol Seniors	Completed	1710 Alum Rock Ave.	San Jose	28th St/Alum Rock	0.5 to 1 mi	Seniors	59	0	59	0	0	0
Homebase	Completed	865 Calhoun St.	San Jose	28th St/Alum Rock	0.5 to 1 mi	Special Needs	12	0	0	12	0	0
Las Golondrinas	Completed	77 Kentucky Place	San Jose	28th St/Alum Rock	0.5 to 1 mi	Seniors	49	49	0	0	0	0
Mayfair Court Apartments	Completed	65 McCreery Ave	San Jose	28th St/Alum Rock	0.5 to 1 mi	Family	92	46	46	0	0	0
Quetzal Gardens	Committed	1695 Alum Rock Avenue	San Jose	28th St/Alum Rock	0.5 to 1 mi	Family	70	17	13	40	0	0
Tierra Encantada	Completed	1918 Alum Rock Avenue	San Jose	28th St/Alum Rock	0.5 to 1 mi	Family	92	14	62	16	0	0
Villa Hermosa	Completed	1640 Hermocilla Way	San Jose	28th St/Alum Rock	0.5 to 1 mi	Seniors	99	0	99	0	0	0
Arbor Park Community	Completed	899 North King Road	San Jose	28th St/Alum Rock	1 to 1.5 mi	Family	74	7	39	28	0	0
Belovida Apartments	Completed	1777 Newbury Park Drive	San Jose	28th St/Alum Rock	1 to 1.5 mi	Seniors	184	48	136	0	0	0
Betty Anne Gardens	Completed	945 Lundy Ave	San Jose	28th St/Alum Rock	1 to 1.5 mi	Family	75	8	67	0	0	0
Jardines Paloma Blanca	Completed	132 North Jackson Avenue	San Jose	28th St/Alum Rock	1 to 1.5 mi	Seniors	43	0	42	1	0	0
Kings Crossing	Completed	678 North King Road	San Jose	28th St/Alum Rock	1 to 1.5 mi	Family	92	42	50	0	0	0
Poco Way	Completed	1900 Poco Way	San Jose	28th St/Alum Rock	1 to 1.5 mi	Family	129	0	126	3	0	0
Pollard Plaza	Completed	1150 McLaughlin Av	San Jose	28th St/Alum Rock	1 to 1.5 mi	Special Needs	129	0	128	1	0	0
Sunset Square	Completed	2080 Alum Rock Avenue	San Jose	28th St/Alum Rock	1 to 1.5 mi	Family	94	10	84	0	0	0
Villa de Guadalupe	Completed	2151 Plaza de Guadalupe	San Jose	28th St/Alum Rock	1 to 1.5 mi	Seniors	41	0	0	41	0	0
101 San Fernando	Completed	101 E.San Fernando St, Ste 100	San Jose	Downtown San Jose	< 0.5 mi	Family	68	0	68	0	0	0
Casa del Pueblo	Completed	200 S. Market Street	San Jose	Downtown San Jose	< 0.5 mi	Seniors	163	0	154	9	0	0
Colonnade	Completed	201 S 4th Street	San Jose	Downtown San Jose	< 0.5 mi	Family	16	0	0	16	0	0
Donner Lofts	Completed	158 E. St. John St.	San Jose	Downtown San Jose	< 0.5 mi	Family	101	21	80	0	0	0
Giovanni	Completed	85 S. 5th Street	San Jose	Downtown San Jose	< 0.5 mi	Family	24	0	24	0	0	0
Jeanne D'Arc Manor	Completed	85 S. 5th Street	San Jose	Downtown San Jose	< 0.5 mi	Seniors	0	0	0	0	0	0
Masson Building Rehabilitation Project	Completed	161 West Santa Clara St	San Jose	Downtown San Jose	< 0.5 mi	Family	4	0	0	4	0	0
San Pedro Square Apts.	Completed	155 W. Santa Clara St.	San Jose	Downtown San Jose	< 0.5 mi	Family	32	0	0	7	25	0
St. Claire Apartments	Completed	311 S.First Street	San Jose	Downtown San Jose	< 0.5 mi	Family	7	0	3	0	4	0
Town Park Towers	Completed	60 North 3rd Street	San Jose	Downtown San Jose	< 0.5 mi	Family	216	0	65	151	0	0
Villa Torino	Completed	29 West Julian Street	San Jose	Downtown San Jose	< 0.5 mi	Family	85	0	0	0	85	0
Villas on the Park	Committed	278 N 2nd St	San Jose	Downtown San Jose	< 0.5 mi	Family	83	42	41	0	0	0
Vintage Tower	Completed	235 East Santa Clara St	San Jose	Downtown San Jose	< 0.5 mi	Family	59	0	30	29	0	0
YWCA Third Street	Completed	375 South 3rd Street	San Jose	Downtown San Jose	< 0.5 mi	Family	62	0	62	0	0	0
Casa Feliz Studios	Completed	525 S.9th St	San Jose	Downtown San Jose	0.5 to 1 mi	Special Needs	60	52	7	0	0	1
Fountain Plaza	Completed	190 Ryland Street	San Jose	Downtown San Jose	0.5 to 1 mi	Family	46	0	0	0	46	0
Julian Gardens	Completed	319 North 8th Street	San Jose	Downtown San Jose	0.5 to 1 mi	Family	9	0	9	0	0	0
Mabuhay	Completed	270 E. Empire Street	San Jose	Downtown San Jose	0.5 to 1 mi	Seniors	94	14	80	0	0	0
Market Gateway Apartments	Completed	535 S.Market St	San Jose	Downtown San Jose	0.5 to 1 mi	Family	22	0	0	0	22	0
Miraido Village	Completed	566 N. 6th Street	San Jose	Downtown San Jose	0.5 to 1 mi	Family	36	0	22	14	0	0
North San Pedro Studios	Committed	201 Bassett St	San Jose	Downtown San Jose	0.5 to 1 mi	Family	134	49	85	0	0	0
Plaza Maria	Completed	115 East Reed Street	San Jose	Downtown San Jose	0.5 to 1 mi	Family	52	0	26	26	0	0
Sobrato House	Completed	496 S. Third St	San Jose	Downtown San Jose	0.5 to 1 mi	Special Needs	19	19	0	0	0	0
The Villa	Completed	184 South 11th Street	San Jose	Downtown San Jose	0.5 to 1 mi	Special Needs	26	20	6	0	0	0
Troy Apartments	Completed	714 S Almaden Ave	San Jose	Downtown San Jose	0.5 to 1 mi	Family	30	0	14	16	0	0

Project Name	Project Status	Address	City	Nearest Station	Distance to Nearest Station	Target Population	Total Affordable Units	Extremely Low Income (<30% AMI)	Very Low Income (30-50% AMI)	Low Income (50-80% AMI)	Moderate Income (80-120% AMI)	Unknown / Manager Unit
Art Ark	Completed	1058 S.5th Street	San Jose	Downtown San Jose	1 to 1.5 mi	Family	146	42	104	0	0	0
Bella Castello	Completed	570 Keyes St	San Jose	Downtown San Jose	1 to 1.5 mi	Family	103	10	65	28	0	0
Cornerstone	Completed	875 N.10th Street	San Jose	Downtown San Jose	1 to 1.5 mi	Family	52	14	31	7	0	0
Fuji Towers	Completed	690 North 5th Street	San Jose	Downtown San Jose	1 to 1.5 mi	Seniors	0	0	0	0	0	0
Japantown Seniors	Completed	685 North 6th Street	San Jose	Downtown San Jose	1 to 1.5 mi	Seniors	126	8	60	58	0	0
Second Street Studios	Under Construction	1150 S 2nd Street	San Jose	Downtown San Jose	1 to 1.5 mi	Special Needs	216	34	117	65	0	0
Villa Torre I	Completed	955 S 6th St	San Jose	Downtown San Jose	1 to 1.5 mi	Family	102	0	31	71	0	0
Villa Torre II	Completed	955 S 6th St	San Jose	Downtown San Jose	1 to 1.5 mi	Family	87	0	27	60	0	0
Willow Pointe	Completed	1010 S. 3rd Street	San Jose	Downtown San Jose	1 to 1.5 mi	Family	36	4	24	8	0	0
Cinnabar Commons	Completed	875 Cinnabar St	San Jose	Diridon	< 0.5 mi	Family	243	29	51	163	0	0
Laurel Grove	Under Construction	777 Park Avenue	San Jose	Diridon	< 0.5 mi	Family	81	23	58	0	0	0
Museum Park	Completed	465 W San Carlos St	San Jose	Diridon	< 0.5 mi	Family	19	0	0	0	19	0
Park Avenue Senior Apartments	Under Construction	Park and Sunol	San Jose	Diridon	< 0.5 mi	Seniors	99	10	89	0	0	0
Delmas Park	Completed	350 Bird Avenue	San Jose	Diridon	0.5 to 1 mi	Family	122	26	40	56	0	0
Lenzen Gardens Senior	Completed	893 Lenzen Avenue	San Jose	Diridon	0.5 to 1 mi	Seniors	94	94	0	0	0	0
Lenzen Square	Completed	790 Lenzen Avenue	San Jose	Diridon	0.5 to 1 mi	Special Needs	88	0	22	66	0	0
Parkview Family	Completed	360 Meridian Avenue	San Jose	Diridon	0.5 to 1 mi	Family	89	9	26	53	0	1
Parkview Seniors	Completed	355 Race Street	San Jose	Diridon	0.5 to 1 mi	Seniors	140	14	124	0	0	2
Pensione Esperanza	Completed	598 Columbia Avenue	San Jose	Diridon	0.5 to 1 mi	Special Needs	108	29	79	0	0	0
Buena Vista Midtown	Completed	1523 West San Carlos St	San Jose	Diridon	1 to 1.5 mi	Seniors	94	29	65	0	0	0
Hester Apartments	Completed	1759 Hester Avenue	San Jose	Diridon	1 to 1.5 mi	Special Needs	16	8	8	0	0	0
La Fenetre	Completed	705 Northrup Street	San Jose	Diridon	1 to 1.5 mi	Family	50	0	10	40	0	0
Paula Street	Completed	801 Paula Street	San Jose	Diridon	1 to 1.5 mi	Family	21	0	10	0	11	0
Trestles Apartments	Completed	1566 Scott St.	San Jose	Diridon	1 to 1.5 mi	Family	70	0	7	63	0	0
Unity Place I	Completed	917 Northrup Street	San Jose	Diridon	1 to 1.5 mi	Special Needs	34	34	0	0	0	0
Willows Apartments	Completed	886 Paula Street	San Jose	Diridon	1 to 1.5 mi	Family	46	0	5	41	0	0
Homesafe Santa Clara	Completed	611 El Camino Real	Santa Clara	Santa Clara	< 0.5 mi	Shelter	25	0	16	9	0	0
Quetzal House	Completed	884 Lafayette Street	Santa Clara	Santa Clara	< 0.5 mi	Shelter	16	0	16	0	0	0
Runaway Youth Shelter	Completed	3490 The Alameda	Santa Clara	Santa Clara	< 0.5 mi	Shelter	20	0	20	0	0	0
Casa De Novo	Completed	2188 The Alameda	San Jose	Santa Clara	0.5 to 1 mi	Special Needs	27	27	0	0	0	0
Belovida Senior Apartments	Completed	1820 Main St.	Santa Clara	Santa Clara	0.5 to 1 mi	Senior	27	8	19	0	0	0
BWC Teen Parent Transitional	Completed	1284/1294 Jackson St	Santa Clara	Santa Clara	0.5 to 1 mi	Family	5	0	5	0	0	0
DeLaCruz House Acquistion	Completed	3779 DeLaCruz Blvd.	Santa Clara	Santa Clara	0.5 to 1 mi	Special Needs	4	0	4	0	0	0
Domicillio (Sobrato I)	Completed	431 El Camino Real	Santa Clara	Santa Clara	0.5 to 1 mi	Family	31	0	0	15	16	0
Gateway Santa Clara Sr. Housing	Completed	1000 El Camino Real	Santa Clara	Santa Clara	0.5 to 1 mi	Senior	41	0	40	1	0	0
Liberty Tower	Completed	890 Main St	Santa Clara	Santa Clara	0.5 to 1 mi	Senior	100	0	99	1	0	0
Presidio El Camino	Completed	1450 El Camino Real	Santa Clara	Santa Clara	0.5 to 1 mi	Family	40	5	30	5	0	0
Supplemental Living Center	Completed	1597 Market Street	Santa Clara	Santa Clara	0.5 to 1 mi	Special Needs	4	0	4	0	0	0
Vermont House	Completed	1072 & 1082 Vermont St	San Jose	Santa Clara	1 to 1.5 mi	Family	30	0	28	0	0	2
BWC-Main Street House	Completed	2120 Main Street	Santa Clara	Santa Clara	1 to 1.5 mi	Shelter	5	0	5	0	0	0
Chateau Apartments	Completed	2150 Main St	Santa Clara	Santa Clara	1 to 1.5 mi	Family	25	0	5	19	0	1
Sommerset Apartments	Completed	2151 Main St	Santa Clara	Santa Clara	1 to 1.5 mi	Family	43	0	9	33	0	1
Westwood Ambassador	Completed	2606 Newhall St	Santa Clara	Santa Clara	1 to 1.5 mi	Family	41	0	10	31	0	0
Total 0.5 Mile Station Radii							**1,625**	**166**	**938**	**388**	**133**	**0**
Percent of Total							**100%**	**10%**	**58%**	**24%**	**8%**	**0%**
Total 1.5 Mile Station Radii							**6,532**	**982**	**3,850**	**1,462**	**228**	**10**
Percent of Total							**100%**	**15%**	**59%**	**22%**	**3%**	**0%**

Source: City of San Jose, Q4 2017; City of Santa Clara, 2018.