DIRIDON STATION AREA PLAN

INTEGRATED FINAL
PROGRAM ENVIRONMENTAL IMPACT REPORT

State Clearinghouse # 2011092022

City of San José

August 2014

INTRODUCTION TO THE INTEGRATED FINAL PROGRAM EIR

This Integrated Final Program EIR (PEIR) document is a compilation of documents prepared individually and previously made available to the public. Consistent with normal practice in the City of San José, a First Amendment to the Draft PEIR was prepared by the City prior to certification of the PEIR. The First Amendment, together with the Draft PEIR, constitutes the Final PEIR for this project. This Final PEIR document integrates these two documents, but changes none of them. In conformance with Section 15132 of the CEQA Guidelines, this Final PEIR contains the following, at the locations indicated:

(a) The Draft PEIR in its entirety is found in the document which follows this page and the technical appendices (including Appendices A through F).

(b) The information included in the First Amendment to the Draft PEIR is incorporated into the text of the Draft PEIR (pages 1 through 441) which follows this page, and the First Amendment to the Draft PEIR (Appendix G) in its entirety.

(c) Resolution of the City Council certifying the Final PEIR for the project as complete and in conformance with CEQA and adopting findings for the *Diridon Station Area Plan Program EIR* (Appendix H).

(d) Resolution of the City Council approving the addition of The Alameda/Naglee Avenue, Park Avenue/Naglee Avenue, and Lincoln Avenue/San Carlos Street intersections to the protected intersection list pursuant to the provisions of the City's Transportation Impact Policy (Appendix I).

(e) Resolution of the City Council approving General Plan amendment actions (Appendix J).

(f) Notice of Determination for the *Diridon Station Area Plan Program EIR* (Appendix K).

The Draft PEIR was circulated to affected public agencies and interested parties for a 60-day review period. The First Amendment to the Draft PEIR consists of comments received by the Lead Agency on the Draft PEIR, responses to those comments, and revisions to the text of the Draft PEIR. The First Amendment to the Draft PEIR was circulated to the public and commenting public agencies 10 days prior to the PEIR certification hearing. The text revisions identified in the First Amendment have been incorporated into the text of this Integrated Final PEIR. All deletions are shown with a ~~line though the text~~ and all new text is shown with <u>underlining</u>.

Integrated Final Program Environmental Impact Report

Diridon Station Area Plan

SCH#: 2011092022

Prepared by:

CITY OF SAN JOSE
CAPITAL OF SILICON VALLEY

In Consultation with:

DAVID J. POWERS & ASSOCIATES, INC.

August 2014

PREFACE

This document has been prepared by the City of San José as the Lead Agency in conformance with the California Environmental Quality Act (CEQA) and the CEQA Guidelines. This Environmental Impact Report (EIR) provides program and project-level environmental review for the proposed Diridon Area Station Plan. The purpose of an EIR is clarified in Sections 15121, 15146, and 15151 of CEQA:

§15121. Informational Document.

(a) An EIR is an informational document, which will inform public agency decision makers and the public of the significant environmental effects of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project. The public agency shall consider the information in the EIR, along with other information which may be presented to the agency.

(b) While the information in the EIR does not control the agency's ultimate discretion on the project, the agency must respond to each significant effect identified in the EIR by making findings under Section 15091 and if necessary by making a statement of overriding considerations.

§15146. Degree of Specificity. The degree of specificity required in an EIR will correspond to the degree of specificity involved in the underlying activity which is described in the EIR.

(a) An EIR on a construction project will necessarily be more detailed in the specific effects of a project than will an EIR on the adoption of a local general plan or comprehensive zoning ordinance because the effects of the construction can be predicted with greater accuracy.

(b) An EIR on a project such as the adoption or amendment of a comprehensive zoning ordinance or local general plan should focus on the secondary effects that can be expected to follow from the adoption or amendment, but the EIR need not be as detailed as an EIR on the specific construction project that might follow.

§15151. Standards for Adequacy of an EIR. An EIR should be prepared with a sufficient degree of analysis to provide decision makers with information which enables them to make a decision which intelligently considers environmental consequences. An evaluation of the environmental effects of the proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The courts have looked not for perfection, but for adequacy, completeness, and a good-faith effort at full disclosure.

TABLE OF CONTENTS

Figures

TABLE OF CONTENTS

Photos

TABLE OF CONTENTS

Tables

TABLE OF CONTENTS

Appendices

TABLE OF CONTENTS

The proposed project is the adoption of the *Diridon Station Area Plan* (DSAP), which establishes a vision for Diridon Station and the surrounding area in response to the planned extension of Bay Area Rapid Transit (BART) and High Speed Rail (HSR) service to San José.

The boundary of the DSAP ("Plan area") encompasses approximately 250 acres in and adjacent to Downtown San José, west of State Route 87. The Plan area is generally bounded by Lenzen Avenue and the UPRR tracks to the north, Interstate 280 to the south, the Guadalupe River and Delmas Avenue to the east, and Sunol Avenue and the Diridon Station commuter rail tracks to the west.

Diridon Station is located at the western edge of Downtown San José, adjacent to the SAP Center (referred to as the "San José Arena") and the proposed major league baseball stadium site-. The DSAP includes a conceptual plan for expansion of the existing transit station to accommodate BART and HSR service. The DSAP also contains a Land Use Diagram, Transportation Improvement Strategies, and Design Guidelines to encourage appropriate transit-oriented redevelopment within an approximately 0.5-mile radius around the station. Maximum development capacities for residential, commercial, retail, and hotel uses are established, although specific development projects are not proposed at this time. The project also includes amendments to the *Envision San José 2040 General Plan* (2040 General Plan) necessary to implement the DSAP.

The DSAP area is almost entirely within identified Growth Areas of the 2040 General Plan, including the Downtown. The project includes the designation of the Diridon Station Urban Village and modification of the overlapping Growth Area boundaries and capacities. Although the project includes minor amendments to the 2040 General Plan, the proposed development capacity is consistent with, and is a subset of, that anticipated in the 2040 General Plan. Therefore, future growth that would occur under the DSAP was evaluated in the *Envision San José 2040 General Plan* Program Environmental Impact Report (Envision PEIR) at a conceptual level. This document tiers off the Envision PEIR, particularly for the evaluation of cumulative impacts. The DSAP's consistency with the 2040 General Plan is discussed in detail in Section 4.1 *Land Use* of this EIR.

The purpose of the DSAP is to integrate past and present plans into one vision and guide future development in a manner that takes full advantage of the high level of connectivity. The Plan area is divided into three Identity Zones. The Northern Zone is generally north of The Alameda, the Central Zone is the core area centered on Diridon Station, and the Southern Zone is roughly between Park Avenue and Interstate 280. The maximum development levels proposed by the DSAP for each zone are shown in Table S-1 below. The areas shown in the table represent the upper limit of development that could be allowed in each zone. Development cannot exceed the General Plan density ranges or height limits without additional environmental review. The height limits prevent more intense development in most cases, unless smaller housing units (i.e., Single Room Occupancy – SROs) are proposed.

Table S-1: Maximum Development by Zone				
ZONE	**Office/R&D/Light Industrial (sq. ft.)**	**Retail/Restaurant (sq. ft.)**	**Residential (units)**	**Hotel (rooms)**
Northern	3,012,400	81,100	223	0
Central	1,146,000	140,000	0	250
Southern	805,000	203,000	2,365	650
TOTAL	**4,963,400**	**424,100**	**2,588**	**900**

The maximum development levels represent a net increase over existing development assumed to remain in the Plan area, including the existing surface parking lot in the Arena North subarea and the Delmas Park Apartments and Museum Park Apartments in the Park/San Carlos subarea. Approved but not yet built projects that would also remain under build-out conditions include the Whole Foods Market on The Alameda and the Park Avenue Townhomes projects.

Summary of Impacts and Mitigation Measures

The following table includes a summary of the significant impacts discussed within the body of this PEIR and identifies mitigation measures to avoid or reduce those impacts. For a complete description of impacts and mitigation measures, refer to the text of the PEIR. Alternatives to the proposed project and known views of local groups and areas of controversy are also summarized at the end of the table. A complete description of the project and discussion of impacts and proposed mitigation measures can be found in the Sections 2.0 and 4.0 of the PEIR, which follows this summary.

The City's Level of Service (LOS) standard for intersections is LOS D; however, the LOS Policy allows exceptions to this standard within Special Strategy Areas, including Transit Oriented Development Corridors and Transit Station Areas. The Policy allows for "Protected Intersections", which are intersections that have been built to their maximum capacity and/or have been prioritized for other modes of travel (i.e., pedestrian, bicycle, and/or transit). The policy allows for the addition of intersections to the list of Protected Intersections so long as they are located within designated Special Planning Areas and are consistent with the General Plan. The Special Planning Areas include:

- Transit-oriented Development Corridors
- Planned Residential/Community Areas
- Neighborhood Business Districts
- Downtown Gateways

Expansion of these intersections to increase vehicle capacity is infeasible due to physical constraints or because roadway improvements would have an adverse effect on other modes. If a project is found to have a significant impact on operations at a Protected Intersection, the project may be approved by funding off-setting improvements to pedestrian, bicycle, and transit facilities that enhance the capacity of the transportation in the project area. The City's Transportation Impact Policy (also referred to as the Level of Service Policy) is intended to protect pedestrian and bicycle facilities from undue encroachment by automobiles.

The City's General Plan allow accounts for the fact that roadway capacity-enhancing improvement measures can impede a City's ability to encourage infill, preserve community livability, and promote transportation alternatives that do not solely rely on automobile travel. Therefore, the General Plan recognizes that protecting intersections by exempting them from infeasible traffic mitigation requirements allows for improvements to transit, bicycle, and/or pedestrian facilities that can better provide regional benefits.

The project includes adding three intersections to the City's List of Protected Intersections: Park Avenue/Naglee Avenue, The Alameda/Naglee Avenue, and Lincoln Avenue/San Carlos Street as described under TRAN-2 and TRAN-4 in the summary table below. Offsetting improvements will be required for impacts to these intersections. For a full discussion of transportation impacts, please refer to Section 4.2, *Transportation*, of this EIR.

SIGNIFICANT IMPACTS	MITIGATION AND AVOIDANCE MEASURES	Significance After Mitigation
	TRANSPORTATION IMPACTS	
Impact TRAN 1: When compared to existing conditions, build-out of the DSAP would result in a significant impact on 15 directional mixed flow freeway segments and four directional HOV lane freeway segments during at least one peak hour when compared to the existing condition. **[Significant Impact]**	Full mitigation of significant project impacts on freeway segments would require roadway widening to construct additional through lanes, thereby increasing freeway capacity. It is not feasible for the proposed project to bear the responsibility for implementing such extensive transportation system improvements due to constraints in acquisition and cost of right-of-way. In addition, Caltrans or VTA have not developed a freeway widening program to which individual projects can contribute. The DSAP is intended to reduce vehicle travel and congestion in the long-term. In particular, the intensification of development in proximity to Diridon Station would make transit a more viable commute option for people living and working in the Plan area, which would reduce vehicle traffic at a citywide and regional scale. However, it is not possible to know if the strategies proposed by the DSAP would reduce freeway impacts to a less than significant level. **[Significant Unavoidable Impact]**	**SU**
Impact TRAN-2: Build-out of the DSAP would result in significant impacts to the intersections of The Alameda/Naglee Avenue and Park Avenue/Naglee Avenue under Strategy 2000 plus Project Build-out conditions. **[Significant Impact]**	These intersections serve as gateways to Downtown and as important transit, bicycle, and pedestrian corridors. Therefore, the project proposes to add these two intersections to the List of Protected Intersections. As a condition of project approval, the City/future developers will be required to implement offsetting improvements to pedestrian, bicycle, and transit facilities in the vicinity of the existing and proposed protected intersections. The construction of offsetting improvements would be required for impacts at these intersections. **[Significant Unavoidable Impact]**	**SU**
Impact TRAN-3: The proposed project would result in a significant impact on mixed flow lanes of one additional freeway segment under Strategy 2000 plus Project Build-out conditions. **[Significant Impact]**	Freeway widening is not a feasible mitigation measure and it is not possible to know if the strategies proposed by the DSAP would reduce freeway impacts to a less than significant level. Although the DSAP is intended to reduce vehicle travel over the long-term, particularly at a citywide and regional level, it is not possible to know if the	**SU**

SIGNIFICANT IMPACTS	MITIGATION AND AVOIDANCE MEASURES	Significance After Mitigation
	contribution to freeway impacts would be reduced to a less than significant level. **[Significant Unavoidable Impact]**	
Impact TRAN-4: Build-out of the DSAP would make a substantial contribution to significant cumulative impacts at the intersections of Park Avenue/Naglee Avenue, The Alameda/Naglee Avenue, and Lincoln Avenue/San Carlos Street under Cumulative plus Project conditions. **[Significant Cumulative Impact]**	There are no feasible mitigation measures that can be implemented at these intersections that would reduce the identified impacts to a less than significant level. Therefore, the project would add the intersections of Park Avenue/Naglee Avenue, The Alameda/Naglee Avenue, and Lincoln Avenue/San Carlos Street to the City's List of Protected Intersections and offsetting improvements will be required. **[Significant Unavoidable Cumulative Impact]**	**SU**
Impact TRAN-5: The project would make a substantial contribution to significant impacts on transit priority corridors. **[Significant Cumulative Impact]**	Although General Plan policies, DSAP strategies, and planned BRT improvements are intended to reduce traffic congestion and improve transit efficiency, these measures may not reduce the cumulative impact or the DSAP's contribution to a less than significant level. This conclusion is consistent with the analysis in the Envision PEIR. **[Significant Unavoidable Cumulative Impact]**	**SU**
NOISE AND VIBRATION		
Impact NV-1: Build-out of the DSAP would result in a significant unavoidable impact at existing noise-sensitive land uses adjacent to segments of Julian Street, Park Avenue, and San Carlos Street due to substantial increases in traffic noise. Although the Envision PEIR did not identify noise increases at these specific locations, this conclusion is consistent with the analysis in the Envision PEIR, which acknowledged that future development would result in a significant traffic noise impact at noise-sensitive uses throughout the City. **[Significant Impact]**	The City may consider including noise reduction measures at residences along the affected segment of Park Avenue as part of a capitol improvement program into which future developers in the Plan area would contribute. A detailed analysis would be required to identify specific measures to reduce traffic noise levels at affected properties along Park Avenue, although it may not be possible to reduce the traffic noise impacts at existing noise-sensitive receptors along segments of Julian Street, Park Avenue, and San Carlos Street to a less than significant level. **[Significant Unavoidable Impact]**	**SU**

SIGNIFICANT IMPACTS	MITIGATION AND AVOIDANCE MEASURES	Significance After Mitigation
	AIR QUALITY	
Impact AQ-1: Build-out of the DSAP would result in a net increase in ROG and NOx in the Bay area, contributing to existing violations of ozone standards. This conclusion is consistent with the analysis in the Envision PEIR and Strategy 2000 EIR. **[Significant Impact]**	To reduce emissions associated with vehicle travel, future development will be required to implement a transportation demand management (TDM) program, consistent with the Transportation and Parking Management Plan (TPMP) to be prepared for the DSAP. During supplemental review of future projects, the TDM programs will be evaluated for consistency with the DSAP and General Plan policies. All feasible and applicable measures will be required as part of project design or as conditions of approval. Although the DSAP could substantially reduce emissions of regional air pollutants over the long-term, it cannot be determined whether implementation of General Plan policies and proposed measures would reduce the impact to a less than significant level. **[Significant Unavoidable Impact]**	**SU**
Impact AQ-2: Build-out of the DSAP would result in a cumulatively considerable contribution to the significant impact to regional air quality identified in the Envision PEIR. **[Significant Cumulative Impact]**	The DSAP would support the use of transit by intensifying development in proximity to Diridon Station and Downtown. When combined with the planned improvements to the pedestrian, bicycle, and trail networks, the Transportation Strategies proposed by the DSAP would further support the replacement of vehicle trips with walking, biking, and transit trips. Future development will be required to implement a transportation demand management (TDM) program. For these reasons, the DSAP is considered a key strategy for reducing VMT and vehicle trips in the city over the long-term. Although the DSAP is intended to reduce emissions of regional air pollutants over the long-term, it cannot be determined whether implementation of General Plan policies and proposed measures would reduce the project's contribution to the significant cumulative impact to a less than significant level. **[Significant Unavoidable Cumulative Impact]**	**SU**

SIGNIFICANT IMPACTS	MITIGATION AND AVOIDANCE MEASURES	Significance After Mitigation
	CULTURAL RESOURCES	
Impact CUL-1: The DSAP would make a cumulatively considerable contribution to previously identified significant impacts to historic resources. **[Significant Cumulative Impact]**	Removal of individual Structures of Merit would be less than significant when viewed on a project-by-project basis. However, redevelopment of all or most of the properties currently listed on the City's historic resource inventory (HRI) within the Plan area would be considered a significant cumulative impact due to the collective loss of historical structures and destruction of the area's historic fabric. **[Significant Unavoidable Cumulative Impact]**	**SU**
Impact CUL-2: Implementation of the conceptual station expansion plan would not directly affect Diridon Station as an individual resource, but would result in a significant impact to the historic district directly through the potential removal of contributing elements and indirectly through new construction and circulation improvements that affect its setting and character. **[Significant Cumulative Impact]**	For purposes of this PEIR, it is assumed that the following measures will be implemented to reduce impacts to the Diridon Station: • **Secretary of The Interior's Standards and Guidelines:** Consistent with the Preservation Covenant between the Joint Powers Board and the South Bay Historical Railroad Society, any modifications or additions to Diridon Station will be completed in accordance with the Secretary of the Interior's *Standards for the Treatment of Historic Properties*. New construction within the National Register/City Landmark historic district will be required to conform to the Secretary of the Interior's Standards, California Historic Building Code, and other applicable regulations. • **Supplemental Analysis:** During the final design phase of the station expansion, a supplemental analysis will be completed by a professional architectural historian to evaluate the effects on the historic building and district. The analysis will recommend design treatments that would reduce impacts to a less than significant level to the building and minimize impacts to the historic district to the extent feasible. • **Additional Review:** Consistent with the Preservation Covenant, the South Bay Historical Railroad Society will review the final design of the station expansion to ensure the historic character of the station is maintained. The final design will also be reviewed by the California Legislature/SHPO prior to implementation of the station expansion plan.	**SU**

SIGNIFICANT IMPACTS	MITIGATION AND AVOIDANCE MEASURES	Significance After Mitigation
	These measures are intended to complement any measures identified for the HSR and BART projects to reduce or avoid impacts to the historic district of Diridon Station. Additional measures may be required as design of the station is finalized. The California High Speed Rail Authority (CHSRA) will be responsible for evaluating the design-level impacts of the HSR project on historic resources in the subsequent project-level EIR for the San José to Merced segment, taking into account the analysis in this PEIR. Because the station expansion design has not been finalized and the City is not the lead agency for the HSR project, it cannot be determined if the proposed measures listed above will reduce the impact to a less than significant level. Therefore, the impact to the district would be considered significant and unavoidable. **[Significant Unavoidable Cumulative Impact]**	
BIOLOGICAL RESOURCES		
Impact BIO-1: The DSAP would make a cumulatively considerable contribution to a significant increase in nighttime light levels of the Los Gatos Creek corridor. **[Significant Cumulative Impact]**	Adherence to General Plan policies and the design guidelines, setbacks, and lighting controls established in the Riparian Corridor Policy would reduce the magnitude of the cumulative impact. Given the potential increase in light levels, however, the impact would remain significant and unavoidable. **[Significant Unavoidable Cumulative Impact]**	**SU**
GREENHOUSE GAS EMISSIONS		
Impact GHG-1: Build-out of the DSAP would make a considerable contribution to the significant unavoidable cumulative impact to global climate change identified in the Envision PEIR. **[Significant Cumulative Impact]**	Build-out of the DSAP is expected to occur over 25-30 years. Although the DSAP is intended to reduce emissions of regional air pollutants over the long-term, it cannot be determined whether implementation of General Plan policies and proposed measures would reduce greenhouse gas emissions to meet the necessary carbon-efficiency standards. Given the amount of proposed development, the project would make cumulatively considerable contribution to the significant greenhouse gas impact resulting from planned growth in San José as envisioned in the 2040 General Plan. **[Significant Unavoidable Cumulative Impact]**	**SU**

SIGNIFICANT IMPACTS	MITIGATION AND AVOIDANCE MEASURES	Significance After Mitigation
POPULATION AND HOUSING		
Impact PH-1: Future development under the proposed DSAP would make a substantial contribution to the significant unavoidable impact related to the jobs/housing imbalance, as identified in the Envision PEIR. **[Significant Cumulative Impact]**	The main environmental issue associated with a jobs/housing imbalance is increased VMT and the DSAP is a key strategy for reducing VMT; however, because the project will increase jobs over residential units within the City, the DSAP would contribute to the significant unavoidable impact identified in the Envision PEIR. **[Significant Unavoidable Cumulative Impact]**	**SU**

SUMMARY OF ALTERNATIVES

CEQA requires that an EIR identify alternatives to a project as it is proposed. The CEQA Guidelines specify that the EIR should identify alternatives that "will feasibly attain most of the basic objectives of the project but will avoid or substantially lessen any of the significant effects of the project." The purpose of the alternatives section is to determine whether there are alternatives of design, scope, or location that will substantially lessen the significant impacts, even if those alternatives "impede to some degree the attainment of project objectives," or are more costly. [CEQA Guidelines Section 15126.6(b)]

In order to comply with CEQA, it is important to identify alternatives that reduce the significant impacts that are anticipated to occur if the project is implemented and to try to meet as many of the project's objectives as possible. The CEQA Guidelines emphasize a common sense approach. The alternatives should be reasonable, "foster informed decision-making and public participation," and must focus on alternatives that avoid or substantially lessen the significant impacts. The project's objectives are listed in Section 1.4 of this EIR.

As discussed in Section 6.0, *Significant Unavoidable Impacts* of this EIR, the proposed project would result in significant unavoidable impacts related to traffic (freeways, three intersections, and transit priority corridors), noise, air quality, historic resources, biological resources, climate change, and jobs/housing balance. The majority of these impacts are cumulative in nature. The alternative analysis in this EIR focuses on alternatives that would reduce or eliminate these impacts.

Given that the main objective of the project is to establish a land use plan and policy framework to guide future development in a specific area of the City, it would not be feasible to evaluate an alternative location (i.e., in another city or location in San José). The DSAP area is located in Downtown San José and the proposed project has been designed taking into account the surrounding land uses, and its location within the flight path of the airport and proximity to an existing and future rail line. To evaluate another location for such specific development, especially given the recent approval of the 2040 General Plan update, which anticipates growth similar to what is proposed by the DSAP, would not be meaningful for the purposes of informing a decision about the proposed project.

Various assumptions were made for the future condition to evaluate potential alternatives to the project. BART and HSR (either above- or below-ground) are anticipated to be constructed within the DSAP area. Other assumptions include the realignment of Autumn Parkway and improvements to other streets, completion of the Los Gatos Creek Master Plan, and construction of a new park at the existing fire department training yard south of Park Avenue.

Prior to the preparation of the DSAP, an Alternatives Analysis Report (July 2010) was prepared to evaluate three project alternatives (A, B, and C) based on existing conditions in the area and the desired density given the proximity to rail and transit. The three alternatives were the result of numerous community workshops and meetings, given the various future development and constraints in the DSAP and surrounding area. Alternative B is the alternative with the most potential to reduce environmental impacts because it includes significantly less office/R&D square footage when

compared to the proposed project. Although residential uses under this alternative are significantly greater than the proposed project, residential uses result in 30 percent less traffic than jobs-related land uses. For this reason, Design Alternative B was carried forward into this EIR alternatives discussion. The following are evaluated as alternatives to the proposed DSAP:

- No Project Alternative
- Design Alternative
- Reduced Scale Alternative
- Land Use Policy Alternatives

NO PROJECT ALTERNATIVE

The purpose of this alternative is to identify what development and associated environmental impacts would occur if the City does not adopt the proposed DSAP; in other words, how the area would continue to grow and evolve under the current 2040 General Plan's goals, policies, and Land Use Transportation Diagram. Under the No Project Alternative, the project area would be developed consistent with the 2040 General Plan and Downtown Strategy Plan.

While there are some locations where General Plan land use designations would be changed, including areas along West San Carlos Street, the amount of development proposed under the DSAP is not significantly different than that approved as part of the 2040 General Plan. The job capacity and planned housing yields with the approved 2040 General Plan and the proposed DSAP are the same; therefore, development intensity and the particular properties to be affected would be similar.

Comparison of Environmental Impacts: The No Project Alternative would potentially require the removal of historic structures, similar to the proposed project. This alternative would result in similar impacts to biological resources given the project location and amount of development proposed are very similar. Impacts to the riparian corridor would be similar including lighting. The implementation of the DSAP would result in traffic impacts similar to what would be expected under the 2040 General Plan because the amount of development would be comparable. Significant unavoidable traffic impacts associated with freeway operations, intersections, and transit priority corridors would still occur under the No Project Alternative. The No Project Alternative would not reduce traffic generated noise impacts to segments of Julian Street, Park Avenue, and San Carlos Street. The No Project Alternative would not result in a decrease in ROG, NOx, or regional air quality when compared to the proposed project because development levels would be almost identical. Build-out of the 2040 General Plan land uses within the DSAP area would generate greenhouse gas emissions similar to the proposed project, as development intensities would be comparable. The land uses proposed for the DSAP area as part of this project are very similar to what would be allowed under the 2040 General Plan, and therefore, the No Project Alternative would not reduce the project's contribution towards the significant unavoidable cumulative population and housing impact.

Feasibility of No Project Alternative: The No Project Alternative is feasible from the standpoint that no changes to the General Plan would be required to implement the DSAP and a similar amount of development would occur within the DSAP area. That development, however, would not reflect the DSAP design guidelines prepared to take into account the intensification of development to

accommodate future transit opportunities in the DSAP area, while emphasizing pedestrian and bicycle access and connectivity.

Relationship to Project Objectives: While the No Project Alternative would result in a similar amount of residential uses and jobs in the DSAP, the 2040 General Plan does not provide the amount of detail required to provide a regional destination with a mix of land uses and sufficient density to support existing and planned transit infrastructure. Urban design standards were not developed as part of the 2040 General Plan to promote walkable, liveable, and business supportive environments in the DSAP area. Because of the lack of detail in the 2040 General Plan, the underlying purpose of transforming the Diridon Station area into a regional, high active, lively pedestrian and bicycle friendly place to live and work may not be realized. For these reasons, this Alternative would not fully meet the basic project objectives of the City of San José for the DSAP area.

DESIGN ALTERNATIVE

Alternative B is the design alternative that has the greatest potential to reduce the impacts of the DSAP as described in this EIR. The Design Alternative establishes a mix of vibrant uses and districts with a high-intensity, entertainment oriented core providing a link between the Ballpark and the Arena. Residential uses are primarily located east and west of the core along West San Carlos Street, with freeway-oriented retail located in the south. This alternative includes a freestanding high speed rail building (assuming a below-grade alignment) between Cahill and Montgomery Streets. The historic depot would continue to be used for commuter rail services. This Design Alternative is compared to the proposed project in Table S-2, below.

Comparison of Environmental Impacts: The Design Alternative includes development throughout the DSAP area and therefore, would potentially require the removal of historic structures, similar to the proposed project. The Design Alternative would result in similar impacts to biological resources given the project location and amount of development proposed are very similar. Impacts to the riparian corridor would be similar, including lighting. Some traffic impacts would be reduced, however, it would be unlikely that they would be reduced to a less than significant level. More residential units would be affected by future traffic generated noise with this alternative.

Implementation of the Design Alternative would not result in a significant decrease in ROG, NOx, or regional air quality when compared to the proposed project. Build-out of the 2040 General Plan land uses within the DSAP area would generate greenhouse gas emissions similar to the Design Alternative and the proposed project, as development intensities would be comparable. The Design Alternative would result in fewer jobs than the proposed project, thereby resulting in a reduction in VMT when compared to the proposed project. However, future development in the DSAP represents a small proportion of overall growth in the City. For this reason, it is estimated that the Design Alternative could still result in a significant contribution towards this cumulative impact.

Table S-2: Conceptual Land Use Alternatives		
Features & Land Uses	**Proposed DSAP**	**Design Alternative**
Description	**Mix of Residential, Commerical, Employment, and Entertainment** with neighborhood squares, community parks, and green fingers	**Sports & Entertainment** with green squares
North, Central, and South Districts	**N**: Innovation Zone **C**: Commerce and Entertainment Zone **S**: Neighborhoods Zone	**N**: R&D/Comm. & residential NW **C**: Sport/Rest/Retail **S**: Neighborhoods & Commercial
Ballpark	Ballpark	Ballpark
Office/R&D	4.96 million sf in the North, Central, & Southern Zones	1.15 million sf in the North & Central Zone
Residential	2,588 dwellings	4,000 dwellings
Hotels	900 rooms	600 rooms
Retail/Restaurant	424,000 sf Primarily within Central Zone	400,000 sf Neighborhood, sports/entertainment in Central District
Notes: All areas and counts for the conceptual land use alternatives are approximate quantities for each land use. All alternatives and the proposed project have a parking structure north of the San José Arena area.		

Feasibility of Design Alternative: The Design Alternative is feasible from the standpoint that the land uses could be implemented within the DSAP area. This alternative would result in additional residential and less office/R&D when compared to the DSAP, which could affect the City's jobs to housing ratio, inconsistent with the 2040 General Plan.

Relationship to Project Objectives: The Design Alternative would provide a variety of commercial and mixed use development, and create highly active and lively pedestrian and bicycle friendly environments within the Downtown area. However, the additional development levels of office/R&D included in the proposed project would increase the extent to which the objectives of the project are met when compared to the Design Alternative. Additional residential units could affect the City's jobs to housing balance as described in the Envision PEIR.

REDUCED SCALE ALTERNATIVE

A Reduced Scale Alternative that proposes half of the development in the DSAP (approximately 2.5 million square feet of office/R&D uses, 210,000 square feet of retail/restaurant, 1,300 residential units, and 450 hotel rooms) would not reduce impacts to the intersections outside of the Downtown Core to a less than significant level. This alternative could be developed in such a way as to spread the uses over the DSAP area, thus resulting in less intensive development or could be as intense, but not utilize as much as land as the DSAP. This could reduce additional impacts as described below. The Reduced Scale Alternative would include a freestanding high speed rail building (assuming a below-grade alignment) between Cahill and Montgomery Streets. The historic depot would continue to be used for commuter rail services, including high speed rail.

Comparison of Environmental Impacts: The Reduced Scale Alternative would include development throughout the DSAP area and therefore, would potentially require the removal of historic structures, similar to the proposed project. The Reduced Scale Alternative could result in similar impacts to biological resources given the project location; however, some properties along Los Gatos Creek could be avoided to reduce lighting impacts. This would avoid the cumulatively considerable contribution towards this cumulative impact. Some traffic impacts would be reduced, however, it is unlikely that they would be reduced to a less than significant level. Development under the Reduced Scale Alternative is expected to result in less traffic and could therefore, reduce traffic generated noise although perhaps not to a less than significant level. Implementation of the Reduced Scale Alternative would reduce the amount of ROG and NOx generated and could reduce impacts to regional air quality when compared to the proposed project. The Reduced Scale Alternative would result in the generation of fewer greenhouse gas emissions when compared to the DSAP project, as development intensities would be substantially less. Because this is a cumulative condition, the Reduced Scale Alternative would contribute towards the significant greenhouse gas impacts identified in the Envision PEIR, although not to the same extent. The Reduced Scale Alternative would result in fewer jobs and residents than the proposed project, thereby resulting in a reduction in VMT when compared to the proposed project. However, future development in the DSAP represents a small proportion of overall growth in the City. For this reason, it is estimated that the Reduced Scale Alternative could still result in a significant contribution towards this cumulative impact.

Feasibility of Reduced Scale Alternative: The Reduced Scale Alternative is feasible from the standpoint that the land uses could be implemented within the DSAP area. This alternative would result in less residential and office/R&D uses when compared to the DSAP, which could affect the City's jobs to housing ratio, inconsistent with the 2040 General Plan.

Relationship to Project Objectives: The Reduced Scale Alternative would not contribute to balancing the jobs to housing ratio to the same extent as the DSAP. It also would not provide the same internalization of trips anticipated by the proposed project, which supports transit ridership and economic development while reducing overall vehicular traffic and air quality emissions. The Reduced Scale Alternative would provide a variety of commercial and mixed use development and create highly active and lively pedestrian and bicycle friendly environments within the Downtown area. However, the Reduced Alternative would reduce the extent to which the objectives of the project are met. Urban design standards could still be implemented to promote walkable, livable, and business supportive environments within the Diridon Station Area. The Reduced Scale Alternative

would not act as a catalyst for similar developments in the surrounding area to the extent that the proposed project would. Fewer jobs and residential units could affect the City's jobs to housing balance as described in the Envision PEIR.

LAND USE POLICY ALTERNATIVES

There are two land use designation alternatives that are slight variations to the proposed project. The traffic report for the project included an additional 155 residential units that were ultimately not distributed within the DSAP Preferred Plan. It is anticipated that these units would be placed on one or both of the alternatives below, if either or both are pursued. If more units are ultimately proposed, subsequent environmental review may be required.

Alternative for block bound by Julian Street, Stockton Avenue, The Alameda, and the Union Pacific Railroad

This alternative would designate the properties between Julian Street, Stockton Avenue, The Alameda, and the Union Pacific Railroad tracks with an Urban Village Land Use Designation. To further the City's Envision San Jose 2040 goal of transforming San Jose from the bedroom community for Silicon Valley to a regional employment center for the Bay Area, the Urban Village Land Use designation, as applied to the properties in this alternative, would have a minimum commercial FAR of 0.5 for projects containing residential uses. This designation would therefore only support residential development in a mixed-use format that includes commercial uses or square footage that is equal to or greater than a 0.5 FAR for a given project. The commercial component of a project would need to be built simultaneously or prior to the construction of the residential component.

In addition to furthering the employment goals of the Envision San Jose 2040 General Plan, locating employment or commercial uses in proximity to the Diridon Station would be more supportive of the major transit investments that have, and are planned to be made at Diridon; employment uses adjacent to transit generates more ridership on the adjacent transit system than does locating housing, of a comparable intensity, adjacent to that system.

Alternative for the Whole Foods Site and Surrounding Properties

This alternative would designate the properties on the west side of Stockton Avenue from Julian Street to The Alameda with an *Urban Village* land use designation. Included in this alternative is the property that contains the Whole Foods project currently under construction and the adjacent properties that contain the recently approved mixed-use project at 785 The Alameda. As with the alternative above, the *Urban Village* General Plan land use designation applied to the properties in this alternative would include a minimum commercial FAR of 0.5 for all projects including residential uses. The commercial component of a project would need to be built simultaneously or prior to the construction of the residential component. This designation would allow higher residential densities than the Urban Residential designation in the proposed DSAP. New development adjacent to The Alameda and the intersection of The Alameda and Stockton Avenue would be required to include active and functional retail space fronting the street. Both the Whole

Foods project and the approved mixed-use project at 785 The Alameda are consistent with this land use.

Comparison of Environmental Impacts: The Land Use Policy Alternatives would potentially require the removal of historic structures, similar to the proposed project. Impacts would not be reduced with implementation of this alternative. These alternatives would result in similar impacts to biological resources given they would ultimately be developed as part of the DSAP, regardless of the ultimate uses. Development of residential uses on the Land Use Policy Alternatives properties would not significantly change the amount of traffic generated by the DSAP project. It is estimated that impacts to intersections, freeway segments, and transit priority corridors would still occur under the Land Use Policy Alternatives. The Whole Foods block would not be significantly affected by additional noise when compared to the DSAP. Additional noise impacts would occur that would affect future residents on the east side of Stockton Avenue when compared with the DSAP. This noise would be generated by adjacent rail and Transit Employment Center uses. Implementation of the Land Use Policy Alternatives would not result in a decrease in ROG, NOx, or regional air quality when compared to the proposed project because the alternatives and proposed project would result in a similar amount of development. Implementation of the Land Use Policy Alternatives would generate construction-related greenhouse gas emissions similar to the proposed project, as development intensities would be comparable. Traffic-generated GHG emissions would be similar. The Land Use Policy Alternatives would not reduce the project's contribution towards the significant unavoidable cumulative population and housing impact identified in this EIR and the Envision PEIR.

Feasibility of Land Use Policy Alternatives: The Land Use Policy Alternatives are feasible alternatives in that the development allowed by the *Urban Village* designation is consistent with and similar to the uses proposed for other properties in the DSAP. Additional studies and mitigation measures may be required due to the presence of existing rail adjacent to the site on the east side of Stockton Avenue and the planning of additional rail lines near that site. Although implementation of the mitigation measures included in this EIR as well as General Plan policies and other regulations would reduce some impacts to the new residential uses on the property bounded by Julian Street, Stockton Avenue, The Alameda, and the Union Pacific Railroad to a less than significant level, additional environmental review may be required.

Relationship to Project Objectives: The Land Use Policy Alternatives would result in the development of additional residential units within the DSAP while at the same time reducing the amount of *Transit Employment Center* lands in the northern Innovation Zone. These alternatives could be considered to meet most if not all of the project objectives because the development of additional residential uses would be consistent with the project goals of creating a walkable, liveable, and business supportive environment in the DSAP area. For this reason, this alternative would meet the basic project objectives of the City of San José for the DSAP area.

ENVIRONMENTALLY SUPERIOR ALTERNATIVE

The CEQA Guidelines specify that an EIR must identify the environmentally superior alternative among those discussed. If the environmentally superior alternative is the "No Project" alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives.

The No Project Alternative would result in implementation of General Plan land use designations which are not significantly different than the land uses proposed in the DSAP. In other words, if the DSAP is not approved, the project area will eventually develop according to the General Plan which will also result in high density development in the DSAP area.

Two alternatives would reduce the environmental impacts of the DSAP: the Design Alternative and the Reduced Scale Alternative. Traffic and traffic-generated noise and air quality impacts could be reduced with the implementation of either of these alternatives because fewer residential units and less office/R&D and commercial uses would be developed. While impacts of the Reduced Scale Alternative to cultural and biological resources could be reduced if fewer properties are developed, the Design Alternative would not reduce these impacts because the same DSAP properties would be developed. Greenhouse gas emissions and impacts to population would also still occur with the Design and Reduced Scale Alternatives although not to the extent expected by the DSAP. For these reasons, the Reduced Scale Alternative, which would result in less development overall than the Design Alternative, is considered to be the environmentally superior alternative. The Reduced Scale Alternative would reduce impacts overall when compared to the DSAP project, although most likely not to a less than significant level. This is primarily due to the existing deficiencies of intersections outside the Downtown Core and poor operation of freeway segments in the Downtown area.

While the Reduced Scale Alternative could meet the basic project objectives of developing a land use plan and policy framework to guide future development toward land uses that support transit ridership and economic development and create a world-class destination. It could also improve pedestrian, bicycle, motorized, and transit connectivity between the station site and existing adjacent commercial and residential areas. However, none of these objectives would be met to the same extent as the proposed project.

KNOWN AREAS OF CONTROVERSY

Pursuant to Section 15123(b)(2) of the state CEQA Guidelines, an EIR shall identify areas of controversy known to the lead agency including issues raised by agencies and the public. The City has made extensive efforts to engage members of the business and development community in the planning process, as well as residents within the immediate area and surrounding long-established neighborhoods. The Diridon Station Good Neighbor Committee was formed to provide a forum to work collaboratively in addressing the opportunities and constraints that may arise from developments in the Diridon Area. The Notice of Preparation (NOP) for the DSAP EIR was circulated starting on October 20, 2011. The public scoping meeting was held on November 2nd, 2011.

The NOP and responses to the NOP are included in Appendix A of this document. The key issues raised include:

- Extension of the scoping process.
- Traffic impacts along local streets and to surrounding freeways.
- Pedestrian accommodations and access to transit.
- Noise impacts to adjacent residences.
- Visual compatibility to surrounding land uses.

- Preservation and expansion of biological resources along Los Gatos Creek and Los Gatos Creek Trail.
- Safety impacts both to airplanes and people and structures on the ground from the lack of One Engine Inoperable height restrictions.

SECTION 1.0 INTRODUCTION, BACKGROUND, AND PROJECT OBJECTIVES

1.1 INTRODUCTION

This Program Environmental Impact Report (PEIR) has been prepared in accordance with the requirements of the California Environmental Quality Act (CEQA) and the City of San José. The purpose of the PEIR is to inform the public and various governmental agencies of the environmental effects of the proposed project. The PEIR includes descriptions of the physical environment in the project area as those conditions existed at the time the Notice of Preparation (NOP) for the DSAP PEIR was circulated (September 12, 2011 to November 10, 2011). The PEIR evaluates the potential for development proposed as part of the DSAP to result in significant environmental effects; that is, exceeding stated levels or "thresholds" of significance. Measures included in the project to minimize the significant environmental effects are also described in the discussion of environmental impacts, per CEQA Guidelines Section 15126.

The proposed project is the adoption of the *Diridon Station Area Plan* (DSAP), which establishes a vision for Diridon Station and the surrounding area in response to the planned extension of Bay Area Rapid Transit (BART) and High Speed Rail (HSR) service to San José. Diridon Station is located at the western edge of Downtown San José, adjacent to the SAP Center (referred to as the "San José Arena") and the proposed major league baseball stadium. The DSAP includes a conceptual plan for expansion of the existing transit station to accommodate BART and HSR service.[1] The DSAP also contains a Land Use Diagram, Transportation Improvement Strategies, and Design Guidelines to encourage appropriate transit-oriented redevelopment within an approximately 0.5-mile radius around the station. Maximum development capacities for residential, commercial, retail, and hotel uses are established, although specific development projects are not proposed at this time. The project also includes amendments to the *Envision San José 2040 General Plan* necessary to implement the DSAP.

DSAP is not a Specific Plan or Redevelopment Plan as defined by State law, nor an Area Development Policy as defined by the City for transportation planning purposes. Rather, the Diridon Station Area would be designated as an Urban Village in the *Envision San José 2040 General Plan* (VT 72). The "area plan" includes the implementing strategies and actions to guide redevelopment of the Diridon Station Area Urban Village.

The proposed DSAP is described further in Section 2.0 *Description of the Proposed Project* and is available for review at: http://www.sanjoseca.gov/planning/diridon/Diridon_Station_Area_Plan.asp. All other documents referenced in this PEIR are available for review at the City of San José Department of Planning, Building, and Code Enforcement, 200 E. Santa Clara Street, San José, CA.

The NOP and responses to the NOP are provided in Appendix A of this PEIR.

[1] Expansion of the station was part of the environmental review for the BART and HSR projects. This EIR only describes the overall conceptual plan developed as part of the DSAP design process.

1.1.1 Project Location

The boundary of the Diridon Station Area Plan ("Plan area") encompasses approximately 250 acres in and adjacent to Downtown San José, west of State Route 87. As shown on Figures 1-1 and 1-2, the Plan area is generally bounded by Lenzen Avenue and the UPRR tracks to the north, Interstate 280 to the south, the Guadalupe River and Delmas Avenue to the east, and Sunol Avenue and the Diridon Station commuter rail tracks to the west.

1.1.2 Program-Level Environmental Review

According to Section 15168 of the CEQA Guidelines, a Program EIR addresses a series of actions that can be characterized as one large project and will be carried out as individual activities under the same authorizing statutory and regulatory authority and have generally similar environmental effects which can be mitigated in similar ways. Program EIRs allow for a more exhaustive consideration of effects, cumulative impacts, and alternatives than would be practical for a series of individual project-level EIRs. A Program EIR also allows lead agencies to consider broad policy alternatives and program-wide mitigation measures to deal with basic environmental issues and cumulative effects through the use of "tiering". Tiering refers to using the analysis of general matters contained in a broader EIR in later environmental review documents prepared for projects with a narrower scope or more limited geographic scale (CEQA Guidelines, Section 15152). To use the tiering concept, the later EIR incorporates by reference the general discussions from the broader EIR and concentrates on the issues specific to the later project and effects that were not identified in the prior EIR.

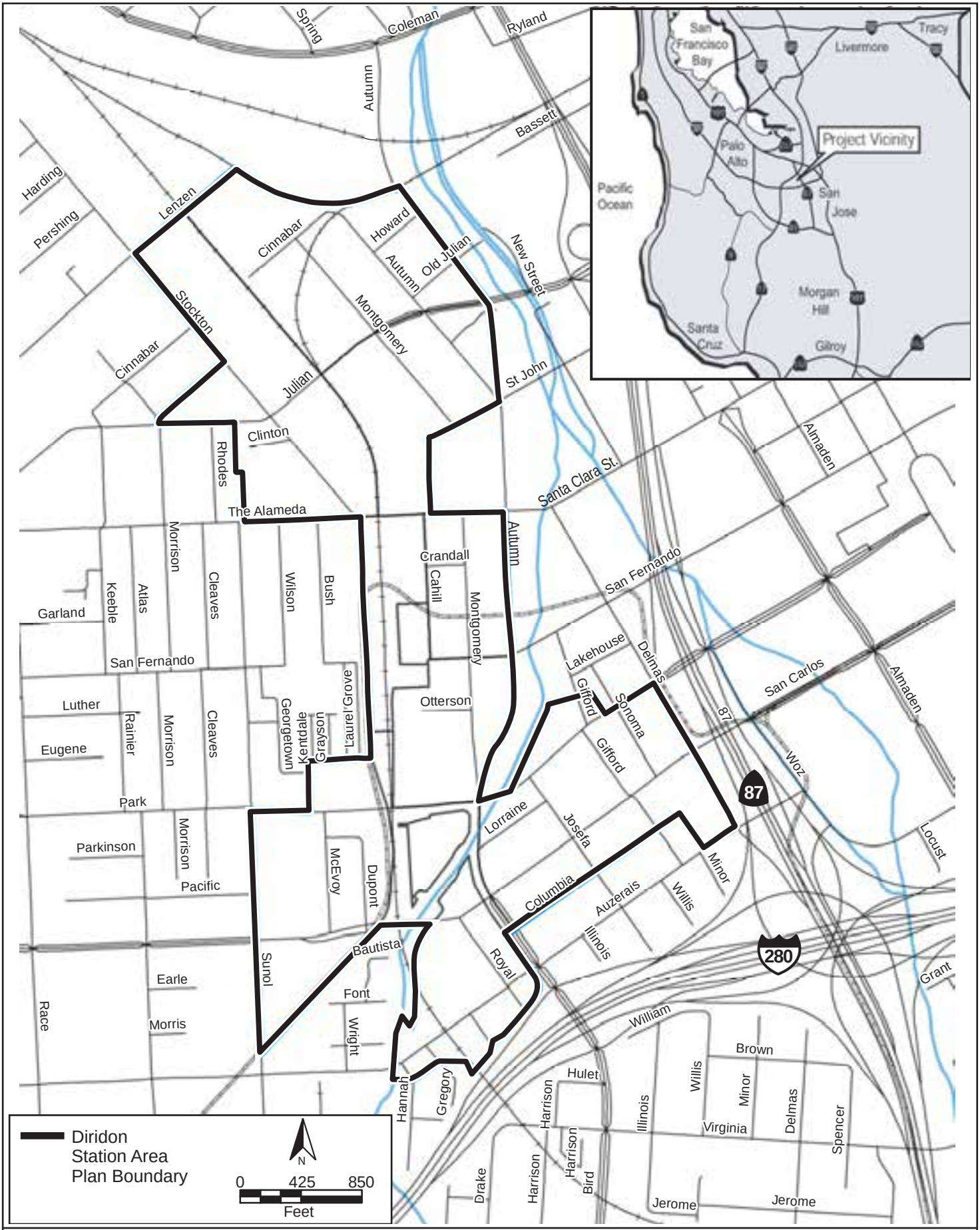
As described below, this EIR tiers from two previously prepared documents and is intended to provide program-level review for future actions under the DSAP. Project-level environmental review for individual projects under the DSAP would then tier from this PEIR.

1.1.2.1 *San José Downtown Strategy 2000*

In 2005, the City of San José approved the *San José Downtown Strategy 2000 Project* ("Strategy 2000") and associated Program EIR ("Strategy EIR"). The Downtown Strategy was prepared to guide development and redevelopment in the greater downtown area based on four guiding principles: 1) make downtown a memorable urban place to live, work, shop, and play; 2) promote the identity of downtown as the capitol of Silicon Valley; 3) create a walkable, pedestrian-friendly downtown; and 4) promote and prioritize development that serves the needs of the entire city and valley. Strategy 2000 provided the following development capacity within the expanded boundaries of the Downtown Core:[2]

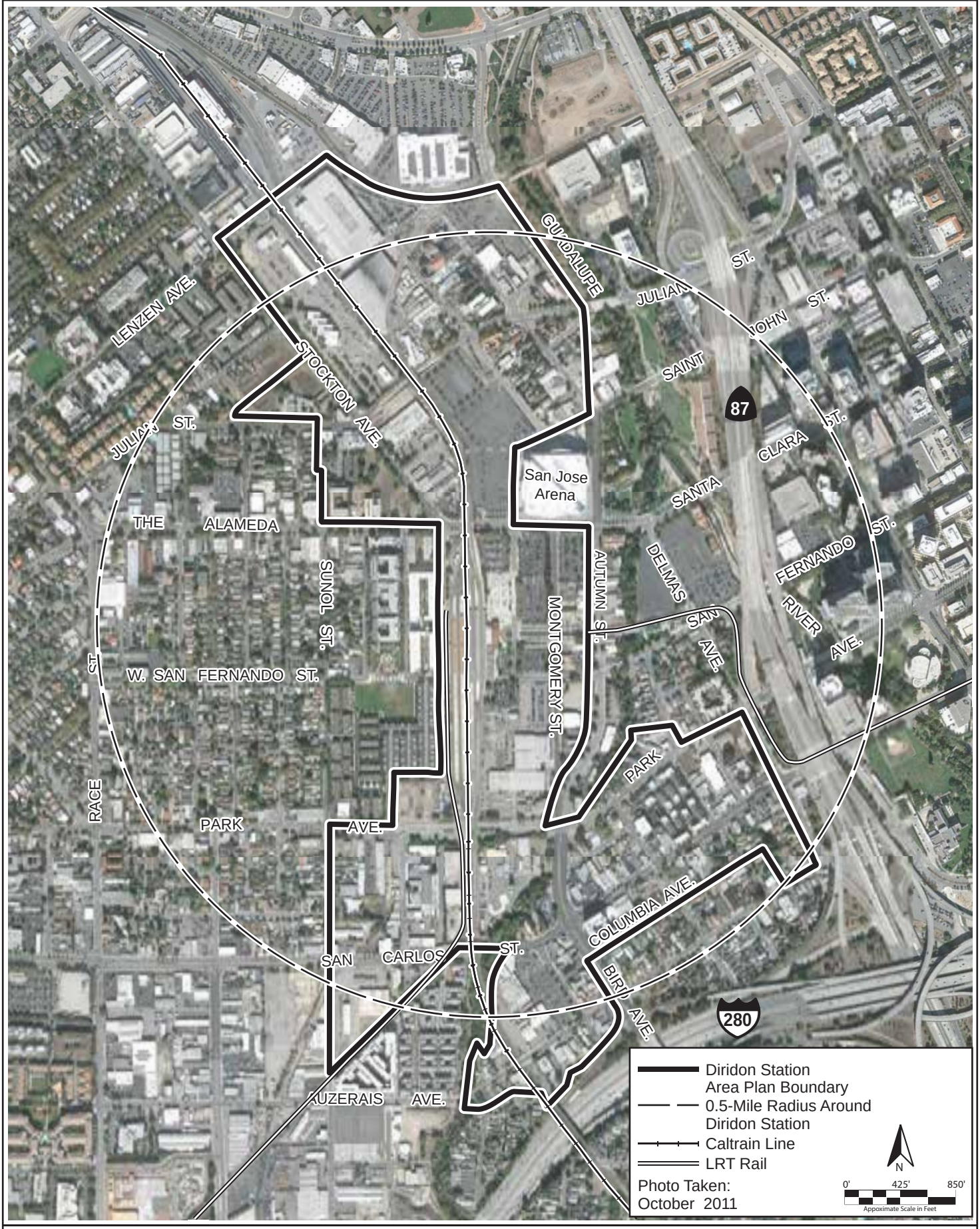
- 8,000,000 to 10,000,000 square feet of office space
- 8,000 to 10,000 dwelling units
- 900,000 to 1,200,000 square feet of retail space
- 2,000 to 2,500 hotel guest rooms

[2] The Downtown Core is bounded by Julian Street, North 4th Street, East St. John Street, 7th Street, East San Fernando Street, South 4th Street, Interstate 280, the Union Pacific Railroad line, Stockton Avenue, Taylor Street, and Coleman Avenue.



VICINITY MAP

FIGURE 1-1



AERIAL OF PLAN AREA

FIGURE 1-2

The majority of the Plan area is within the Downtown Core. Strategy 2000 recommends long-term expansion of the downtown into the Diridon/Arena area through the development of high- and mid-rise office and residential uses with ground floor commercial and entertainment. Given that much of the development proposed under the DSAP was previously evaluated in the Strategy 2000 EIR, this document tiers off the Strategy 2000 EIR to the extent possible.

1.1.2.2 *Envision San José 2040 General Plan*

In 2011, the City adopted *Envision San José 2040 General Plan* ("2040 General Plan"), which establishes a vision for future population and economic growth and the provision of municipal services for the City of San José. The 2040 General Plan provides capacity for the development of up to 470,000 new jobs and 120,000 new dwelling units, primarily within identified Growth Areas. The 2040 General Plan assumes roughly the same level of development in the Downtown Core as was anticipated in Strategy 2000.[3]

The City prepared a Program Environmental Impact Report ("Envision PEIR") for the 2040 General Plan to analyze the environmental effects of the planned growth and identify program-level mitigation measures (policies and actions) to reduce and avoid those impacts. The City certified the Envision PEIR on September 28, 2011 and adopted the 2040 General Plan on November 1, 2011.

During preparation of the Envision PEIR, the scope of the DSAP was known only at a conceptual level. The City's Planning staff has since completed the Draft DSAP. As shown on Figure 1-3, the Plan area is almost entirely within identified Growth Areas, including the Downtown. The project includes the designation of the Diridon Station Urban Village and modification of the overlapping Growth Area boundaries and capacities. Although the project includes minor amendments to the 2040 General Plan, the proposed development capacity is consistent with, and is a subset of, that anticipated in the 2040 General Plan. Therefore, future growth that would occur under the DSAP was evaluated in the Envision PEIR at a conceptual level. This document tiers off the Envision PEIR, particularly for the evaluation of cumulative impacts. The DSAP's consistency with the 2040 General Plan is discussed in detail in Section 4.1 *Land Use* of this EIR.[4]

1.1.2.3 *DSAP Program Analysis*

The Envision PEIR and Strategy 2000 EIR address growth over a larger area than is covered by the DSAP; therefore, this PEIR provides a more focused evaluation of area-specific impacts. Like the Envision PEIR and Strategy 2000 EIR, this document is also a Program EIR because it is being prepared to address a series of actions that can be characterized as one large project. The subsequent environmental review of future activities proposed under the DSAP will tier off this PEIR.

As described further in Section 2.5 *Uses of the EIR*, this PEIR is also intended to provide project-level CEQA clearance for certain traffic-related impacts. Supplemental analyses will be needed when there are circumstances unique to a specific project site that have not been analyzed in detail in this EIR (e.g., historic resources, hazardous materials, etc.). Future projects under the DSAP will be

[3] The 2040 General Plan provides capacity for 360 more dwelling units in the Downtown Core, over Strategy 2000.
[4] The Envision PEIR is available for review at San José City Hall, 3rd Floor, 200 East Santa Clara Street, San José, or at: http://www.sanjoseca.gov/planning/eir/EIR.asp.

examined in light of this PEIR to determine the appropriate level of subsequent environmental review and what, if any, additional analysis will be needed.

1.2 PROJECT BACKGROUND

The Diridon Station Transit Center is served by Caltrain, Amtrak, freight services, Altamont Commuter Express (ACE), Santa Clara Valley Transportation Authority (VTA), and other bus operators. The Peninsula Corridor Joint Powers Board (PCJPB) manages Caltrain and owns Diridon Station.

The Diridon Station Area has been the subject of multiple planning efforts over the years, including the previously approved *San José Downtown Strategy 2000 Project* (described above), *Diridon/Arena Strategic Development Plan*, *Midtown Specific Plan*, *Julian-Stockton Redevelopment Plan*, and *Delmas Park Neighborhood Improvement Plan*. These plans are described further in Section 4.1 *Land Use*.

1.2.1 Future Projects

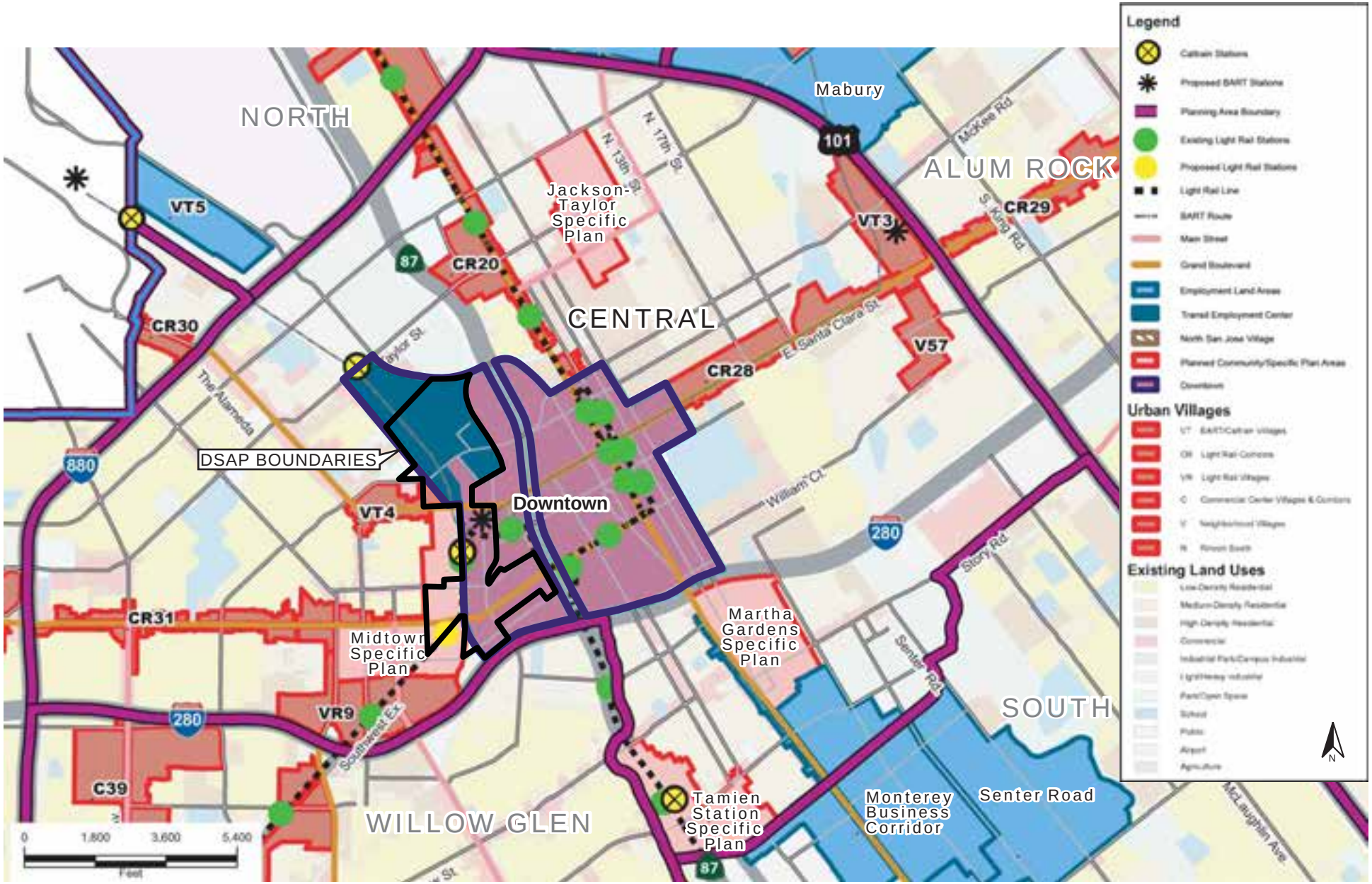
In addition to area-wide plans, multiple development and transportation projects have been approved or planned for in the Plan Area. The DSAP assumes completion of these projects and has been designed to accommodate and support them. As described below, the future projects have already been evaluated in previous environmental documents. The locations of the projects are shown on Figure 1-4.

1.2.1.1 *Baseball Stadium*

The City of San José is currently working to facilitate the relocation of the Oakland Athletics major league baseball team to San José, as proposed by the team's ownership. The City has conceptually designed and evaluated a new 32,000- to 36,000-seat baseball stadium on 15 acres at the northwest corner of Park Avenue and Autumn Parkway, just south of Diridon Station. Each season, the stadium would host approximately 80 home games from March through September. Most games would be held weekdays at 7:05 PM or on the weekends at 1:05 PM or 7:05 PM. The stadium could also host post-season games, exhibition games, and non-baseball events such as music concerts or civic gatherings.[5]

A Supplemental EIR was certified for construction and operation of the baseball stadium in 2010.[6] Although the baseball stadium has already undergone separate environmental review, Major League Baseball has not yet approved the territorial adjustment to allow the move by the Athletics and the City of San José has not approved the project.

[5] Approximately 15-20 non-baseball events would be held throughout the year.
[6] City of San José. *Baseball Stadium in the Diridon/Arena Area (Modified Project) Supplemental EIR.* 2010.



2040 GENERAL PLAN GROWTH AREAS DIAGRAM - CENTRAL/DOWNTOWN PLANNING AREA FIGURE 1-3

PLANNED PROJECTS IN THE DSAP AREA (REVISED) FIGURE 1-4

1.2.1.2 *Transit Projects*

California High Speed Rail

The California High Speed Rail Authority (CHSRA) is planning for the development of a statewide high speed rail (HSR) system, linking San Francisco and Los Angeles.[7] The HSR project includes construction of a new passenger terminal north of the existing Diridon Station building. Based on current plans, the alignment through San José would run along an elevated structure, rising above Interstate 280 and State Route 87 south of the station.[8] For this reason, the proposed DSAP assumes construction of the aboveground alignment because this option has the potential to affect proposed land uses to a greater extent than any below ground option (in terms of aesthetics, noise, land use compatibility, etc.). The conceptual station expansion plan in the proposed DSAP is intended to guide the design of the new station. The conceptual design can be modified to accommodate an underground HSR alignment should that become the adopted alignment alternative. It is important to note that City policy has called for the full environmental analysis of both the aerial and underground HSR alignment through the City of San José.

The CHSRA adopted a Statewide Program EIR in 2005, followed by a Program EIR for the Bay Area to Central Valley segment in 2008 (revised in 2010 and 2012).[9] Project-level environmental review is currently underway for the two sections of the Bay Area to Central Valley alignment, including the San Francisco to San José and San José to Merced segments. The alignment for future HSR service within the Diridon Station area and the station design will be cleared under the San José to Merced EIR, which is currently scheduled for public release in 2016.[10] Completion of the HSR to Diridon Station is anticipated in 2026.

~~The Peninsula Joint Powers Board, in cooperation with CHSRA, has also begun the process of fully electrifying the Caltrain Corridor extending from the Transbay Transit Center in Downtown San Francisco to the Tamien Caltrain Station in San José. The environmental clearance process for the electrification of the Peninsula Corridor has begun and is expected to be completed by Fall 2014, with construction complete and service activated by late 2019.~~

[7] Details about the California High Speed Rail project, including the proposed route, can be found at: ~~http://www.cahighspeedrail.ca.gov/home.aspx~~ http://www.hsr.ca.gov.

[8] ~~The CHSRA is currently preparing a Phased Implementation Analysis for construction of HSR infrastructure between San Francisco and San José. During the initial phase of operation, the HSR trains would share the existing Caltrain tracks. Source: California High-Speed Rail Authority. "San Francisco to San Jose Phased Implementation Fact Sheet." April 2011. Available at: http://www.cahighspeedrail.ca.gov/San_Francisco_-_San_Jose.aspx.~~ Along the San Francisco Bay Peninsula, the CHSRA will operate a "blended" operation with Caltrain, for which the CHSRA will be a tenant on existing Caltrain tracks. "Caltrain/California HSR Blended Operations Analysis." March 2012. Available at: http://www.caltrain.com/Assets/Caltrain+Modernization+Program/Documents/Final-Caltrain-California+HSR+Blended+Operations+Analysis.pdf.

[9] California High-Speed Rail Authority (CHSRA) and Federal Railroad Administration (FRA). *Final Program Environmental Impact Report/ Environmental Impact Statement for the Proposed California High-Speed Train System* (August 2005) and *Bay Area to Central Valley High-Speed Train Program Environmental Impact Report/ Environmental Impact Statement* (May 2008). The CHSRA and FRA also prepared revised EIRs in 2010 and 2012 in response to a court ruling. The issues addressed in the revised EIRs do not affect the HSR segment through the DSAP area. All HSR reports are available at: ~~http://www.cahighspeedrail.ca.gov/library.aspx~~ http://www.hsr.ca.gov/Programs/Environmental_Planning/index.html.

[10] Ben Tripousis. Northern California Regional Director, California High Speed Rail Authority. Email communication. August 20, 2013.

BART

The Bay Area Rapid Transit (BART) system is planned to extend 16 miles from the future terminus at the Warm Springs Station in Fremont to Santa Clara via Downtown San José. The route will be fully grade-separated including a subway through Downtown San José. There will be an underground BART Station south of Santa Clara Street. The Fremont to San José BART extension has undergone separate environmental review.[11] Construction on the extension to Berryessa began in April 2012 and is projected to begin operation in 2018.[12] Construction of the six-mile link from Berryessa to the Santa Clara station is "on hold" until construction funding is secured.

Caltrain Electrification

Caltrain plans to convert its mainline between San Francisco and San José from the current diesel-electric locomotive power to fully electric power. The primary purposes of the Caltrain Electrification Program are to improve train performance, reduce noise, improve regional air quality, and modernize Caltrain. Because electric trains can accelerate and decelerate faster than diesel trains, the program allows operation of additional peak hour trains ~~and provides travel time reductions~~. ~~Environmental review was completed for the Caltrain Electrification Project in April 2010.~~ Caltrain is the lead agency for the project and previously completed an Environmental Impact Report, but decided to prepare a new EIR for corridor electrification to update existing conditions, the environmental analysis, and the cumulative analysis. The updated EIR was released on February 28, 2014. Caltrain currently anticipates that construction will be complete in ~~2015~~ 2019.

Light Rail Transit

The Winchester-Mountain View LRT line (LRT) runs through the Plan area, with a stop at Diridon Station. The Santa Clara Valley Transportation Authority (VTA) is planning to construct a station just south of West San Carlos Street in the Plan area, pending funding.[13] This station was evaluated in the *Vasona Corridor Light Rail Transit Project Environmental Impact Statement/Report* (EIR/EIS) prepared by VTA and the Federal Transit Administration (FTA) in 1999.

Bus Rapid Transit

The VTA is also planning enhanced bus rapid transit (BRT) service along three corridors through the Plan area: the Santa Clara Street/Alum Rock Avenue/Capitol Expressway corridor, the El Camino Real Corridor, and the San Carlos Street/Stevens Creek Boulevard corridor. Future improvements are anticipated to include a combination of improvements including permanent rail-like stations, off-vehicle fare payment, real-time transit information, intersections with Bus Signal Priority, and new specially designed vehicles. VTA approved the Final EIR for the Santa Clara/Alum Rock BRT Project on December 11, 2008.[14]

[11] The environmental documents are available at: http://www.vta.org/bart/environmentaldocuments.html.
[12] Santa Clara Valley Transportation Authority (VTA). "BART Silicon Valley Frequently Asked Questions (FAQ)." March 29, 2012. Available at: http://www.vta.org/bart/faq.html.
[13] Project updates are available at: http://www.vta.org/projects/vasona/project/index.html.
[14] http://www.vta.org/projects/dtev/final_eir.html

1.2.1.3 *Roadway and Streetscape Improvements*

Coleman Avenue/Autumn Street Improvement Project

The Strategy 2000 EIR identified the extension of Autumn Street and widening of Coleman Avenue as mitigation for traffic impacts. In 2008, the City of San José prepared a Focused EIR and approved the Coleman Avenue/Autumn Street Improvement Project.[15] The project includes widening Coleman Avenue to six lanes between Hedding Street and Autumn Street and the extension, widening, and partial realignment of Autumn Street from Coleman Avenue in the north to Park Avenue in the south. Between Santa Clara Street and Park Avenue, Autumn Street (to be renamed "Autumn Parkway") will be converted from one-way to two-way traffic and widened to four lanes (two in each direction). The realignment project also includes the removal of existing buildings between Autumn Street and Los Gatos Creek, which will create an open space buffer of at least 50 feet.[16] The Autumn Parkway alignment generally forms the eastern boundary of the Plan area. Construction of the first of the improvement project, the extension of Autumn Street from Coleman Road to Julian Street began in 2013.

Park Avenue Narrowing

The proposed baseball stadium project analyzed the narrowing of Park Avenue from four to two lanes between Sunol Street and the future Autumn Parkway. This roadway modification is also reflected in the 2040 General Plan.

The City recently approved the Park Avenue Multi-Modal Improvement Project, which includes the streetscape improvements along Park Avenue from Sunol Street to Bird Avenue. The project includes the addition of bike lanes and pedestrian amenities (such as sidewalk improvements, directional signage, lighting, landscaping, and street trees), improvements to vehicular movements, and reconstruction of the Park Avenue/Sunol Street intersection. The City filed a Notice of Exemption under CEQA in January 2012.

San Carlos Rail Overpass Replacement

The San Carlos Street overpass over the rail tracks is currently outdated and provides inadequate sight distance for vehicle travel. It will also constrain future rail traffic planned for the area. For these reasons, it is anticipated that the bridge will be replaced with a new overpass structure once rail plans and funding are identified.

San Fernando Street Enhanced Bikeway and Pedestrian Access Project

The City ~~is currently constructing~~ has constructed the San Fernando Street Enhanced Bikeway and Pedestrian Access Project, which includes a variety of streetscape improvements on San Fernando Street between Cahill Street and 10th Street. The western portion of the project alignment is within the Plan area.

[15] City of San José. *Coleman Avenue/Autumn Street Improvement Project Final Integrated Focused EIR.* 2008.
[16] It should be noted that if the project does not ultimately include the removal of existing urban uses, the properties on the east side of Autumn Street could be redeveloped with new development, consistent with the 2040 General Plan.

The Alameda: A Plan for the Beautiful Way

In 2009, the City was awarded an MTC grant for improvements to The Alameda consistent with the "Beautiful Way" Plan prepared in April 2010. Implementation of the plan will be done in two phases. Both Phase I and II, do not propose a reduction in the number of thru travel lanes.

Phase I, from Stockton Avenue to Fremont Street, currently under construction, will provide roadway and pedestrian improvements along The Alameda. Improvements include landscape median islands, signal modifications, enhanced crosswalks with median refuges, corner or sidewalk bulb-outs, and bus stop enhancements.

Similar improvements will continue in Phase II, from Fremont Street to I-880. The project is currently under design with an anticipated 2015-2016 completion date."

~~The City is considering a plan to reduce the number of travel lanes on The Alameda from four lanes to two lanes to allow for a landscaped median and bicycle lanes. *The Alameda: A Plan for the Beautiful Way* (2010) also includes various pedestrian-scale treatments such as crosswalk improvements, construction of bulb-outs, and bus stop enhancements.[17] The plan is related to the larger "Grand Boulevard Initiative" along the entire stretch of the El Camino Real in the Bay area.[18] Construction is currently underway with completion expected in early 2014.~~

In 2009, the City was awarded an MTC grant for improvements to The Alameda consistent with the "Beautiful Way" Plan prepared in April 2010. Implementation of the plan will be done in two phases. Both Phase I and Phase II do not propose a reduction in the number of thru travel lanes.

1.2.1.4 *Parks and Trails*

In 2002, the City adopted the Guadalupe River Park Master Plan that establishes a vision for the park and outlines the various flood control, recreational, and habitat elements. The master plan calls for the future development of park amenities between St. John Street and the railroad tracks, adjacent to the Plan area.

In 2008, the City approved the Del Monte Park Master Plan for the development of a 1.7-acre neighborhood park on the south side of Auzerais Avenue, immediately west of Los Gatos Creek. The future "Del Monte Park" site was dedicated to the City by KB Home to satisfy their Park Impact Obligation for the Monte Vista development located across Auzerais Avenue. The park may ultimately be expanded west to Sunol Street, in accordance with the 2040 General Plan land use designation.

The City has also designated the San José Fire Department Training Facility as a future park site in the Midtown Specific Plan (1992), Diridon/Arena Strategic Development Plan (2002), Greenprint (2009), and 2040 General Plan.

[17] The plan is available here: http://www.sjredevelopment.org/thealamedatransportationimprovements.htm.
[18] Additional information on the Grand Boulevard Initiative is available here: http://www.grandboulevard.net/.

Los Gatos Creek Trail Master Plan

A Trail Master Plan was completed in 1985 for the 3.5-mile long segment of Los Gatos Creek within the City of San José, extending from Bascom Avenue to the confluence with Guadalupe River. Four of the five reaches have been implemented, including the Reach 4 from Lonus Street to Auzerais Avenue.[19] In 2008, the City approved a Trail Master Plan for Reach 5 (Auzerais Avenue to Santa Clara Street).[20] The construction of the portion between Auzerais Avenue and San Carlos Street was completed as part of adjacent residential development. Once built, the remaining one mile-long segment of Reach 5 will complete the Los Gatos Creek Trail connection between the Guadalupe River Trail and the existing segment that runs south through the City of Campbell.

A portion of the planned Reach 5 trail alignment will be constructed within the DSAP Area on the existing San José Fire Department Training Facility property, located between San Carlos Street and Park Avenue.[21] The trail will utilize existing pedestrian facilities to cross Park Avenue/Autumn Parkway, then continue north along the west side of Los Gatos Creek. According to the Master Plan, the trail would follow on-street alignments between San Fernando Street and Santa Clara Street., ~~although the City currently plans to construct the trail in the open space created by the Autumn Street realignment project.~~

1.2.1.5 *Development Projects*

In addition to development in Downtown, the City envisions significant population and employment growth in North San José, based on the North San José Area Development Policy (NSJADP). The NSJADP was adopted in 2005 and covers the area generally bounded by SR 237, I-880, and US 101. Phase 1 of the NSJADP allows the development of up to 7,000,000 square feet of industrial use and 8,000 dwelling units.

Specific development projects have been approved within and surrounding the DSAP Area and Downtown area (as part of Strategy 2000), as listed in the table below. The Adobe - San José Water Company and Plaza at Almaden projects are within the Downtown Core, while the Ohlone Mixed Use and San Carlos - Meridian Mixed Use projects are within the Midtown Specific Plan boundaries. Refer to Figure 1-4 for the locations of these approved future development projects.

Table 1-1:
Approved Development Projects in the Area

Project	Proposed Development	Location
Within or Intersecting the DSAP Boundaries		
Whole Foods Market (PD 07- 039)	33,500 square feet of retail space	Northwest corner of The Alameda and Stockton Avenue

[19] As part of a residential development, the trail was recently extended north from Auzerais Avenue to just south of San Carlos Street.
[20] The Initial Study/MND prepared for the Reach 5 Master Plan was approved in 2008.
[21] The SJFD Training Facility property is designated on the 2040 General Plan for redevelopment with a new community park.

Park Avenue Lofts (PDC05-037)	122 attached live/work lofts and 2,500 square feet of retail space	North side of Park Avenue, west of the railroad tracks
Major League Baseball Stadium (PP05-214)	36,000-seat, 155-foot height (maximums) stadium with parking structure	South of W. San Fernando Street, north of Park Avenue, between Autumn Street and the Caltrain tracks.
Outside DSAP Boundaries		
Morrison Park Townhomes (PD 07-008)	250 multi-family attached units	West side of Stockton Avenue, south of Cinnabar Street
Adobe - San José Water Company Project (PDC02-046)	1.04 million square feet of office/retail space and 325 multi-family attached units	South of Santa Clara Street, between Los Gatos Creek and Guadalupe River
Ohlone Mixed Use Project (PDC08-061)	800 multi-family attached units and 30,000 square feet of commercial space	West side of Sunol Street, between San Carlos Street and Auzerais Avenue
Plaza at Almaden Project (RH00-005)	860,000 square feet of office and 34,500 square feet of ground-floor retail space	Northwest corner of Woz Way and Almaden Boulevard
San Carlos - Meridian Mixed Use Project (PDC07-096)	218 multi-family attached units and 22,600 square feet of commercial space	Southwest corner of West San Carlos Street and Meridian Avenue

1.3 DEVELOPMENT OF THE DIRIDON STATION AREA PLAN

Given the anticipated changes in the land use pattern, transportation network, and activity levels resulting from the future projects described above, there is a need for coordinated planning efforts in the Plan area. The purpose of the DSAP is to integrate past and present plans into one vision and guide future development in a manner that takes full advantage of the high level of connectivity.

In anticipation of BART and HSR services coming to Diridon Station, the City of San José was awarded a Station Area Planning Grant by the Metropolitan Transportation Commission (MTC) in July 2008. As a result, the City, in coordination with the San José Redevelopment Agency, VTA, and other local and regional transportation agencies, embarked on developing the DSAP to provide a vision and framework for higher intensity, transit-oriented development in the Diridon area.

The DSAP planning effort began with the San José City Council's action to accept the grant from MTC and approve consultant contracts for the preparation of the Plan and EIR. The City has made extensive efforts to engage members of the business and development community in the planning

process, as well as residents within the immediate area and surrounding long-established neighborhoods. The Diridon Station Good Neighbor Committee was formed to provide a forum to work collaboratively in addressing the opportunities and constraints that may arise from developments in the Diridon Area.

The planning team prepared an Existing Conditions Report to establish the constraints, opportunities, emerging themes, and specific goals for the project. Three project alternatives were developed and presented to the public at community workshops. Based on comments and feedback received, a preferred alternative was developed and integrated into a Draft Plan. On April, 28, 2011, the City Council accepted the Draft Plan as the project to be evaluated in this PEIR.

Project themes were developed to gain consensus on the primary goals and objectives for the development of the preferred DSAP. These themes revolved around establishing the Diridon Area as a vibrant, iconic, innovative, and distinctive place where visitors and residents alike can live, work, and play. Specific goals include:

- ***Urban Form and Structure.*** Create a high-intensity urban district with a mix of uses including commercial, office, entertainment, and residential development next to Diridon Station, with taller buildings at the core.
- ***Connectivity.*** Establish and strengthen connections to surrounding districts and within the planning area for pedestrians, bicyclists, and motorists with emphasis on east-west connectivity across SR-87 and the rail corridor.
- ***Transportation.*** Prioritize pedestrian circulation and transit. Improve pedestrian and bicycle connections to the Guadalupe River.
- ***Compatibility with Surrounding Neighborhoods.*** Ensure sensitive transitions in scale and design to surrounding residential neighborhoods.
- ***Land Use.*** Provide a range of commercial and residential uses. Commercial uses would include entertainment venues, restaurants, hotels, and offices, as well as retail shops and services that would serve the surrounding residential neighborhoods.
- ***Open Space.*** Enhance and expand recreational opportunities in the Plan Area and establish an open space system integrated with Los Gatos Creek and the Guadalupe River Park.
- ***Art.*** Activate the streets, parks, and Station with art that engages visitors and residents alike. Integrate art into infrastructure to humanize and enliven standard features.
- ***Parking.*** Disperse parking in different locations in the planning area and beyond and ensure easy walking access to destinations.

1.4 PROJECT OBJECTIVES

Pursuant to CEQA Guidelines Section 15124, an EIR must include a statement of objectives, including the underlying purpose of the project. The underlying purpose of ~~this proposed project~~ the Diridon Station Area Plan is to transform the Diridon Station Area into a regional destination~~, with a mix of land uses and sufficient density to support existing and planned transit infrastructure~~. The Plan will leverage the area's existing and planned transit infrastructure to plan for and encourage the

types of mixed-use, livable, walkable, urban employment, entertainment, and living opportunities that Bay Area residents and workers increasingly demand. The City's basic objectives for the proposed project are provided below.

- ~~1.~~ Establish a land use plan and policy framework that will guide future development and redevelopment in the Diridon Station Area toward land uses that support transit ridership and economic development and create a world-class cultural destination. Ambitious job and housing growth capacity is planned for the two growth areas covering Downtown. This growth capacity is important to achieve multiple City goals, including support for regional transit systems, correcting the City's jobs to housing imbalance, and for the development of Downtown as a regional job center, consistent with the Envision San José 2040 General Plan, Strategy 2000, and MTC goals for transit-oriented development near regional transit expansion projects.

- ~~2.~~ Improve pedestrian, bicycle, motorized, and transit connectivity between the station site and existing adjacent commercial and residential areas.

- ~~3.~~ Develop and implement urban design standards that promote walkable, livable, and business supportive environments within the Diridon Station Area.

- ~~4.~~ Provide a variety of commercial and mixed use development opportunities, ranging from large-scale corporate or institutional sites to smaller infill development sites.

- ~~5.~~ Create a highly active and lively pedestrian and bicycle friendly environment with excellent connectivity to downtown destinations and regional transit.

- ~~6.~~ Support partner agencies in the expansion of Diridon Station to create a well-integrated center of architectural and functional significance.

- Ensure the continued vitality of the San Jose Arena, recognizing that the Arena is a major anchor for both Downtown San Jose and the Diridon Station area, and that parking and access for Arena customers are critical for the Arena's on-going success.

- ~~7.~~ Enhance the existing neighborhoods and add high-density residential, commercial, and mixed use development within the Diridon area to act as a catalyst for similar developments in the surrounding areas.

- ~~8.~~ Educate and inform the public about the area planning process and Transit-Oriented Development (TOD) concepts.

SECTION 2.0 DESCRIPTION OF THE PROPOSED PROJECT

This section provides a summary of the proposed DSAP. The complete plan is available for review at: http://www.sanjoseca.gov/planning/diridon/Diridon_Station_Area_Plan.asp.

2.1 LAND USE DEVELOPMENT

2.1.1 Identity Zones

The Plan area is divided into three Identity Zones. As shown on Figure 2-1, the Northern Zone is generally north of The Alameda, the Central Zone is the core area centered on Diridon Station, and the Southern Zone is roughly between Park Avenue and Interstate 280. These Identity Zones were borne out of the planning process, as it became apparent that each area has very different physical characteristics and opportunities for development potential. Existing land uses to remain in place and the desire for better vehicle, pedestrian, and bicycle connectivity were factors in the evolution of these identity zones. For planning purposes, each Identity Zone was divided into subareas. The three zones and corresponding subareas are described in the following sections.

2.1.1.1 *Northern Zone*

The Northern "Innovation" Zone is expected to be a high-intensity business district north of The Alameda that includes innovative office, research and development, and incubator space for product and business development, including "green technology". The plan for this zone also includes a new 900-space parking structure in the Arena North subarea.

2.1.1.2 *Central Zone*

The Central "Commerce and Entertainment" Zone includes the new high speed rail terminal and proposed baseball stadium, as well as new commercial and entertainment uses in the Station East subarea. These employment, retail, hotel, and entertainment uses would support transit activity and establish the area as a region-wide destination with connections to the Arena and baseball stadium.

2.1.1.3 *Southern Zone*

The Southern "Neighborhoods" Zone includes three sets of rail tracks and the future realigned Autumn Parkway. Each of the three subareas in this zone has different existing conditions, which influence the nature and character of the new development being proposed. Mixed use residential development is proposed for the Park/San Carlos and Dupont/McEvoy subareas, while the Royal/Auzerais subarea is designated for employment uses and a new community park. Hotels are envisioned along Bird Avenue, with groundfloor retail/restaurant uses integrated throughout the zone.

2.1.2 Proposed Land Use Diagram

The DSAP includes a Land Use Diagram to identify suitable locations for employment, residential, and mixed use development (refer to Figure 2-2). The proposed Land Use Diagram establishes a mix of uses that build off the synergy and activity of the Arena, Diridon Station, Downtown, and existing neighborhoods, as well as the future projects to be implemented in the area, as described above in Section 1.2.1. The DSAP has been designed to accommodate and support these future projects, including the proposed baseball stadium.[22]

The proposed Land Use Diagram uses 2040 General Plan land use designations, including *Urban Residential (30-95 dwelling units per acre), Transit Residential (65-250 dwelling units per acre), Commercial Downtown, Transit Employment Center, Combined Industrial/Commercial, Public/Quasi-Public,* and *Open Space, Parklands, and Habitat*. Table 2-1 on the following page summarizes the land use types and urban form of future development allowed under each of these land use designations. Allowable density ranges are expressed in dwelling units per acre (DU/AC) or floor area ratio (FAR).[23]

Most of the land use designations in the DSAP Land Use Diagram are consistent with the Land Use/Transportation Diagram in the 2040 General Plan; however, amendments to the General Plan are proposed as part of the project. These proposed amendments are described in Section 2.1.4 below.

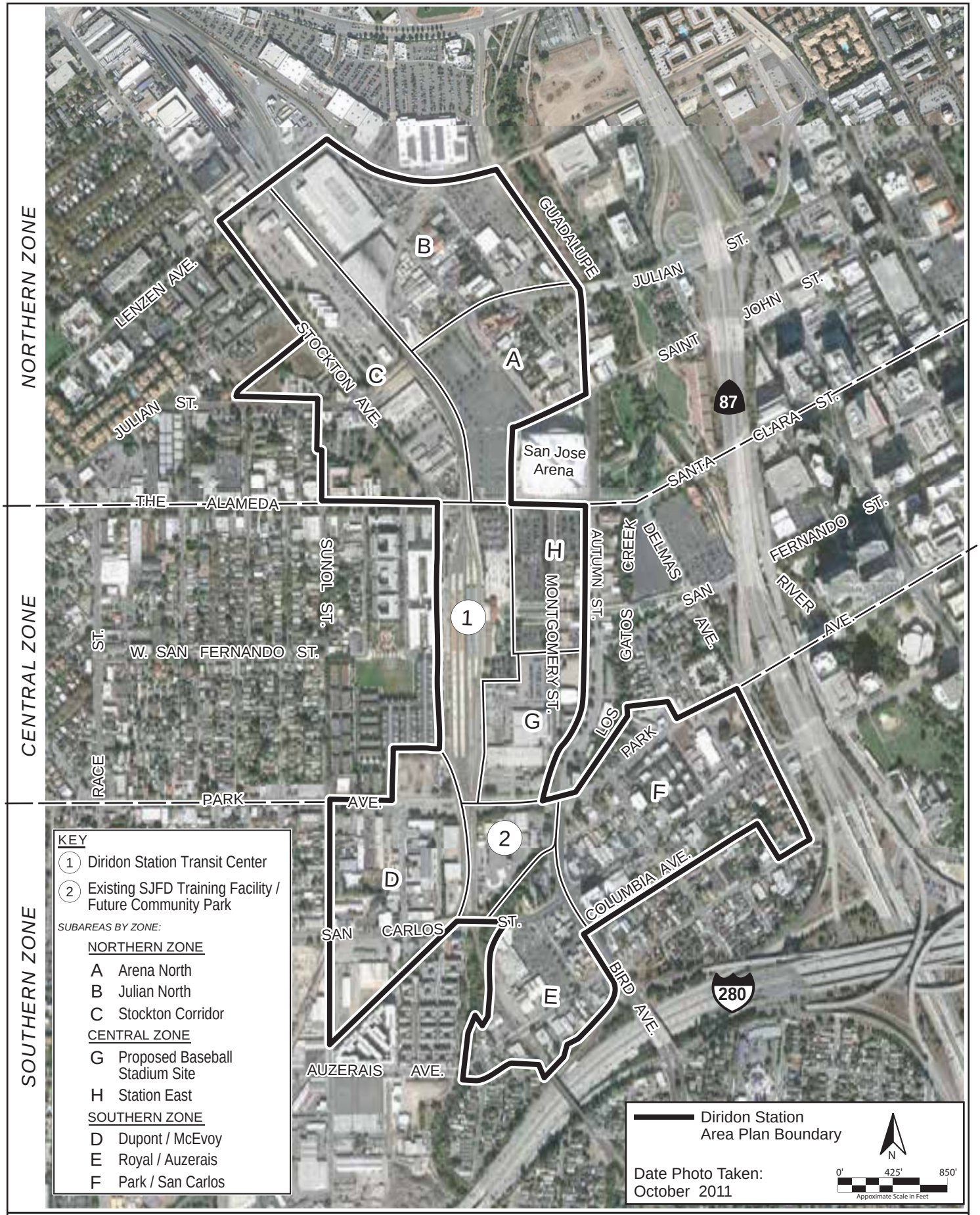
2.1.2.1 *Building Height Limits*

The DSAP establishes maximum building heights based on location within the Plan area (refer to Figure 2-3). Under the guidelines, new buildings would range in height from three to 12 stories. As described further in Section 4.1 *Land Use*, the maximum building heights over most of the project area would comply with Federal Aviation Administration (FAA) obstruction standards to protect the airspace around the Mineta San José International Airport. Individual mid- or high-rise buildings, depending on specific proposed heights and locations, will be subject to required FAA regulatory review and modified if necessary prior to City approval. The proposed maximum building heights are also based on neighborhood compatibility considerations.

The building height limits are incorporated into the proposed Design Guidelines, which are described in Section 2.4.1 below.

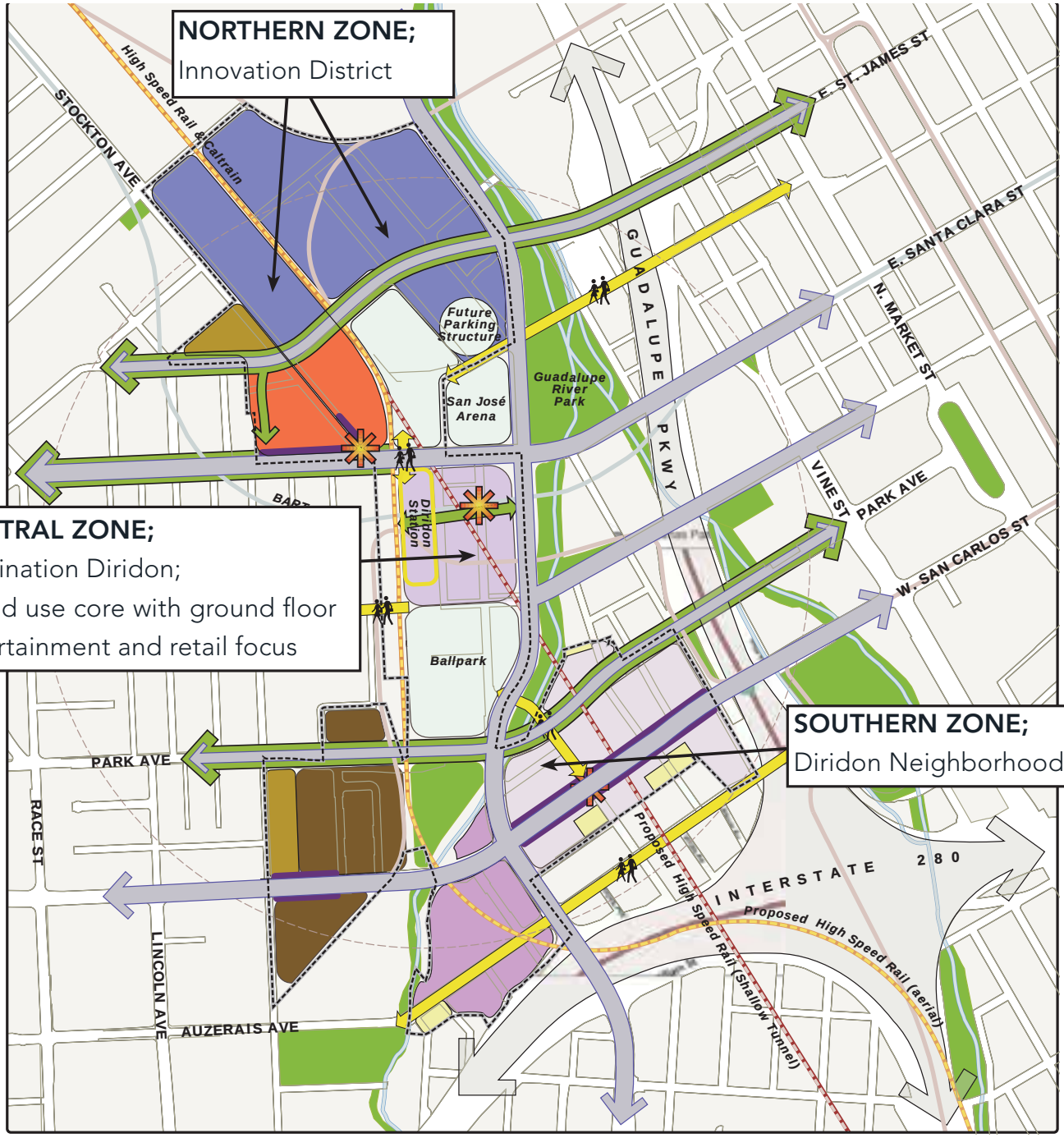
[22] An alternative that evaluates a scenario where the stadium is not built is included in Section 8.0 *Alternatives* to the Proposed Project. The future projects discussed in Section 1.2.1 are analyzed as part of the cumulative conditions for the purposes of this PEIR, as described further in Section 4.0 *Environmental Setting, Impacts, and Mitigation.*

[23] Note that the allowable density is identified in dwelling units per acre (DU/AC) or floor area ratio (FAR). FAR is calculated by dividing the total area of all floors in a building(s) by the total area of the site. For example, an FAR of 2.0 would indicate that the floor area of a multi-story building is twice as large as the gross area of the site. A single-story building would have an FAR of less than 1.0, while tall buildings could have an FAR of 15.0 or higher.

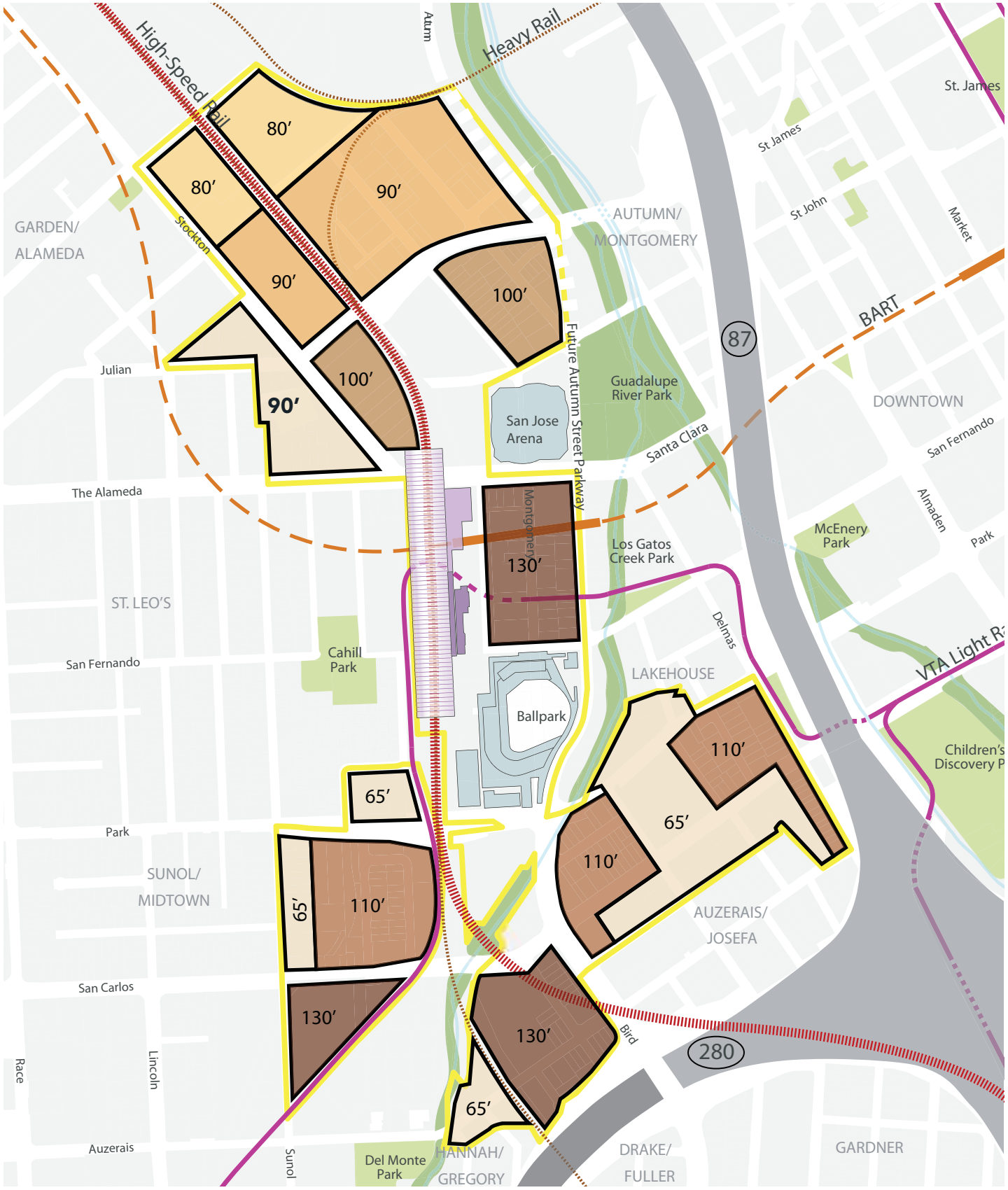


DSAP BOUNDARIES, ZONES, AND SUBAREAS

FIGURE 2-1



PROPOSED LAND USE PLAN (REVISED) FIGURE 2-2



PROPOSED BUILDING HEIGHT LIMITS (REVISED) FIGURE 2-3

Table 2-1: **Envision San José 2040 Land Use Designations Included in the DSAP**	
Commercial Downtown	
Density: FAR Up to 15.0 (3 to 30 stories)	This designation allows office, hotel, retail, service, and entertainment uses. Residential uses are excluded from this designation. Redevelopment should be at very high intensities, unless incompatibility with other major policies within the General Plan (such as Historic Preservation Policies) indicates otherwise. All development within this designation should enhance the "complete community" in downtown, support pedestrian and bicycle circulation, and increase transit ridership. Within the Plan area, this designation applies to the majority of the Central Zone, including the proposed baseball stadium site. It is envisioned that retail and entertainment uses would be located at the ground level with high-intensity hotel or office development above. In order to intensify development adjacent to Diridon Station, the minimum FAR is 2.0; however, development adjacent to the station should generally be built at higher FARs. Given the building height restrictions, it is anticipated that development in this area would not exceed an FAR of 6.0 and new buildings would range from seven to nine stories.
Transit Employment Center	
Density: FAR Up to 12.0 (4 to 25 stories)	Uses allowed under this designation include office, industrial, research and development, manufacturing, assembly, and testing. Retail shops are permitted in the first two floors of the buildings. Large hotels of at least 200 rooms and four or more stories in height are also allowed. New development should orient buildings toward public streets and transit facilities and include features to provide an enhanced pedestrian environment. This designation applies to the majority of the Northern Zone, east of Stockton Avenue and north of the Arena. The Driving Industry type businesses expected to locate to this area include high technology and green tech type businesses that would place a premium on being adjacent to Diridon Station with its wide array of transit opportunities. Because this area is nearest the Mineta San José International Airport, it has the most stringent building height restrictions in the Plan area.
Combined Industrial/Commercial	
Density: FAR Up to 12.0 (1 to 24 stories)	This designation allows for a significant amount of flexibility for the development of a varied mixture of compatible commercial and industrial uses. It applies to the Royal/Auzerais subarea, which is envisioned for Driving Industry types of uses, as well as neighborhood-serving commercial uses along Bird Avenue. Given the desire for flexibility, the allowed FAR varies from

	0.25 to 12.0; however, the FAR will not likely exceed 8.0 to 10.0 due to building height restrictions.
Transit Residential	
Density: 65-250 DU/AC FAR 2.0 to 12.0 (5 to 25 stories)	This designation is intended for high density, mixed use residential development in close proximity to transit and other services. The designation supports office, retail, hotels, hospitals, and private community gathering facilities. Within the Plan area, this designation applies to properties within walking distance of Diridon Station. The commercial mixed use portion of these properties should be focused as retail frontage along San Carlos Street. Residential densities are expected to range between 65 and 175 DU/AC. Average building heights should be between four and six stories, with up to ten stories where airport regulations and neighborhood compatibility allow.
Urban Residential	
Density: 30-95 DU/AC FAR 1.0 to 4.0 (3 to 12 stories)	This designation allows for medium density residential development, with commercial uses mixed in a vertical or horizontal arrangement. Allowable commercial uses include office, retail, hospitals, and private community gathering facilities. Application of this designation in the Plan area is intended to encourage medium density residential development, while providing a transition to lower density residential uses. Commercial uses should be focused along West San Carlos Street and along or adjacent to The Alameda. The commercial uses should provide shops and services to nearby residents, employees, and transit riders, although commercial spaces could take the form of live/work units or flex space (i.e., units that could be converted from living space to commercial space over time). Building heights would range from three or four stories adjacent to lower density residential development to six stories near higher intensity residential.
Residential Neighborhood	
Density: Typically 8 DU/AC (Match existing neighborhood character FAR up to 0.7 (1 to 2.5 stories)	This designation is applied broadly throughout the City to encompass most of the established, single-family residential neighborhoods, including both the suburban and traditional residential neighborhood areas which comprise the majority of its developed land. The intent of this designation is to preserve the existing character of these neighborhoods and to strictly limit new development to infill project which closely conform to the prevailing existing neighborhood character as defined by density, lot size and shape, massing, and neighborhood form and pattern. This designation supports the development of new commercial uses within established residential neighborhoods if located on busier streets or at street intersections, and provided such development does not negatively impact the surrounding neighborhood.

Open Space, Parklands, and Habitat	
Density: N/A	Lands in this designation are typically devoted to open space, parks, recreation areas, trails, habitat buffers, and other permanent open space areas. These lands can be publicly- or privately-owned areas that are intended for low intensity uses. The only property in the Plan area with this designation is the future community park site, located at the southwest corner of Park Avenue and Montgomery Street. This designation also includes open space and habitat area along Los Gatos Creek north of Park Avenue, adjacent to the Plan area.
Public/Quasi Public	
Density: N/A	Uses permitted in this designation include public land uses, including schools, colleges, corporation yards, homeless shelters, libraries, fire stations, water treatment facilities, convention centers and auditoriums, museums, governmental offices and airports. Within the Plan area, this designation applies to Diridon Station, as well as the surface parking lot associated with the Arena.
Downtown	
Density FAR Up to 350 DU/AC; FAR Up to 15.0 (3 to 30 stories)	This designation includes office, retail, service, residential, and entertainment uses in the Downtown. Redevelopment should be at very high intensities, unless incompatibility with other major policies within the *Envision General Plan* (such as Historic Preservation Policies) indicates otherwise. Where single-family detached homes are adjacent to the perimeter of the area designated as Downtown, new development should serve as a transition to the lower-intensity use while still achieving urban densities appropriate for the perimeter of downtown in a major metropolitan city. All development within this designation should enhance the "complete community" in downtown, support pedestrian and bicycle circulation, and increase transit ridership. The area within the Southern Zone, east of Autumn Parkway, is primarily designated with a Downtown land use designation. This land use designation supports residential uses as well as non-residential uses including office, retail, service, hotel, medical and entertainment uses. The designation also supports residential and commercial uses in a mixed-use format. While residential densities approaching 350 dwelling units to the acre may be achievable under the Diridon Station Area Plan through development of high density housing projects that include very small units, new commercial development could not achieve the FAR's allowed under the General Plan given the height guidelines of this Plan and the need for new development to be compatible with the surrounding neighborhood. New development should, however, be built at relatively high densities/intensities consistent the Plan's height guidelines and compatible with the surrounding residential neighborhood. All development within this designation should support pedestrian and bicycle circulation, and encourage transit ridership. Uses that are automobile oriented

	are discouraged and drive-through uses are not supported. To help activate the corridor, new residential development along West San Carlos Street should incorporate ground floor commercial uses along this street.
Urban Village	
Density: Up to 250 DU/AC; FAR Up to 10.0	The Urban Village designation is applied within the Urban Village areas to accommodate higher density housing growth along with a significant amount of job growth. Development within the Urban Village designation should conform to land use and design standards established with an adopted Urban Village Plan, which specifies how each Urban Village will accommodate the planned housing and job growth capacity within the identified Urban Village Growth Area. Prior to preparation of an Urban Village Plan, this designation supports uses consistent with those of the Neighborhood Community Commercial designation, as well as development of Signature Projects as described in the *Envision General Plan* Implementation policies. Following preparation of an Urban Village Plan, the appropriate use for a site will be commercial, residential, mixed-use, public facility or other use as indicated within the Urban Village plan as well as those uses supported by the Neighborhood/Community Commercial designation. The minimum density for development that includes a significant residential component is at least 55 DU/ AC, although lower residential densities are acceptable for mixed-use projects that include small amounts of residential in combination with significant amounts of non-residential square footage or on specific sites identified within the Urban Village Plan as being appropriate for development at a lower density so as to be compatible with adjacent land uses. For projects that are wholly employment uses, a lower FAR than indicated in the Urban Village Plan is also appropriate to facilitate development of interim employment uses. All projects must still meet the Community Design Policies and in the applicable Urban Village Plan. The height and building form of development within the Urban Village areas can vary significantly depending upon the type and character of the Urban Village, consistent with the Urban Village policies.
FAR = floor area ratio, DU/AC = dwelling units per acre	

2.1.3 Maximum Development Capacity

A conceptual "test-fit" or build-out plan was developed to determine a maximum level of development that the proposed Land Use Diagram could accommodate. [24] The test-fit plan was based on several assumptions, including:

- 100 percent build-out of all properties that are City owned, private and underutilized, or private and fully utilized but an inappropriate use for the property;
- consolidation of individual parcels over time for more efficient development; and

[24] The test-fit plan is not prescriptive or intended to demonstrate the exact form of future development.

- maximum building heights established by the DSAP.[25]

The maximum development levels proposed by the DSAP for each zone are shown in Table 2-2 below. The areas shown in the table represent the upper limit of development that could be allowed in each zone. Development cannot exceed the General Plan density ranges or height limits without additional environmental review. The height limits prevent more intense development in most cases, unless smaller housing units (i.e., Single Room Occupancy – SROs) are proposed.

Table 2-2:
Maximum Development by Zone

ZONE	Office/R&D/Light Industrial (sq. ft.)	Retail/Restaurant (sq. ft.)	Residential (units)	Hotel (rooms)
Northern	3,012,400	81,100	223	0
Central	1,146,000	140,000	0	250
Southern	805,000	203,000	2,365	650
TOTAL	**4,963,400**	**424,100**	**2,588**	**900**

The maximum development levels represent a net increase over existing development assumed to remain in the Plan area, including the existing surface parking lot in the Arena North subarea and the Delmas Park Apartments and Museum Park Apartments in the Park/San Carlos subarea. Approved but not yet built projects that would also remain under build-out conditions include the Whole Foods Market on The Alameda and the Park Avenue Townhomes projects.

2.1.4 Proposed Amendments to the 2040 General Plan

2.1.4.1 *Land Use/Transportation Diagram*

As shown on Figure 2-4, the project proposes to amend the 2040 General Plan Land Use/Transportation Diagram by adding the Urban Village Overlay for the Diridon Station Area (VT72- BART/Caltrain Village) and by modifying the boundaries of the Midtown Specific Plan Area and Urban Villages VT4 (The Alameda Village) and CR31 (San Carlos Street) to eliminate overlap with the Diridon Station Area Urban Village.

The project also proposes to amend land use designations on the Land Use/Transportation Diagram to match the DSAP's Land Use Diagram. Appendix A includes a complete list of the proposed land use designations by parcel.[26] As shown on Figure 2-4, the land use designation amendments are proposed in three general locations, including:

[25] Refer to the DSAP for a complete discussion of the test-fit plan.

[26] The amendments would involve a total of 189 parcels within the Plan area. Of the approximately 159 individual ~~141~~ parcels in the Park/San Carlos subarea, ~~92~~ 94 are currently designated *Downtown*, 17 are designated *Residential Neighborhood*, and ~~45~~ 48

- the properties west of Stockton Avenue and north of The Alameda within the Stockton Corridor subarea of the Northern Zone, which would be amended from *Mixed Use Commercial* to *Urban Residential* (17 parcels);
- the block between Park Avenue and San Carlos west of the Caltrain tracks within the Dupont/McEvoy subarea, which would be amended from *Mixed Use Commercial* to *Transit Residential* (28 parcels);~~[27]~~ and
- the ~~entire~~ San Carlos Street frontage within the Park/San Carlos subarea, which would be amended from *Neighborhood/Community Commercial* to *Downtown* (48 parcels) ~~a mix of *Downtown*, *Residential Neighborhood*,~~ and ~~*Neighborhood/Community Commercial* to *Transit Residential* or *Urban Residential* (141 parcels)~~.

The following General Plan amendments to change the Land Use/Transportation Diagram land use designation are also included to achieve consistency of the DSAP with the 2040 General Plan and effect the goals of the DSAP:

- a 6.06 gross acre site generally bounded by West Julian Street to the north, Stockton Avenue to the east, The Alameda to the south, and to the west approximately 180 feet from Rhodes Court, from *Mixed Use Commercial* to *Urban Village*.

- a 6.5 gross acre site generally located on both sides of West San Carlos Street between Bird and Delmas Avenues, from *Neighborhood/Community Commercial* to *Downtown*.

- a 0.36 gross acre site generally at the northeast corner of Park and Gifford Avenues, from *Neighborhood/Community Commercial* to *Downtown*.

- a 0.14 gross acre site generally located on the east side of Josefa Street at the terminus of Columbia Avenue, approximately 200 feet south of West San Carlos Street, from *Residential Neighborhood* to *Downtown*.

- a 0.14 gross acre site generally located on the west side of Gifford Avenue, approximately 90 feet south of West San Carlos Street, from *Residential Neighborhood* to *Downtown*.

- a 0.38 gross acre site generally located at the northwest corner of Auzerais and Delmas Avenues, from *Neighborhood/Community Commercial* on 0.13 acres and *Residential Neighborhood* on 0.25 acres to *Downtown*.

- a 5.9 acre site generally located between Stockton Avenue, Julian Street, the Union Pacific Railroad and The Alamada from *Transit Employment Center* to *Urban Village*, with a minimum requirement for inclusion of a 0.5 Floor Area Ratio (FAR) of the commercial space within projects that include residential uses.

---

are designated *Neighborhood/Community Commercial* on the 2040 General Plan Land Use/Transportation Diagram. ~~Two of the 141 parcels would be amended from *Urban Residential* to *Transit Residential*, while another two parcels would be amended from *Residential Neighborhood* to *Urban Residential*.~~ With the proposed changes, approximately 146 parcels would be designated as *Downtown* and 13 would be designated as *Residential Neighborhood*.

~~[27] Portions of three parcels would be amended from *Urban Residential* to *Transit Residential* in this subarea.~~

It should be noted that rezonings are not proposed by the DSAP. Rezonings to conform to the General Plan land use designation would be completed as future development projects are proposed.

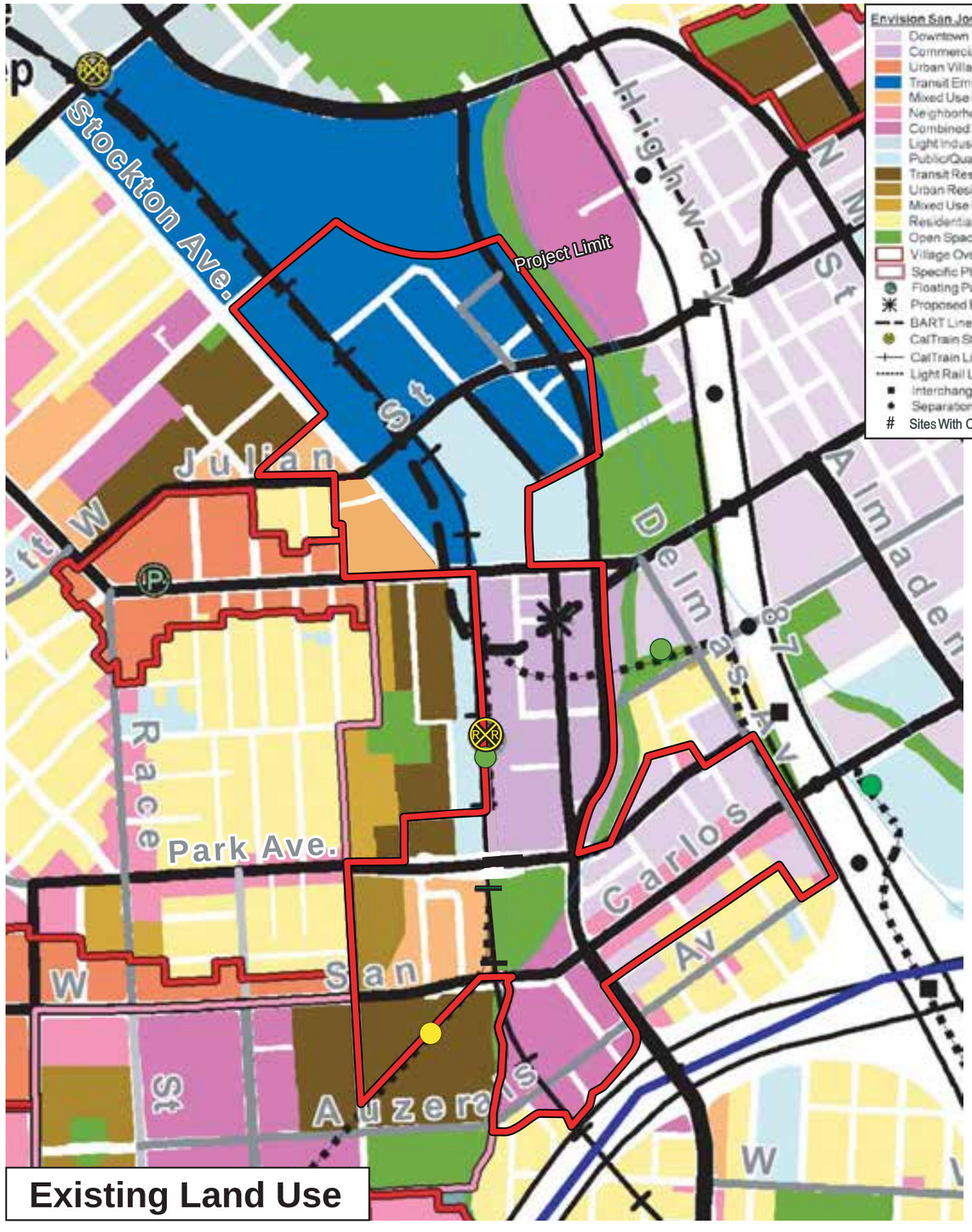
2.1.4.2 *Planned Growth Areas Diagram*

As shown on Figure 2-5, the project proposes to amend the Planned Growth Areas Diagram in the 2040 General Plan to: 1) add the Diridon Station Area Urban Village boundary; and 2) modify the boundaries of the Downtown Growth Area, Midtown Specific Plan, and Urban Village VT4 (The Alameda Village) to eliminate overlap with the DSAP.

As described in Section 4.1.3.4, with the proposed modifications, both the Midtown Specific Plan and Downtown Growth Area would be divided into two distinct areas. The Diridon Station Area Urban Village would separate the built-out portion of Midtown from the rest of the specific plan area and the Transit Employment Center lands south of Taylor Street from the rest of the Downtown Growth Area.

The boundary of the "Downtown Core" (also referred to as the "Downtown Zoning Area") would not change; however, it would no longer align with the boundary of the Downtown Growth Area. As described in Section 4.2.2.5, intersections within the Downtown Core are exempt from the City's level of service (LOS) standard. In addition, properties within the Plan area and Downtown Core may be rezoned to a Downtown district as development proceeds under the DSAP.[28]

[28] Chapter 20.70 of the San José Municipal Code establishes zoning regulations for properties located within the Downtown Zoning Area and have a Downtown zoning designation (DC or DC-NT1).



Existing Land Use

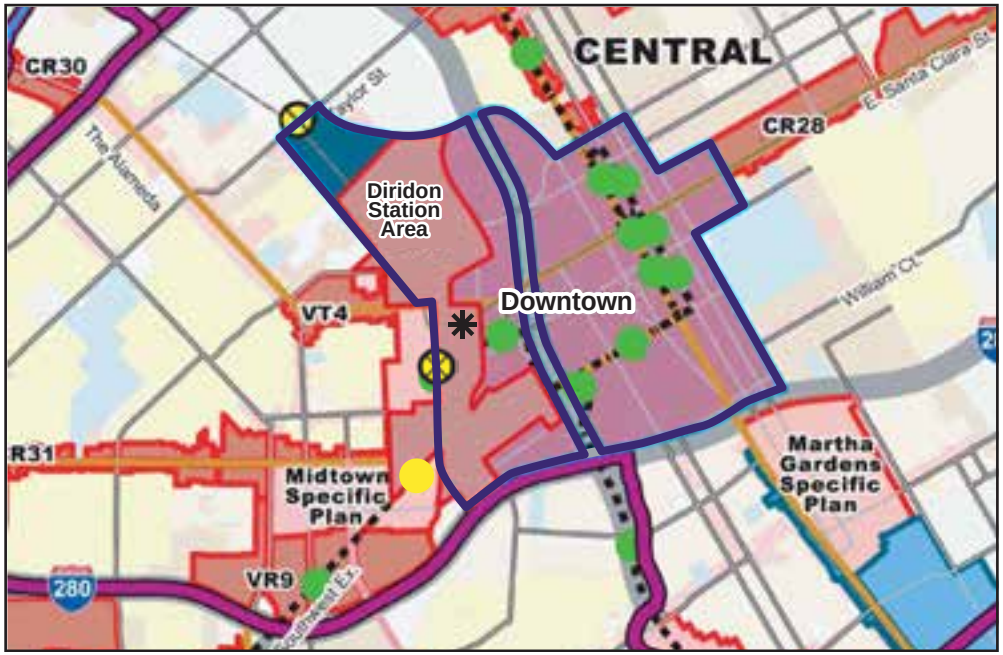
Proposed Land Use

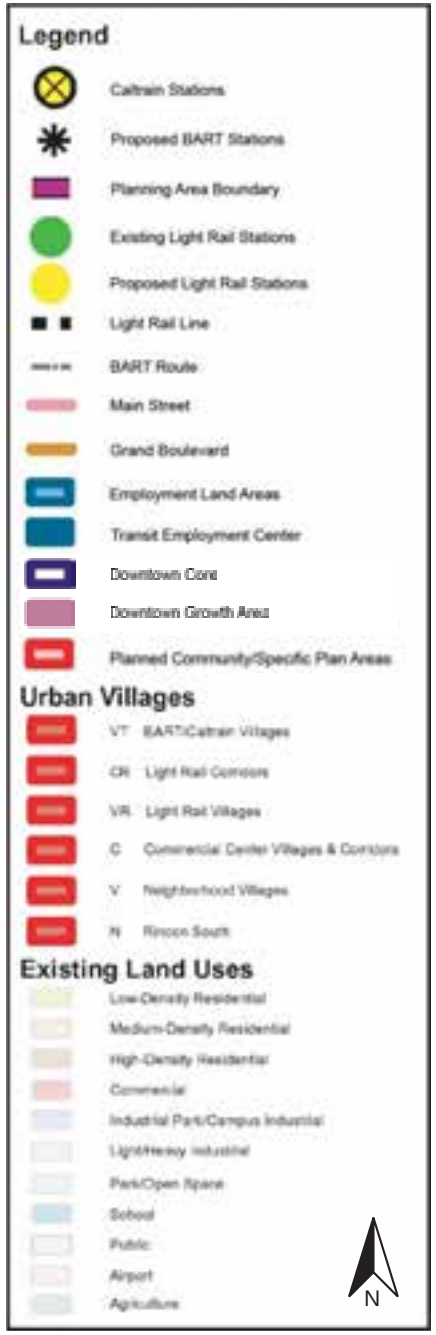
* Changes reflect resolution No. 77098, dated June 30, 2014.

EXISTING AND PROPOSED LAND USE DESIGNATIONS ON THE 2040 GENERAL PLAN LAND USE/TRANSPORTATION DIAGRAM (REVISED) FIGURE 2-4

EXISTING

PROPOSED





PROPOSED AMENDMENTS TO 2040 GENERAL PLAN GROWTH AREAS DIAGRAM FIGURE 2-5

2.1.4.3 *Text Amendments*

The project proposes the following text amendments to the 2040 General Plan to describe the DSAP as an Urban Village and to modify the boundaries of the Midtown Specific Plan to eliminate overlap with the DSAP:

Chapter 1, page 27, Growth Areas:

> **Downtown**
> The *Envision San José 2040 General Plan* reinforces the importance of San José's Downtown as the physical and symbolic center of the City. Planned growth capacity and the General Plan policies are intended to further support the growth and maturation of the Downtown as a great place to live, work or visit. ~~The *Envision San José 2040 General Plan* maintains and augments the City's *Downtown Strategy 2000* 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.~~
>
> ~~The boundaries for the Downtown Growth Area (also referred to as the "Downtown Area" and historically as the "Downtown Core") are defined on the Planned Growth Areas Diagram. The Downtown Growth Area is bounded by Julian Street, North 4th Street, East St. John Street, 7th Street, East San Fernando Street, South 4th Street, Interstate 280, the Union Pacific Railroad line, Stockton Avenue, Taylor Street, and Coleman Avenue.~~ The *Envision San José 2040 General Plan* maintains the Downtown Core (also referred to as the "Downtown Zoning Area") and establishes two separate growth areas: the Downtown Growth Area and Diridon Station Area Urban Village. As shown on the Planned Growth Areas Diagram, the Downtown Core includes most of the Diridon Station Area Urban Village, while the Downtown Growth Area covers the remainder of the Core.
>
> The *Envision San José 2040 General Plan* maintains and augments the City's *Downtown Strategy 2000* to support high-rise development in the Downtown Growth Area. The *Diridon Station Area Plan* guides land use development in the Diridon Station Area Urban Village.
>
> Ambitious job and housing growth capacity is planned for the two growth areas covering Downtown ~~and supported by Downtown Strategy 2000~~. This growth capacity is important to achieve multiple City goals, including support for regional transit systems and for the development of Downtown as a regional job center. It also helps to advance all elements of the General Plan Vision.

Chapter 1, page 50, Envision San José 2040 Context and Key Issues:

Midtown Specific Plan (1992)

Like Jackson-Taylor, the Midtown Specific Plan directs the conversion of an aging industrial area to a vibrant mixed use community oriented to transit and designed for the pedestrian. Located just west of Downtown and south of the San José Arena, this 210-acre area was planned for close to 3,000 high density housing units, parks, employment opportunities, neighborhood-serving commercial uses, some industrial activities, and close community connections with the San José Diridon Caltrain/Amtrak station and planned light rail stations. Since its adoption, the portion of Midtown directly west of the Diridon Station has been largely built out, as planned, with new high density housing and mixed-use development and with a public park. The western boundary of the Midtown Specific Plan between San Carlos and Santa Clara Streets was shifted west to the railroad tracks. With adoption of the Diridon Station Area Plan, the portion of Midtown generally bounded by the light rail tracks and Sunol Street was integrated into the Diridon Station Area Urban Village. The Midtown Specific Plan now primarily provides direction for development south of West San Carlos Street, which is planned for industrial and commercial uses, as well as high density transit residential uses on identified properties.

Chapter 5, page 26, Urban Village Plan Areas

The following areas have Urban Village Plans which have been reviewed by the City Council and provide detailed land use policy guidance, consistent with the requirements of the General Plan Implementation Policies for Urban Village Areas:

- The Diridon Station Area – The majority of the Diridon Station Urban Village is contained within the Downtown Core. The Diridon Station Area Plan includes a blueprint for the development of a mix of high intensity/ density commercial, entertainment, research and development, and residential uses surrounding the Diridon Station. The Diridon Station Area Plan also provides specific direction on land use, urban design, and circulation, consistent with the objectives of the Urban Village planning process.

Appendix 5:

The DSAP would be added to the "Growth Areas Planned Capacity by Horizon" table in Appendix 5. The growth capacity for the Diridon Station Area Urban Village would draw from the planned job capacities and housing yields for Downtown, the Midtown Specific Plan, and the "VT4 – The Alameda (East)" Urban Village. As described in Section 4.1.3.4, the planned housing units and jobs would be allocated between the Diridon Station Area and other Growth Areas such that there would be no net change in the overall development capacity over the current 2040 General Plan. The proposed changes to the table in Appendix 5 are shown below.

Table 2-3:
Proposed Revisions to the Growth Areas Planned Capacity by Horizon Table (Appendix 5)

	Planned Job Capacity	**Planned Housing Yield (DU)**	**Base** *Existing Capacity*	**Planned DU Growth Capacity** *Horizon 1*
Downtown				
Downtown	~~48,500~~ 25,816	~~10,360~~ 8,450	~~10,360~~ 8,450	
Portion Housing Already Entitled		1,139		
Diridon Station Area Urban Village	23,010	2,710	122	2,588
Specific Plan Areas				
Midtown Specific Plan	~~1,000~~ 841	~~1,600~~ 800	~~1,600~~ 800	
Portion Housing Already Entitled		800		
BART/Caltrain Villages				
VT4 - The Alameda (East)	~~1,610~~ 1,443	411	9	402
Portion Housing Already Entitled		9		

For planning purposes, the job capacity for the Diridon Station Area Urban Village was calculated by assuming 2.2 jobs per hotel room, one job per 400 square feet of retail, and one job per 250 square feet of office, commercial, industrial, and R&D uses. Note that the proposed growth capacities for the Diridon Station Area Urban Village is higher than the maximum development levels proposed under the DSAP, listed in Section 2.1.3 above, because the growth capacity includes the approved Whole Foods Market (33,500 square feet of retail) and Park Avenue Townhomes project (122 dwelling units and 2,500 square feet of retail).

2.2 CONCEPTUAL DIRIDON STATION EXPANSION PLAN

The DSAP includes a conceptual expansion plan for Diridon Station to accommodate the future convergence of high speed rail (HSR), Bay Area Rapid Transit (BART), and significant growth of the current intercity rail, commuter rail, light rail transit (LRT), and bus transit. The Diridon Station conceptual plan includes additions and modifications to the station and circulation improvements in the surrounding area. The conceptual station expansion plan is intended to increase access points, optimize internal and external circulation, and facilitate transfers between the various modes of transportation. The conceptual plan can accommodate either an above or below ground HSR alignment.

2.2.1 Additions and Modifications to the Station

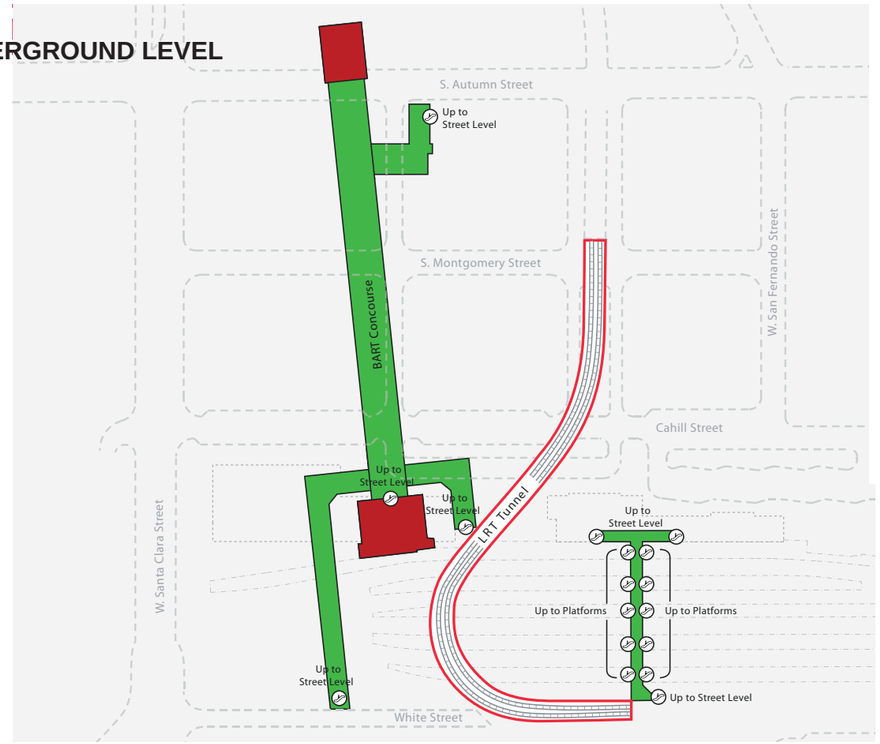
Specific architectural and design plans for the station have not yet been prepared. Under the conceptual expansion plan, however, the historic depot building would remain for passenger rail functions and a new station building would be located near the corner of Cahill Street and West Santa Clara Street. The new station would be arranged linearly ~~east~~ west of Cahill Street on the south side of Santa Clara Street. The existing heavy rail platforms, LRT facilities, and pedestrian tunnel would remain in their current locations.

As shown on Figure 2-6, the conceptual station expansion plan includes four levels: 1) underground, 2) street level, 3) mezzanine level, and 4) HSR platform level. The new platforms for the HSR trains would be constructed approximately 60 feet above the existing at-grade platforms. The mezzanine level would provide access to the two platforms levels and crossings over the railroads tracks and Santa Clara Street. At the street level, a plaza would be located between the existing and new station buildings. The future BART concourse would be constructed under the new HSR station building. The conceptual station massing and an example station design are shown on Figure 2-7.[29]

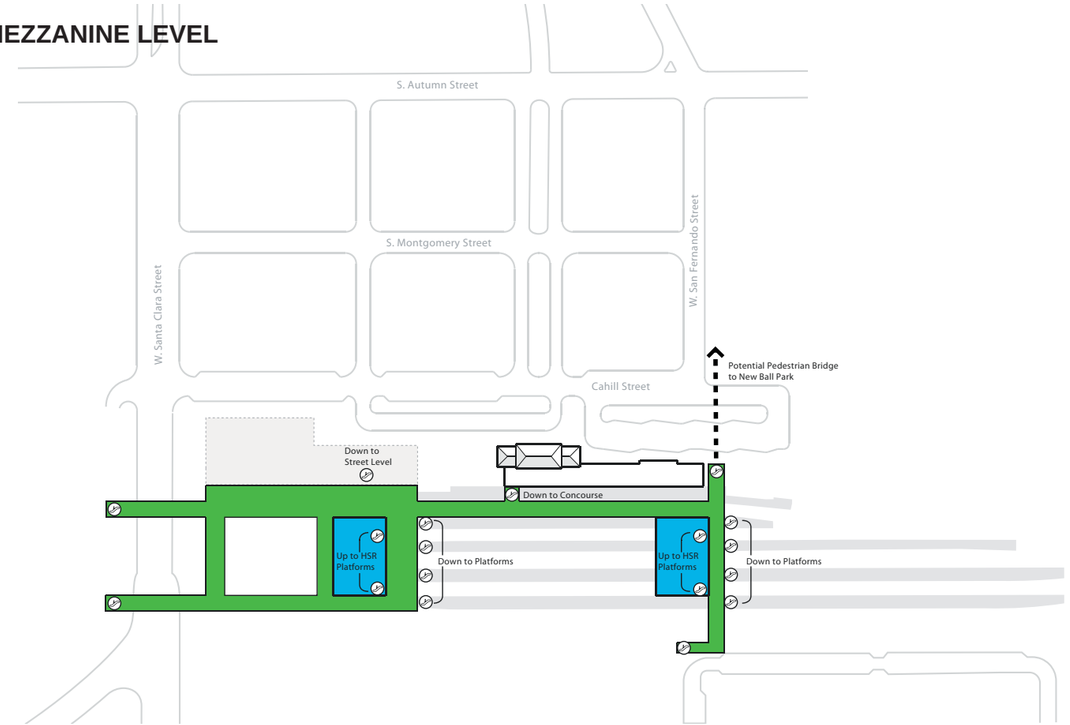
Figure 2-6
Conceptual Station Massing and Photosimulation of Example Station Design

[29] The photosimulation was taken from the *San Jose California High-Speed Train Infrastructure Visual Design Guidelines.* Refer to Section 4.13 *Aesthetics* for additional photosimulations.

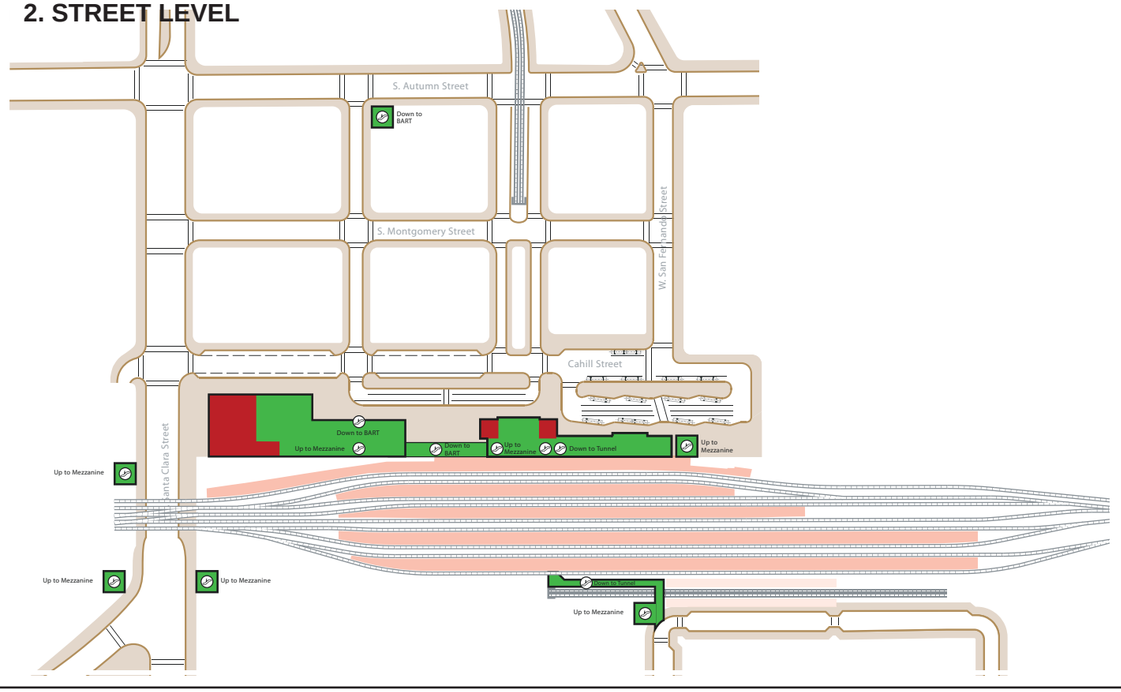
1. UNDERGROUND LEVEL



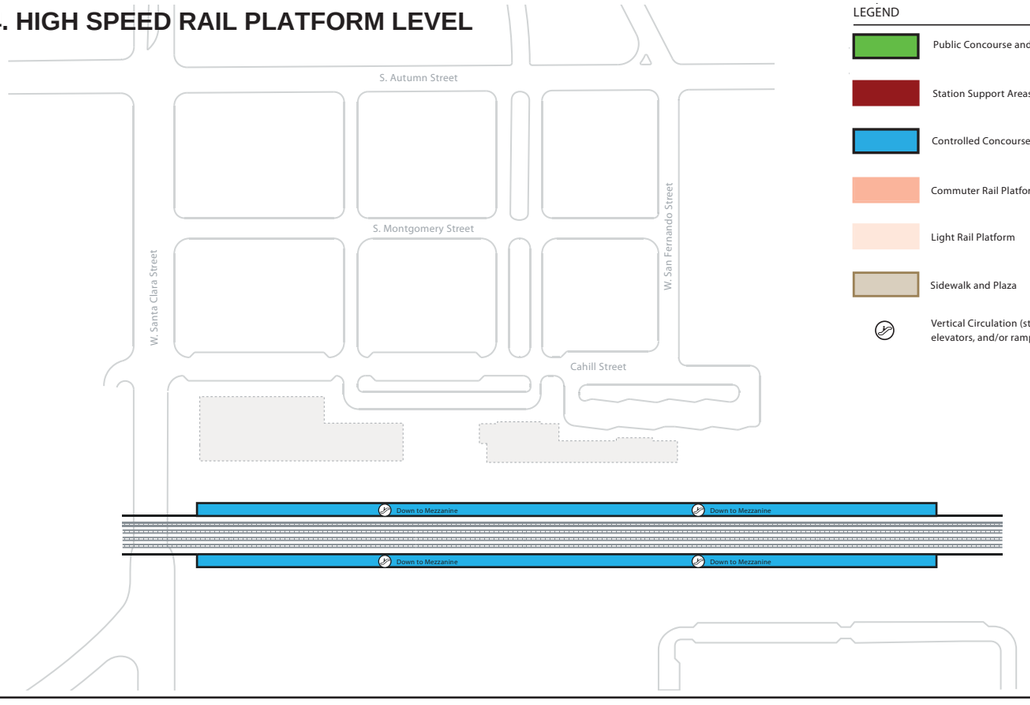
3. MEZZANINE LEVEL



2. STREET LEVEL



4. HIGH SPEED RAIL PLATFORM LEVEL



LEGEND

- Public Concourse and Circulation
- Station Support Areas
- Controlled Concourse and HSR Platforms
- Commuter Rail Platform
- Light Rail Platform
- Sidewalk and Plaza
- Vertical Circulation (stairs, escalators, elevators, and/or ramps)

CONCEPTUAL DIRIDON STATION EXPANSION PLAN

FIGURE 2-7

The expanded station would incorporate waiting areas, vertical circulation facilities (elevators, escalators, ramps, and/or stairs), and security checkpoints to control access to HSR platforms. Station support areas (i.e., "back-of-house" areas, equipment, etc.) would be provided at the mezzanine, street, and underground levels. The new HSR terminal could accommodate some retail uses.

In addition to the new station elements, the conceptual station expansion plan includes minor modifications to the interior of the existing Diridon Station building, including:

- Improvements for passenger circulation, including modifying the existing pedestrian tunnel to meet ADA requirements;
- Installation of ticket machines, signage, and other passenger support functions and amenities;
- Creation of a new entrance at the southern end of the baggage building; and
- Relocation of station support facilities to the new station building.

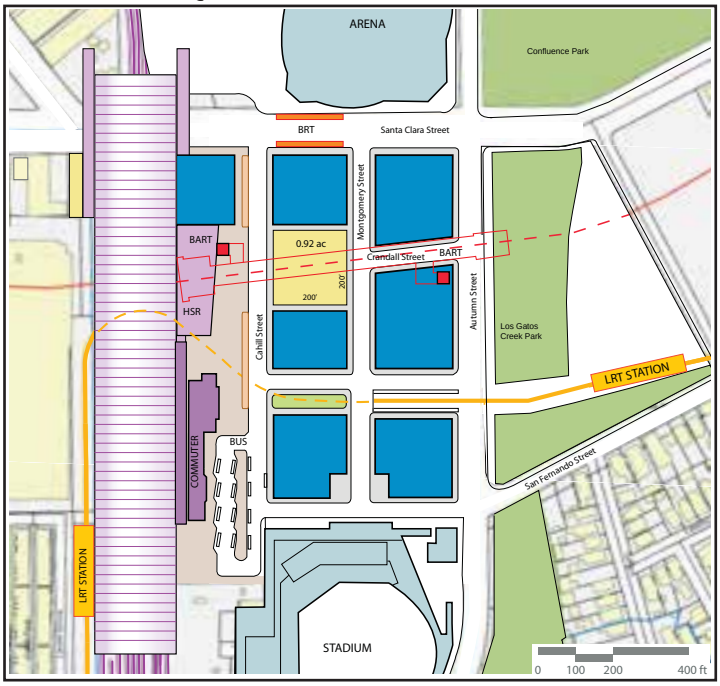
2.2.2 External Circulation Improvements

Vehicular access to the station would be provided primarily from Cahill Street. "Kiss and ride" curbs for passenger drop-off and curb frontage for shuttles and taxis would be located adjacent to the station. A transit center for bus operations would be provided adjacent to the station in the form of a "bus plaza" or "transit mall" on either Crandall Street or San Fernando Street. In addition, the station could accommodate new airport shuttle service. A bus rapid transit (BRT) stop would be constructed on Santa Clara Street. The DSAP includes three conceptual plans that illustrate possible layouts for these station area improvements, as shown on Figure 2-8.

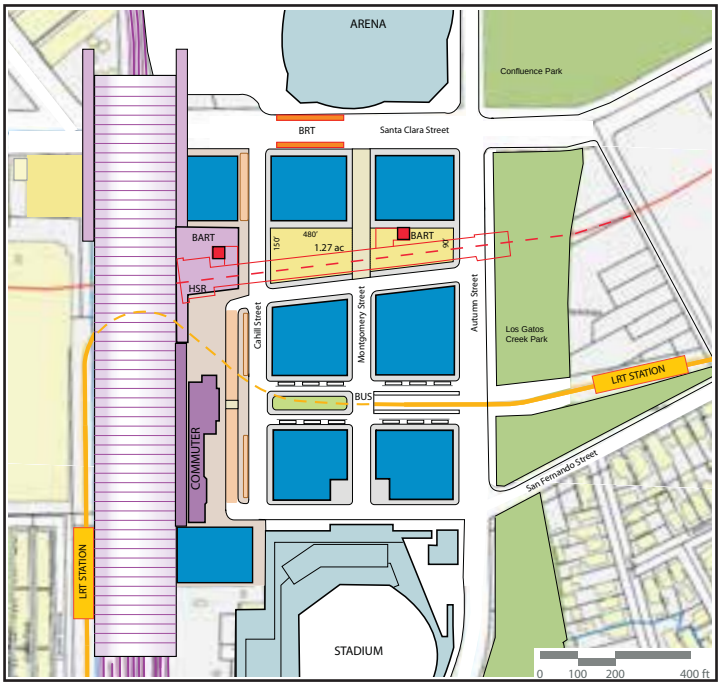
The CHSRA and VTA are the lead agencies for the HSR and BART facilities, including stations. Therefore, for purposes of this PEIR, the proposed project does not include the actual construction or implementation of station expansion plan. Rather, the conceptual station expansion plan represents the City's preferred configuration and is intended to provide a framework for future planning efforts, including the ultimate architectural design of new station facilities.

Although the City of San José is not responsible for the construction of the HSR and BART facilities, the City may serve as a responsible agency during final design phases and the lead agency for some of the external circulation improvements.

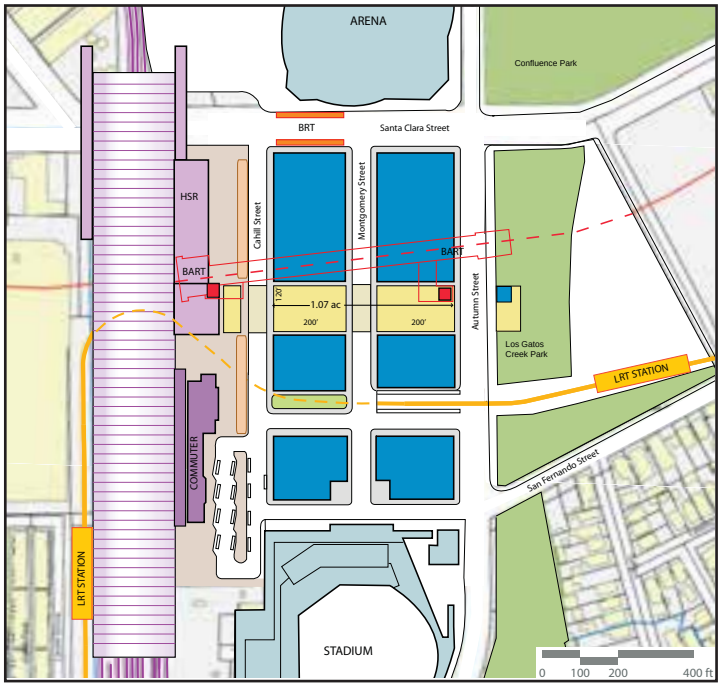
CENTRAL SQUARE PLAZA



TRIANGULAR PLAZA



LINEAR PLAZA



- Development Blocks
- Public Spaces
- Station front plaza
- Drop-Off/ Taxi Areas
- Pedestrian Crossings/ Traffic Calming
- Green Network
- Existing Station Building
- New Terminal

CONCEPTUAL LAYOUTS FOR STATION AREA IMPROVEMENTS FIGURE 2-8

2.3 OTHER DSAP COMPONENTS

2.3.1 Public Open Space Network

The DSAP outlines five types of public open spaces and landscape amenities. The open space network is intended to serve residents and visitors and support a liveable and sustainable urban environment. Elements of the open space network could be constructed by the City as part of a public improvement project or may be incorporated into future private development. As shown on Figure 2-9, the network includes public plazas, neighborhood squares, a community park, creek trails, and wide linear parks referred to as "green fingers".

Public plazas would be located near Diridon Station to create a central gathering space that could be used for a range of programmed activities and events. Elements that may be integrated into public spaces include: water feature, amphitheater with seating, a major public artwork, display areas, stage, concession stands, and/or restrooms. The plaza would be designed to accommodate high volumes of pedestrian movement. Possible locations for public spaces are shown on Figure 2-8.

Neighborhood squares would be distributed throughout the Plan area to create focal points within each neighborhood and increase the availability of recreational facilities and open space. Consistent with the 2040 General Plan and other City plans, the community park would replace the existing San José Fire Department (SJFD) Training Facility, which is bounded by Park Avenue, Montgomery Street, Los Gatos Creek, San Carlos Street, and the railroad tracks.[30] The City may ultimately expand the park to include the properties at the northwest corner of Park Avenue and Montgomery Street, which are currently developed with commercial uses, although this is not proposed by the project. The community park would provide gathering spaces and outdoor recreation areas for nearby residents and the greater community.

As described in Section 1.2.1.4 above, the City plans to complete the Los Gatos Creek Trail connection to the Guadalupe River Trail. Within the Plan Area, a small segment of the trail would be constructed on the SJFD property and ultimately incorporated into the future park. The trail alignment would utilize existing pedestrian facilities to cross Montgomery Street and Park Avenue. Adjacent to the Plan area, the trail would continue north along the west side of Los Gatos Creek in the open space created by the Autumn Street realignment project.[31]

The green fingers would be a minimum of 30 to 40 feet wide and contain landscaping and pedestrian-level amenities such as pathways. The green fingers would be constructed along transportation corridors such as Julian Street, Park Avenue, and the light rail right-of-way in the Southern Zone. ~~A local trail connection is proposed along the former railroad line in the Northern Zone (referred to as the "Northern Railroad Trail").~~ Class I and III bike facilities are proposed on Cinnabar Street east of Montgomery Street, which would provide an east-west connection in the north part of the Station area and connect to the Guadalupe River Trail. Together, the green fingers and trails would provide a network of pedestrian/bicycle pathways connecting the various open spaces within and adjacent to the Plan area.

[30] The project does not include the relocation of the SJFD Training Facility, which would require additional review.
[31] If the existing uses between Los Gatos Creek and Autumn Parkway are not removed, the trail would follow an on-street alignment from San Fernando Street to Santa Clara Street, in accordance with the approved Trail Master Plan.

Note: The pedestrian connections along St. John St., Auzerais Ave., and West San Carlos are expected to contain landscaping and pedestrian level amenities such as pathways.

OPEN SPACE NETWORK IMPROVEMENT STRATEGY (REVISED) FIGURE 2-9

2.3.2 Access and Circulation

2.3.2.1 *Transportation Improvement Strategies*

The DSAP proposes a range of transportation improvement strategies that are intended to maximize the efficiency, safety, and connectivity of the circulation system. The strategies emphasize increasing access and mobility for alternative modes of transportation (i.e., pedestrian, bicycle, and transit), while balancing the needs of automobile travel.

The proposed transportation strategies are grouped into four categories: walking, bicycling, transit, and complete streets, as summarized in Table 2-4 below. The term "complete streets" describes a comprehensive approach to planning transportation corridors to support travel by all users of the roadway. A key strategy proposed by the DSAP in support of this concept is to create new linkages within and adjacent to the Plan area, given that a well-connected street grid with short blocks makes walking and biking more convenient.

While the proposed pedestrian and bicycle strategies would apply to all streets and intersections in the Plan area, the DSAP emphasizes the improvement of key intersections, pedestrian corridors, and bicycle priority streets. These streets provide east-west and north-south connections and are projected to have high levels of walking and biking activity.

The bicycle network would include existing and new Class I bicycle paths, Class II bicycle lanes, and Class III bicycle routes. Class I facilities, which are off-street trails that can also be used by pedestrians, include the planned segment of the Los Gatos Creek Trail and existing Guadalupe River Trail. In addition, the DSAP proposes ~~a~~ new Class I and III bike facilities are proposed on Cinnabar Street east of Montgomery Street, which would provide an east-west connection in the north part of the Station area and connect to the Guadalupe River Trail. ~~trail using a former railroad right-of-way. The "North Railroad Trail" would run along the Arena parking lot from Santa Clara Street and connect to the Guadalupe River Trail at Autumn Street.~~ The proposed improvements to the pedestrian, bicycle, and street networks are shown on Figure 2-10. Refer to Figure 1-4 for the location of the planned transit facilities.

Table 2-4:
Transportation Improvement Strategies

Pedestrian Network
• Promote walking connections from surrounding neighborhoods and employment centers to the Plan area by providing a continuous network of sidewalks, paseos, and pathways. • Facilitate pedestrian access and safety through pedestrian enhancements, including the installation of wider sidewalks along key corridors. • ~~Provide~~ Consider enhanced crosswalks at signalized intersections and key pedestrian crossings through the use of pedestrian bulb-outs, median refuge islands, and/or special paving treatments. • ~~Provide~~ Consider mid-block crosswalks and/or pedestrian signals at high-use uncontrolled crossings, as appropriate.

Table 2-4:
Transportation Improvement Strategies

- ~~Provide~~ Consider a pedestrian "scramble" signal phasing at locations with high pedestrian volumes. ~~adjacent to the Arena (and possibly at other locations with high pedestrian volumes) to allow pedestrians to cross in all directions at once.~~
- Enhance pedestrian underpass connections through installation of ramps, pedestrian-scale lighting, wider sidewalks, and public art.

Bicycle Network

- Provide a network of bicycle priority streets that provide linkages throughout the Plan area.
- Provide bicycle lanes (Class II facilities) on streets with available right-of-way and higher traffic volumes.
- Enhance the safety and comfort of the bicycle network through the use of colored bike lanes, "sharrow" markings, separated bike lanes, signage, and/or other specialized treatments.
- Develop ~~the Los Gatos Creek Trail and proposed North Railroad trail connection~~ trail connections along Los Gatos Creek and Guadalupe River.
- ~~Provide~~ Where appropriate, provide grade-separated crossings along the Los Gatos Creek and Guadalupe River Trails to enhance connectivity and safety of the trail network.
- Provide sufficient bicycle parking facilities for short-term and long-term purposes.
- ~~Establish and promote a public bike-sharing program that allows free or low-cost rental of bikes at Diridon Station and other key generators.~~ With the Station Area as its focus, promote usage of the existing bike share station and overall expansion of the program to encourage cycling as a primary mode of transit without having to transport a bicycle.
- Support the expansion of Diridon Station's bicycle parking supply with the aim of creating a major bicycle parking facility, such as the 4th and King Bike Station in San Francisco.

Transit

- Consider using electric vehicles for the Downtown Area Shuttle (DASH).
- Enhance bus stops with appropriate amenities (shelters, benches, lighting, real-time passenger information) to improve the overall comfort and safety for transit riders.
- Support rail transit operators (including VTA, Caltrain, ACE, Amtrak, and BART) to improve service and amenities that increase daily ridership and reduce potential negative effects on the community.
- Consider implementing an additional shuttle route connecting Diridon Station and Mineta San José International Airport (SJC).

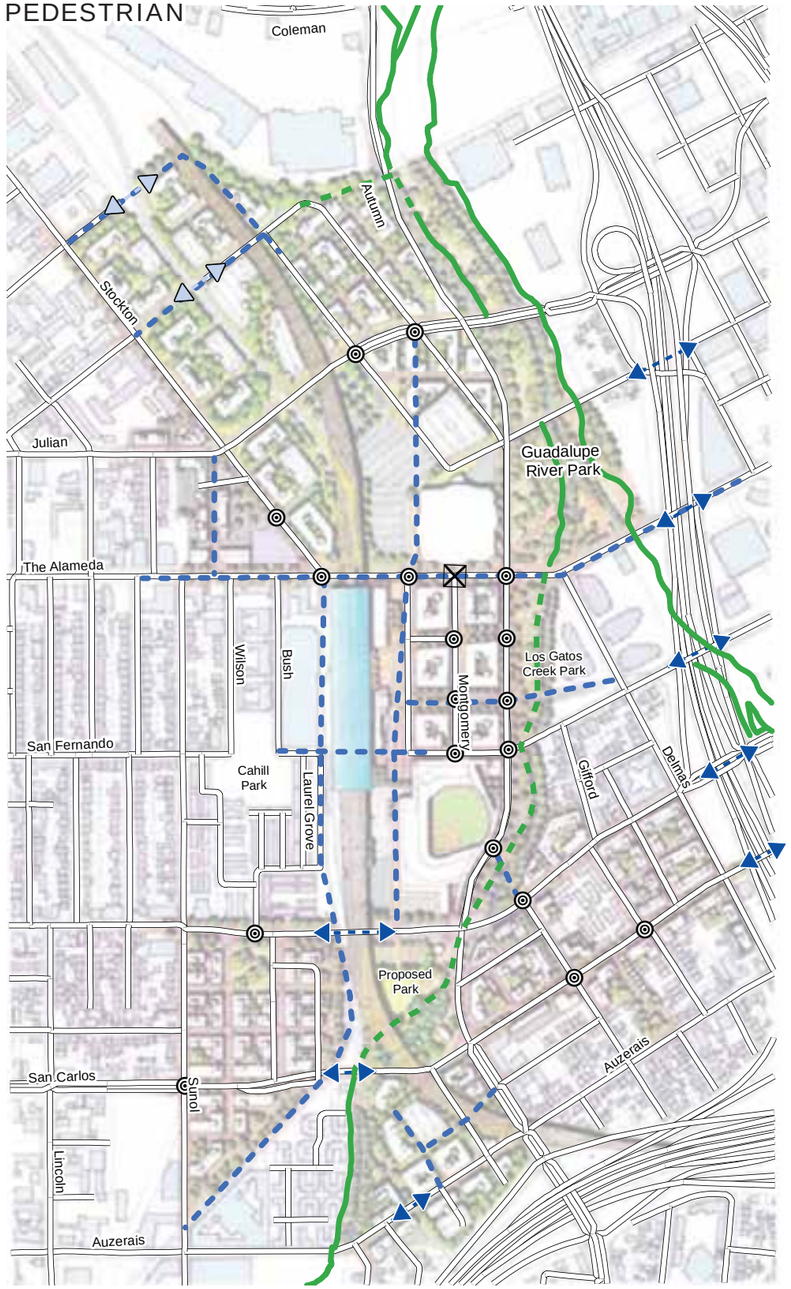
Complete Streets

- Improve the street grid system by creating new street connections and shorter blocks to promote additional travel options and reduce walking distances to destinations.
- Provide adequate width for all sidewalk uses, including loading and unloading from on-street parking, walking traffic, window shopping traffic, bicycle parking, and street furniture.
- Provide street trees to separate the pedestrian walkway from the bicycle and/or vehicle travel way, and to add identity and enhance the aesthetics of the area.
- ~~Install~~ Provide pedestrian-scale lighting on key streets, crosswalks, and mid-block crossings.
- Provide amenities such as kiosks, benches, newspaper racks, trash cans, bus shelters, café tables, hanging flower baskets, and chairs to increase the number of opportunities for people to socialize and spend leisure time outdoors along public streets.

Table 2-4:
Transportation Improvement Strategies

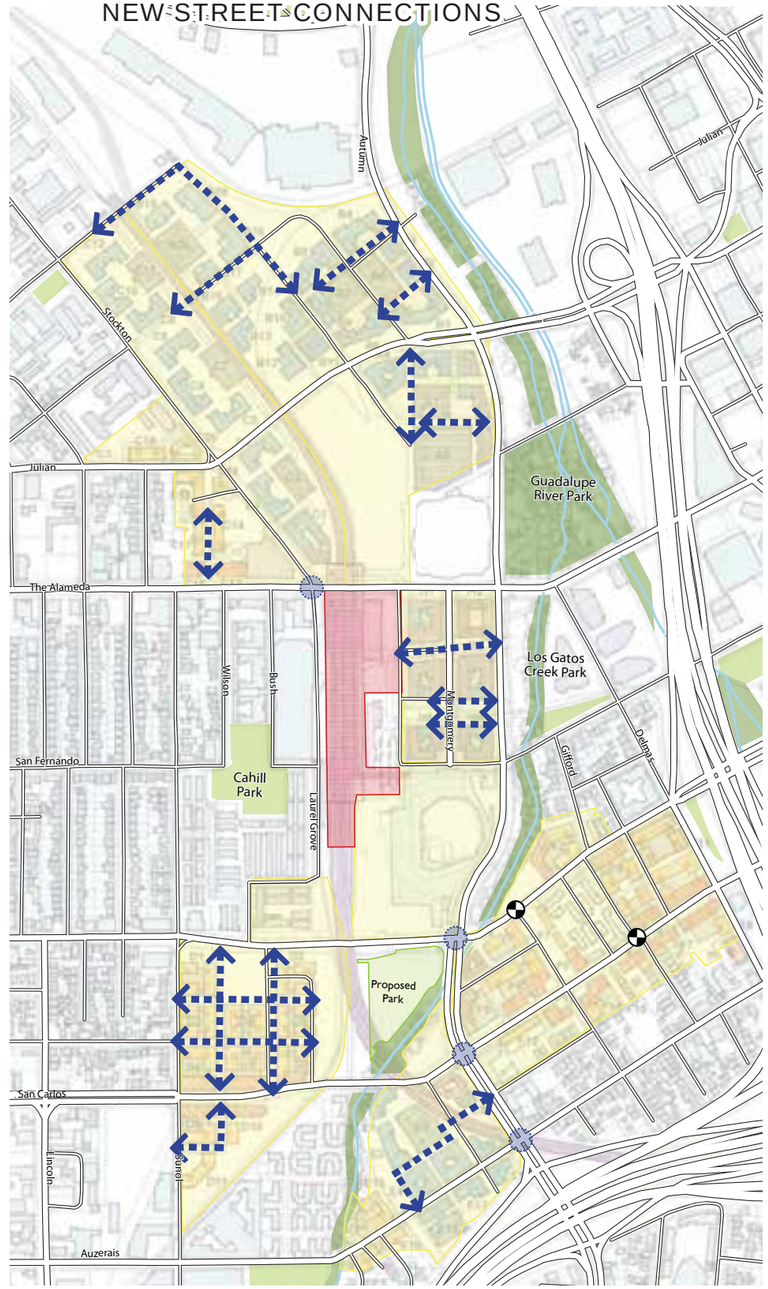
- Incorporate "green street" features such as pervious surfaces, open channels, and vegetated drainage swales at appropriate locations.
- Remove existing pork-chop islands to enhance pedestrian safety.
- ~~Install~~ Consider roundabouts at ~~identified~~ key locations ~~(refer to Figure 2-10)~~ to improve safety and reduce greenhouse gas emissions. ~~and~~ Consider ~~additional~~ alternative locations for future roundabouts.
- Consider implementing "road diets" on other streets with projected excess vehicle capacity to reduce the number of travel lanes or the roadway width and to use the available public right-of-way to provide wider sidewalks, bicycle lanes, transit amenities, or landscaping.
- Provide continuous sidewalk improvements along major arterial streets. Close gaps between pedestrian connections.

PEDESTRIAN



BICYCLE and TRAIL

NEW STREET CONNECTIONS



Proposed Enhanced Pedestrian Undercross Connection
New Pedestrian Scramble
Intersection
Class I Bicycle Path - Existing
Class I Bicycle Path - Proposed
Proposed Enhanced Pedestrian Connection

Class I Bicycle Path - Existing
Class II Bicycle Lane - Existing
Class III Bicycle Route - Existing
Class I Bicycle Path - Proposed
Class II Bicycle Lane - Proposed
Class III Bicycle Route - Proposed

One-way street
At-grade crossing with future potential grade-separated crossing
Future potential grade-separated crossing
0
0.2 Miles
N

New Street Connection
Existing Street Network
N
NOT TO SCALE
Signal
Removed "Pork-chop" Islands

TRANSPORTATION IMPROVEMENT STRATEGIES

(REVISED) FIGURE 2-10

2.3.2.2 *Parking*

The existing demand for parking in the Plan area is primarily driven by the Arena, Diridon Station, and to a lesser degree, existing private land uses. Future development allowed under the DSAP, new transit services (BART and HSR), and the proposed baseball stadium would further increase the demand for parking in the Plan area. In addition, planned development in the Central Zone would replace surface lots that currently serve the Arena and Diridon Station.

The DSAP proposes to meet demand generated by existing and future development by requiring that new development provide off-street parking, primarily through structured or underground garages. The DSAP projects future off-street parking ratios that would ultimately be achieved with build-out of the DSAP and completion of the planned transit facilities, including BART and High Speed Rail.

Table 2-5:
Projected Future Parking Ratios

Land Use Type	Minimum Parking Spaces per Unit
Commercial/R&D	1.51 spaces per 1,000 ~~gross~~ net square feet of space*
Retail	0 spaces
Residential	1 space per unit
Hotel	0.2 spaces per room

* Weighted average of the three zones.

The City Council-adopted Envision San José 2040 General Plan calls for a significant reduction in single-occupant vehicle (SOV) travel. It sets the goal of reducing SOV trips from about 80% currently to 40% in 2040. The DSAP parking analysis is based on a projection of 60% total auto trips with the remaining 40% of trips by other modes of travel (transit, walking, and bicycling). ~~The projected parking ratios are consistent with the Envision San José 2040 General Plan's goal to reduce drive alone automobile trips from 77.8% of all commute trips to no more than 40% of all commute trips. The future projected parking ratios were used to develop the test fit plan in the DSAP, which determined the amount of development that could realistically be accommodated in the Plan area and is analyzed in this PEIR.~~ The projected off-street parking ratios for commercial/R&D, retail, residential, and hotel uses are summarized in Table 2-5. The projected ratios for commercial/R&D uses are different for each zone, recognizining the unique development characteristics of each. Consistent with current zoning regulations for the Downtown Core, off-street parking would be shared by retail and commercial office uses with retail uses having no dedicated on-site parking.

The projected residential parking ratio is also consistent with the current Downtown minimum parking requirements for residential uses. The projected future parking ratios for commercial/R&D and hotel uses are lower, however, than the current minimum required parking spaces in the Downtown. For example, Downtown commercial office and R&D uses are required to have a minimum of 2.~~13~~5 spaces per 1,000 ~~gross~~ net square feet of space, while in the DSAP the projected parking ratios are 1.51 spaces per 1,000 gross square feet of commercial/R&D space. The minimum Downtown parking requirement for hotels is currently 0.35 spaces per room versus a projected parking ratio of 0.2 spaces per room in the DSAP.[32]

[32] Development in the Downtown that qualifies for parking exemptions by providing transportation demand management measures, can reduce their off-street parking ratios by 50%. For example, commercial office and R&D development that

Having lower projected parking ratios for commercial/R&D and hotels than current requirements is considered to be appropriate for build-out of the DSAP over the next 30 years. Already a major transit hub, Diridon Station is anticipated to become one of the busiest multi-modal stations both in California and the western United States with the BART extension to Silicon Valley and the High Speed Rail to San Francisco and Los Angeles. In addition to these major investments, the DSAP also plans for a dense network of bicycle and pedestrian facilities that will further improve access to the Plan area from the surrounding communities. Given the planned high level of transit, bicycle, and pedestrian accessibility, it is anticipated that more people will travel to the Diridon area using an alternative mode of transportation than by driving alone, thereby necessitating the need for less parking than is currently required in Downtown for office/R&D and hotel uses.

While the projected parking ratios are lower than those required Downtown, the project does not propose revisions to Municipal Code parking requirements to support these ratios. Revisions, if necessary, would be considered during subsequent phases of the DSAP planning process. The application of ratios would be flexible and may change overtime, as the parking supply and demand would be managed through a comprehensive Transportation Demand Management (TDM) and Parking Management Plans to be prepared for the DSAP area, as described further below and in the DSAP.

The parking demand for transit services under build-out conditions is projected to range from 1,350 to 2,200. The DSAP does not propose to supply new parking facilities specifically for transit users. Rather, the parking demand would be met through surplus spaces to be provided in the new structures associated with future development. The proposed ratios incorporate the need for surplus parking to serve transit users.

To continue to meet parking demand generated by the Arena, the existing 1,400-space (approximately) surface lot would remain under build-out conditions. In addition, the DSAP includes a 900-space, 2-3 level parking structure to provide additional shared parking for the general public. The garage would be located at the northeast corner of St. John Street and Montgomery Street, north of the Arena.

The parking demand generated by the proposed baseball stadium was estimated to be approximately 13,000 spaces.[33] According to the 2010 Baseball Stadium SEIR, this demand would be met through existing parking facilities in the Downtown area, the majority of which are located east of SR 87. Although new parking facilities in the Plan area could serve stadium patrons, they are not necessary to accommodate the increase in demand associated with the stadium.

Based on the projected parking ratios, maximum development levels, and projected transit parking demand, the total recommended parking supply would be approximately 11,950 spaces. The parking

qualifies for a 50% parking reduction would only be required to provide a parking ratio of 1.06 spaces per 1,000 square feet of building area.

[33] The *Baseball Stadium in the Diridon/Arena Area (Modified Project) Supplemental EIR* prepared by the City of San José in February 2010 identified the Diridon Station Area Plan as a cumulative project. The analysis of parking supply and demand in the SEIR took into account the redevelopment and intensification of the station area.

supply does not include on-street parking, off-street parking to be provided at the Whole Foods Market or Park Avenue Townhomes sites, or the existing surface lot associated with the Arena. As described above, parking would be supplied by future development in the form of structured or underground facilities.

It should be noted that developers may decide to build more parking spaces than would be required under the projected parking ratios. In this event, it is likely that any additional parking above the minimum would be built in lieu of development capacity. If this were to occur for multiple projects, it could result in less overall development in the Plan area than proposed by the DSAP.

2.3.2.3 *Transportation and Parking Management Plan*

During the next phase of the DSAP planning process, a Transportation Demand Management (TDM) and Parking Management Plan ~~(TPMP)~~ will be prepared to manage travel demand and maximize efficient use of parking and transportation resources, integrating the proposed parking and transportation improvement strategies described in the above sections. ~~One of the objectives of the TPMP is to reduce parking intrusion within existing surrounding neighborhoods.~~

~~The TPMP will include~~ A well-designed parking management plan can efficiently manage parking ~~tools~~ using both parking supply and demand approaches for both short- and long-term traffic management. On the supply side, recommended management tools include parking trade, shared parking , advanced parking reservation systems (APRS), permit parking programs, preferential parking for carpools and vanpools, and way-finding and parking guidance systems (PGS). Demand management approaches include on- and off-street pricing, "unbundling" parking costs from other user costs, and cash-out programs to allow employees to choose between free parking or the equivalent cost of the subsidized parking space. These programs are described in detail in the DSAP.

In addition to the Parking Management Plan, a companion TDM Plan would encourage adoption of alternative modes of transportation and support efficient use of the Station area's valuable parking resources. TDM measures include design-based and program-based strategies to manage travel demand. At a minimum, the TDM Plan could include: discounted transit passes, car-sharing programs, biking facilities (e.g., lockers, bike sharing, bike valet), guaranteed ride home programs, and employee shuttles to Diridon Station. These programs are also described in detail in the DSAP.

~~The TPMP will also include a transportation demand management (TDM) plan that will utilize design-based and program-based strategies to manage travel demand. At a minimum, the TDM plan will include: discounted transit passes, car-sharing programs, biking facilities (e.g., lockers, bike sharing, bike valet), guaranteed ride home programs, and employee shuttles to Diridon station. These programs are described in detail in the DSAP.~~

~~The San José Arena currently implements a TPMP that has substantially reduced traffic, parking, and pedestrian access impacts on event days. As stated in the Baseball Stadium SEIR, a detailed TPMP will be prepared for the stadium to implement short-term traffic controls on game days to provide for efficient ingress and egress of vehicles, pedestrians, and transit services to and from the ballpark, Arena, and identified parking facilities to minimize the effect of stadium/Arena traffic and parking on surrounding neighborhoods.~~

2.3.2.4 *Transportation and Parking Management Plan (TPMP)*

The City of San José, in partnership with San Jose Arena Management and the San Jose Arena Authority (SJAA), utilize an event-based Transportation and Parking Management Plan (TPMP). The most recent edition was prepared in 2005.

The purpose of the TPMP is to establish event traffic and parking management strategies for the San Jose Arena that:

1) Promote efficient and effective vehicular and pedestrian traffic circulation;
2) Provide convenient and easy access to and from area parking facilities;
3) Minimize traffic congestion on surrounding roadway facilities; and
4) Minimize traffic and parking intrusion into surrounding business and neighborhood communities.

The TPMP will be periodically updated as the Diridon area develops and the Arena continues to operate at a high level of activity.

2.3.3 Utilities

The existing utility infrastructure serving the Diridon Station Area is antiquated and undersized to meet future build-out needs. Therefore, the project includes, at a minimum, the following infrastructure improvements:

- Replacement of the water distribution system to meet domestic and fire service demands, in coordination with the San José Water Company;
- Replacement of sanitary sewer pipelines and possibly siphons to accommodate increased wastewater flows;
- Upgrades to the storm drain system to accommodate 10-year storm events; and
- Stormwater detention/retention facilities and replacement of existing outfalls or installation of new outfalls as needed.

The infrastructure improvements may be provided on an area-wide or site-specific basis depending on the results of additional required analysis and the ultimate phasing of development.

2.3.4 Affordable Housing

The DSAP acknowledges the City's policy goal to incorporate affordable housing into the residential mix. While no specific sites or strategies are proposed, potential financial strategies will be determined in the implementation of the DSAP for including affordable homes and may include, but are not limited to, the following:

- Impact fees;
- Development agreements;
- Public benefit agreements;
- Public-private partnerships;

- Tax increment financing;
- Assessment districts;
- Planning tools such as density bonuses, overlay zones, or public benefits conferred through rezonings;
- Private lending/capital; and
- Seek grant funding.

2.3.5 Public Art

The City of San José initiated the Diridon Station Area Art Master Plan to develop a framework for giving the area a distinctive character, capitalizing on the changes anticipated over the next decade. The Art Master Plan is based on the concept that San José is "at the crossroads" of innovation, ecology, and engagement. The artwork could take many forms and is envisioned to vary in aesthetic and thematic approach depending on the location: the northern zone (Innovation), open space areas (Ecology), and the remainder of the Plan area (Engagement). The Climate Clock Project is a public art initiative currently underway in the Plan area. The San José Public Art Program will lead implementation of the Art Master Plan, working with public and private entities to achieve its vision.

2.4 DSAP POLICIES AND PHASING

2.4.1 Design Guidelines

The DSAP contains Design Guidelines to assist the City with the review of future development and implementation of public improvement projects. The Design Guidelines are intended to facilitate development in a financially viable manner that is consistent with the long-term vision of the Plan area and achieves current City policies. The design guidelines may become the basis for the City of San José to establish regulations, implementation strategies, and/or subsequent planning documents such as detailed design standards.

The Design Guidelines are separated into three categories: 1) Built Form, 2) Open Space Network, and 3) Streetscape. The Built Form guidelines generally apply to private development sites. The Open Space and Streetscape guidelines are primarily directed at improvements to the public realm that would be implemented as part of future development or as public improvement projects.

The Built Form guidelines include standards and recommendations for site planning and building design, including maximum building heights based on location within the Plan area. According to the guidelines, block sizes should generally be limited to 400 feet (a generally acknowledged comfortable walking distance), new development should be oriented to the street, incorporate active groundfloor uses, and provide direct connections for pedestrians and bicyclists through pathways that connect to the public street and open space networks. The built form guidelines and the Design Guidelines call for "sustainable site planning" through the integration of natural assets and green building practices (e.g., on-site stormwater collection systems, use of rooftops for energy generation, etc.).

The Open Space guidelines complement the strategy described in Section 2.3.1 above, describing the various open space types and the intended character of each zone. The guidelines also call for the use of sustainable/green design, enhancing connections to Guadalupe River and Los Gatos Creek, and provision of urban paseos, public art, furnishings (e.g., benches, lighting, etc.), and a clear signage system.

The Streetscape guidelines complement the transportation improvement strategy described in Section 2.3.2 above and describe the "street typologies" assigned to the roadways in the Plan area, which are consistent with the Land Use/Transportation Diagram in the 2040 General Plan. The purpose of the street typologies is to provide a network of "complete" streets that accommodate all users and improve the safety of the circulation system. The Streetscape guidelines address the design of pedestrian crossings, bicycle treatments, bicycle parking, underpasses, street lighting, sidewalks, landscaping, street parking, traffic calming, and street furniture. The guidelines also provide design considerations for the high speed rail viaduct and interfaces with at-grade railroad tracks.

Overall, the Design Guidelines are intended to create a transit-oriented, pedestrian/bicycle-friendly environment with a vibrant urban character in a manner that maximizes compatibility between new and existing uses. The Design Guidelines are included in the Draft DSAP and discussed in detail in Section 4.13 *Aesthetics*.

The guidelines describe the envisioned design of the Plan area at full build-out. A master plan for each site or planned development should be prepared to demonstrate ultimate compliance with the Design Guidelines and show how the phasing strategy achieves the final goal. The application of the guidelines should be flexible to reflect unique challenges, development opportunities, and market conditions.

The DSAP Design Guidelines are generally consistent with General Plan policies and actions intended to guide development in Downtown and Urban Villages. Implementation of the DSAP Design Guidelines and General Policies are assumed to be part of the project. Future development would also be subject to adopted Design Guidelines for Commercial, Residential, Industrial, and Downtown development, although in the event of conflicting guidelines, the DSAP Design Guidelines would take precedence.

2.4.2 Project Phasing

It is anticipated that project construction would be phased over approximately 30 years or more. The DSAP has been developed so that some or all of the projects can be designed and implemented all at one time or on a site-specific basis.

The conceptual station expansion plan is primarily dependent on the HSR project. If the HSR project does not move forward, the plan could be modified to incorporate internal and external circulation improvements such as those related to the BART project, existing transit services, or ADA requirements. The City of San José would support its partner agencies in these improvements, as it does not own the station.

In addition, Major League Baseball has not approved the Athletics territorial rights to relocate to San José and the City has not approved the baseball stadium project. Under the proposed project, no other development is considered for the 15-acre ballpark site and existing uses are assumed to remain in the interim. If the proposed baseball stadium project does not move forward, the area could be developed in accordance with the current land use designation under the 2040 General Plan (*Commercial Downtown*), which is generally consistent with other land uses proposed as part of the DSAP in the Central Zone.

2.5 USES OF THE EIR

As described in Section 1.1 *Introduction*, this PEIR intended to inform the decision makers and general public of the environmental impacts associated with adopting and implementing the *Diridon Station Area Plan*.

2.5.1 Program-level Environmental Review

As described in Section 1.1.2, this EIR provides program-level review for future development and public improvement projects that implement the DSAP and are consistent with the project's goals and policies. This Program EIR will provide the basis for tiering the subsequent environmental review of future actions.[34]

The City of San José will use this PEIR to provide program-level environmental review under CEQA for the following actions:

1. Adoption of the DSAP, including the Land Use Diagram, Design Guidelines, and Conceptual Diridon Station Expansion Plan.

2. Approval of amendments to the 2040 General Plan.

3. Approval of the following maximum development capacity in the Diridon Station Area:

   - 4,963,400 square feet of commercial/R&D/light industrial uses
   - 424,100 square feet of retail/restaurant uses
   - 2,588 residential units, and
   - 900 hotel rooms.

2.5.2 Project-Level Environmental Review

Although specific development projects are not proposed at this time, this PEIR contains sufficient information to provide project-level clearance for certain impacts by including standard measures that apply to all projects in San José. This PEIR is also intended to provide project-level clearance for the following traffic-related impacts:

[34] For the purposes of this EIR, "subsequent environmental review" includes preparation and adoption of a Categorical Exemption, Negative Declaration, Environmental Impact Report, or Addendum.

- Intersection Operation Impacts (Impacts TRAN-2 and TRAN-4) *for projects proposed within the Downtown Core only*;[35]
- Adding the intersections of Park Avenue/Naglee Avenue, The Alameda/Naglee Avenue, and Lincoln Avenue/San Carlos Street to the City's List of Protected Intersections;
- Freeway Operation Impacts (Impacts TRAN-1 and TRAN-3);
- Traffic Noise (Impacts NV-1); and
- Operational Emissions of Criteria Pollutants (Impacts AQ-1 and AQ-2).

At the time future actions are proposed, the City will review the future actions for consistency with the assumptions in this PEIR (including conformance with General Plan policies and measures included in the project). Supplemental analyses may be required as part of the subsequent environmental review process to evaluate impacts that are unique to a specific project site or design and could not be analyzed in sufficient detail in this EIR and to identify additional mitigation measures, if necessary. It is anticipated that most future projects under the DSAP will be required to complete a Phase I Environmental Site Assessment and Tree Survey, at a minimum. Projects with a residential component will need to complete additional studies, including at least the following site-specific studies:

- Noise Reports (Impact NV-1)
- Human Health Risk Assessments
- Air Quality Modeling to assess TAC exposure (Impact AQ-4)

Additional analyses may be required for future projects depending on their location, land use type, and other design/operational characteristics. For example, projects located outside of the Downtown Core will need to complete a near-term Traffic Impact Analysis. For projects that would impact structures more than 45 years old, preparation of a Historic Resources Report would be required. Please refer to Section 4.0 *Environmental Setting, Impacts, and Mitigation* for a detailed description of these requirements.

The appropriate level of subsequent environmental review and need for additional analyses will be determined at the time future actions are proposed. Future private development and capital improvement projects that are consistent with the DSAP and the assumptions in this Program EIR may not require substantial additional review. In this event, compliance with CEQA would likely occur through the preparation of an Initial Study or Addendum. Future actions that propose substantial changes to the DSAP and/or would result in new or substantially greater environmental impacts than identified in this Program EIR would require the preparation of a subsequent EIR, in accordance with Section 15162 of the CEQA Guidelines.[36]

Although the DSAP accommodates the proposed baseball stadium by designating the site on the Land Use Diagram, this PEIR does ***not*** constitute the CEQA review for the stadium project. The

[35] As shown on Figure 2-5, the Downtown Core is bounded by Julian Street, North 4th Street, East St. John Street, 7th Street, East San Fernando Street, South 4th Street, Interstate 280, the Union Pacific Railroad line, Stockton Avenue, Taylor Street, and Coleman Avenue.

[36] A subsequent EIR would also be required if new information becomes available or physical or regulatory circumstances change such that the conclusions in this EIR are no longer applicable.

City of San José previously evaluated the stadium project in 2006 and 2010.[37] Similarly, the project does not include implementation of the station expansion plan, as the City is not responsible for the construction and operation of HSR and BART infrastructure. As described in Section 2.5.1.3 below, the CHSRA and VTA are the lead agencies for HSR and BART projects. The cumulative effects associated with the DSAP, proposed stadium, and station expansion are described in Section 4.0 *Environmental Setting, Impacts, and Mitigation*.

2.5.1.1 *Future Actions*

Future actions that implement the DSAP may include the following:

- Adoption of ordinances, policies, and plans that implement the DSAP such as the Transportation and Parking Management Plan.
- Final design of the Diridon Station Expansion Plan (refer to Section 2.5.1.3 below)
- Special studies required by or related to implementation of the DSAP.
- Updates to the Zoning Code and rezoning of properties in conformance with the DSAP and General Plan Land Use/Transportation Diagram.
- Issuance of entitlements such as Site Development Permits, Planned Development (PD) Permits, Conditional Use Permits, encroachment permits, Historic Preservation Permits, and Demolition Permits.
- Issuance of Stormwater Pollution Prevention, Grading, and Tree Removal Permits.
- Approval of Vesting Tentative Maps for the subdivision of parcels or the combining of parcels to accommodate intended intensity of development.
- Rehabilitation, alteration, modernizations, and other improvements to existing structures.
- Acquisition of real property.
- Reservation of certain areas for public purposes.
- Demolition, removal, or clearance of structures and relocation of businesses and resident occupants on land acquired by the City (when those buildings are determined to be non-significant historic resources).
- Agreements for the vacation and realignment of streets, rights-of-way, and underground utilities. Contracts for public infrastructure improvements, such as:
  - relocation, extension, or replacement of utilities (i.e., storm drains, sewers, etc.);
  - addition of new landscaping, public art, signage, lighting, and other amenities;
  - construction of new linear parks, neighborhood squares, trails, plazas, and a community park at the existing SJFD Training Facility.[38]
  - modifications to sidewalks and roadways to enhance pedestrian, bicycle, and transit facilities.
- New parking garage planned between Montgomery and Autumn Streets, north of Saint John Street.

2.5.1.2 *Other Agency Review*

Future actions under the DSAP may involve coordination with and/or review by other responsible and trustee agencies. Under CEQA, a responsible agency is a public agency, other than the lead

[37] City of San José. *Baseball Stadium in the Diridon/Arena Area Draft EIR* (2006) and *Baseball Stadium in the Diridon/Arena Area (Modified Project) Supplemental EIR* (2010).
[38] The construction of the Los Gatos Creek Trail through the Plan area has been evaluated in a previously adopted Initial Study/MND and would be incorporated into the community park project.

agency, which has responsibility for carrying out or approving a project. A trustee agency is a state agency that has jurisdiction by law over natural resources affected by a project that are held in trust for the people of the State of California. This PEIR may also be used by other agencies reviewing subsequent actions consistent with the DSAP; however, no public agency other than the City of San José has any discretionary approval over the DSAP. The following agencies may act as responsible and/or trustee agencies for subsequent projects considered under the DSAP:

- Bay Area Air Quality Management District
- Regional Water Quality Control Board
- Santa Clara Valley Transportation Authority
- Santa Clara Valley Water District
- Peninsula Corridor Joint Powers Board
- Federal Railroad Administration
- California High Speed Rail Authority
- State Office of Historic Preservation
- Native American Heritage Commission
- California Air Resources Board
- California Department of Housing and Community Development
- California Department of Resources Recycling and Recovery
- California Department of Transportation
- California Public Utilities Commission
- State Water Resources Control Board

2.5.1.3 *Diridon Station Expansion Plan*

Diridon Station is a shared facility requiring coordination among multiple agencies, including the Peninsula Corridor Joint Powers Board (PCJPB), VTA, the City of San José, and other transit operators. The City of San José is not responsible for the construction of the HSR and BART facilities. These projects have undergone previous environmental review under CEQA.

The California High Speed Rail Authority (CHSRA) is the Lead Agency for the construction of all HSR infrastructure, including station facilities and operations. The CHSRA, in cooperation with the City of San José, is also the Lead Agency for the construction of streetscape improvements associated with the HSR project (i.e., pedestrian and bicycle facilities, landscaping, soundwalls, fencing, utilities, etc.), although the City would be responsible for ownership and long-term maintenance of any facilities within its right-of-way.

The CHSRA will evaluate the new HSR terminal as part of the project-level EIR to be prepared for the San José to Merced segment.[39] The City will serve as a Responsible Agency to review and comment on the design of HSR infrastructure and associated environmental review. The design review process is described further in Section 4.13 *Aesthetics*.

[39] As described in Section 1.2.1.2, the public release of the Draft EIR/EIS for the San José to Merced segment is currently scheduled for the fall of ~~2013~~ 2016. The EIR/EIS will evaluate conceptual or preliminary station layout/design only. Architectural design will not be included in this review, but will be included in the subsequent project implementation scope.

The Conceptual Station Expansion Plan, described in Section 2.2 above, represents the City's preferred configuration and is intended to provide a framework for future planning efforts, including the ultimate architectural design of new station facilities. City approval of the Conceptual Station Expansion Plan will not allow any physical construction.

Although this PEIR does not provide project-level clearance for construction of the station expansion, it does provide program-level review of the expanded station and associated circulation improvements, based on information known at this time. In general, the construction of the new station facilities would result in similar land disturbance impacts as future development (i.e., tree removal, drainage, etc.) and is implicitly addressed in the discussions on projects impacts. Detailed discussions are provided on the cumulative impacts of the station expansion plan in relation to historic resources and aesthetics, as described in Sections 4.5.4 and 4.13.4. Operational impacts of the HSR and BART are addressed in other cumulative impact discussions throughout this PEIR.

Subsequent analysis of station impacts will be completed by the CHSRA and FRA at the time of final design. The CHSRA, FRA, and other public agencies with approval authority over the HSR project may tier from this PEIR as appropriate during supplemental environmental review.

SECTION 3.0 CONSISTENCY WITH ADOPTED PLANS

Section 15125(d) of the CEQA Guidelines require that an EIR discuss any inconsistencies between a proposed project and applicable general plans, specific plans, and regional plans. In addition, the EIR must determine if the project would conflict with any policy or regulation adopted for the purpose of avoiding or mitigating an environmental effect, including those established in general and specific plans (CEQA Checklist). Furthermore, "tiering" from a General Plan EIR requires consistency with the General Plan (Section 15152 of the CEQA guidelines) and projects must be consistent with the General Plan to be covered by the City's GHG Reduction Strategy (Section 15183.5 of the CEQA Guidelines). For these reasons, consistency with the *Envision San José 2040 General Plan* is discussed in detail in Section 4.1 *Land Use*. Other adopted plans relevant to implementation of the proposed DSAP are addressed in the sections listed in the table below.

Table 3-1:
Consistency with Adopted Plans

Relevant Plan	PEIR Section(s)
Downtown Strategy 2000 and *Midtown Specific Plan* City of San José	4.1 *Land Use*
Envision San José 2040 General Plan City of San José	4.1 *Land Use*
California High-Speed Train Program Plan (2005) California High Speed Rail Authority	4.1 *Land Use*
San José Airport Comprehensive Land Use Plan Santa Clara County Airport Land Use Commission	4.1 *Land Use* 4.3 *Noise and Vibration* 4.6 *Hazardous Materials and Hazards*
Basin Plan SF Regional Water Quality Control Board	4.9 *Hydrology and Water Quality*
Clean Air Plan Bay Area Air Quality Management District	4.4 *Air Quality*
Congestion Management Program Santa Clara Valley Transportation Authority	4.2 *Transportation*
San Francisco Bay Area Housing Needs Plan ABAG	4.15 *Population and Housing*
Climate Change Scoping Plan State of California	4.12 *Greenhouse Gas Emissions*
Integrated Waste Management Plan Santa Clara County	4.10 *Utilities and Service Systems*

Draft Santa Clara Valley Habitat Conservation Plan and Natural Community Conservation Plan Local Partners and Wildlife Agencies	4.7 *Biological Resources*

SECTION 4.0 ENVIRONMENTAL SETTING, IMPACTS, AND MITIGATION

This section of the PEIR includes a description of existing conditions in the Plan area. In each of the impact discussions where it is possible to do so, the impact of the project (under future build-out conditions) is compared to existing conditions.

As described in Sections 1.1 *Introduction* and 2.5 *Uses of the EIR*, this PEIR tiers off the analyses in the Envision 2040 PEIR and Strategy 2000 EIR and provides program-level review for future actions under the DSAP.

"Mitigation Measures" that are relevant to the effects of a long-term General Plan are laws, regulations, policies, and adopted procedures that will minimize, avoid, rectify, reduce, or eliminate a significant impact (CEQA Guidelines §15370). Accordingly, the 2040 General Plan is largely considered "self-mitigating" because it incorporates policies and actions for the purposes of avoiding or reducing environmental impacts resulting from planned growth. When the City cannot commit to immediate implementation of a new program or policy that would reduce or avoid an impact, the Envision PEIR identifies these impacts as significant and unavoidable for the purposes of CEQA.[40]

The Envision PEIR identified 17 significant unavoidable impacts.[41] For all other effects, it was concluded that implementation of General Plan policies, existing regulations, and adopted plans and policies would reduce the impact to a less than significant level. These conclusions are generally based on the assumption that all future projects allowed under the General Plan will reduce impacts to a less than significant level through measures included in project design or as conditions of approval, consistent with the policies and procedures for protecting environmental quality in the 2040 General Plan. Future development projects will be evaluated for consistency with this assumption. Supplemental analysis may be required to identify additional mitigation measures.

The Program EIR prepared for Strategy 2000 identified specific mitigation measures to be implemented by future projects. The Strategy 2000 EIR identified 10 significant unavoidable impacts.[42] For all other significant impacts, it was concluded that implementation of the mitigation measures would reduce the impacts to a less than significant level.

Consistent with the approach taken in the Strategy 2000 PEIR, this PEIR identifies specific measures that future public and private projects under the DSAP would be required to implement, when sufficient information is known to adequately characterize the impact and necessary mitigation. These measures (identified as "Measures Included in the Project to Reduce and Avoid Impacts…" in this PEIR) are standard conditions for all projects in City of San José and/or were previously identified in the Strategy 2000 EIR or other applicable environmental documents. It is assumed that

[40] This paragraph is derived from page 134 of the Envision PEIR, at the beginning of the *Environmental Setting, Impacts, and Mitigation* section.
[41] Three of the significant unavoidable impacts are related to development in North Coyote Valley and are not applicable to the proposed project. The remaining 14 impacts are related to the projected increase in vehicle miles travelled (VMT) in the region, resulting from implementation of the 2040 General Plan.
[42] All but three of the significant unavoidable impacts are related to traffic congestion (level of service). The remaining three impacts are related to regional air quality and cumulative effects on architectural and archaeological resources.

incorporation of these measures into future projects (either through project design or as conditions of approval) would reduce the impact of the future project (and of the DSAP as a whole) to a less than significant level. In addition, this PEIR identifies "Measures Included in the Project" for significant unavoidable impacts resulting from DSAP implementation and is specifically intended to provide project-level clearance for traffic-related impacts. At the time development is proposed, all future projects will be reviewed for consistency with these assumptions and additional measures may be required to reduce impacts to a less than significant level.

For all other impacts, this PEIR only provides program-level review. In general, the significance conclusions are based on the assumption that future projects under the DSAP will reduce the impacts to a less than significant level through implementation of General Plan policies and existing regulations. For certain environmental effects that are unique to a specific project design or location, future projects would be required to complete a subsequent analysis at the time development is proposed to identify appropriate measures for reducing the impact to a less than significant level. Future projects that would conflict with policies or regulations may be required to complete detailed evaluations during supplemental environmental review. This approach is consistent with the programmatic analysis in the Envision PEIR.

To summarize, this PEIR is intended to provide project-level CEQA clearance for traffic-related impacts and facilitates project-level review of some impacts by including specific measures in the project. When it is not feasible to identify specific measures that would reduce impacts of future projects to a less than significant level, this EIR only provides program-level review, requiring subsequent analyses and/or verification of consistency with General Plan policies and existing regulations.

Cumulative Impacts

Cumulative impacts, as defined by CEQA, refer to two or more individual effects, which when combined, are considerable or which compound or increase other environmental impacts. Cumulative impacts may result from individually minor, but collectively significant projects taking place over a period of time. CEQA Guideline Section 15130 states that an EIR should discuss cumulative impacts "when the project's incremental effect is cumulatively considerable." The discussion does not need to be in as great detail as is necessary for project impacts, but is to be "guided by the standards of practicality and reasonableness." The CEQA Guidelines advise that a discussion of cumulative impacts should reflect both their severity and the likelihood of their occurrence.

The purpose of the cumulative analysis is to allow decision-makers to better understand the potential impacts which might result from approval of past, present, and reasonably foreseeable future projects, in conjunction with the proposed project addressed in this EIR. Cumulative analyses are based on the premise that impacts of specific actions may be less than significant when viewed on a project-by-project basis, but when considered along with the impacts of other projects involving similar activities, these specific actions may be cumulatively considerable.

The effects of past projects are generally reflected in the existing conditions described in the specific sections of this EIR. Present projects are those approved but not yet developed. Reasonably

foreseeable projects include the approved, planned, and proposed projects described in Section 1.2.1. These projects have already been evaluated in previous environmental documents.
The analysis of cumulative impacts is included at the end of each impact section. For each subject area, the following aspects of cumulative impacts are discussed:

- Would the effects of the proposed project (in this case the DSAP), when combined with the effects of all past, present, and pending development result in a cumulatively significant impact on the resources in question?

- If a cumulative impact is likely to be significant, would the contribution of the proposed project to that impact be cumulatively considerable?

Section 15130(B) of the CEQA Guidelines states that lead agencies should define the geographic scope of the area affected by the cumulative effect. For example, the project effects on air quality would combine with the effects of projects in the entire San Francisco air basin, whereas noise impacts would primarily be localized to the surrounding area. The proposed project would primarily contribute to the cumulative effects of development in the Downtown; therefore, the cumulative discussion mainly refers to the environmental impact analysis in the Envision PEIR and Strategy 2000 EIR.

In addition, emphasis is given to the proposed baseball stadium and planned BART and HSR projects, given the scale of these projects and relationship to the DSAP. It should be noted that the DSAP was known at a conceptual level during preparation of the Stadium EIR, HSR Program EIR, and Envision PEIR. Therefore, this PEIR focuses on the potential for the DSAP to result in a *new* cumulative impact or make a cumulatively considerable contribution to a previously identified significant impact. The cumulative analyses also address the potential for the planned/proposed projects to result in a new or more significant impact on development proposed by the DSAP than previously assumed.

4.1 LAND USE

This section is based primarily upon the Envision PEIR, except where noted.

4.1.1 Existing Setting

The Plan area is currently developed with a wide range of urban land uses, as shown on Figure 4-1 and summarized in Table 4.1-1 below. Commercial and industrial uses cover approximately half of the Plan area, although the area is generally lacking in office and retail establishments. Two main commercial corridors cut through and serve the Plan area: The Alameda/Santa Clara Street and San Carlos Street. The Park/San Carlos subarea and Arena North subareas have the highest concentrations of residential uses. Public/institutional uses include Diridon Station, the SJFD Training Facility, Sunol Community School (also referred to as Foundry Community Day School), and two transitional housing facilities. Los Gatos Creek runs through the Plan area and joins the Guadalupe River north of Santa Clara Street. Of the 250-acre Plan area, approximately 40 acres are vacant, unoccupied, underutilized publicly-owned land, or sites used solely for parking.

4.1.1.1 *Existing Land Uses by Zone*

The Plan area is divided into three identity zones. The existing land uses in each of these zones are described below and summarized in Table 4.1-1. Photos of each zone and the surrounding area are provided on the following pages. An aerial with the photo viewpoints and surrounding land uses is shown on Figure 4-2.

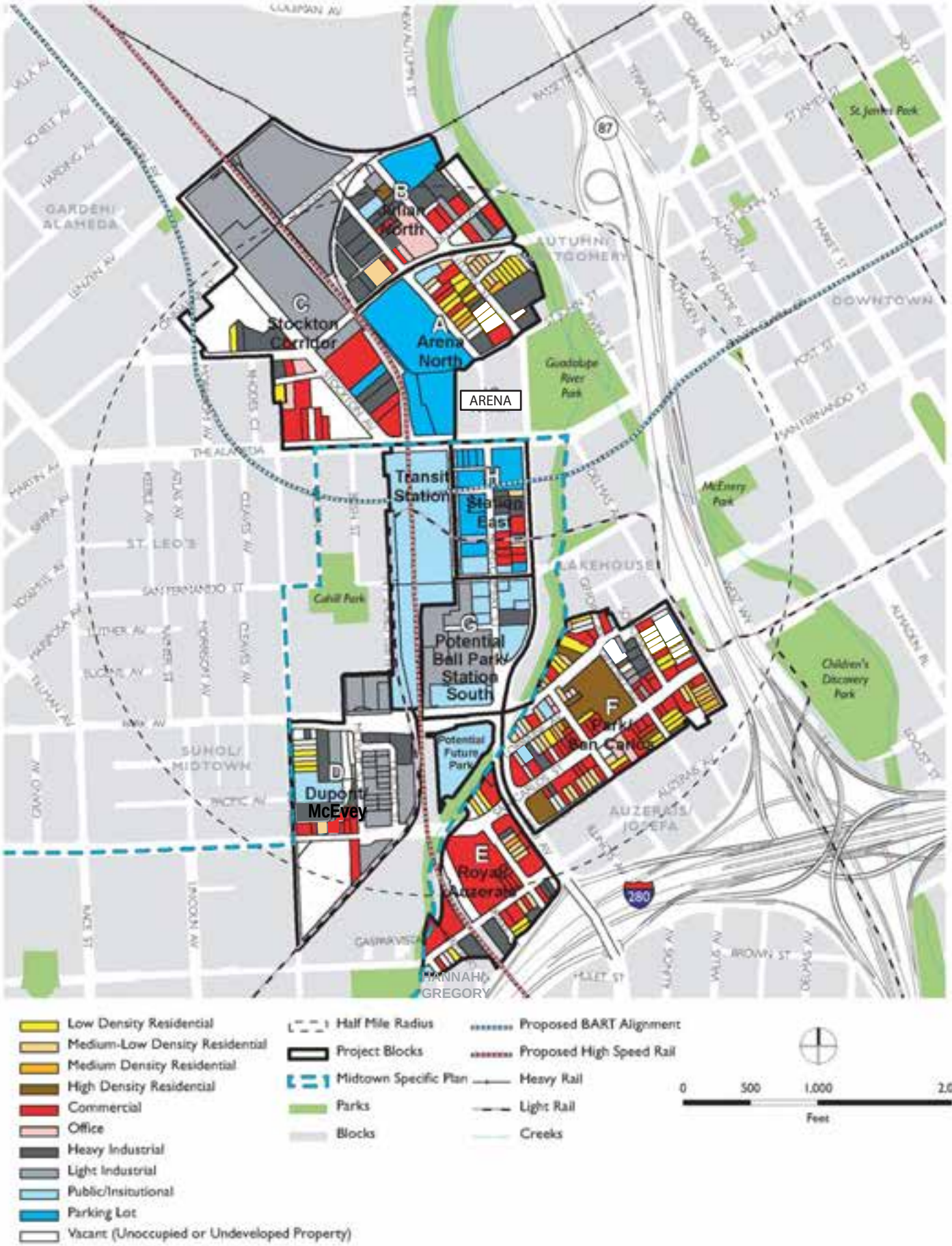
Table 4.1-1:
Summary Of Existing Land Uses By Zone In Acres

Land Uses	Northern	Central	Southern
Residential	5.0	0.2	13
Heavy and Light Industrial	35.8	8.5	13.3
Commercial	9.0	1.3	17.5
Office	2.4	0	1.2
Parking Lot	13.9	4.8	0
Public/Institutional	1.2	22.8	7.0
Unoccupied or Undeveloped	10.3	0.1	11.6
TOTAL	**77.6**	**37.7**	**63.6**

Note: These acreages are approximate. The total does not add up to 250 acres, because roadways, open space, and other areas were not included in the land use assessment.

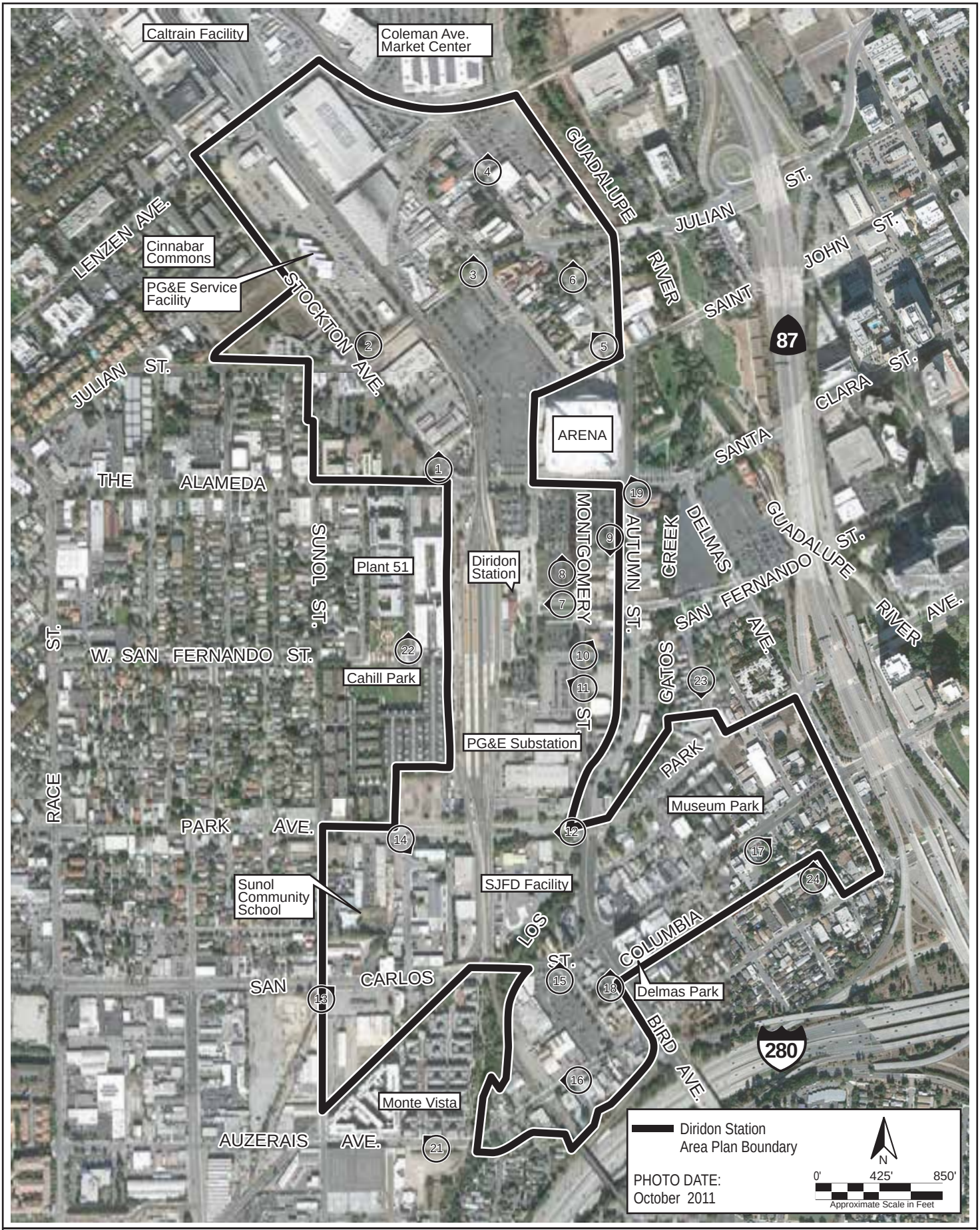
Northern Zone

The Northern Zone is generally bounded by The Alameda/West Santa Clara Street, Sunol Street, Lenzen Avenue, and the Guadalupe River. This zone includes the large surface parking lot serving the Arena. The portion of the Stockton Corridor subarea on the west side of Stockton Avenue is within the Garden Alameda neighborhood. The Stockton Corridor and Julian North subareas are primarily developed with mid- and larger-scale industrial, office, and commercial uses, including a PG&E service and fueling facility. The Arena North subarea is part of the Autumn Montgomery residential neighborhood, which is intermixed with industrial and commercial uses. Two transitional housing facilities are located on Montgomery Street. There are several vacant properties in the Northern Zone, including the Whole Foods Market site at the northwest corner of The Alameda and Stockton Avenue. The Morrison Park Townhomes site on the west side of Stockton south of Cinnabar Street is adjacent to the Plan Area.



EXISTING LAND USES

FIGURE 4-1



AERIAL OF SURROUNDING LAND USES AND PHOTO VIEWPOINTS FIGURE 4-2

Photos of the Northern Zone

1) Commercial uses on Stockton Avenue

2) Commercial uses on Stockton Avenue

3) Industrial uses on Montgomery Street

4) Parking lot on Autumn Street

5) Industrial uses on Autumn Street

6) Residential uses on Autumn Court

Photos of the Central Zone

7) Diridon Station

8) Parking lot between Cahill and Montgomery Streets

9) Industrial uses on Autumn Street

10) Commercial uses at of Montgomery and San Fernando Streets

11) PG&E Substation on Proposed Stadium Site

12) Park Avenue, looking west

Photos of the Southern Zone

13) Commercial uses on San Carlos Street

14) Light industrial uses on McEvoy Street

15) Residential and commercial uses on Royal Avenue

16) Commercial/industrial uses on Auzerais Avenue

17) Auto repair/sales uses on San Carlos Street

18) Delmas Park Apartment Building on Bird Avenue

Photos of the Surrounding Areas

19) Arena (HP Pavilion)

20) Guadalupe River Park

21) Cannery Square at Monte Vista

22) Plant 51, north of Cahill Park

23) Lakehouse District

24) Auzerais/Josefa Neighborhood

Central Zone

The Central Zone is generally bounded by the Alameda/Santa Clara Street to the north, Autumn Parkway to the east, Park Avenue to the south, and Laurel Grove Lane to the west. The western portion of the zone consists of the Diridon Station and transit center. The rest of the zone is primarily developed with parking lots and commercial and industrial uses. The Station South subarea, which is the site of the proposed baseball stadium, also includes vacant properties and a PG&E substation. A few residences are located in the Station East subarea.

Southern Zone

The Southern Zone is generally bounded roughly by Park Avenue, Interstate 280, Sunol Street, and Delmas Avenue. San Carlos Street, which runs through the zone, is lined with auto-oriented commercial uses, as well as restaurants, supply stores, offices, retail, and other services. The Dupont/McEvoy subarea is dominated by industrial uses, with a school, residences, and vacant properties located along Sunol Street. The Royal/Auzerais subarea is developed predominantly with retail and service-oriented commercial uses, with a few residential and industrial uses scattered along Royal and Auzerais Avenues.

The Park/San Carlos subarea includes the Delmas Park neighborhood. The Park/Lorraine neighborhood is a subset of this neighborhood, roughly bounded by Park Avenue to the north and San Carlos Street to the south. Two new high-density residential developments are located along San Carlos Street (the Legacy at Museum Park community and Delmas Park apartment building). Industrial uses are concentrated between Gifford Avenue and Sunol Street, south of Park Avenue. Vacant properties are scattered throughout the subarea.

4.1.1.2 *Surrounding Land Uses*

The Plan Area is generally surrounded by well established single-family neighborhoods, including the Garden/Alameda, St. Leo's, Midtown/Sunol, Hannah/Gregory, and Delmas Park neighborhoods. Delmas Park is comprised of three sub-neighborhoods: Lorraine/Park, Lakehouse, and Auzerais/Josefa. The Lorraine/Park neighborhood is located entirely within the Park/San Carlos subarea, while the historic Lakehouse District is north of Park Avenue and the Auzerais/Josefa neighborhood is south of San Carlos Street. Recent residential developments in the surrounding area include Cinnabar Commons, Cahill Park, Plant 51, and Cannery Square at Monte Vista. These neighborhoods and housing developments are shown on Figures 4-1 and 4-2.

Existing land uses and features east of the Plan area (from north to south) include: the Guadalupe River Park, Arena, businesses along the east side of Autumn Street, Los Gatos Creek, SR 87, Delmas Dog Park, and I-280. To the north are the Caltrain Centralized Equipment Maintenance and Operations Facility on Lenzen Avenue and the San José Market Center on Coleman Avenue, opposite the railroad tracks. Downtown San José is located east of SR 87, while The Alameda and San Carlos commercial corridors are located to the west. Norman Y. Mineta San José International Airport (SJC) is located approximately two miles north of Diridon Station.

4.1.2 Regulatory Framework

4.1.2.1 *Airport-related Plans and Regulations*

The Mineta San José International Airport is owned and operated by the City of San José. It is regulated by various federal, state, and local laws, including the Code of Federal Aviation Regulations. Part 77 of the Federal Aviation Regulations regulate obstructions to navigable airspace, as described in Section 4.2 *Transportation*.

County of Santa Clara Airport Land Use Commission and Comprehensive Land Use Plan

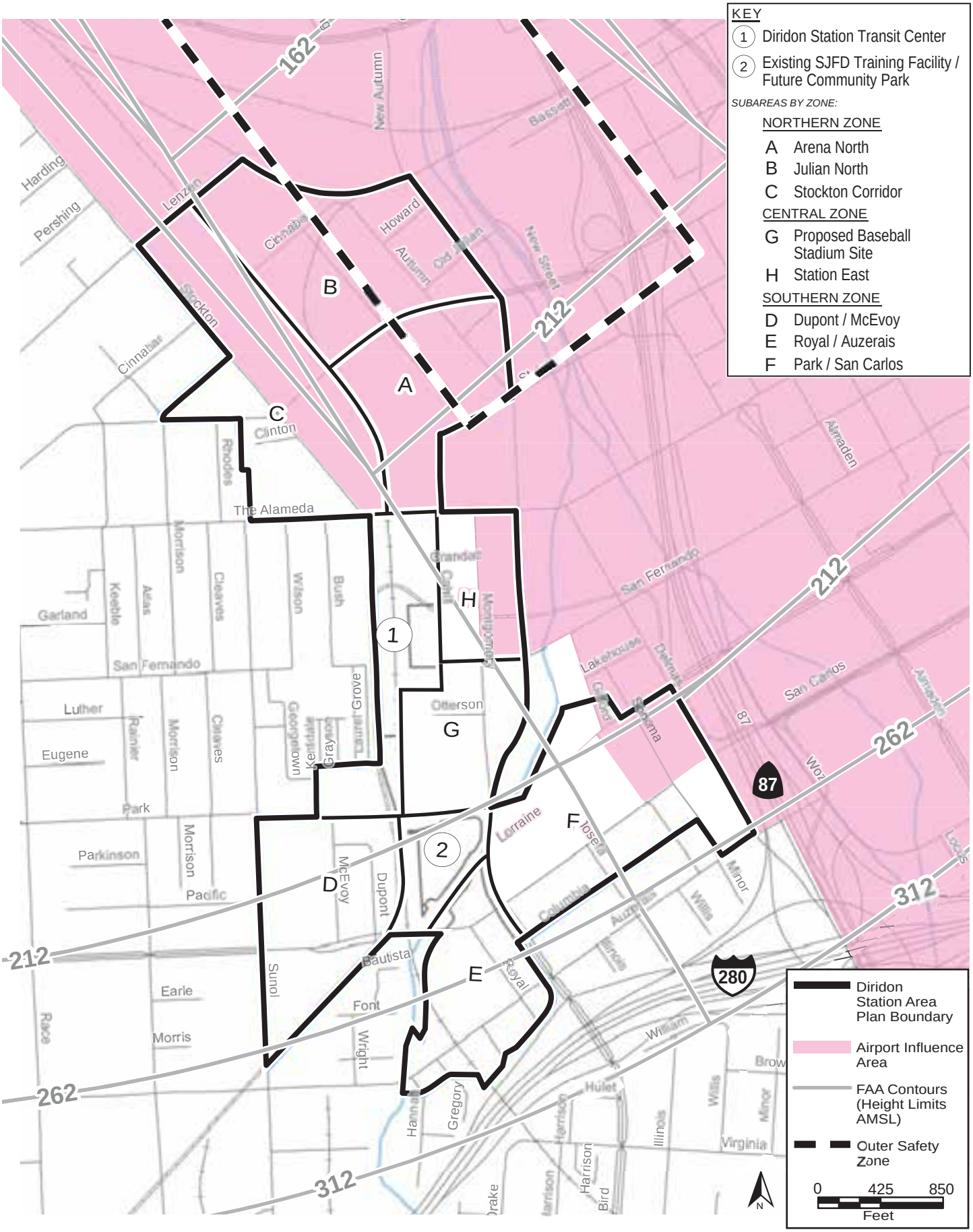
The Santa Clara County Airport Land Use Commission (ALUC), under State of California mandate[43], has adopted a Comprehensive Land Use Plan (CLUP) for the Mineta San José International Airport. The CLUP contains policies applicable to new development or redevelopment of existing land uses within the Airport Influence Area (AIA). These policies address compatibility between airports and future nearby land uses by focusing on noise, over-flight safety, and airspace protection concerns for the airport over a 20-year horizon. Noise contours indicate general areas of likely community response to noise generated by aircraft activity and serve as the basis for land use compatibility determinations. Airport safety zones are established to minimize the number of people exposed to potential aircraft accidents in the vicinity of an airport by imposing density and use limitations within these zones. The CLUP also establishes a Height Restriction Area, based on federal regulations.

As shown on Figure 4-3, approximately 110 acres of the Plan area are located in the AIA for the Mineta San José International Airport.[44] All areas within the AIA should be regarded as potentially subject to aircraft over-flights and are subject to CLUP policies. As described in Section 4.3 *Noise*, only the northeastern corner of the Plan area is within the 65 CNEL noise contour for the airport.

4.1.2.2 *Santa Clara Valley Habitat Conservation Plan*

The Plan area is covered by the Santa Clara Valley Habitat Conservation Plan/Natural Community Conservation Plan (HCP/NCCP). As described in Section 4.7 *Biological Resources*, the HCP/NCCP is a conservation program that has been developed to promote the recovery of endangered species while accommodating planned growth in southern Santa Clara County. The HCP/NCCP has been approved and the implementing agency established.

[43] California State Aeronautics Act, Public Utilities Code: Division 9, Part 1, Chapter 4, Article 3.5, Section 21670 et seq.
[44] Santa Clara County Airport Land Use Commission. *Comprehensive Land Use Plan, Norman Y. Mineta San Jose International Airport*. 2010.



ALUC AIRPORT INFLUENCE AREA AND SAMPLE FAA OBSTRUCTION HEIGHTS FIGURE 4-3

4.1.2.3 *City of San José Plans and Policies*

Envision San José 2040 General Plan

As described in Section 1.1, the City of San José recently approved the Envision San José 2040 General Plan and associated Program EIR. The 2040 General Plan provides a vision of future growth, development, and the provision of municipal services for San José. It provides capacity for the development of up to 470,000 new jobs and 120,000 new dwelling units, supporting a population of approximately 1.3 million people by 2035. The vision is based on 12 major strategies:

1) **Community Based Planning:** Embody the community values and goals articulated through an extensive and meaningful community based planning process.
2) **Form Based Plan:** Use the General Plan Land Use/Transportation Diagram designations and Plan Goals and Policies to address the form and character as well as land uses and densities for the future development of San José.
3) **Focused Growth:** Strategically focus new growth into areas of San José that will enable the achievement of City goals for economic growth, fiscal sustainability and environmental stewardship and support the development of new, attractive urban neighborhoods.
4) **Innovation/Regional Employment Center:** Emphasize economic development within the City to support San José's growth as center of innovation and regional employment.
5) **Urban Villages:** Promote the development of Urban Villages to provide active, walkable, bicycle-friendly, transit-oriented, mixed-use urban settings for new housing and job growth attractive to an innovative workforce and consistent with the Plan's environmental goals.
6) **Streetscapes for People:** Design streets for people, not just cars, and to support a diverse range of urban activities and functions, develop important roadways as Grand Boulevards to connect multiple neighborhoods and act as urban design elements at a citywide scale, and promote the development of Main Streets to foster community identity and walkability.
7) **Measurable Sustainability/Environmental Stewardship:** Advance the City's Green Vision through 2040 and establish Measurable Environmental Sustainability indicators consistent with Green Vision Goal #7.
8) **Fiscally Strong City:** Establish a land use planning framework that promotes the right fiscal balance of revenue and costs to allow the City to deliver high-quality municipal services, consistent with community expectations.
9) **Destination Downtown:** Support continued growth in the Downtown as the City's cultural center and as a unique and important employment and residential neighborhood to support the General Plan's economic, fiscal, environmental, and urban design/place making goals.
10) **Life Amidst Abundant Natural Resources:** Promote access to the natural environment and a favorable climate as important strengths for San José by building a world-class trail network, reinforcing the Greenline/Urban Growth Boundary, and adding parks and other recreational amenities to serve existing and new populations.
11) **Design for a Healthful Community:** Support the physical health of community members by promoting walking and bicycling as commute and recreational options, encouraging access to healthful foods, and supporting the provision of health care and safety services.

12) **Phasing and Periodic Review:** Ensure that the General Plan addresses the current community context and values and closely monitor the achievement of key Plan goals through a periodic major review of the General Plan and the use of Plan Horizons to phase implementation of the Plan over time.

A key component of the General Plan is the emphasis given to directing new job and housing growth to areas served by transit and other existing City services in order to minimize the fiscal and environmental impacts of that new growth. In support of that basic premise, the General Plan established "Growth Areas" to accommodate nearly all of the city's planned housing and job growth capacity. These Growth Areas include the existing Downtown Core, North San José, Specific Plan areas, employment land areas, major commercial/transit corridors, and new "Villages" located at transit stations or within walking distance of existing neighborhoods. Accordingly, the Envision PEIR focused on the environmental impacts related to the newly designated Growth Areas and associated development capacities.

The DSAP area is at the convergence of three Growth Areas. The majority of the Plan area is currently within the Downtown Growth Area, while a portion is covered by the Midtown Specific Plan. Approximately 6.4 acres in the Northern Zone is within the Alameda Urban Village (VT4). Only a small portion of the Plan area is not currently within a Growth Area (an approximately three-acre area north of Julian Street and west of Stockton Avenue in the Stockton Corridor subarea).

The Envision PEIR lists the DSAP as a cumulative project and describes it as a development strategy proposed to transform Diridon Station into the "Grand Central Station" of the West Coast, integrate the existing downtown core, and link alternative modes of transportation to nearby offices, retail uses, and housing.

Land Use Diagram

The Land Use/Transportation Diagram is intended to promote the compatibility of existing and future land uses. The land use designations currently found within and adjacent to the Plan area are shown on Figure 2-3 and summarized as follows:

- *Transit Employment Center*,
- *Public/Quasi-Public*,
- *Commercial Downtown*,
- *Urban Residential (30-95 dwelling units per acre)*,
- *Transit Residential (65-250 dwelling units per acre)*,
- *Combined Industrial/Commercial*,
- *Open Space, Parklands, and Habitat*,
- *Downtown*,
- *Mixed Use Commercial*,
- *Neighborhood Commercial*, and
- *Residential Neighborhood*.

The designations proposed by the DSAP Land Use Diagram are described in Section 2.1.2, while Table 4.1-2 below summarizes the allowable densities and uses for the designations that would no longer exist within the Plan area under the proposed project. The allowable density is identified in

dwelling units per acre (DU/AC) or floor area ratio (FAR). FAR is calculated by dividing the total area of all floors in a building(s) by the total area of the site.[45]

Table 4.1-2:
Summary of Existing Land Use Designations

Designation	Land Use Types	Density
Downtown	This designation allows for a mix of office, retail, service, residential, and entertainment uses in the Downtown.	Up to 350 DU/AC; FAR Up to 15.0 (3 to 30 stories)
Mixed Use Commercial	This designation allows a mix of uses with an emphasis on commercial activity, with residential uses allowed in a secondary role.	Up to 50 DU/AC; FAR 0.5 to 3.0 (1 to 6 stories)
Neighborhood/ Community Commercial	This designation allows a very broad range of commercial uses, including neighborhood-serving retail, services, and office development.	FAR Up to 2.0 (1 to 4 stories)
Residential Neighborhood	This designation is applied to most of the established, single-family residential neighborhoods throughout the city.	Typically 8 DU/AC; FAR up to 0.7 (1 to 2.5 stories)

As shown on Figure 2-3, there is a *BART/Caltrain Urban Village Overlay* on the properties located on the west side of Stockton Avenue between The Alameda and Julian Street within the Plan area. There is also a *Planned BRT Corridor Urban Village Overlay* on the north side of San Carlos Street, west of the Plan area. The *Urban Village Overlay* is applied to areas planned for higher density housing and significant job growth, typically in proximity to transit, existing services and other amenities that support their intensification.

As described in the Implementation Chapter of the 2040 General Plan (Goal IP-5), a comprehensive Urban Village Plan must be prepared prior to residential development. The Village Plan should address: job and housing growth capacity, land use designations, building heights and densities, infrastructure, urban character/design, greenhouse gas reduction/sustainability, financing, and implementation. The Urban Village planning process allows land use amendments to refine the type and location of land uses to achieve the desired levels of housing and job growth. The purpose of the Village Plan is to support coordinated development and a cohesive urban character that is compatible with adjacent neighborhoods.

In addition to Urban Villages, the Land Use/Transportation identifies Neighborhood Business Districts (NBD). The NBD overlay applies to commercial areas that function as central business districts and contribute to neighborhood identity. The NBD Program seeks to preserve, enhance, and revitalize these corridors through the coordination of public and private improvements, such as

[45] For example, an FAR of 2.0 would indicate that the floor area of a multi-story building is twice as large as the gross area of the site. A single-story building would have an FAR of less than 1.0, while tall buildings could have an FAR of 15.0 or higher.

streetscape beautification, facade upgrading, and business development. Portions of The Alameda and West San Carlos Neighborhood Business Districts are within the Plan area. The Alameda NBD extends from Magnolia Street to just past Stockton Avenue, and the West San Carlos NBD extends from I-880 to Dupont Street.

General Plan Policies

The General Plan includes numerous policies and actions aimed at avoiding or mitigating an environmental effect, as listed in the applicable sections of this EIR. Relevant policies adopted for the purpose of avoiding or mitigating land use impacts are summarized in the following table.

Table 4.1-3:
General Plan Policies: Land Use

Attractive City Policies	
Policy CD-1.14	Use the Urban Village Planning process to establish standards for their architecture, height, and massing.
Policy CD-1.15	Consider the relationship between street design, use of the public right-of-way, and the form and uses of adjoining development. Address this relationship in the Urban Village Planning process, development of new zoning ordinances, and the review of new development proposals in order to promote a well-designed, active, and complete visual street environment.
Compatibility Policies	
Policy CD-4.5	For new development in transition areas between identified growth areas and non-growth areas, use a combination of building setbacks, building step-backs, materials, building orientation, landscaping, and other design techniques to provide a consistent streetscape that buffers lower-intensity areas from higher-intensity areas and that reduces potential shade, shadow, massing, viewshed, or other land use compatibility concerns.
Policy CD-4.8	Include development standards in Urban Village Plans that establish streetscape consistency in terms of street sections, street-level massing, setbacks, building facades, and building heights.
Policy CD-4.9	For development subject to design review, the design of new or remodeled structures will be consistent or complementary with the surrounding neighborhood fabric (including but not limited to prevalent building scale, building materials, and orientation of structures to the street).
Land Use/Transportation Diagram Policies	
Policy IP-1.5	Maintain a Zoning Ordinance and Subdivision Ordinance that aligns with and supports the Land Use/Transportation Diagram and the General Plan goals and policies. Develop new Zoning Districts which enumerate uses and establish development standards including heights to achieve vital mixed-use complete communities and facilitate their implementation.

Policy IP-1.6	Ensure that proposals to rezone and prezone properties conform to the Land Use/Transportation Diagram and advance General Plan Vision, goals and policies and benefit community welfare.
Policy IP-1.7	Use standard Zoning Districts to promote consistent development patterns when implementing new land use entitlements. Limit use of the Planned Development Zoning process to unique types of development or land uses which cannot be implemented through standard Zoning Districts, or to sites with unusual physical characteristics which require special consideration due to those constraints.
Policy IP-1.8	Consider and address potential land use compatibility issues, the form of surrounding development, and the availability and timing of infrastructure to support the proposed land use when reviewing rezoning or prezoning proposals.
Community Health, Safety, and Wellness Policies	
Policy CD-5.9	To promote safety and to minimize noise and vibration impacts in residential and working environments, design development that is proposed adjacent to railroad lines to provide the maximum separation feasible between the rail line and dwelling units, yards, or common open space areas, offices and other job locations, facilities for the storage of toxic or explosive materials and the like. To the extent possible, devote areas of development closest to an adjacent railroad line to use as parking lots, public streets, peripheral landscaping, the storage of non-hazardous materials and so forth. In industrial facilities, where the primary function is the production, processing or storage of hazardous materials, for new development follow the setback guidelines and other protective measures called for in the City's Industrial Design Guidelines when such facilities are to be located adjacent to or near a main railroad line.
Urban Village Planning Policies and Actions	
Policy IP-5.4	Prepare and implement Urban Village Plans carefully, with sensitivity to concerns of the surrounding community, and property owners and developers who propose redevelopment of properties within the Urban Village areas. Proceed generally in the order of the following timeline, although some steps may be taken concurrently: 1. City Council approves commencement of the Plan growth Horizon which includes the Urban Village Area during a Major General Plan Review. Completing Urban Village Plans for Urban Villages within the current Horizon is of greatest priority, but it is possible to prepare an Urban Village Plan for an Urban Village in an upcoming Horizon. 2. The City completes preparation of and Council reviews an Urban Village Plan. 3. The City or private property owners initiate rezoning for specific properties within the Urban Village as needed to implement the Urban Village Plan. Because most Urban Village sites initially have commercial zoning, rezoning will be necessary to provide for redevelopment and intensification with residential or residential mixed use projects on those sites. 4. Private property owners or developers propose individual site designs and building architecture to be reviewed and determined through a Development Permit application and review process.

Urban Villages Urban Design Policies and Actions	
Policy CD-7.1	Support intensive development and uses within Urban Villages and Corridors, while ensuring an appropriate interface with lower-intensity development in surrounding areas and the protection of appropriate historic resources.
Policy CD-7.3	Review development proposed within an Urban Village Area prior to approval of an Urban Village Plan for consistency with policies pertaining to the proposed use (e.g., general Urban Design policies). Encourage such new development to be consistent with the Design Policies for Urban Villages.
Policy CD-7.4	Identify a vision for urban design character consistent with development standards, including but not limited to building scale, relationship to the street, and setbacks, as part of the Urban Village planning process. Accommodate all planned employment and housing growth capacity within each Urban Village and consider how to accommodate projected employment growth demand by sector in each respective Urban Village Plan.
Policy CD-7.6	Incorporate a full range of uses in each Urban Village Plan to address daily needs of residents, businesses, and visitors in the area. Consider retail, parks, school, libraries, day care, entertainment, plazas, public gathering space, private community gathering facilities, and other neighborhood-serving uses as part of the Urban Village planning process. Encourage multi-use spaces wherever possible to increase flexibility and responsiveness to community needs over time.
Policy CD-7.7	Maintain and implement land use policies that are consistent with the urban nature of Urban Village areas. Incorporate spaces and support outdoor uses for limited 24-hour uses, so long as the potential for significant adverse impacts is mitigated.
Policy CD-7.8	Encourage development along edges of public parks or plazas within or adjacent to Urban Villages to incorporate site and architectural design measures which promote access to and encourage use of the park and which minimize potentially negative shade and shadow impacts upon the park or plaza space.
Action CD-7.10	As described in the Implementation Chapter, develop Urban Village Plans in cooperation with the nearby community and obtain San José City Council acceptance or approval of the plans prior to issuance of land use entitlements for any new residential development in designated Urban Village Area Boundaries. Residential uses that are purely ancillary to primary employment uses, "Signature" projects, and other types of development expressly allowed in accordance with General Plan policies may proceed prior to acceptance or approval of the Urban Village Plan.

Strategy 2000: San José Greater Downtown Strategy for Development (2005)

The *Strategy 2000: Downtown Strategy for Development* (Strategy 2000) was approved by City Council in 2005. Strategy 2000 provides a long-range conceptual program for revitalizing Downtown through higher density infill development. Strategy 2000 covers the Downtown Core, which is generally bounded by Taylor Street and Coleman Avenue to the north, Fourth Street to the east, Interstate 280 to the south, and Stockton Avenue and the railroad tracks to the west. The "Guiding Principles" of Strategy 2000 are to:

- Make the Greater Downtown a memorable urban place to live, work, shop and play;
- Promote the identity of Downtown San José as the Capital of Silicon Valley;
- Create a walkable, pedestrian-friendly Greater Downtown; and
- Promote and prioritize development that serves the needs of the entire City and Valley.

As part of the Strategy 2000 process, the City prepared and adopted several planning documents to guide redevelopment and improvements in the Downtown Core, including Downtown Design Guidelines (2004), Downtown Signage Master Plan (2002), Downtown Streetscape Master Plan (2003), Downtown Lighting Master Plan (2003), and Downtown Parking Management Plan (2001, 2007).

Strategy 2000 also identified numerous improvements to the "public realm" and transportation system, as well as specific strategies and actions for geographic areas. Strategy 2000 recommends long-term expansion of the downtown into the Diridon/Arena area through the development of high- and mid-rise office and residential uses with ground floor commercial and entertainment. The vision for the Diridon/Arena area is a vibrant urban environment that seamlessly extends into downtown.

As described above, the majority of the Plan area is within the Downtown Core, which is a Growth Area in the 2040 General Plan. Strategy 2000 is the primary planning document supporting the planned job and housing capacity for Downtown.

Midtown Specific Plan

As shown on Figure 1-3, a portion of the Plan Area is currently covered by the Midtown Specific Plan, which provides development guidelines for a 210-acre area west of the Downtown Core Area. The Midtown Specific Plan was adopted in 1992 by the City Council and is incorporated within the 2020 General Plan and the *Envision San José 2040 General Plan*. Originally, the Midtown Specific Plan included the area west of Los Gatos Creek and south of Santa Clara Street. As part of the 2040 General Plan process, the western boundary of the Midtown Specific Plan between San Carlos and Santa Clara Streets was moved west to the railroad tracks.

As described in the Strategy 2000 EIR, the goal of the Midtown Specific Plan is to create a mixed-use community that includes high-density commercial and residential areas that are geared toward public transit, while at the same time maintaining some existing service and industrial uses in the area. The Midtown Specific Plan specifically calls for:

- Creation of a new residential community with a wide range of housing choices;
- Preservation and intensification of industrial and commercial service uses within Midtown;
- Reinforcement of existing neighborhood business districts;
- Creation of a network of open space and pedestrian walkways;
- Development of a street pattern that enhances neighborhood livability; and
- Design of development that is compatible with surrounding areas.

The Midtown Specific Plan provides generalized land use and urban design guidelines for the overall neighborhood and specialized plans for individual sub-areas. The specific plan also designates a

future neighborhood park on the City-owned property currently utilized by the SJFD as a training facility. This park would provide nearby residents with active recreation uses such as playfields, contribute to the enhancement of Los Gatos Creek, and allow expansion of a portion of the regional creek trail system.

Like Downtown, the Midtown is identified as a Growth Area in the 2040 General Plan. The Specific Plan is the planning document that supports the planned job and housing capacity. The Dupont/McEvoy subarea is currently within the boundaries of the Midtown Growth Area.

Diridon/Arena Strategic Development Plan (2003)

The Diridon/Area Strategic Development Plan currently provides the framework for planning for a 166-acre area around Diridon Station and the Arena. The area is bounded by the railroad tracks to the north, Guadalupe River to the east, Stockton Avenue and Diridon Station to the west, and Park Avenue to the south. The Strategic Development Plan is based on the following goals:

- Support the development and expansion of downtown San Jose.
- Create an integrated transportation hub.
- Encourage transit ridership and pedestrian activity through land use decisions.
- Provide an appropriate level of parking.
- Protect adjacent neighborhoods from negative impacts.
- Create new public amenities for residents and workers in the area.

Julian-Stockton Redevelopment Plan

The Julian-Stockton Redevelopment Plan Area is generally bounded by Coleman Avenue, Market Street, The Alameda/Santa Clara Street, Stockton Avenue, and Taylor Street. The overall objective of the plan is to make the area physically attractive and economically viable. Specific goals include:

- Strengthen the economic base of the project area by providing new commercial, industrial and office expansion;
- Develop undeveloped areas that are economically stagnant, physically constrained, or improperly utilized;
- Eliminate environmental deficiencies including small and irregular lots, obsolete and aged buildings, substandard alleys, and deteriorated public improvements;
- Strengthen the commercial, industrial and office support functions near Downtown;
- Assemble land into parcels suitable for appropriate, integrated development designed to provide improved pedestrian and vehicular circulation;
- Provide adequate land for parking and open spaces;
- Expand low and moderate income housing within the project area.

Zoning Ordinance

The City of San José's Zoning Ordinance (Title 20 of the Municipal Code) is intended to promote the public peace, health, safety, and general welfare of residents, while supporting the goals and policies of the General Plan. The Zoning Ordinance regulates development through the designation of zoning districts for various land use types. Each zoning district has development standards for building

height, density, size, yard areas, setbacks, parking, and operations. These standards are adopted for the purposes of protecting visual character, preserving open space, and preventing overcrowding of the land, traffic hazards, and unwarranted deterioration of the environment.

Chapter 20.70 of the San José Municipal Code establishes zoning regulations for properties located within the Downtown Core (or "Downtown Zoning Area") and have a Downtown zoning designation (*DC Downtown Core* or *DC-NT1 Downtown Core – Neighborhood Transition 1*).

The majority of the Plan area is zoned *Light Industrial*, with *Heavy Industrial* zones in the northern and southern portions of the area. There are several properties along The Alameda, Stockton Avenue, and San Carlos Avenue that are zoned *Commercial General* or *Commercial Neighborhood*, as well as a few properties zoned *Single Family Residential* on Park Avenue, Columbia Avenue, and Drake Street. Additional designations in the Plan area include *Industrial Park*, *Commercial Pedestrian*, *Combined Industrial/Commercial*, and *Planned Development*.

It should be noted that San José is a Charter City, as opposed to a General Law City. As a Charter City, the zoning of land in San José is not required to be consistent with its General Plan. However, it is City policy that zoning should be consistent with the General Plan.[46]

Design Guidelines and Review Process

The San José City Council has adopted design guidelines for various land use types: Residential, Industrial, Commercial, Downtown/Historic, and Downtown. The guidelines generally seek to provide a common understanding of the minimum design standards to be applied to various land uses, development types, and sometimes specific locations. The design review process evaluates projects for conformance with City ordinances and the requirements of previous entitlements such as Planned Development zoning approvals, or concurrent processes such as subdivisions.

4.1.3 Land Use Impacts

4.1.3.1 *Thresholds of Significance*

For the purposes of this PEIR, a land use impact is significant if implementation of the proposed DSAP would:

- Introduce a new land use that would conflict with existing or planned uses in the area;
- Physically divide or disrupt an established community;
- Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect; or
- Conflict with any applicable habitat or natural community conservation plan.

[46] The existing zoning maps for all of San José and the Zoning Ordinance itself can be found on the City's website: http://www.sanjoseca.gov/planning/zonemap/default.asp.

4.1.3.2 *Land Use Compatibility Impacts*

Land use impacts can occur when a particular use is placed at a location that is unsuitable for that use. For example, the development of industrial uses in proximity to residential uses has the potential to result in land use conflicts. Land uses may be also incompatible with each other if they are too close or if their design does not minimize conflicts (such as a "good neighbor" fence). The intensification of land uses can also cause conflicts with adjacent lower intensity neighborhoods. According to the Envision PEIR, conformance with General Plan policies, the Zoning Ordinance, and adopted design guidelines would limit or preclude land use impacts to existing businesses and residential development resulting from new development in Growth Areas.

The 2040 General Plan identifies the Diridon Station area as a major location for growth, given that the Plan area is at the convergence of three Growth Areas: Downtown, Midtown, and The Alameda Urban Village (VT4). The project would designate the DSAP as an Urban Village in the 2040 General Plan and modify the boundaries and growth capacities of Midtown and VT4. As described further in Section 4.1.3.4, the growth capacity of the Diridon Station Area Urban Village would be 23,010 jobs and 2,710 dwelling units, which was accounted for in the 2040 General Plan. The proposed growth capacity takes into account the maximum development levels proposed by the DSAP and entitled development projects (i.e., Whole Food Market and Park Avenue Townhomes).

The DSAP would serve as the Urban Village Plan for the Growth Area. The DSAP identifies suitable areas for employment and residential development through application of General Plan land use designations. As described in Section 4.1.2.3 above, the Urban Village planning process allows land use amendments to refine the type and location of land uses in order to achieve the desired levels of housing and job growth. Accordingly, the DSAP proposes land use designation amendments to allow higher density residential development in three areas: the Dupont/McEvoy subarea, Park/San Carlos subarea, and a portion of the Stockton Corridor subarea. Under the proposed Land Use Diagram, however, the three areas planned for employment uses (the majority of the Northern Zone, Central Zone, and the Royal/Auzerais subarea) would retain their current land use designations.[47] The proposed distribution is intended to increase the residential population living in proximity to Diridon Station, while maintaining areas for employment-oriented development.

The existing and proposed land uses in each subarea are summarized in the table below. For purposes of this analysis, it is assumed that all existing uses in these subareas would be removed and replaced with the maximum development levels, with the exception of recently constructed and approved but not yet built projects.[48] In addition to these primary uses, private community gathering facilities and public facilities such as schools and libraries could also be constructed throughout the Plan area, although specific facilities are not proposed at this time.[49]

[47] The Diridon Station property, Arena parking lot, planned community park site, and proposed baseball stadium site would also retain their current designations.
[48] Existing land uses assumed to remain include: the existing surface parking lot in the Arena North subarea, Delmas Park Apartments, and Museum Park Apartments. Approved but not yet built projects that would also remain under build-out conditions include: the Whole Foods Market project in the Stockton Corridor subarea and Park Avenue Townhomes project in the Dupont/McEvoy subarea.
[49] Examples of private community gathering facilities include religious buildings, performance venues, and recreation facilities.

Based on the existing mix of uses, the Dupont/McEvoy and Arena North subareas would undergo the largest shift in primary land use type. The Dupont/McEvoy subarea would be converted from primarily industrial to residential uses, while the Arena North subarea would transition from a mix of residential and commercial uses to an employment center.

Although existing development would be replaced and the primary land use type may shift in some of the subareas, there would be an overall net increase in all land use types under DSAP build-out. Increasing the amount of development in the Plan area would require intensifying the use of land through the development of bigger and taller buildings, less surface parking lots, and more parking structures. Based on the proposed Design Guidelines, the DSAP would also result in more open/green space within the public right-of-way and on private property. The visual effects of the increased land use intensity are discussed further in Section 4.13 *Aesthetics*.

Table 4.1-4:
Primary Land Uses by Subarea under Existing and Project Conditions

Subarea	Primary Uses under Existing Conditions	Primary Uses under DSAP Build-out
Stockton Corridor (east of Stockton Avenue)	Commercial, Industrial	High/Green Tech Businesses: Commercial, Office, R&D, Industrial, Manufacturing,
Julian North	Industrial	
Arena North	Residential, Commercial	
Station East	Commercial, Surface Parking	Commercial, Office
Royal/Auzerais	Commercial, Industrial	Commercial, Office, R&D
Stockton Corridor (west of Stockton Avenue)	Commercial	Residential
Dupont/McEvoy	Industrial, Commercial	Residential
Park/San Carlos	Residential, Commercial	Residential

Land Use Compatibility of Future Development

New industrial facilities could generate elevated noise, odors, lighting, dust, truck traffic, and/or pollution that can adversely affect sensitive land uses such as residences and schools. Conflicts between sensitive receptors and industrial facilities can also result in the loss of businesses who cannot afford the liability and limitations that result from such conflicts.[50] Even companies that don't

[50] Envision PEIR.

deal with any noxious substances or emit pollutants usually require access to truck services that may create problems for substantial numbers of pedestrians or bicycle riders, particularly children.

Within the Plan Area

Under existing conditions, the majority of areas designated for employment uses are developed with low intensity commercial and industrial uses and are generally separated from planned residential uses and existing residences in the surrounding area by Los Gatos Creek, railroad lines, and roadways (Stockton Avenue, Autumn Street, Bird Avenue, and Auzerais Avenue). Because these employment areas generally have transitional buffers from more sensitive uses and operational measures already in place, intensifying new job development in these locations minimizes disturbances to residential development. The separation of new industrial uses from sensitive uses under build-out would minimize the potential for conflicts due to incompatible land use types.

Under existing conditions, commercial uses in the Plan area are dominated by automotive-related businesses, with very little office and retail uses. Under the DSAP, commercial uses would primarily consist of office buildings and neighborhood-serving retail, with a concentration of entertainment-oriented facilities in the Central Zone. As a result, the project would result in a wider variety of commercial uses such as office, restaurants, and shops. Given that the new development would be less likely to use hazardous materials or generate hazardous wastes when compared to automotive-related facilities, the project may decrease potential land use conflicts associated with hazardous uses over the long-term.

Although the DSAP promotes land use compatibility under build-out, in the interim, it is possible that development under the DSAP could locate new industrial uses in proximity to existing residential/sensitive uses and/or locate new residential/sensitive uses in proximity to existing hazardous materials users. This would be most likely to occur in the subareas that would be converted from primarily industrial to residential or vice versa (i.e., Arena North and Dupont/McEvoy).

As described in Section 4.3 *Noise*, residential development would be exposed to relatively high noise levels, given the proximity to rail lines, Mineta San José International Airport, industrial/commercial facilities, and high volume roadways. Noise and vibration from railroad operations would primarily affect development in the eastern portion of the Dupont-McEvoy, while aircraft and freeway noise would be most audible in the Park/San Carlos subarea. Development of employment uses in the Northern Zone and Royal/Auzerais subarea would also be exposed to noise and vibration associated with heavy rail. Portions of the Station East subarea and Northern Zone, which are designated for nonresidential use, are within the 65 dBA CNEL contour for the Mineta San José International Airport. It is anticipated that all future development in the Plan area would be required to incorporate noise reduction measures into the project design to reduce and avoid noise impacts (refer to Section 4.3 *Noise*).

As described in Section 4.1.3.4 below and in Section 4.6 *Hazards and Hazardous Materials*, the DSAP does not propose land use types or development intensities that would conflict with airport safety and compatibility policies.

In addition to noise, railroad lines could pose hazards and safety risks to nearby development. In accordance with GP Policy CD-5.9, future development adjacent to railroad lines would be subject to the following measures:

- To promote safety and to minimize noise and vibration impacts in residential and working environments, new development shall be designed to provide the maximum separation feasible between the rail line and dwelling units, yards, common open space areas, offices, and facilities for the storage of toxic or explosive materials.
- To the extent possible, areas closest to the railroad line should be used as parking lots, public streets, peripheral landscaping, or the storage of non-hazardous materials.
- For industrial facilities where the primary function is the production, processing, or storage of hazardous materials, new development shall follow the setback guidelines and other protective measures called for in the City's Industrial Design Guidelines for development adjacent to a railroad line.

With Surrounding Neighborhoods

As described above, future industrial uses under the DSAP would be generally separated from existing residential uses in the surrounding area. The interface with the most potential for conflicts includes the Royal/Auzerais subarea with the Hannah/Gregory neighborhood.

Future residential development would be generally compatible with adjacent uses, as the Plan area is primarily surrounded by existing residential neighborhoods. For example, the *Urban Residential* development in the Stockton Corridor subarea would be surrounded by the approved but not yet built Morrison Park Townhomes project to the north and existing commercial uses along The Alameda and the Garden/Alameda neighborhood to the west. Residential development in the Dupont-McEvoy subarea would be surrounded by housing, including the Sunol-Midtown neighborhood, Cahill Park and Monte Vista communities, and the 800-unit Ohlone Mixed Use project that has been approved but not yet built. Residential development in the Park/San Carlos subarea would be located between established single-family neighborhoods, including the historic Lakehouse District to the north and the Auzerais/Josefa area to the south. Future development would also be compatible with the nearby St. Leo's neighborhood, which is generally bounded by The Alameda, Race Street, Park Avenue, and the Cahill Park community.

Although the proposed uses would be compatible with existing development in the surrounding area, the intensification of development within the Plan area could conflict with the adjacent lower intensity neighborhoods in terms of scale and design. Adverse effects on adjacent residential development could include increased lighting, visual intrusion, and elevated noise levels due increased traffic and activity. All types of neighboring development, including existing businesses, could be exposed to secondary effects related to increased traffic such as odors and air quality, in addition to inadequate utility capacity and cumulative construction impacts. Aesthetics, noise, traffic, air quality, odor, and utilities are discussed in separate sections of this EIR.

To minimize impacts from the intensification of development on adjoining low density neighborhoods, the DSAP contains Design Guidelines related to buildings, open spaces, streetscapes, and landscaping (refer to Section 2.4.1). The Design Guidelines are intended to create a transit-

oriented, pedestrian/bicycle-friendly environment with a vibrant urban character and to maximize compatibility between new and existing uses.

The Design Guidelines include building height limits that are consistent with airport-related height restrictions. At the interfaces with single-family residential neighborhoods, the maximum building height would be 65 feet to reduce potential shade, shadow, massing, viewshed, or other land use compatibility concerns related to scale. Higher building heights would be allowed in the *Transit Residential* and employment-oriented areas, away from single-family residences and adjacent to other higher density development. For example, future development south of San Carlos Street in the Dupont/McEvoy subarea would be located adjacent to the Ohlone and Monte Vista communities. Future residential development in the Park/San Carlos subarea would complement the existing Museum Park community, Delmas Park Apartments, and condominiums on the north side of Park Avenue.

In addition to the DSAP Design Guidelines, future development would be subject to General Plan policies intended to reduce and avoid conflicts between various land uses. For example, new development will be required to use a combination of building setbacks, building step-backs, materials, building orientation, landscaping, and other design techniques to provide a consistent streetscape that buffers lower-intensity areas from higher-intensity areas and that reduces potential shade, shadow, massing, viewshed, or other land use compatibility concerns (GP Policy CD-4.5). In accordance with GP Policy CD-4.9, the design of new structures shall be consistent with or complementary to the surrounding neighborhood fabric (including but not limited to prevalent building scale, building materials, and orientation of structures to the street).

Future projects under the DSAP will be subject to supplemental environmental review and the City's design review process. This process would involve the review of building architecture, site design, parking, access, landscaping, lighting, and on-site security, services, and amenities (trash enclosures, usable open space, etc.), in conformance with applicable standards including the Zoning Ordinance. The supplemental environmental review process will allow for public input on the project design, to take into account the potential for land use conflicts.

With implementation of the DSAP Design Guidelines, General Plan policies, Zoning Ordinance, and other applicable regulations, future development under the DSAP would not result in significant land use conflicts. This conclusion is consistent with the analysis in the Envision PEIR. **[Less than Significant Impact]**

4.1.3.3 *Impacts to Established Communities*

As described above, there are several established communities overlapping with and surrounding the Plan area. Under the DSAP, the portion of Delmas Park within the Park/San Carlos subarea would remain as a primarily mixed residential/commercial neighborhood.[51] However, new housing would be constructed at a higher density, changing the character of the Park/Lorraine sub-neighborhood and potentially affecting the established neighborhoods to the north and south.

[51] Delmas Park is comprised of three sub-neighborhoods: Lorraine/Park, Lakehouse, and Auzerais/Josefa. The Lorraine/Park neighborhood is located entirely within the Park/San Carlos subarea, while the historic Lakehouse District is north of Park Avenue and the Auzerais/Josefa neighborhood is south of San Carlos Street.

The Stockton Corridor subarea, west of Stockton Avenue, is within the Garden/Alameda neighborhood. The majority of properties designated for redevelopment under the DSAP are commercial/industrial uses. There are only two residences located in this subarea.

The Arena North subarea is within the western portion of the Autumn/Montgomery neighborhood, which is divided in half by the Guadalupe River. The neighborhood includes residences dating from the 1870's to 1920's. In recent decades, the area has undergone substantial changes through demolitions and development of industrial and commercial uses. The Arena now dominates the character of the area, due to its scale, modern architecture, and expansive surface lot. In addition, the planned extension and realignment of Autumn Street involves the removal of four residences on Autumn Court and two businesses within the neighborhood.[52] Under build-out of the DSAP, the remainder of the houses on Autumn Court and other residences in the Arena North subarea would be replaced with employment uses. The planned roadway improvement combined with future redevelopment would further alter the original character of the neighborhood. The potential displacement of people and housing is discussed further in Section 4.15 *Population and Housing*.

The Park/San Carlos, Arena North, and Stockton Corridor subareas all contain vacant lots, deteriorating buildings, and/or underutilized properties that currently disrupt the landscape of their respective neighborhoods. In particular, the Autumn/Montgomery neighborhood is already physically divided and lacks a strong identity west of SR 87. The DSAP is intended to revitalize these areas by creating a transit-oriented, pedestrian/bicycle-friendly environment with a vibrant urban character. Application of the Design Guidelines to future development, as well as implementation of the open space network and transportation strategies, would create safer, more attractive connections within and surrounding the Plan area.

Redevelopment of underutilized properties and implementation of streetscape improvements in the Park/San Carlos subarea would enhance the cohesiveness of the Delmas Park neighborhood, while maintaining the integrity of the Lakehouse district and Auzerais/Josefa neighborhood. Future mixed use residential development in the Stockton Corridor subarea would be compatible with the high density housing and commercial uses that characterize the southeastern portion of the Garden/Alameda neighborhood.

For these reasons, the DSAP would not physically divide or disrupt the Delmas Park, Garden/Alameda, or Autumn/Montgomery neighborhoods. The proposed DSAP does not include any features that would physically divide or disrupt surrounding neighborhoods such as Sunol/Midtown, Hannah/Gregory, or St Leo's. With implementation of the DSAP Design Guidelines, General Plan policies, Zoning Ordinance, and other applicable regulations, future development under the DSAP would not result in a significant impact on established communities. **[Less than Significant Impact]**

4.1.3.4 *Consistency with Plans and Policies*

As described further in Section 4.7 *Biological Resources*, the proposed project would not conflict with the HCP/NCCP.

[52] City of San José. *Coleman Avenue/Autumn Street Improvement Project Final Integrated Focused EIR.* 2008.

San José Airport Comprehensive Land Use Plan

According to the Envision PEIR, new development could expose people to increased noise and hazards from airport operations. Portions of the Central/Downtown Planning area are within height restriction areas and/or airport safety zones. Conformance with General Plan and regulatory requirements will limit adverse land use compatibility impacts near airports.

As described in Sections 4.3 *Noise* and 4.6 *Hazardous Materials and Hazards*, the land uses and building height maximums proposed by the DSAP are consistent with the noise compatibility policies and height restrictions set forth in the CLUP subject to FAA review of specific building heights. Future projects within the AIA would be required to conform to CLUP policies and be subject to review by the ALUC. The DSAP would not conflict with the CLUP adopted for the Mineta San José International Airport. This conclusion is consistent with the analysis in the Envision PEIR. **[Less than Significant Impact]**

Envision San José 2040 General Plan

The proposed project would designate the Diridon Station Area as an Urban Village in the 2040 General Plan, and the DSAP would serve as the Urban Village Plan. It was developed in accordance with the Urban Village planning process and includes the required components (refer to GP Policy IP-5.1). For example, the DSAP identifies suitable areas for employment and residential development through application of General Plan land use designations, identifies infrastructure improvements, addresses sustainability goals, and establishes urban design guidelines, including building height maximums and preferred densities.

Land Use Designation Amendments

Consistent with the Urban Village planning process, the DSAP proposes several land use designation amendments to redistribute the location of land uses within the Plan area to meet desired levels of housing and job growth, while minimizing potential land use conflicts. As shown on Figure 2-4 ~~2-3~~, the DSAP proposes to change the land use designation to *Urban Residential* or *Transit Residential* in two ~~three~~ areas: the Dupont/McEvoy~~, Park/San Carlos,~~ and Stockton Corridor subareas. These areas are currently designated as *Mixed Use Commercial~~, Downtown, Residential Neighborhood~~*, or ~~*Neighborhood/Community Commercial*~~. ~~These~~ This designations ~~allow~~s the development of residential uses integrated with commercial uses. ~~with the exception of the *Neighborhood/Community Commercial* designation, which is applied to properties along San Carlos Street in the Park/San Carlos subarea~~.

The proposed amendments in the Dupont/McEvoy and Stockton Corridor subareas would allow higher density residential development and taller buildings, when compared to the current *Mixed Use Commercial* designations. The changes in the Park/San Carlos subareas are intended to allow residential uses along San Carlos Street and encourage mixed use residential development that is compatible with existing uses to remain and the surrounding neighborhoods. Only ~~two~~ three properties would be amended from *Residential Neighborhood*. Given that the *Downtown* designation allows for higher intensity development and a wider mix of uses than the proposed designations, the

amendments in the Park/San Carlos subarea would allow for a smoother transition to adjacent neighborhoods, while still supporting higher density infill development.

As described in Section 4.1.3.2 above, the development of residential uses in the subareas would not result in significant land use conflicts, with implementation of the DSAP Design Guidelines, General Plan policies, and other applicable standards and regulations. Other environmental effects due to the intensification of development are addressed throughout this EIR. Program-level mitigation is provided for all potential impacts to surrounding development. For these reasons, the proposed land use designation amendments would not result in a significant land use impact or conflict with General Plan policies related to land use compatibility.

Growth Area Amendments

The proposed project includes amendments to existing Growth Areas, including Downtown, Midtown Specific Plan, and The Alameda Urban Village (VT4).[53] Specifically, the boundaries of the ~~Downtown Growth Area,~~ Midtown Specific Plan~~,~~ and The Alameda Urban Village (VT4) would be amended to eliminate overlap with the Diridon Station Area Urban Village, as shown on Figure 2-5. The Downtown Growth Area ~~Core~~ boundary would remain unchanged. The planned job capacity and housing yield would be reallocated to the Diridon Station Area Urban Village from the Midtown Specific Plan~~,~~ and The Alameda Urban Village (VT4)~~, and Downtown~~. The capacities of the existing Growth Areas were adjusted such that there would be no net change in the total growth capacity over the current 2040 General Plan, as shown in Table 4.1-5 below.

Table 4.1-5
Existing and Proposed Job Capacity and Planned Housing Yield by Growth Area

Growth Area	Job Capacity		Planned Housing Yield (DU)	
	2040 General Plan	Proposed	2040 General Plan	Proposed
Downtown	48,500	-	10,360	
Diridon Station Area Urban Village	-	23,010		2,710
Downtown (excluding Diridon Station Area)	-	25,816		8,450
Midtown	1,000	841	1,600	800
VT4 – The Alameda Urban Village	1,610	1,443	411	411
TOTAL	**51,110**	**51,110**	**12,371**	**12,371**

[53] Given that Downtown (supported by Strategy 2000) and the Midtown Specific Plan are incorporated into the 2040 General Plan as Growth Areas, consistency with planned development assumptions for these areas is discussed in this section. For project consistency with the goals and policies of Midtown Specific Plan and Strategy 2000, refer to the discussion on "Other Adopted Plans" below.

Changes to VT4: Approximately 6.4 acres of the Plan area currently overlap The Alameda Urban Village (VT4). No housing was assumed for the overlapping area during preparation of the 2040 General Plan; therefore, the planned housing yield for VT4 would remain unchanged. Only the job capacity would be adjusted slightly, as jobs associated with the approved Whole Foods Market project and planned development under the DSAP in the overlapping area would draw from VT4 capacity.

Changes to the Midtown Specific Plan: With the proposed boundary adjustments, the Midtown Specific Plan would essentially be divided into two distinct areas. The northern portion of Midtown has already been built out in accordance with the specific plan. In the southern portion, the properties designated as *Transit Residential* have also been developed (Monte Vista at Del Monte Cannery community) or have been approved for development (Ohlone Mixed Use Project). The DSAP proposes a community park for the land designated as *Open Space, Parklands and Habitat,* consistent with the Midtown Specific Plan. The remainder of the specific plan area is designated as *Combined Industrial/Commercial*.

As shown in the table above, the planned job capacity for the Midtown Specific Plan would be reduced from 1,000 to 841, and the planned housing yield would be reduced from 1,600 to 800 dwelling units. The remaining 800 DU has already been entitled to the Ohlone Mixed Use Project, leaving no additional housing capacity in the Midtown growth area. The reduced planned job capacity could be accommodated in the *Combined Industrial/Commercial* area and as part of the Ohlone Mixed Use Project. The Midtown Specific Plan would remain in effect primarily to provide direction for employment development (and for transit-oriented residential development should the Ohlone Mixed Use Project not proceed).

Changes to the Downtown Growth Area: As noted above, the boundaries of the Downtown Growth Area are not proposed to be changed. The project does, however, propose to delineate the Diridon Station Area as a subset of the Downtown Growth Area, which would be reflected in the Growth Table in the Appendix of the General Plan. The total amount of housing and growth capacity in the Downtown Growth Area would remain unchanged from the planned capacities in the Envision San Jose General Plan. The project also does not propose to modify the Envision San Jose 2040 General Plan's distribution of jobs capacity between the historic Downtown east of Highway 87 and the Diridon Station Area, retaining the planned number of jobs in the historic Downtown. ~~With the proposed modifications, the Downtown Growth Area would comprise the portion of the Downtown Core outside of the DSAP boundaries. It would be divided into two distinct areas, as the Diridon Station Area Urban Village would separate the Transit Employment Center lands south of Taylor Street from the rest of the Growth Area. Although the project would reduce the size and development capacity of the Downtown Growth Area, the combined capacity of the four adjoining Growth Areas would not change. In effect, the project would shift some of the job and housing development capacity from east of SR 87 to the west within the DSAP area, while maintaining a large amount of development capacity in the traditional Downtown center. The Strategy 2000 plan would continue to guide development in the Downtown Growth Area.~~

As described in Section 4.1.2.3 above, the 2040 General Plan intends for Growth Areas to accommodate nearly all of the City's planned housing and job development. The Plan area overlaps with existing Growth Areas and the proposed project would designate a new Urban Village, for which the DSAP would provide the implementation framework. The proposed modifications to Growth Area boundaries and capacities would not result in a net change in the City's housing and job growth capacity. Therefore, the proposed project would be consistent with the assumptions regarding planned growth in the 2040 General Plan and associated Envision PEIR.

Goals and Policies

The DSAP is consistent with the major strategies embodied in the General Plan, as listed in Section 4.1.2.3. Specifically, the DSAP is a key strategy for achieving many of the City's goals related economic growth, fiscal sustainability, and environmental stewardship. For example, the DSAP directly supports the objectives of focusing growth within Urban Villages and near regional transit hubs, existing employment centers, and Downtown. The Transportation Improvement Strategies would provide "Streetscapes for People". The proposed improvements to the open space network would promote access to the natural environment and increase recreational opportunities for existing and new populations. The DSAP incorporates design guidelines and strategies to advance the City's Green Vision and goals for environmental sustainability. Overall, the DSAP is intended to transform the Plan area into a vibrant, attractive, and complete neighborhood that would provide an active, walkable, bicycle-friendly, transit-oriented, and mixed-use urban setting for new housing and job growth.

The DSAP incorporates General Plan goals and policies in the proposed Land Use Diagram, Transportation and Open Space Improvement Strategies, and Design Guidelines. All future actions would be subject to 2040 General Plan policies. For these reasons, the DSAP is consistent with the 2040 General Plan.

Other Adopted Plans

The proposed DSAP is generally consistent with the goals of the Strategy 2000, Midtown Specific Plan, Diridon/Arena Strategic Development Plan, Julian-Stockton Redevelopment Plan, and Delmas Park Neighborhood Improvement Plan (refer to Section 4.1.2.3 above for summary of goals).

The Midtown Specific Plan encourages preservation of existing commercial and industrial uses. Although the DSAP proposes redevelopment of existing commercial and industrial uses that are within the current boundaries of Midtown, the DSAP designates three areas for the preservation and intensification of employment uses and the remaining Midtown area would retain existing commercial and industrial uses designated for *Combined Industrial/Commercial* uses. In addition, the DSAP proposes incrementally taller buildings and higher densities in the redevelopment area designated in the Delmas Park Neighborhood Improvement Plan. These inconsistencies in land use types and intensities would not result in new land use conflicts or other environmental impacts, as described above in Section 4.1.3.2.

Zoning Ordinance

The majority of the Plan area is zoned *Light Industrial*, with *Heavy Industrial* zones in the northern and southern portions of the area. Many of the zones do not match the current or proposed 2040 General Plan land use designations. Therefore, when future development is proposed, it may require rezoning to match the General Plan land use designation. Properties within the Plan area and Downtown Core may be rezoned to a Downtown district (*DC Downtown Core* or *DC-NT1 Downtown Core – Neighborhood Transition 1*). Any rezonings would be evaluated during supplemental environmental review. Future development would be subject to design and performance standards of the applicable zoning district.

Future projected parking ratios have been determined for the DSAP based on the "test-fit" plan as described previously in Section 2.3.2.2, *Parking*. These parking ratios are lower than those required by code in the Downtown. Parking supply and demand will be managed through a comprehensive plan to be prepared for the DSAP, as described in Section 2.3.2.3, *Transportation and Parking Management Plan*.

The DSAP would not conflict with the 2040 General Plan, Zoning Ordinance, or other adopted plans and policies adopted for the purpose of avoiding or mitigating an environmental effect. **[Less than Significant Impact]**

4.1.4 Cumulative Impacts

The proposed project has the potential to contribute to cumulative land use impacts in Downtown San José and neighborhoods to the west. In the short-term, construction activities associated with future development could combine with other construction projects, which could affect sensitive land uses. Construction-related effects are discussed in greater detail in the Noise, Air Quality, and Hazardous Materials sections of this EIR. In the long-term, land use impacts could occur if future development conflicts with other planned development or infrastructure projects.

4.1.4.1 *Land Use Compatibility*

The Envision PEIR did not identify any significant impacts related to land use. The Ballpark EIR concluded that the increase in pedestrian/vehicular activity and ambient noise levels on event days could increase potential disturbances to surrounding uses; however, the ballpark would not result in any land use compatibility impacts.

The expansion of Diridon Station, future development under the DSAP, and other planned projects in the Plan area would also combine to increase pedestrian, bicycle, and vehicle traffic and ambient noise levels. However, the increase in activity would not result in a cumulative land use impact, as increased street activity is envisioned as part of the transformation of the Plan area and measures are inherent in the Plan to reduce vehicle-related impacts. For example, sufficient sidewalk width will be provided along key pedestrian corridors to accommodate increased volumes and minimize potential conflicts with vehicle traffic and adjoining land uses.

In addition, the DSAP would increase the residential and employment population exposed to impacts associated with the baseball stadium. Specifically, future residential development in the Park/San Carlos subarea would be subject to similar noise impacts as those described in the Ballpark EIR for adjacent residential uses (refer to Section 4.3 *Noise*). However, the proposed project would not result in a new or more significant impact, given that future development in the Park/San Carlos subarea would be designed to incorporate noise reduction measures appropriate for a downtown environment, consistent with General Plan policies.

High Speed Rail Impacts

The HSR project could directly or indirectly displace existing uses and/or result in land use conflicts due to the need for right-of-way, increased noise and vibration levels, traffic congestion, and visual effects (i.e., shading and massing of the HSR structure in relation to the buildings). These effects would combine with similar effects associated with the existing heavy and light rail lines, which currently divide land uses and generate elevated noise and vibration levels. However, the elevated HSR tracks would not physically divide the community because transportation facilities and buildings could still be constructed under the structures, allowing people to cross. In addition, the HSR alignment would not extend over or through any areas designated for residential uses under the DSAP, although it would run adjacent to the Dupont/McEvoy subarea south of Diridon Station. At this location, travel speeds and thus noise levels would be lowest. As described in Section 4.3 *Noise*, operation of HSR would not expose future residential development to excessive noise levels, with incorporation of site design and noise reduction techniques.

The other areas that would be most affected by the HSR alignment are planned primarily for employment uses under the DSAP. The HSR project could influence the type of businesses, building heights, and other design features of future development in these industrial/commercial areas. The HSR would also affect the type and design of recreational facilities within the planned community park, possibly precluding baseball fields or other facilities that require substantial vertical clearance.

According to the Program EIRs prepared for the HSR project (FRA, 2005 and 2008), high speed rail is considered highly compatible if it would be located in areas planned for multi-modal transportation centers, transit-oriented development, redevelopment/revitalization, and/or high-intensity employment uses. Accordingly, it was determined that the proposed San José station location would be highly compatible with the existing Diridon Station and existing/planned high density uses in the area. The future project-level EIRs for the HSR will evaluate the potential for specific land use impacts and identify mitigation to minimize noise exposure, visual effects, and other conflicts. For example, the CHSRA will maintain a high level of visual quality of HSR facilities by incorporating measures such as visual buffers, trees and other landscaping, architectural design, and public artwork. Therefore, future development under the DSAP is not anticipated to conflict with the HSR project.

Conclusion on Future Compatibility

As described in Section 4.1.3.2 above, the DSAP is intended to promote compatibility with existing development in the surrounding area. Overall, the high density, mixed use development proposed by the DSAP would be compatible with the proposed stadium, expanded station, and planned growth in Downtown, Midtown, and other Urban Villages in the general area. Future projects, including

development under the DSAP, would be required to implement sensitive design measures that minimize land use conflicts.

The DSAP would not result in or make a considerable contribution to a cumulative impact related to land use compatibility. **[Less than Significant Cumulative Impact]**

4.1.4.2 *Shade and Shadow Impacts*

The Strategy 2000 EIR included an analysis of shade and shadow impacts on public open spaces, concluding that future development in Downtown would not result in a significant impact on Guadalupe River Park, but could affect St James, Plaza of Palms and Plaza de Cesar Chavez. The Baseball Stadium EIR concluded that the 165-foot tall stadium would increase the shade and shadow over Diridon Station during the morning hours for most of the year and over Los Gatos Creek during the afternoon in winter months.

The DSAP would contribute to the cumulative shading of public open space by allowing the development of new mid-rise buildings. Buildings would be up to 130 feet tall in the Central Zone, adjacent to Diridon Station. Based on the stadium analysis, new buildings could increase the shade and shadow over Diridon Station and associated public spaces, including the proposed public spaces. Future development, however, would be designed to minimize potential shading and visual effects on the public spaces associated with Diridon Station.

Along Los Gatos Creek and Guadalupe River, new buildings would range in height from 65-130 feet. As described in Section 4.7 *Biological Resources*, new buildings located on the west side of the corridors in the Central and Northern Zones could increase afternoon winter shade of the corridor, but would not cast shadows on the creek corridor for the majority of the year due to the separation created by Autumn Parkway.[54] New buildings adjacent to Los Gatos Creek in the Southern Zone would be more likely to cast shadows on the corridor for longer durations throughout the day and year, based on their proximity and orientation to the creek relative to sunlight.

The majority of the properties abutting the creek in the Southern Zone would have a maximum building height of 65 feet, which reduces the potential for shading when compared to taller buildings that would cast longer shadows. The enforcement of Riparian Corridor Policy setbacks would further reduce potential shading of the open space. In accordance with General Plan (GP) Policy CD-7.8, development adjacent to public open space and parklands would incorporate site and architectural design measures to minimize potentially negative shade and shadow impacts upon the park or plaza space. The DSAP would not result in or make a considerable contribution to a cumulative impact related to shade and shadow. **[Less than Significant Cumulative Impact]**

4.1.5 Conclusion

With implementation of the DSAP Design Guidelines, General Plan policies, Zoning Ordinance, and other applicable regulations, future development under the DSAP would not result in significant land

[54] City of San José. *Baseball Stadium in the Diridon/Arena Area Draft EIR.* 2006.

use impacts. This conclusion is consistent with the analysis in the Envision PEIR. **[Less than Significant Impact]**

4.2 TRANSPORTATION

The following discussion is based upon a Transportation Impact Analysis (TIA) prepared by Hexagon Transportation Consultants, Inc. in June 2013. The TIA is included as Appendix C of this EIR.

This EIR provides project-level environmental clearance for future projects in the Downtown Core for intersection and freeway operation impacts. Future development projects proposed outside of the Downtown Core (that meet minimum trip thresholds) will be required to complete a site-specific traffic impact analysis (TIA).

4.2.1 Existing Setting

The City's transportation network consists of roadways, transit systems, bicycle/pedestrian facilities, and airports. Many factors influence the operations of the various elements of the transportation system in a major city such as San José. Important factors include: demographics (population, age, income, etc.), employment base (types of businesses, intensity, etc.), land use, the state of the economy, current transportation technology, climate, physical infrastructure, and short-term factors such as holidays. Given the dynamic nature of the transportation, this discussion offers only a snapshot of conditions at the time the EIR was prepared.

4.2.1.1 *Roadway Network*

The roadway network is comprised of freeways, expressways, arterial streets, major collectors, local streets, transit malls, pedestrian malls, interchanges, and freeway connectors.[55] The roadways providing local access to the Plan area are shown on Figure 1-1 and described as follows:

Santa Clara Street is a four-lane east-west roadway that provides access east and west of the Plan area. Santa Clara Street becomes Alum Rock Avenue east of US 101 and becomes The Alameda west of Stockton Avenue. **The Alameda** is generally a four-lane north-south arterial that runs west to Santa Clara University. **Montgomery Street** is a two-lane, one-way arterial street that provides a north-south connection from Santa Clara Street to Bird Avenue. **Autumn Street** is three lanes and completes the one-way couplet with Montgomery Street. North of Santa Clara Street, Autumn Street is a two-way street, ending just past Julian Street. The extension of Autumn Street north to Coleman Avenue is currently under construction.

Bird Avenue is a four to six-lane north-south arterial that runs through the Plan area to Park Avenue, where it transitions into the one-way couplet of Autumn and Montgomery Streets. **Julian Street** is an east-west arterial that runs through the northern portion of the Plan area. **San Fernando Street** is a two-lane, east-west road that ends at Montgomery Street, just west of Diridon Station. **San Carlos Street** is a four-lane east-west arterial that runs from 4th Street to Bascom Avenue, where it becomes Stevens Creek Boulevard. **Park Avenue** runs from Market Street to the city of Santa Clara. Park Avenue has four lanes from Market Street to Delmas Avenue and from Montgomery Street and

[55] A Transit Mall is street or series of streets improved for pedestrian use near key transit stops, such as First and Second Streets in Downtown San José. A pedestrian mall is right-of-way primarily used by pedestrians, such as Paseo San Antonio in Downtown.

Sunol Street, but otherwise has two lanes. **Auzerais Avenue** is a two-lane collector street extending from Meridian Avenue to Woz Way.

Regional access to the Plan area is provided by Interstate 880, Interstate 280, and State Route (SR) 87. Segments of these freeways include high occupancy vehicle (HOV) lanes, also known as diamond or carpool lanes. HOV lanes restrict use to vehicles with two or more persons (carpools, vanpools, and buses) or motorcycles during the peak morning (5:00 am to 9:00 am) and evening (3:00 pm to 7:00 pm) commute periods.

4.2.1.2 *Transit Services*

The Valley Transportation Authority (VTA) is the primary provider of transit service in Santa Clara County. VTA operates over 70 bus lines, three light rail transit (LRT) lines, several shuttles, and paratransit services. Diridon Station is currently served by seven bus routes (63, 64, 65, 68, 168, 180, and 181), as well as the DASH shuttle and Highway 17 express bus service. The DASH shuttle serves various Downtown destinations during weekdays, while the Highway 17 shuttle provides express service to Santa Cruz seven days a week. Additional bus routes operate on The Alameda/Santa Clara Street (22 and 522) and San Carlos Street (23 and 81). Route 522 is the only Bus Rapid Transit (BRT) line in the city. Route 522 travels on the same route as Route 22, but has signal priority and fewer stops (30 compared to 112).[56] Routes 22, 522, 68, and 64 are among the top 10 bus routes in terms of ridership.[57] There are approximately 2,640 daily boardings and alightings (i.e., de-boardings) for bus services at Diridon Station, based on 2008-2009 data.[58]

The Winchester-Mountain View LRT line runs through the Plan area and has two stations at San Fernando Street and at Diridon Station. Outside of the Plan area, the nearest LRT stations are at the Children's Discovery Museum (Woz Way and San Carlos Street) and on Race Street at Parkmoor Avenue. The LRT line currently operates seven days a week with 15-minute headways during commute hours and 30-minute or 60-minute headways at all other hours.

[56] The type of BRT service provided by VTA is considered premium-level bus service, with faster operating speeds, greater flexibility, and limited stops compared to local bus service. Other types of BRT service include specialized or dedicated running ways, rail-like stations, and passing lanes to allow other vehicles to bypass stations.
[57] Envision PEIR.
[58] City of San José. Diridon Station Area Plan, Existing Conditions Report. 2010.

In addition to VTA's transit services, Diridon Station is a hub for three commuter rail services: Caltrain, Altamont Express Commuter Rail (ACE), and Amtrak Capitol Corridor. Table 4.2-1 shows the approximate weekday ridership for each of the transit operators at Diridon Station (excluding VTA bus services).

Table 4.2-1
Ridership at Diridon Station under Existing Conditions (2009)

Transit Service	Average Weekday Boardings and Alightings
VTA – Light Rail	970
Caltrain	5,860
ACE	600
Amtrak – Capitol Corridor	450
TOTAL	**7,880**

Source: DSAP – page 2-54

Caltrain provides service between San José and San Francisco, with limited service south to Gilroy. Caltrain operates approximately 100 trains each weekday, including 22 commute hour trains, as well as about 30 trains each weekend day. All trains stop at Diridon Station, which is the busiest Caltrain station in San José and the fourth busiest among all Caltrain stations.[59] ACE currently operates three trains during weekday commute hours between Stockton and the Silicon Valley. Amtrak operates between Sacramento and San José, with seven daily round trips.

In addition to public transit, private employers provide independently-operated commute +

transportation services tailored closely to the wants and needs of employees.[60] These services are typically provided by the large high-tech firms in the area.

4.2.1.3 *Pedestrian and Bicycle Facilities*

The mild climate and relatively flat terrain provide an ideal environment for walking and bicycling in San José, particularly for shorter trips (less than two miles in length). In San José, approximately eight percent of peak period trips are currently made on foot or by bicycle, but only a small percentage (approximately two percent) are trips to and from work.[61]

Pedestrian facilities in the Plan area generally consist of sidewalks, crosswalks, and signal heads at intersections. With few exception, sidewalks exist along all roadways in and surrounding the Plan area. The following types of bicycle facilities are provided in San José:

- **Bike paths (Class I)**: paved pathways that are separated from roadways and are designated for the exclusive use of bicycles and pedestrians.
- **Bike lanes (Class II):** lanes for bicyclists adjacent to the outer vehicle travel lanes, with special lane markings, pavement legends, and signage.
- **Bike routes (Class III):** low-traffic streets signed for bike use, with signage and shared-lane markings known commonly as "sharrows".~~with no separated right-of-way or lane striping.~~

[59] Envision PEIR.
[60] Envision PEIR.
[61] Envision PEIR.

The two nearest Class I paths include the Guadalupe River Trail (between Virginia Street south of I-280 to Gold Street in Alviso ~~I-880 and I-280~~) and Los Gatos Creek Trail (Lonus Street to San Carlos Street). Surveys conducted in 2007 and 2008 show that nearly 1,000 people use the Guadalupe River Trail daily, with a majority reporting that they commute to work in Silicon Valley.[62]

Existing bike lanes in the general area include the segments of:

- San Fernando Street, between Cahill Street to 11th Street ~~SR 87 and 10th Street~~
- Park Avenue, between Naglee Avenue and Race Street
- Coleman Avenue, between Taylor Street and SR 87
- 7th Street, between Santa Clara Street to Empire Street ~~Saint James Street and Empire Street~~
- 7th Street, between Hedding Street and Commercial Street
- Commercial Street, between 4th Street to 10th Street ~~1st Street and 10th Street~~
- Coleman Avenue, between Newhall Drive and McKendrie Street
- Cahill Street, between Crandell to San Fernando
- Almaden Boulevard, between Santa Clara to Woz Way
- Almaden Boulevard, between St. John Street to Santa Clara
- Notre Dame Ave, between Carlylse to St. John Street
- Woz Way, between Almaden Boulevard to San Carlos St
- Balbach, between Almaden Boulevard to Almaden Ave
- 3rd Street, between Reed Street to Jackson Street
- 4th Street, between Reed Street to Jackson Street
- 7th Street, between San Salvador Street to Tully Road
- 10th Street, between Keyes Street to Hedding Street
- 10th Street, between Keyes Street to Old Bayshore
- Hedding Street, between Ruff Drive to 17th Street
- Empire Street, between 1st Street to 10th Street
- Empire Street, between 15th to 21st Street
- Bird Avenue, between Virginia to Coe
- Taylor Street, between 1st Street to Spring Street

~~In addition, on San Fernando Street between Diridon Station and SR 87, the City has installed "sharrow" symbols on the pavement to designate the appropriate travel path for cyclists and increase driver awareness of bicycles.~~

Existing bike routes in the general area include the segments of:

- St. John Street, between Almaden Boulevard to 17th Street
- San Salvador Street, between Market Street to 16th Street
- Vilola Avenue, between Almaden Avenue to Market Street
- Balbach Street, between Almaden Avenue to Market Street
- Almaden Avenue between Balbach Street to Viola Avenue
- Notre Dame Avenue, between Santa Clara to Carlylse
- Empire, between 10th Street to 15th Street
- Virginia, from Drake Street to the Guadalupe River Trail

[62] Envision PEIR.

- Park Avenue, between Sunol Street to Race Street
- 7th Street, between Empire to Hedding Street

4.2.1.4 *Heavy Rail*

Multiple heavy rail lines run through the Plan area. North of Diridon Station, a line serving Caltrain and freight operations runs to the northwest, parallel to Stockton Avenue. South of the station, the line runs southeast and crosses over Los Gatos Creek and I-280. A UPRR line with infrequent freight service runs southwest along the Vasona light rail line.

4.2.1.5 *Air Traffic*

The Norman Y. Mineta San José International Airport (SJC) is located approximately two miles north of Downtown and is owned and operated by the City of San José. The airport serves 12 airlines and has three runways, including two for commercial and larger general aviation aircraft and one for small general aviation aircraft. The airport averages approximately 260 commercial and 90 general aviation departures and landings daily. The City's Airport Master Plan, originally adopted in 1997, includes approximately 70 specific facility improvement projects, more than half of which have been completed to date or are currently underway.

4.2.1.6 *Planned Transportation Improvements*

There are also several transportation projects planned for Diridon Station and the Downtown area. As described in Section 1.2.1, these include:

- California High Speed Rail (HSR) from San Francisco to Los Angeles
- Bay Area Rapid Transit (BART)
- Caltrain Electrification[63]
- Construction of a LRT station on the south side of San Carlos Street, east of Sunol Street
- BRT Improvements for The Alameda/Santa Clara Street/Alum Rock corridor
- New BRT service on San Carlos Street
- Coleman Avenue/Autumn Street Improvement Project
- Park Avenue Narrowing between Sunol Street and Montgomery Street
- San Carlos Street Overpass Replacement
- ~~San Fernando Street Enhanced Bikeway and Pedestrian Access Project~~
- The Alameda: A Plan for the Beautiful Way
- Los Gatos Creek Trail, Reach 5 (San Carlos Street to Santa Clara Street)

[63] ~~In addition to long-term plans for electrification, some of the planned short-range improvements to~~ Caltrain modernization also includes upgrading the signaling and communications systems~~, replacing old bridges, and eliminating all of the remaining "hold-out" stations (where trains are required to wait while another train is in the main station)~~.

4.2.2 Regulatory Framework

The City of San José has jurisdiction over all city streets and City-operated traffic signals.[64] The California Department of Transportation (Caltrans) manages state facilities including I-280, I-880, and SR 87, as well as on- and off-ramp intersections with local streets. Caltrain is owned by the Peninsula Corridor Joint Powers Board (PCJPB), which is a government entity consisting of three member agencies, including the VTA, San Mateo County Transit District (SamTrans), and City and County of San Francisco.[65]

The Federal Highway Administration (FHWA) administers and oversees highway programs and the distribution of federal funds for transportation projects. The California Transportation Commission (CTC) administers transportation programming at the state level. The San Francisco Bay Area Metropolitan Transportation Commission (MTC) is the transportation planning agency and the metropolitan planning organization (MPO) for the Bay area region.[66]

Applicable programs, policies, and regulations related to transportation are described below. Additional federal, state, and regional regulations are described in the Envision PEIR.

4.2.2.1 *Federal Aviation Administration (FAA) Regulations*

Title 14 of the Code of Federal Aviation Regulations (FAR) sets standards for obstructions to airspace. In general, the Federal Aviation Administration (FAA) is responsible for administering these regulations. As owner/operator of the Mineta San José International Airport, the City is required to comply with FAA regulations and policies intended to protect the airport and aircraft in flight from incompatible land uses that potentially create hazards or constraints to airport operations.

Part 77

Part 77 of the FAR establishes imaginary surfaces for airports and runways as a means to identify objects that are obstructions to air navigation, including buildings. The imaginary surfaces radiate out several miles from the airport and are defined as a certain altitude above mean sea level (msl). As shown on Figure 4-3, the Plan area is within the Part 77 height restriction zone for the Mineta San José International Airport.

4.2.2.2 *Transportation 2035*

In April 2009, the MTC adopted the current regional transportation plan for the Bay area, known as *Transportation 2035*.[67] *Transportation 2035* establishes a detailed set of investments and strategies to maintain, manage, and improve the surface transportation system throughout the region during the

[64] For the purposes of this discussion, a jurisdiction is a level of government (city, county, state, or federal) or regulatory authority (local, regional, state, or federal) responsible for some or all aspects of the planning, implementation, operations, and maintenance of transportation facilities and services in a defined area.
[65] Each member agency sends three representatives to make up the nine-member Board of Directors.
[66] Additional information on MTC is available at: http://www.mtc.ca.gov/about_mtc/about.htm.
[67] Under state and federal laws, MPO's are required to develop a 25-year Regional Transportation Plan (RTP) to guide transportation investment in the region, based on a realistic forecast of future revenues. MPO's must update the RTP at least every four years based on new projections of population growth and travel demand.

next 25 years. Most of this "committed funding" will go toward maintaining the region's existing transportation infrastructure.

4.2.2.3 *Congestion Management Program*

All urbanized counties in California are required to prepare a Congestion Management Program (CMP) in order to obtain their share of gas tax revenues. The CMP legislation requires that each CMP contain five mandatory elements: 1) a system definition and traffic level of service standard element; 2) multimodal performance measures element; 3) a trip reduction and transportation demand management element; 4) a land use impact analysis program element; and 5) a capital improvement element.

The VTA serves as Santa Clara County's Congestion Management Agency (CMA) and oversees its CMP. The county's CMP includes the five mandated elements and three additional elements, including a countywide transportation model and data base element, an annual monitoring and conformance element, and a deficiency plan element. VTA requires proposed development projects to address impacts on the CMP Transportation System, which consists of three networks: roadway, transit, and bicycle. The CMP roadway network includes interstate highways, state highways, county expressways, and principal arterials. The CMP bicycle network is based on the countywide bicycle plan, originally adopted by VTA in 2000 and updated in 2008. Designated cross-county bicycle corridors in the vicinity include: SR 87/Guadalupe LRT and I-880/I-680/SR 17/Vasona Rail/Los Gatos Creek. The transit network includes the facilities described above in Section 4.2.1.2.

The CMP identifies Transportation Demand Management (TDM) strategies to promote alternative transportation methods, reduce vehicle trips (especially during peak travel periods), improve the balance between jobs and housing, and support the requirements of the California Clean Air Act (CCAA). TDM programs are often implemented by large employers but TDM strategies can also be incorporated into housing development. Example of TDM measures include shuttle services, transit pass subsidies, showers and changing rooms, and parking "cash out" programs.[68] Common employer-sponsored annual transit subsidies include "Eco Pass" and "Go Pass." Eco Pass offers unlimited rides on all VTA bus and light rail services seven days a week, while Go Pass offers unlimited rides on Caltrain seven days a week through all zones.

The VTA developed the Community Design & Transportation (CDT) Program and an associated *Manual of Best Practices for Integrating Transportation & Land Use* to encourage pedestrian-friendly, transit-oriented development in Santa Clara County. *Valley Transportation Plan 2035* (VTP 2035), adopted in December 2009, establishes the Transit Program, Bicycle Program, and CDT Program as key components for countywide transportation improvements. Both the CDT Program and VTP 2035 encourage the development and continuation of trip reduction efforts through partnerships and incentive programs.

[68] With parking "cash out" programs, employers offer a cash allowance in lieu of a parking space.

Level of Service Standards

The CMP establishes level of service (LOS) standards for evaluating traffic conditions. LOS is a methodology for rating the congestion at intersections, ranging from LOS A, or free-flow conditions with little or no delay, to LOS F, or jammed conditions with excessive delays (refer to Table 1 of the TIA for definitions). Signalized intersections are evaluated using the *2000 Highway Capacity Manual* (HCM) method and TRAFFIX software, based on average delay per vehicle. Intersections are assigned an LOS during both the AM and PM peak hours, which are the one-hour time periods with the highest volumes of traffic during weekday mornings and evenings.[69]

For the evaluation of impacts on freeway segments, the CMP methodology is based on the density of traffic flow during peak hours, expressed in terms of the number of passenger vehicles per mile per lane. The CMP level of service standard for signalized intersections and freeway segments is LOS E or better. For CMP facilities that operate at unacceptable levels based on the CMP standards, cities are required to prepare a deficiency plan to improve system-wide traffic flow and air quality.

The level of service intersection ratings are generally based on the drivers' perspective, acknowledging "excessive" delay for vehicular traffic as an undesirable condition. The standard methodology does not currently consider capacity or service levels for walking, bicycling, or transit. Identifying the need for roadway improvements based only on the motor vehicle LOS can have unintended impacts to other modes such as increasing the walking time for pedestrians or making a bicycle lane too narrow and potentially more dangerous. Accordingly, VTA allows local jurisdictions to "adopt innovative and comprehensive transportation strategies for improving system wide LOS rather than adhering to strict traffic level of service standard that may contradict other community goals."[70] The City of San José's level of service policy is described in Section 4.2.2.5 below.

4.2.2.4 *Countywide Trails Master Plan*

The Santa Clara County Trails Master Plan Update (1995) was approved by the Santa Clara County Board of Supervisors in 1995. The plan's vision is to provide a contiguous trail network with connections between regional open spaces, County parks, and urbanized areas. The plan identifies regional trail routes, sub-regional trail routes, connector trail routes, and historic trails. Within the Plan area, the Guadalupe River Trail is identified a major regional trail route.

4.2.2.5 *City of San José Plans and Policies*

The City of San José is responsible for the planning, construction, operation, and maintenance of local streets, bikeways, and trails within the city limits.

[69] The AM peak hour of traffic is generally between 7:00 and 9:00 AM, and the PM peak hour is typically between 4:00 and 6:00 PM.
[70] VTA. "Deficiency Plan Requirements." 2010.

Green Vision

The City of San José's Green Vision, which was adopted in 2007, is a comprehensive fifteen-year plan to create jobs, preserve the environment, and improve the quality of life for our community. The Green Vision includes the goals to achieve a 40 percent reduction in the number of motor vehicle miles traveled compared to 2009 and to create 100 miles of interconnected trails.

Bike Plan 2020

The City of San José *Bike Plan 2020* (adopted in 2009) contains policies for guiding the development and maintenance of bicycle and trail facilities within San José, as well as the following goals for improving bicycle access and connectivity:

- Complete 500 miles of bikeways;
- Achieve a five percent bike mode share;
- Reduce bike collision rates by 50 percent;
- Add 5,000 bicycle parking spaces; and
- Achieve Gold-Level Bicycle Friendly Community status.

Level of Service Standards and City Council Policy 5-3

As established in City Council Policy 5-3 "Transportation Impact Policy" (2005), the City of San José uses the same level of service (LOS) method as the CMP, although the City's standard is LOS D rather than LOS E. According to this policy and GP Policy TR-5.3, an intersection impact would be satisfactorily mitigated if the implementation of measures would restore level of service to existing conditions or better, unless the mitigation measures would have an unacceptable impact on the neighborhood or on other transportation facilities (such as pedestrian, bicycle, and transit facilities).[71]

The Downtown Core is exempt from the City's standard of maintaining LOS D. Exceptions to the standard are also made for small, infill projects and for impacts to Protected Intersections within Special Strategy Areas, including Transit Oriented Development Corridors and Transit Station Areas. "Protected Intersections" have been built to their maximum capacity and/or have been prioritized for other modes of travel (i.e., pedestrian, bicycle, and/or transit). The policy allows for the addition of intersections to the list of Protected Intersections so long as they are located within designated Special Planning Areas and consistent with the General Plan. The Special Planning Areas include:

- Transit-oriented Development Corridors
- Planned Residential/Community Areas
- Neighborhood Business Districts
- Downtown Gateways

Expansion of these intersections to increase vehicle capacity is infeasible due to physical constraints or because roadway improvements would have an adverse effect on other modes. If a project is found to have a significant impact on operations at a Protected Intersection, the project may be

[71] Examples of unacceptable impacts include reducing the width of a sidewalk or bicycle lane below the city standard or creating unsafe pedestrian operating conditions.

approved by funding off-setting improvements to pedestrian, bicycle, and transit facilities that enhance the capacity of the transportation in the project area. The City's Transportation Impact Policy (also referred to as the Level of Service Policy) is intended to protect pedestrian and bicycle facilities from undue encroachment by automobiles.

Envision San José 2040 General Plan

The Circulation Element of the General Plan contains various long-range goals and policies that are intended to:

- provide a transportation network that is safe, efficient, and sustainable (minimizes environmental, financial, and neighborhood impacts);
- improve multimodal accessibility to employment, housing, shopping, entertainment, schools, and parks;
- create a city where people are less reliant on driving to meet their daily needs; and
- increase bicycle, pedestrian, and transit travel, while reducing motor vehicle trips.

Street Typologies

To ensure a balanced, multimodal transportation network of "complete streets", the 2040 General Plan organizes streets and other transportation facilities according to "typologies".[72] The designated typology for a given street considers the surrounding land uses, appropriate vehicular travel speeds, and the need to accommodate or prioritize multiple travel modes. The typologies found in the Plan area under the 2040 General Plan are summarized here for reference:

***Grand Boulevards*:** These streets serve as major transportation corridors that connect neighborhoods and contribute to the city's overall identity through cohesive design. All travel modes are accommodated in the roadway, but transit has priority. The public right-of-way includes ample sidewalks on both sides and special features such as enhanced landscaping, banners, and distinctive and attractive lighting.

***On-Street Primary Bicycle Facility*:** These streets include Class II bike lanes or are designated as Class III bike routes, providing continuous access and connections to the local and regional bicycle network. Local automobile, truck, and transit traffic are accommodated in the roadway, but if there are conflicts, bicycles have priority. Neighborhood traffic management strategies may be implemented to slow and discourage through automobile and truck traffic.

***Main Street*:** These streets play an important commercial and social role for the local neighborhood area, supporting retail and service activities and an urban street space for social community gathering and recreational activities through careful attention to the design of streetscape and adjacent land uses. Main Streets should be designed and operated to enable safe, attractive, and comfortable access

[72] The term "complete streets" describes a comprehensive approach to the practice of mobility planning, recognizing that transportation corridors have multiple users with different abilities and mode preferences (e.g., driving, biking, walking, and taking transit).

and travel for all users, with significant emphasis given to pedestrian activity through wide sidewalks with ample amenities.

***City Connector Street*:** These streets typically have four or six travel lanes and would accommodate moderate to high volumes of through traffic within and beyond the city. Automobiles, bicycles, pedestrians, and trucks are prioritized equally. Transit use is accommodated.

***Local Connector Street*:** These streets have two travel lanes and would accommodate low to moderate volumes of through traffic within the city. Automobiles, bicycles, pedestrians, and trucks are prioritized equally. Transit use is accommodated.

General Plan Policies

Various policies in the City's General Plan have been adopted for the purpose of reducing or avoiding impacts related to transportation, as listed in the following table.

Table 4.2-2:
General Plan Policies: Transportation

<table>
<tr><td colspan="2">Balanced Transportation System Policies and Actions</td></tr>
<tr><td>Policy TR-1.1</td><td>Accommodate and encourage use of non-automobile transportation modes to achieve San José's mobility goals and reduce vehicle trip generation and vehicle miles traveled (VMT).</td></tr>
<tr><td>Policy TR-1.2</td><td>Consider impacts on overall mobility and all travel modes when evaluating transportation impacts of new developments or infrastructure projects.</td></tr>
<tr><td>Policy TR-1.3</td><td>Increase substantially the proportion of commute travel using modes other than the single-occupant vehicle. The 2040 commute mode split targets for San José residents and workers are presented in the following table:
<table>
<tr><td colspan="3">Commute Mode Split Targets for 2040</td></tr>
<tr><td></td><td colspan="2">Commute Trips to and From San José</td></tr>
<tr><td>Mode</td><td>2008</td><td>2040 Goal</td></tr>
<tr><td>Drive alone</td><td>77.8%</td><td>No more than 40%</td></tr>
<tr><td>Carpool</td><td>9.2%</td><td>At least 10%</td></tr>
<tr><td>Transit</td><td>4.1%</td><td>At least 20%</td></tr>
<tr><td>Bicycle</td><td>1.2%</td><td>At least 15%</td></tr>
<tr><td>Walk</td><td>1.8%</td><td>At least 15%</td></tr>
<tr><td>Other means (including work at home)</td><td>5.8%</td><td>See Note 1</td></tr>
<tr><td colspan="3">Source: 2008 data from American Community Survey (2008).
Note 1: Working at home is not included in the transportation model, so the 2040 Goal shows percentages for only those modes currently included in the model.</td></tr>
</table></td></tr>
<tr><td>Policy TR-1.4</td><td>Through the entitlement process for new development, fund needed transportation improvements for all transportation modes, giving first consideration to improvement</td></tr>
</table>

	of bicycling, walking and transit facilities. Encourage investments that reduce vehicle travel demand.
Policy TR-1.5	Design, construct, operate, and maintain public streets to enable safe, comfortable, and attractive access and travel for motorists and for pedestrians, bicyclists, and transit users of all ages, abilities, and preferences.
Policy TR-1.6	Require that public street improvements provide safe access for motorists and pedestrians along development frontages per current City design standards.
Policy TR-1.7	Require that private streets be designed, constructed and maintained to provide safe, comfortable, and attractive access and travel for motorists and for pedestrians, bicyclists, and transit users of all ages, abilities, and preferences.
Policy TR-1.8	Actively coordinate with regional transportation, land use planning, and transit agencies to develop a transportation network with complementary land uses that encourage travel by bicycling, walking and transit, and ensure that regional greenhouse gas emission standards are met.
Policy TR-1.9	Give priority to the funding of multimodal projects that provide the most benefit to all users. Evaluate new transportation projects to make the most efficient use of transportation resources and capacity.
Policy TR-1.10	Require needed public street right-of-way dedication and improvements as development occurs. The ultimate right-of-way shall be no less than the dimensions as shown on the Functional Classification Diagram except when a lesser right-of-way will avoid significant social, neighborhood or environmental impacts and perform the same traffic movement function. Additional public street right-of-way, beyond that designated on the Functional Classification Diagram, may be required in specific locations to facilitate left-turn lanes, bus pullouts, and right-turn lanes in order to provide additional capacity at some intersections.
Action TR-1.12	Update the City's engineering standards for public and private streets based on the new street typologies that incorporate the concept of "complete streets."
Action TR-1.13	Reduce vehicle capacity on streets with projected excess capacity by reducing either the number of travel lanes or the roadway width, and use remaining public right-of-way to provide wider sidewalks, bicycle lanes, transit amenities and/or landscaping. Establish criteria to identify roadways for capacity reduction (i.e. road diets) and conduct engineering studies and environmental review to determine implementation feasibility and develop implementation strategies.
Walking and Bicycling Policies and Actions	
Policy TR-2.2	Provide a continuous pedestrian and bicycle system to enhance connectivity throughout the City by completing missing segments. Eliminate or minimize physical obstacles and barriers that impede pedestrian and bicycle movement~~,~~ on City streets. Include consideration of grade-separated crossings at railroad tracks and freeways. Provide safe bicycle and pedestrian connections to all facilities regularly accessed by the public, including the Mineta San José International Airport.

Policy TR-2.5	Integrate the financing, design and construction of pedestrian and bicycle facilities with street projects. Build pedestrian and bicycle improvements at the same time as improvements for vehicular circulation.
Policy TR-2.6	Require that all new traffic signal installations, existing traffic signal modifications, and projects included in San José's Capital Improvement Plan include installation of bicycle detection devices where appropriate and feasible.
Policy TR-2.8	Require new development where feasible to provide on-site facilities such as bicycle storage and showers, provide connections to existing and planned facilities, dedicate land to expand existing facilities or provide new facilities such as sidewalks and/or bicycle lanes/paths, or share in the cost of improvements.
Policy TR-2.9	Coordinate and collaborate with the Santa Clara Valley Transportation Authority, Peninsula Corridor Joint Powers Board, Amtrak, ACE, and local shuttle operators to permit bicyclists to transport bicycles and provide appropriate amenities on-board all commuter trains, buses, and shuttles. Coordinate with local transit operators to provide secure bicycle parking facilities at all park-and-ride lots, train stations and major bus stops.
Policy TR-2.11	Prohibit the development of new cul-de-sacs, unless it is the only feasible means of providing access to a property or properties, or gated communities, that do not provide through and publicly accessible bicycle and pedestrian connections. Pursue the development of new through bicycle and pedestrian connections in existing cul-de-sac areas where feasible.
Action TR-2.13	Implement and regularly update, as needed, the San José Bicycle Master Plan. Include top priority bicycle projects in the annual Capital Improvement Program update. Continue to identify barriers to safe and convenient bicycle access and then identify how and when these barriers will be removed as part of Master Plan Updates.
Action TR-2.17	Establish a pilot public bike program that allows free or low-cost rental of bikes at key locations (e.g., transit stations, San José Diridon Station, San José State University) to encourage cycling as a primary mode and facilitate use of transit without having to transport a bicycle.
Action TR-2.18	Provide bicycle storage facilities as identified in the Bicycle Master Plan.
Policy TR-2.19	Partner with other agencies and/or organizations to establish a comprehensive bicycle safety education program for bicyclists, pedestrians, and motorists of all ages. Provide bicycle safety education at all public and private schools, parks, and community centers, and disseminate information through libraries, brochure mailings, and electronic media.
Action TR-2.22	Collect and report pedestrian and bicycle counts, as part of routine manual traffic counts, along roadways and at intersections where bicycles and pedestrians are permitted. Quantifying pedestrian and bicycle activities will measure the amount of pedestrian and bicycle activities throughout the City and assist in determining and prioritizing infrastructure improvement projects.

Public Transit Policies and Actions	
Policy TR-3.1	Pursue development of BRT, bus, shuttle, and fixed guideway (i.e., rail) services on designated streets and connections to major destinations.
Policy TR-3.2	Ensure that roadways designated as Grand Boulevards adequately accommodate transit vehicle circulation and transit stops. Prioritize bus mobility along Stevens Creek Boulevard, The Alameda, and other heavily traveled transit corridors.
Policy TR-3.3	As part of the development review process, require that new development along existing and planned transit facilities consist of land use and development types and intensities that contribute towards transit ridership. In addition, require that new development is designed to accommodate and to provide direct access to transit facilities.
Policy TR-3.4	Maintain and improve access to transit stops and stations for mobility-challenged population groups such as youth, the disabled, and seniors.
Action TR-3.6	Collaborate with Caltrans and Santa Clara Valley Transportation Authority to prioritize transit mobility along the Grand Boulevards identified on the Growth Areas Diagram *(PEIR Figure 2.2-1)*. Improvements could include installing transit signal priority, queue jump lanes at congested intersections, and/or exclusive bus lanes.
Action TR-3.7	Regularly collaborate with BART to coordinate planning efforts for the proposed BART extension to San José/Santa Clara with appropriate land use designations and transportation connections.
Action TR-3.8	Collaborate with transit providers to site transit stops at safe, efficient, and convenient locations, and to develop and provide transit stop amenities such as pedestrian pathways approaching stops, benches and shelters, nighttime lighting, traveler information systems, and bike storage to facilitate access to and from transit stops.
Policy TR-3.9	Ensure that all street improvements allow for easier and more efficient bus operations and improved passenger access and safety, while maintaining overall pedestrian and bicycle safety and convenience.
Passenger Rail Service Actions	
Action TR-4.5	As appropriate, regularly coordinate with rail operators in San José on the following matters: • Maintenance of rail lines, landscaping, and easements • Vehicle and pedestrian safety at at-grade rail crossings • Rail electrification to increase the frequency of train service and reduce environmental impacts • Grade separations (either aboveground or underground) to improve street connectivity and pedestrian and bicycle mobility at ground level • The establishment of timed transfers with other transit providers in the area • Analysis and mitigation of the potential negative impacts resulting from increased train service, corridor expansion, and the eventual upgrading of a rail line.

Vehicular Circulation and Vehicle Miles Traveled Policies and Actions	
Policy TR-5.1	Develop and maintain a roadway network that categorizes streets according to function and type, considers the surrounding land use context, and incorporates the concepts of "complete streets".
Policy TR-5.3	The minimum overall roadway performance during peak travel periods should be level of service "D" except for designated areas. How this policy is applied and exceptions to this policy are listed in the following bullets: • **Vehicular Traffic Mitigation Measures.** Review development proposals for their impacts on the level of service and require appropriate mitigation measures if development of the project has the potential to reduce the level of service to "E" or worse. These mitigation measures typically involve street improvements. Mitigation measures for vehicular traffic should not compromise or minimize community livability by removing mature street trees, significantly reducing front or side yards, or creating other adverse neighborhood impacts. • **Area Development Policy.** An "area development policy" may be adopted by the City Council to establish special traffic level of service standards for a specific geographic area which identifies development impacts and mitigation measures. These policies may take other names or forms to accomplish the same purpose. Area development policies may be first considered only during the General Plan Annual Review and Amendment Process; however, the hearing on an area development policy may be continued after the Annual Review has been completed and the area development policy may thereafter be adopted or amended at a public meeting at any time during the year. • Small Projects. Small projects may be defined and exempted from traffic analysis per the City's transportation policies. • Downtown Core Area. In recognition of the unique position of the Downtown Core Area as the transit hub of Santa Clara County, and as the center for financial, business, institutional and cultural activities, development within the Downtown Core Area Boundary is exempted from traffic mitigation requirements. Intersections within and on the boundary of this area are also exempted from the level of service "D" performance criteria. • Special Strategy Areas. In recognition of the unique characteristics and particular goals of Special Strategy Areas, intersections identified as Protected Intersections within these areas may be exempt from traffic mitigation requirements. Special Strategy Areas are identified in the City's adopted General Plan and include Corridors and Villages, Transit Station Areas, and Specific Plan Areas. • Protected Intersections. In recognition that roadway capacity-enhancing improvement measures can impede the City's ability to encourage infill, preserve community livability, and promote transportation alternatives that do not solely rely on automobile travel, specially designated Protected Intersections are exempt from traffic mitigation measures. Protected Intersections are located in Special Planning Areas where proposed developments causing a significant LOS impact at a Protected Intersection are

	required to construct multimodal (non-automotive) transportation improvements in one of the City's designated Community Improvement Zones. These multimodal improvements are referred to as off-setting improvements and include improvements to transit, bicycle, and/or pedestrian facilities.
Policy TR-5.4	Maintain and enhance the interconnected network of streets and short blocks that support all modes of travel, provide direct access, calm neighborhood traffic, reduce vehicle speeds, and enhance safety.
Action TR-5.6	Complete build-out of the City's street system per its Land Use/Transportation Diagram.
Transportation Demand Management Policies and Actions	
Policy TR-7.1	Require large employers to develop and maintain TDM programs to reduce the vehicle trips generated by their employees.
Action TR-7.2	Update and enhance the existing TDM program for City of San José employees. This program may include the expansion of transit pass subsidies, free shuttle service, preferential carpool parking, ridesharing, flexible work schedules, parking pricing, car-sharing, and other measures.
Action TR-7.3	Work together with large employers to develop a system for tracking Transportation Demand Management (TDM) programs implemented by employers to allow on-going assessment of results.
Parking Strategies Policies and Actions	
Policy TR-8.4	Discourage, as part of the entitlement process, the provision of parking spaces significantly above the number of spaces required by code for a given use.
Policy TR-8.6	Allow reduced parking requirements for mixed-use developments and for developments providing shared parking or a comprehensive TDM program, or developments located near major transit hubs or within Villages and Corridors and other growth areas.
Policy TR-8.7	Encourage private property owners to share their underutilized parking supplies with the general public and/or other adjacent private developments.
Policy TR-8.8	Promote use of unbundled private off-street parking associated with existing or new development, so that the sale or rental of a parking space is separated from the rental or sale price for a residential unit or for non-residential building square footage.
Policy TR-8.9	Consider adjacent on-street and City-owned off-street parking spaces in assessing need for additional parking required for a given land use or new development.
Action TR-8.10	Update existing parking standards to reduce parking requirements for transit-oriented developments, mixed-use projects and projects within the Urban Villages and Corridors to take advantage of shared parking opportunities generated by mixed-use development. Update existing parking standards to address TDM actions and to require amenities and programs that support reduced parking requirements.

Action TR-8.11	Establish a program and provide incentives for private property owners to share their underutilized parking with the general public and/or other adjacent private developments.
Action TR-8.12	As part of the entitlement process, consider opportunities to reduce the number of parking spaces through shared parking, TDM actions, and parking pricing or other measures which can reduce parking demand. Consider the use of reserve landscaped open space or recreational areas that can be used on a short-term basis to provide parking or converted to formal parking in the future if necessary.
Tier I Reduction of Vehicle Miles Traveled Policies and Actions	
Policy TR-9.1	Enhance, expand and maintain facilities for walking and bicycling, particularly to connect with and ensure access to transit and to provide a safe and complete alternative transportation network that facilitates non-automobile trips.
Policy TR-9.2	Serve as a model for VMT reduction by implementing programs and policies that reduce VMT for City of San José employees.
Tier II Vehicle Miles Traveled Reduction Actions	
Action TR-10.1	Explore development of a program for implementation as part of Tier II, to require that parking spaces within new development in areas adjacent to transit and in all mixed-use projects be unbundled from rent or sale of the dwelling unit or building square footage.
Action TR-10.2	In Tier II, reduce the minimum parking requirements citywide.
Action TR-10.3	Encourage participation in car share programs for new development in identified growth areas.
Action TR-10.4	In Tier II, require that a portion of adjacent on-street and City owned off-street parking spaces be counted towards meeting the zoning code's parking space requirements.
Intelligent Transportation System Policies and Actions	
Policy TR-12.1	Develop a citywide ITS system that sustainably manages and integrates all modes of travel including bicycles, automobiles, trucks, transit, and emergency vehicles.
Policy TR-12.2	Enhance the safety and effectiveness of transit service, bicycle, and pedestrian travel as alternative modes using advanced ITS systems.
Action TR-12.3	Enhance the City's existing Transportation Management Center (TMC) and communications system, which is designed to serve all modes of travel. Continue development and implementation of a fiber optic network to support communications with field equipment including but not limited to: traffic signals, closed circuit television (CCTV) cameras, changeable message signs (CMS) and communication hubs.
Action TR-12.4	Provide enhanced management of new efficient streetlights for energy savings, sustainability, and safety along corridors and at intersections.
Action TR-12.5	Develop a system to provide real-time travel information along all General Plan streets. This will enable all users to make informed travel decisions, enhance safety,

	increase use of non-auto travel modes, minimize emergency response times and reduce greenhouse gas emissions.
Action TR-12.6	Work with VTA to implement transit vehicle priority that allows buses to travel on-schedule and provide reliable service.
Action TR-12.7	Collaborate with VTA to provide real-time transit information at key transit stations and stops, as well as via mobile devices, to provide users with real-time information on bus travel routes and times.
Action TR-12.8	Implement technology on select roadways (primary bikeways) to support bicycling as the preferred mode of transportation, such as advanced detection, signal priority timing, and public information kiosks.
Action TR-12.9	Implement technology to aid pedestrians walking across intersections. Consider devices such as countdown timers and accessible pedestrian signals which include audible and vibrating push buttons for disabled users.
Trails as Transportation Policies and Actions	
Policy TN-2.2	Provide direct, safe and convenient bicycle and pedestrian connections between the trail system and adjacent neighborhoods, schools, employment areas and shopping areas.
Policy TN-2.3	Add and maintain necessary infrastructure to facilitate the use of trails as transportation.
Policy TN-2.5	Maximize hours that trails are open for public use, consistent with safety and other goals. Manage trail closures and special events to minimize limitations to trail accessibility.
Policy TN-2.6	Integrate and connect trail and pathway networks with a larger network of countywide and regional trails such as the Bay Area Ridge, San Francisco Bay, and Juan Bautista DeAnza Trails to allow for a broad base of opportunities and linkage with the greater Bay Area.
Community Design – Function Policies	
Policy CD-2.1	Promote the Circulation Goals and Policies in this Plan. Create streets that promote pedestrian and bicycle transportation by following applicable goals and policies in the Circulation section of this Plan. a. Design the street network for its safe shared use by pedestrians, bicyclists, and vehicles. Include elements that increase driver awareness. b. Create a comfortable and safe pedestrian environment by implementing wider sidewalks, shade structures, attractive street furniture, street trees, reduced traffic speeds, pedestrian-oriented lighting, mid-block pedestrian crossings, pedestrian-activated crossing lights, bulb-outs and curb extensions at intersections, and on-street parking that buffers pedestrians from vehicles. c. Consider support for reduced parking requirements, alternative parking arrangements, and Transportation Demand Management strategies to reduce area dedicated to parking and increase area dedicated to employment, housing, parks, public art, or other amenities. Encourage de-coupled parking to ensure that the value and cost of parking are considered in real estate and business transactions.

Policy CD-2.3	Enhance pedestrian activity by incorporating appropriate design techniques and regulating uses in private developments, particularly in Downtown, Urban Villages, Corridors, Main Streets, and other locations where appropriate. a. Include attractive and interesting pedestrian-oriented streetscape features such as street furniture, pedestrian scale lighting, pedestrian oriented way-finding signage, clocks, fountains, landscaping, and street trees that provide shade, with improvements to sidewalks and other pedestrian ways. b. Strongly discourage drive-up services and other commercial uses oriented to occupants of vehicles in pedestrian-oriented areas. Uses that serve the vehicle, such as car washes and service stations, may be considered appropriate in these areas when they do not disrupt pedestrian flow, are not concentrated in one area, do not break up the building mass of the streetscape, are consistent with other policies in this Plan, and are compatible with the planned uses of the area. c. Provide pedestrian connections as outlined in the Community Design Connections Goal and Policies. d. Locate retail and other active uses at the street level. e. Create easily identifiable and accessible building entrances located on street frontages or paseos. f. Accommodate the physical needs of elderly populations and persons with disabilities. g. Integrate existing or proposed transit stops into project designs.
Policy CD-2.10	Recognize that finite land area exists for development and that density supports retail vitality and transit ridership. Use land use regulations to require compact, low-impact development that efficiently uses land planned for growth, especially for residential development which tends to have a long life-span. Strongly discourage small-lot and single-family detached residential product types in growth areas.
Connections Policies	
Policy CD-3.2	Prioritize pedestrian and bicycle connections to transit, community facilities (including schools), commercial areas, and other areas serving daily needs. Ensure that the design of new facilities can accommodate significant future anticipated increases in bicycle and pedestrian activity.
Policy CD-3.3	Within new development, create a pedestrian friendly environment by connecting the internal components with safe, convenient, accessible, and pleasant pedestrian facilities and by requiring pedestrian connections between building entrances, other site features, and adjacent public streets.
Policy CD-3.4	Encourage pedestrian cross-access connections between adjacent properties and require pedestrian and bicycle connections to streets and other public spaces, with particular attention and priority given to providing convenient access to transit facilities. Provide pedestrian and vehicular connections with cross-access easements within and between new and existing developments to encourage walking and minimize interruptions by parking areas and curb cuts.

Policy CD-3.6	Encourage a street grid with lengths of 600 feet or less to facilitate walking and biking. Use design techniques such as multiple building entrances and pedestrian paseos to improve pedestrian and bicycle connections.

4.2.3 Transportation Impacts

4.2.3.1 *Thresholds of Significance*

For the purposes of this PEIR, a transportation impact is significant if implementation of the proposed DSAP would:

- Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit;
- Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways;
- Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks;
- Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible land uses (e.g., farm equipment);
- Result in inadequate emergency access; or
- Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

According to the City of San José, a project would result in a significant impact on traffic conditions at a signalized intersection (not located within the Downtown Core) if for either peak hour:

1. The level of service at the intersection degrades from an acceptable LOS D or better under existing conditions to an unacceptable LOS E or F under project conditions; or

2. The level of service at the intersection is an unacceptable LOS E or F under existing conditions and the addition of project trips causes both the critical-movement delay at the intersection to increase by four or more seconds and the demand-to-capacity ratio (V/C) to increase by .01 or more.

Volume-to-Capacity Ratio (V/C) is the ratio of measured traffic volume versus capacity of a given intersection. Capacity is the maximum flow rate at which vehicles can be expected to traverse an intersection or point on a roadway segment during a specified time period, usually expressed as vehicles per hour. Critical Delay is the delay in seconds experienced by vehicles that are part of the critical lane groups. A critical lane group is the lane group that has the highest flow ratio (ratio of volume to saturation flow) for a signal phase. Average control delay is a measure of delay experienced by all vehicles at the intersection.

According to CMP standards, a project would result in a significant impact on a freeway segment if for either peak hour:

1. The level of service on the freeway segment is an unacceptable LOS F under project conditions *and* the number of project trips on that segment constitutes at least one percent of capacity on that segment; or

2. The level of service on the freeway segment degrades from an acceptable LOS under existing conditions to an unacceptable LOS F under project conditions.

The intersection impact would be satisfactorily mitigated if the implementation of measures would restore level of service to existing conditions or better. If a project is found to have a significant impact on operations at a Protected Intersection, the project may be approved by constructing off-setting improvements to pedestrian, bicycle, and transit facilities that enhance the capacity of the transportation in the project area. The freeway impact would be satisfactorily mitigated if the implementation of measures would restore freeway conditions to LOS E or better.

4.2.3.2 *Vehicle Traffic Generation Impacts*

Transportation impacts are the direct result of population and employment growth, given that urban development generates vehicle trips to move goods, provide public services, and connect people with work, school, shopping, and other activities. Therefore, the increased quantity of new residential and employment-related development allowed by the DSAP will generate increased vehicular, transit, bicycle, and pedestrian traffic. An individual's travel preferences are influenced by a number of factors such as income, age, access to transit and private vehicles, travel time and distance, and the availability and cost of parking.

Methodology

The TIA prepared for the proposed project evaluates the traffic conditions on local streets, CMP roadways, and freeway segments against the City and CMP level of service standards. The analysis utilized the City's travel demand forecasting model, which is based on the CUBE transportation planning software and is used to update the City's General Plan. The model involves the following four steps:

1. After land use data is inputted, the model estimates the number of person trips (compared to vehicle trips) based on trip generation rates.
2. The model then determines a trip distribution based on distances between origins and destinations, based on type of trip.
3. The model determines a mode of transport for each person trip, based on the availability of a car, trip distance, cost of travel, transit routes, trip purpose, and travel time (including walk time from parking garages or transit stops).
4. To assign trips to the roadway network, the model uses a route selection procedure based on minimum travel times (as opposed to minimum travel distances) and a capacity-constrained trip assignment process, which enables the model to reflect diversion of traffic around congested portions of the network.

To evaluate near-term traffic impacts of individual development projects, the City typically uses the standard TIA methodology that involves manually assigning trips to the roadway network based on a pre-determined distribution pattern. This method differs from the trip assignment process used by the CUBE model, which takes into account numerous factors including regional travel patterns and socioeconomic data.

To evaluate level of service impacts from the proposed project, the City has determined that the CUBE model, rather than the standard near-term TIA method, more accurately reflects the unique nature of the DSAP. While the DSAP is a long-term plan, it also proposes a specific level of development in a specific area (similar to a large development project). Given the scale of the project and central location of the Plan area, it was determined that the CUBE model would allow for a more complete picture of the potential effects on traffic conditions in the greater Downtown area. The standard TIA method would not be able to sufficiently portray the area-wide nature of the project and dynamic nature of travel patterns and behavior.

Based on the trip assignment generated by the travel demand forecasting model, the TIA used TRAFFIX software and the *2000 Highway Capacity Manual* (HCM) method to evaluate signalized intersections and freeway segments, consistent with CMP methodology. The analysis below describes three separate comparisons:

1) Existing conditions vs. Existing plus Project conditions
2) Strategy 2000 background conditions vs. Strategy 2000 plus Project conditions
3) Cumulative conditions vs. Cumulative plus Project conditions

The results of the analyses are discussed below. Existing conditions are based on counts from 2008, which is the baseline for the citywide travel demand forecasting model.[73] For the purposes of this EIR, "project conditions" represents the build-out of the maximum development levels proposed under the DSAP. Although the maximum development levels proposed by the DSAP assume replacement of existing uses, all of the project scenarios include traffic from existing development in the Plan area. In other words, trips associated with existing uses in the Plan area were not subtracted out from traffic volumes under project conditions, as is typically done for similar analyses. Therefore, this PEIR overestimates the traffic volumes associated with the Plan area, although not by a substantial amount, given the relatively small amount of existing uses relative to the proposed development levels. It should also be noted that all scenarios include the construction of the ballpark except existing and existing plus project conditions.[74]

Transportation Network under Project Conditions

For the purposes of this traffic analysis, the transportation network under all project scenarios includes the following major planned facilities, some of which are included in the ballpark project. Other more minor funded improvements were also assumed to be in place as described in Chapter 4 of Appendix C.

[73] Given that traffic conditions in 2008 were generally worse than current 2011-12 conditions in terms of congestion, the use of 2008 counts allows for a more conservative analysis of project impacts.
[74] Although construction and operation of the ballpark has not been approved, the City certified its EIR in 2010. Given the potential for traffic impacts, the City determined that including the stadium project in the traffic analysis would be prudent.

- Realign Julian Street between SR 87 and North 1st Street;
- Coleman Avenue and Autumn Street Improvement Project;
- Narrowing of Park Avenue between McEvoy and Josefa Streets;
- Narrowing of Bird Avenue between San Carlos Street and Park Avenue from three lanes to two lanes in each direction; and
- Couplet Conversions in Downtown (2nd/3rd Streets, 10th/11th Streets, and Almaden/Vine Streets).[75]

These projects are currently at different stages of the design, environmental review, and implementation processes, although all have been previously identified in planning documents and funding for their construction is considered to be reasonably secure. While not explicitly included in the proposed project, the DSAP accommodates these projects. Given the long-term timeframe anticipated for full build-out of the DSAP (about 35 years) and the need for expanded transportation infrastructure to accommodate planned growth in and around Downtown (even without the project, but especially with it), the projects listed above are assumed to be in place under project conditions.

The BART and HSR projects are analyzed in the cumulative impacts section, due to the magnitude of effects on the transportation system and the uncertainty of funding and projected completion dates. "The Alameda Beautiful Way" project is in the preliminary design phases and sufficient information was not available for this project to be included in the project or cumulative scenarios. Additionally, the model does not reflect the other planned transit, pedestrian, and bicycle improvements listed in Section 4.2.1.6. Refer to Appendix C for additional detail on the TIA methodology and future transportation network.

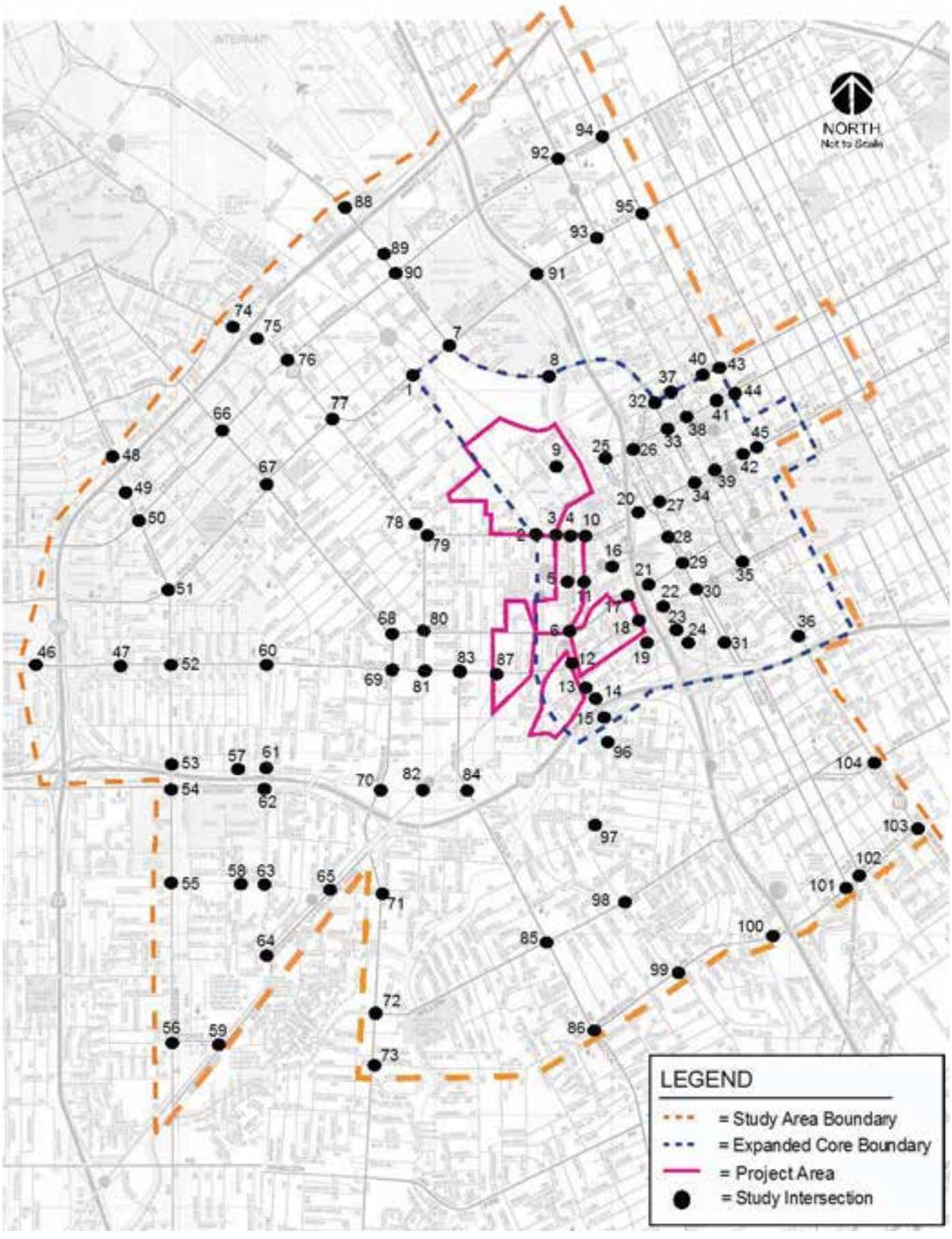
The intersection level of service analysis is intended to evaluate near-term traffic impacts in the Downtown Core. The City has different standards for the Downtown Core because higher levels of congestion are considered to be more acceptable given the high level of economic and social activity. Therefore, future development projects proposed outside of the Downtown Core (that meet minimum trip thresholds) will be required to complete a site-specific, near-term traffic impact analysis (TIA) to address circulation issues within surrounding neighborhoods and at local intersections. These future projects may tier from this EIR for all other transportation impacts, including cumulative effects, freeway level of service, and impacts related to alternative travel modes.

4.2.3.3 *Existing Conditions vs. Existing plus Project Conditions*

Intersection Operations Analysis

The TIA analyzed traffic conditions at 104 intersections in the general area. The study intersections are listed on the following page and shown on Figure 4-4 (CMP intersections are denoted with an asterisk). Based on current traffic counts, the model shows that all 104 of the study intersections currently operate (existing condition) at LOS D or better under existing conditions during the AM (7:00 AM – 9:00 AM) and PM (4:00 PM – 6:00 PM) peak hours. It is during these hours that the most congested traffic conditions occur on an average day.

[75] Converting one-way street couplets in the Downtown area to two-way streets is intended to reduce automobile travel speeds, which will in turn improve pedestrian access and safety, especially at intersections.



DIRIDON STATION AREA PLAN STUDY BOUNDARY AND STUDY INTERSECTIONS

FIGURE 4-4

Intersections in the Downtown Core

1. Stockton Avenue and Taylor Street
2. Stockton Avenue and The Alameda
3. Cahill Street and Santa Clara Street
4. Montgomery St. and Santa Clara Street*
5. Montgomery St. and San Fernando St.
6. Autumn Street and Park Avenue
7. Coleman Avenue and Taylor Street
8. Autumn Street and Coleman Avenue
9. Autumn Street and Julian Street
10. Autumn Street and Santa Clara Street*
11. Autumn Street and San Fernando Street
12. Bird Avenue and San Carlos Street*
13. Bird Avenue and Auzerais Avenue
14. Bird Avenue and I-280 (N)*
15. Bird Avenue and I-280 (S)*
16. Delmas Avenue and San Fernando St.
17. Delmas Avenue and Park Avenue
18. Delmas Avenue and San Carlos Street
19. Delmas Avenue and Auzerais Avenue
20. SR 87 and Santa Clara Street*
21. Woz Way and Park Avenue
22. Woz Way and San Carlos Street
23. Woz Way and Auzerais Avenue
24. Woz Way and SR 87
25. SR 87 and Julian Street (W)*
26. SR 87 and Julian Street I*
27. Almaden Boulevard and Santa Clara St. I
28. Almaden Boulevard and San Fernando St.
29. Almaden Boulevard and Park Avenue
30. Almaden Boulevard and San Carlos St.*
31. Almaden Boulevard and Woz Way
32. Market Street and Julian Street
33. Market Street and Saint James Street
34. Market Street and Santa Clara Street
35. Market Street and San Carlos Street*
36. First Street and Reed Street
37. First Street and Julian Street
38. First Street and Saint James Street
39. First Street and Santa Clara Street
40. Third Street and Julian Street
41. Third Street and Saint James Street
42. Third Street and Santa Clara Street
43. Fourth Street and Julian Street
44. Fourth Street and Saint James Street
45. Fourth Street and Santa Clara Street

Intersections Outside Downtown Core

46. I-880 and Stevens Creek Boulevard*
47. Bellerose Drive and Stevens Creek Boulevard
48. Bascom Avenue and I-880 (N)*
49. Bascom Avenue and I-880 (S)*
50. Bascom Avenue and Hedding Street
51. Bascom Avenue and Naglee Avenue
52. Bascom Avenue and San Carlos Street
53. Bascom Avenue and Parkmoor Avenue
54. Bascom Avenue and Moorpark Avenue*
55. Bascom Avenue and Fruitdale Avenue*
56. Bascom Avenue and Stokes Street*
57. Leland Avenue and Parkmoor Avenue
58. Sherman Oaks Drive and Fruitdale Avenue
59. Southwest Expressway and Stokes Street
60. Leigh Avenue and San Carlos Street
61. Leigh Avenue and Parkmoor Avenue
62. Leigh Avenue and Moorpark Avenue
63. Leigh Avenue and Fruitdale Avenue
64. Leigh Avenue and Southwest Expressway
65. Southwest Expressway and Fruitdale Ave.
66. Park Avenue and Hedding Street
67. Park Avenue and Naglee Avenue
68. Meridian Avenue and Park Avenue
69. Meridian Avenue and San Carlos Street
70. Meridian Avenue and Parkmoor Avenue
71. Meridian Avenue and Fruitdale Avenue
72. Meridian Avenue and Willow Street
73. Meridian Avenue and Minnesota Avenue
74. The Alameda I-880 (N)*
76. The Alameda and Hedding Street*
77. The Alameda and Naglee Avenue*
78. The Alameda and Julian Street
79. Race Street and The Alameda*
80. Race Street and Park Avenue
81. Race Street and San Carlos Street
82. Race Street and Parkmoor Avenue
83. Lincoln Avenue and San Carlos Street
84. Lincoln Avenue and Parkmoor Avenue
85. Lincoln Avenue and Willow Street
86. Lincoln Avenue and Minnesota Avenue
87. Sunol Street and San Carlos Street
88. Coleman Avenue and I-880 (N)*
89. Coleman Avenue and I-880 (S)*
90. Coleman Avenue and Hedding Street
91. SR 87 and Taylor Street
92. First Street and Hedding Street
93. First Street and Taylor Street
94. Fourth Street and Hedding Street
95. Fourth Street and Taylor Street
96. Bird Avenue and Virginia Street
97. Bird Avenue and Coe Avenue
98. Bird Avenue and Willow Street
99. Bird Avenue and Minnesota Avenue
100. Lelong Street and Alma Avenue
101. Vine Street and Alma Avenue
102. Almaden Avenue and Alma Avenue
103. First Street and Alma Avenue*
104. First Street and Keyes Street*

75. The Alameda I-880 (S)*

According to the intersection level of service analysis, all 104 study intersections would continue to operate at LOS D or better during both peak hours under existing plus project build-out conditions. Therefore, the proposed project would not conflict with level of service standards for intersection operations established by the CMA or City of San José. Please refer to Appendix C for a table summarizing the level of service results for all study intersections.

Build-out of the DSAP would not result in a significant impact to intersection operations. **[Less than Significant Impact]**

Freeway Operations Analysis

The TIA analyzed traffic conditions on 76 freeway segments on SR 87, I-280, I-880, I-680, and US 101. Based on the 2008 CMP Annual Monitoring Report, 62 of the 76 study freeway segments currently operate at an unacceptable LOS F during at least one of the peak hours. In addition, the HOV lanes on 10 of the segments also operate at LOS F conditions during at least one of the peak hours. The peak directions of travel are northbound during the AM peak hour and southbound during the PM peak hour. Poor levels of service on the downtown freeway segments are primarily attributable to traffic moving through the downtown area bound for destinations to the north or south, given that all freeway ramps serving the downtown area are currently operating at acceptable levels. Any vehicle queues at the ramps are due to ramp metering, which is used to maintain freeway operations.

Existing plus DSAP Build-out conditions traffic volumes for the study freeway segments were estimated with the use of the traffic model, based on the 2008 CMP traffic volume data. Because the model redistributes traffic patterns at a citywide level, rather than manually assigning "project trips", additional trips on a particular freeway or roadway segment do not necessarily correspond to new trips generated in the Plan area; rather, it could be an "existing" trip that was redistributed. Therefore, the freeway analysis is based on the projected change in volume, rather than "project trips".

The results show that the project would not cause any segments operating at LOS E or better under existing conditions to degrade to LOS F. The same freeway segments currently operating at LOS F would continue to operate at LOS F. Of these segments, the project would cause the number of trips to increase on the mixed flow lanes of 15 directional segments and on the HOV lanes of four directional segments such that the additional trips would represent at least one percent of the segments' capacity. Based on CMP standards, this would be considered a significant impact. The impacted segments are listed in Table 4.2-3. Complete summary tables of the freeway segment analysis are included in Appendix C.

Full mitigation of significant project impacts on freeway segments would require roadway widening to construct additional through lanes, thereby increasing freeway capacity. It is not feasible for the proposed project to bear the responsibility for implementing such extensive transportation system improvements due to constraints in acquisition and cost of right-of-way. In addition, Caltrans or VTA have not developed a freeway widening program to which individual projects can contribute.

As described further in Section 4.2.4.2 below, the DSAP is intended to reduce vehicle travel and congestion in the long-term. In particular, the intensification of development in proximity to Diridon Station would make transit a more viable commute option for people living and working in the Plan area, which would reduce vehicle traffic at a citywide and regional scale. However, it is not possible to know if the strategies proposed by the DSAP would reduce freeway impacts to a less than significant level. Therefore, the significant impacts on freeway segments identified above must be considered significant and unavoidable.

Impact TRAN-1: When compared to existing conditions, build-out of the DSAP would result in a significant impact on 15 directional mixed flow freeway segments and four directional HOV lane freeway segments during at least one peak hour when compared to the existing condition. **[Significant Unavoidable Impact]**

Table 4.2-3:
Summary of Freeway Impacts under Existing plus Project Conditions

Freeway Segment		**Direction**	**Peak Hour**
Mixed Flow Lanes			
SR 87	Almaden Road to Alma Avenue	NB	AM
	Julian Street to I-280	SB	PM
	I-280 to Alma Avenue	SB	PM
I-280	US 101 to McLaughlin Avenue	WB	AM
	McLaughlin Avenue to 10th Street	WB	AM
	10th Street to SR 87	WB	AM
	Bird Avenue to Meridian Avenue	WB	AM
	Meridian Avenue to Bird Avenue	EB	PM
	SR 87 to 10th Street	EB	PM
I-680	McKee Road to Alum Rock Avenue	SB	AM
	Alum Rock Avenue to Capitol Expressway	SB	AM
	Capitol Expressway to King Road	SB	AM
I-880	Montague Expressway to Brokaw Road	SB	PM
	1st Street to SR 87	SB	PM
	SR 87 to Coleman Avenue	SB	PM
HOV Lanes			

SR 87	Capitol Expressway to Curtner Avenue	NB	AM
	Curtner Avenue to Almaden Road	NB	AM
US 101	Story Road to I-280	NB	AM
	I-280 to Santa Clara Street	NB	AM

4.2.3.4 *Strategy 2000 Background Conditions vs. Strategy 2000 plus Project Conditions*

Intersection Operations Analysis

As described in Section 4.1.3.4, adoption of the DSAP would affect the distribution of future development within the expanded Downtown Core, when compared to the Strategy 2000 plan. The TIA prepared for the Strategy 2000 assumed that some high density development would occur in the Diridon/Arena Area, although the majority of new development was allocated to the traditional Downtown center, east of SR 87.[76] Under the DSAP, the assumed locations of some development would shift west of SR 87.

In addition, the DSAP proposes development outside of the Downtown Core, which was not included in Strategy 2000. Based on the conceptual build-out plan, approximately 83,800 square feet of retail space and 1,398 residential units would be developed west of Downtown. This level of development represents the increment of growth between the Strategy 2000 and DSAP. However, this development does not represent an increase in growth capacities established in the 2040 General Plan. Given that the growth capacity for the DSAP would draw from the planned housing yields for both the Midtown Specific Plan and Downtown Growth Areas, and the overall growth capacity for the combined Downtown/Midtown/DSAP area would not change, traffic impacts resulting from full build-out of the Growth Areas were previously evaluated in the Envision PEIR. Refer to Section 4.2.4.2 below for a discussion of the project's contribution to significant impacts identified in the Envision PEIR.

This background condition also includes trips from several approved development projects in the study area, including Phase 1 of the North San José Area Development Policy, and the Adobe – San José Water Company, Ohlone Mixed Use, Plaza at Almaden, and San Carlos – Meridian Mixed Use projects. These approved but not yet built projects are described in Section 1.2.1. The baseball stadium is also included in the background condition. For further detail on the methodology used for the level of service analyses, please refer to Appendix C.

As shown in Table 4.2-4 and Figure 4-5 on the following pages, 14 of the study intersections are projected to operate at LOS E or F during at least one peak hour under Strategy 2000 plus Project conditions. When compared to Strategy 2000 conditions, the DSAP would result in the degradation

[76] The TIA prepared for the Strategy 2000 used TRANPLAN software, which is now outdated. To provide an accurate comparison to the proposed DSAP, the TIA prepared for the proposed project uses the City's new transportation demand forecasting model, which is based on CUBE software. Due to variations in the models, this analysis identified some differences in intersections projected to operate at deficient levels, when compared to those identified in the Strategy 2000 EIR. This analysis is not intended to update the Strategy 2000 environmental review or identify new impacts associated with Strategy 2000.

of levels of service at 10 of these intersections. Six of the 10 intersections are CMP-designated facilities: Montgomery Street/Santa Clara Street, Autumn Street/Santa Clara Street, Bird Avenue/San Carlos Street, SR 87/Julian Street (E), The Alameda/Hedding Street, and The Alameda/Naglee Avenue. All of these intersections are projected to operate at LOS E or better during both peak hours. Therefore, the proposed project would not conflict with CMP level of service standards under Strategy 2000 plus Project conditions.

Table 4.2-4:
Results of the Intersection Operations Level of Service Analysis:
Strategy 2000 plus Project Conditions

Intersection		Peak Hour	Level of Service (LOS)			Strategy 2000 plus Project		
			Existing Conditions	Existing plus Project	Strategy 2000	LOS	Incr. in Crit. Delay[1]	Incr. in Crit. V/C[2]
Within the Downtown Core								
4	Montgomery Street and Santa Clara Street*	AM	B	C	C	C	4.7	0.157
		PM	A	D	C	**E**	**56.8**	**0.280**
6	Montgomery Street and Park Avenue	AM	C	D	D	D	-4.5	-0.033
		PM	D	D	**E**	**F**	**59.4**	**0.178**
7	Coleman Avenue and Taylor Street	AM	D	D	D	D	0.2	0.008
		PM	D	D	**F**	**F**	**14.6**	**0.035**
10	Autumn Street and Santa Clara Street	AM	C	D	D	**E**	**23.2**	**0.121**
		PM	B	D	D	**E**	**28.3**	**0.100**
12	Bird Avenue and San Carlos Street*	AM	C	C	C	C	0.4	0.014
		PM	D	D	**E**	**E**	**13.6**	**0.036**
16	Delmas Avenue and San Fernando Street	AM	B	B	B	B	-0.7	-0.053
		PM	B	B	B	**F**	**76.7**	**0.574**
22	Woz Way and San Carlos Street	AM	C	C	D	D	0.6	0.021
		PM	C	C	**E**	**E**	**-12.3**	**-0.035**
26	SR 87 and Julian Street (E)*	AM	D	D	**E**	**E**	**4.8**	**0.024**
		PM	D	D	D	D	5.0	0.109
30	Almaden Boulevard and San Carlos Street*	AM	C	D	D	D	-0.7	-0.006
		PM	D	D	**E**	**E**	**-6.3**	**-0.026**
Outside of Downtown Core								
67	Park Avenue and Naglee Avenue	AM	C	C	C	C	0.7	0.022
		PM	D	D	**E**	**E**	**9.5**	**0.058**
69	Meridian Avenue and San Carlos Street	AM	D	D	D	D	0.3	0.013
		PM	D	D	**E**	**E**	**-1.1**	**-0.006**
76	The Alameda and Hedding Street*	AM	D	D	D	**E**	**9.6**	**0.037**
		PM	C	C	C	D	3.7	0.099
77	The Alameda and Naglee Avenue*	AM	D	D	D	D	1.6	0.030
		PM	D	D	**E**	**E**	**14.4**	**0.054**

93	First Street and	AM	D	D	D	D	0.0	0.000
	Taylor Street	PM	D	D	**E**	**E**	**1.1**	**0.008**

* CMP Intersection
[1] In Seconds [2] Total Critical V/C can be found in the TIA in Appendix C
Entries denoted in **bold** indicate conditions that exceed the current level of service standard.
Entries denoted in **bold and shaded** indicates the intersection would degrade below LOS standards.

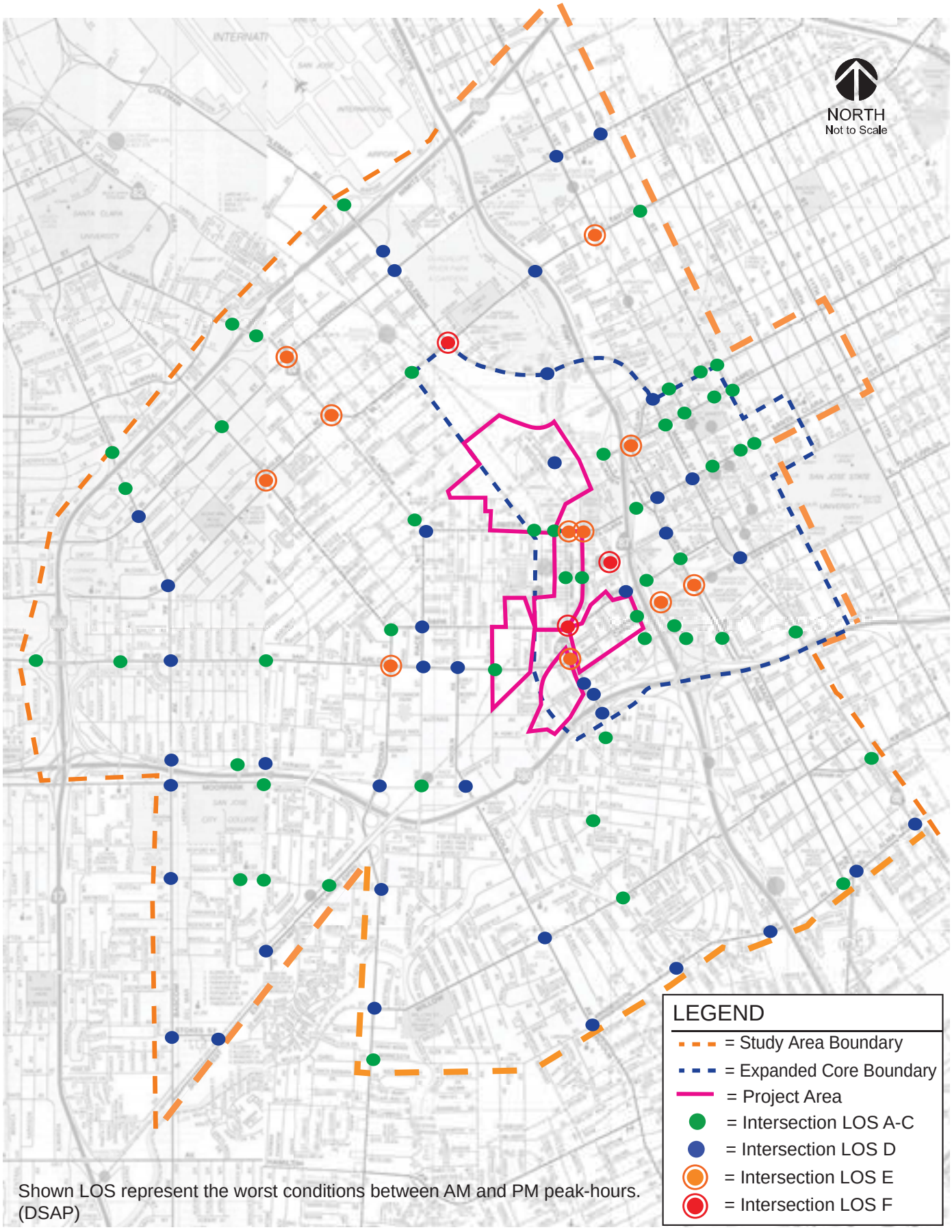
Seven of the ten intersections are located within the Downtown Core Area boundary, including Montgomery Street/Santa Clara Street, Montgomery Street/Park Avenue, Coleman Avenue/Taylor Street, Autumn Street/Santa Clara Street, Bird Avenue/San Carlos Street, Delmas Avenue/San Fernando Street, and SR 87/Julian Street (E). The TIA determined that roadway improvements identified in the Strategy 2000 EIR would improve the average delay at these intersections, but they would still operate at LOS E during one of the peak hours.[77] There are no feasible improvements that would improve the level of service to LOS D at these intersections. Based on the City's level of service policy, these intersections are exempt from the LOS D standard. Therefore, the proposed project would not result in a significant impact to the seven Downtown Core intersections under Strategy 2000 plus Project Build-out conditions.

The intersection of The Alameda and Hedding Street would operate at an unacceptable LOS with the proposed project; however, this intersection is listed as a City of San José Protected Intersection. It has been built to its maximum capacity and there are no feasible improvements that would improve the level of service at this intersection. For this reason, construction of offset improvements would be required. Therefore, the project would not result in a significant impact to this intersection under Strategy 2000 plus Project Build-out conditions.

The TIA also determined that the intersections of The Alameda/Naglee Avenue and Park Avenue/Naglee Avenue have been built to their maximum capacity due to right-of-way restrictions. There are no feasible improvements that would improve the level of service to LOS D during the PM peak hour at these intersections. Therefore, the proposed project would result in a significant impact to the intersections of The Alameda/Naglee Avenue and Park Avenue/Naglee Avenue under Strategy 2000 plus Project conditions.

These intersections serve as gateways to Downtown and as important transit, bicycle, and pedestrian corridors. Therefore, the project proposes to add these two intersections to the List of Protected Intersections. As a condition of project approval, the City/future developers will be required to implement offsetting improvements to pedestrian, bicycle, and transit facilities in the vicinity of the existing and proposed protected intersections. The construction of offset improvements would be required for impacts at these intersections.

[77] The previously identified improvements include the widening of Coleman Road, extension of Autumn Street, and turn lane additions at the Coleman Avenue/Taylor Street intersection, Bird Avenue/San Carlos Street intersection, and the SR 87/Julian Street/Notre Dame interchange. The average delay and level of service under mitigated conditions are summarized in Appendix C.



Shown LOS represent the worst conditions between AM and PM peak-hours. (DSAP)

DIRIDON STATION AREA PLAN BUILDOUT PLUS STRATEGY 2000
INTERSECTION LEVELS OF SERVICE CONDITIONS

FIGURE 4-5

Impact TRAN-2: Build-out of the DSAP would result in a significant impact to the intersections of The Alameda/Naglee Avenue and Park Avenue/Naglee Avenue under Strategy 2000 plus Project Build-out conditions. The project proposes to add these two intersections to the List of Protected Intersections. **[Significant Unavoidable Impact]**

Freeway Operations Analysis

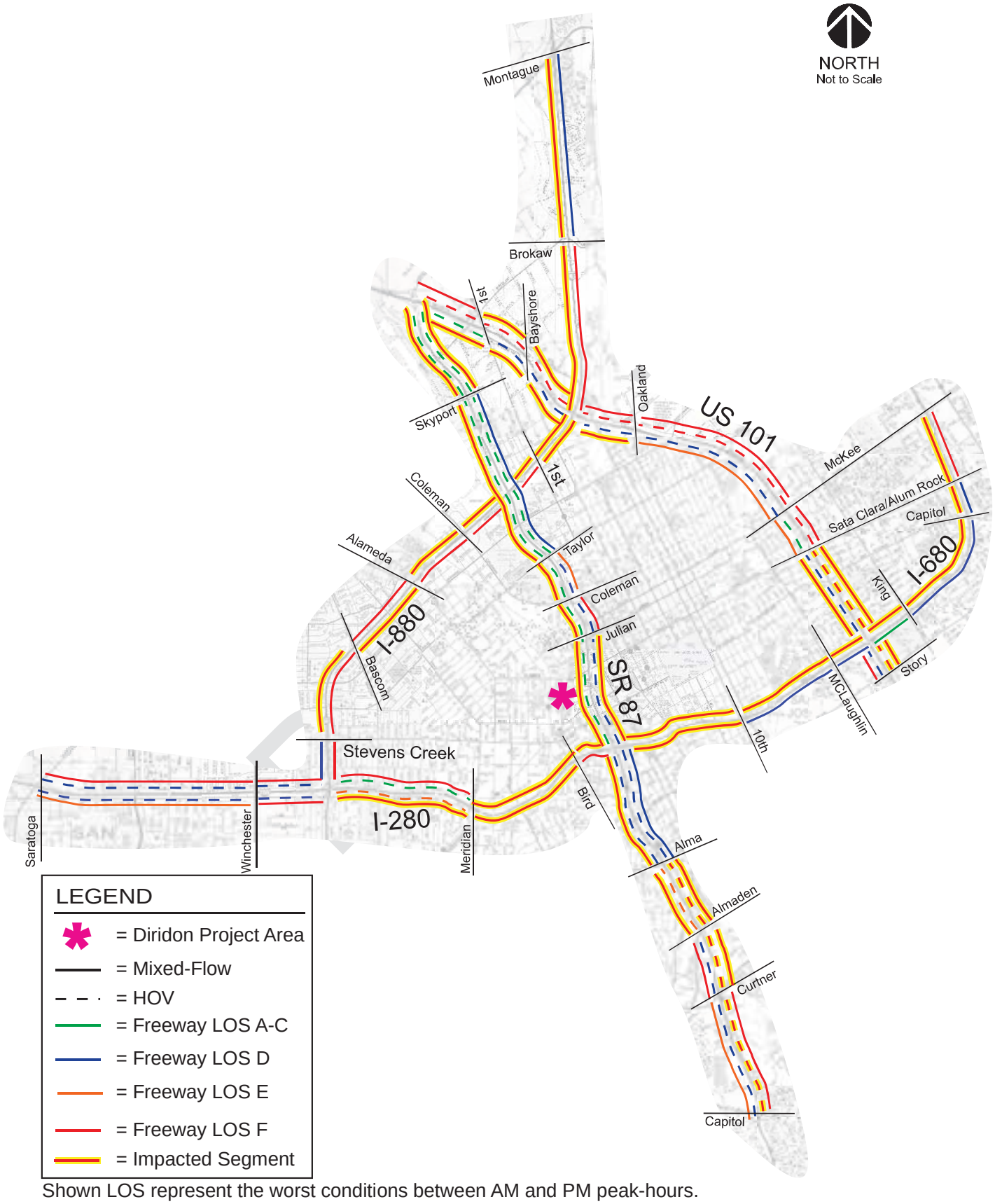
The TIA analyzed traffic conditions under Strategy 2000 and Strategy 2000 plus Project Conditions on the same 76 freeway segments evaluated in Section 4.2.3.3 above. Please refer to Appendix C for the complete freeway segment analysis.

As previously described, the freeway analyses are based on the projected change in volume, rather than "project trips". The results of the freeway level of service analysis show that the same 62 mixed-flow lanes that currently operate at an unacceptable LOS F during at least one peak hour would also operate at LOS F under both Strategy 2000 and Strategy 2000 plus Project conditions, as shown on Figure 4-6. In addition, the HOV lanes on 11 of the segments are also projected to operate at LOS F. The significant impacts, based on CMP criteria, are summarized in Table 4.2-5 on the following page.

Of the impacted segments, 40 of the directional freeway segments and five of the HOV segments would be significantly affected under Strategy 2000 conditions. When comparing Strategy 2000 conditions to Strategy 2000 plus Project conditions, overall, one additional impact (net) would occur at one directional freeway segment; however impacts to HOV lanes would remain at five. The results generally show that congestion is expected to worsen on freeway segments due to planned growth in the Downtown area, with or without implementation of the DSAP.

As described further in Section 4.2.3.3 above, freeway widening is not a feasible mitigation measure and it is not possible to know if the strategies proposed by the DSAP would reduce freeway impacts to a less than significant level. Therefore, the impacts on freeway segments must be considered significant and unavoidable.

Impact TRAN-3: The proposed project would result in a significant impact on mixed flow lanes of one additional freeway segment under Strategy 2000 plus Project Build-out conditions. Although the DSAP is intended to reduce vehicle travel over the long-term, particularly at a citywide and regional level, it is not possible to know if the contribution to freeway impacts would be reduced to a less than significant level. **[Significant Unavoidable Impact]**



Shown LOS represent the worst conditions between AM and PM peak-hours. (DSAP)

FREEWAY LEVEL OF SERVICE
UNDER STRATEGY PLUS PROJECT CONDITIONS

FIGURE 4-6

Table 4.2-5:
Freeway Impacts under Strategy 2000 plus Project Conditions

Freeway Segment		Direction	Peak Hour
Mixed Flow Lanes			
SR 87	**Curtner Avenue to Almaden Road**	**NB**	**AM**
	Almaden Road to Alma Avenue	NB	AM
	I-280 to Julian Street	NB	AM
	Skyport Drive to US 101	NB	AM
	US 101 to Skyport Drive	SB	PM
	Skyport Drive to Taylor Street	SB	PM
	Taylor Street to Coleman Street	SB	PM
	Coleman Avenue to Julian Street	SB	PM
	Julian Street to I-280	SB	PM
	I-280 to Alma Avenue	SB	PM
	Alma Avenue to Almaden Road	SB	PM
US 101	Story Road to I-280	NB	AM
	I-280 to Santa Clara Street	NB	AM
	I-880 to Old Bayshore Highway	NB	AM
	Old Bayshore Highway to North 1st Street	NB	AM
	Guadalupe Parkway to North 1st Street	SB	PM
	North 1st Street to Old Bayshore Highway	SB	PM
	Old Bayshore Highway to I-880	SB	PM
	I-880 to Oakland Road	**SB**	**PM**
	Santa Clara Street to I-280	SB	PM
I-280	US 101 to McLaughlin Avenue	WB	AM
	McLaughlin Avenue to 10th Street	WB	AM
	10th Street to SR 87	WB	AM
	Bird Avenue to Meridian Avenue	WB	AM
	SR 87 to Bird Avenue	WB	PM
	I-880 to Meridian Avenue	EB	PM
	Meridian Avenue to Bird Avenue	EB	PM
	SR 87 to 10th Street	EB	PM
I-680	McKee Road to Alum Rock Avenue	SB	AM
	Alum Rock Avenue to Capitol Expressway	SB	AM

Table 4.2-5:
Freeway Impacts under Strategy 2000 plus Project Conditions

Freeway Segment		Direction	Peak Hour
	Capitol Expressway to King Road	SB	AM
	King Road to US 101	SB	AM
I-880	Bascom Avenue to The Alameda	NB	AM
	1st Street to US 101	**NB**	**AM**
	Bascom Avenue to Stevens Creek Boulevard	SB	AM
	Montague Expressway to Brokaw Road	SB	PM
	Brokaw Road to US 101	SB	PM
	US 101 to 1st Street	SB	PM
	1st Street to SR 87	SB	PM
	SR 87 to Coleman Avenue	SB	PM
	Coleman Avenue to The Alameda	SB	PM
HOV Lanes			
SR 87	Capitol Expressway to Curtner Avenue	NB	AM
	Curtner Avenue to Almaden Road	NB	AM
	Almaden Road to Alma Avenue	NB	AM
US 101	Story Road to I-280	NB	AM
	I-280 to Santa Clara Street	NB	AM

NB = northbound, SB = southbound
Bold indicates a significant unavoidable freeway impact under Strategy plus Project conditions.

4.2.3.5 *Additional Traffic Analyses*

10-Year Horizon Analysis

While the CEQA Guidelines require analysis of an entire project, not phases of development, a 10-year horizon development scenario was evaluated in the TIA (Chapter 7). A first approximately 10-year development scenario in the DSAP/Downtown Core including approximately 1.15 million sf of commercial/R&D/light industrial, 140,000 sf of retail/restaurant, and 250 hotel rooms was evaluated based on current traffic and parking conditions. The construction of the ballpark was included in this scenario, as well as roadway improvements such as the extension of Autumn Street to Coleman Avenue.

This evaluation determined that all of the study intersections would operate at acceptable levels under existing and existing plus DSAP 10-year development scenario conditions. When compared to

background (Strategy 2000) conditions, the level of service at two downtown intersections (Montgomery Street/Park Avenue and Delmas Avenue/San Fernando Street) and one intersection outside the expanded core (Meridian Avenue/Fruitdale Avenue) would degrade to unacceptable levels of service. As described previously, downtown intersections are exempt from the LOS policy.

Although this impact would not occur at either the Existing or Background plus Project Build-out condition, it is not known how long this condition would exist given the overall timeframe for development of the DSAP. For this reason, impacts at this intersection are considered to be significant.

If it is determined by the City that the amount of development anticipated within the 10-year horizon scenario is going to occur, improvements to the Meridian Avenue/Fruitdale Avenue intersection shall be implemented prior to completion of the development anticipated. Additional studies and design work may be necessary to determine the specific improvements necessary; however, at this time, it is anticipated that the mitigation for the intersection is the addition of a second eastbound left-turn lane. Implementation of this measure will reduce the impact to a less than significant level.

Implementation of above-described measure to improve the Meridian Avenue/Fruitdale Avenue intersection for the potential 10-year horizon development scenario would reduce the impact to a less than significant level. **[Less than Significant Impact]**

6-7 PM Analysis

While the City's level of service policy is applicable to only the standard weekday AM and PM peak commute periods, the project site is located in proximity to the San José Arena and the future ballpark site where major events will occur simultaneously between five and 13 times per year at or after 7 PM.[78] For this reason, an analysis was completed for informational purposes only to evaluate traffic conditions during the 6:00 – 7:00 PM event period. This analysis, which was prepared for both Project Build-out and the 10-year horizon development scenarios, can be found in Chapter 8 of Appendix C.

The City of San José determines CEQA traffic impacts based upon the City's Level of Service Policy. This policy evaluates AM (7-9 AM) and PM (4-6 PM) traffic at identified study intersections Monday through Friday, when traffic is at its peak. Other hours or days are not evaluated. For this reason, the 6-7 PM evaluation is not considered to result in CEQA impacts and mitigation is not required.

4.2.3.6 *Impacts to Pedestrian, Bicycle, and Transit Facilities*

The City of San José and VTA have adopted several plans and programs intended to encourage the use of alternative transportation modes and increase the safety and performance of transit, bicycle, and pedestrian facilities. For example, the City's General Plan and Bike Plan 2020 (adopted in 2009) contain policies for guiding the development and maintenance of pedestrian, bicycle, and trail facilities within San José.

[78] Baseball Stadium SEIR. February 2010.

Increased vehicle traffic could affect the safety of pedestrian and bicycle travel in the Plan area, by increasing potential conflict points. The increase in vehicle traffic resulting from future development could also adversely affect travel times for local and express bus service on The Alameda and San Carlos Street. Conversely, the increase in traffic congestion may encourage residents, employees, and visitors in the Plan area to use transit, bike, or walk rather than drive.

As described in Section 2.3.2, the DSAP proposes a range of transportation improvement strategies intended to maximize the efficiency, safety, and connectivity of the circulation system. The strategies emphasize increasing access and mobility for alternative modes of transportation (i.e., pedestrian, bicycle, and transit). The proposed transportation strategies are grouped into four categories: walking, bicycling, transit, and "complete streets".

New street connections and shorter blocks will be provided to make walking and biking more convenient. To ensure that adequate facilities are provided for pedestrian and bicycle travel, public streets will include a continuous sidewalk network and an interconnected network of bicycle paths, lanes, and boulevards. Wider sidewalks would be provided on key corridors to accommodate higher volumes of pedestrian traffic. To expand the network of off-street pathways and increase pedestrian/bicycle linkages, "green fingers" (i.e., wide linear parks with pathways) will be provided along key transportation corridors, as shown on Figure 2-10, and paseos and pathways will be incorporated into new development. To improve pedestrian safety, the City will remove existing pork-chop islands in the Plan area, ~~install roundabouts at identified locations,~~ and provide enhanced crosswalks through the use of pedestrian bulb-outs, median refuge islands, and/or special paving treatments.

The City would continue to coordinate with transit providers to provide amenities at bus stops, enhancing the safety and comfort of transit users. Implementation of General Plan policies to facilitate transit operations will minimize impacts from congestion on the efficiency of transit. As described in Section 4.2.4.2 below, the project is also intended to reduce traffic congestion over time, which would help reduce impacts on the efficiency of transit.

The design of future development and transportation projects in the Plan area will be required to facilitate pedestrian access and safety, in accordance with the proposed strategies, as well as the DSAP Design Guidelines and General Plan policies. Together, implementation of these strategies and policies would support General Plan policies regarding the performance and safety of the pedestrian and bicycle networks.

For these reasons, the proposed project supports goals, policies, and programs adopted by the City and VTA for encouraging alternative transportation modes and increasing the safety and performance of transit, bicycle, and pedestrian facilities. Implementation of the DSAP would not conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities. **[Less than Significant Impact]**

4.2.3.7 *Impacts to Air Traffic Patterns*

Implementation of the DSAP would result in the intensification of land uses in the vicinity of the Mineta San José International Airport. The proposed building height maximums would comply with

FAA obstruction standards subject to required FAA review of specific building heights. Consistent with General Plan policies, future development of buildings exceeding the Part 77 imaginary surfaces would be subject to the FAA review process, as described in Section 4.6 *Hazards and Hazardous Materials*. Therefore, the construction of taller buildings in the Plan area would not cause a change in normal air traffic patterns. As described in Section 4.2.2.1 above, the City of San José applies FAA Part 77 height criteria to identify potential safety hazards under CEQA.

Future development under the DSAP would not increase air traffic in excess of the projections in the adopted Airport Master Plan.[79] Implementation of the proposed DSAP will not change air traffic patterns associated with the San José International Airport. This conclusion is consistent with the analysis in the Envision PEIR. **[Less than Significant Impact]**

4.2.3.8 *Transportation Hazards and Emergency Access*

The DSAP would not result in any incompatible uses of City streets, as the proposed residential, commercial, and retail development is consistent with urban areas. The proposed DSAP includes conceptual designs for various street typologies that will guide modifications to existing roadways and construction of new streets (refer to Section 2.3.2 of this EIR and Sections 2.6 and 3.3 of the DSAP for additional detail). The transportation strategies proposed by the DSAP are intended to ensure a balanced, multi-modal network that improves safety for all users.

Consistent with City policies and practices, modifications to public and private street designs will be developed under the direction of the City's Directors of Transportation and Public Works and subject to professional engineering analysis.[80] The roadway network will be designed to accommodate emergency vehicles. Traffic laws would continue to be enforced in the Plan area.

According to the Envision PEIR, the potential for safety hazards may increase with the addition of population and traffic near or adjacent to at-grade rail crossings due to the potential for vehicle queues to extend onto the tracks. The only at-grade crossing of heavy rail tracks in the Plan area is at Auzerais Avenue, approximately 725 feet west of the signalized intersection with Bird Avenue. Based on the results of the traffic modeling, the increased traffic volumes on Auzerais Avenue under long-term conditions would not cause vehicle queues to extend onto the tracks.[81] During supplemental review of specific development projects on Auzerais Avenue, operational issues such as vehicle queues will be evaluated and the need for additional safety measures (e.g., signal timing, medians) would be identified at that time.

Please refer to Section 4.6 *Hazards and Hazardous Materials* and 4.16 *Public Facilities and Services* for additional discussions on emergency access. With implementation of General Plan policies, the proposed project would not result in inadequate emergency access, nor substantially increase hazards due to design features or incompatible uses. This conclusion is consistent with the analysis in the Envision PEIR. **[Less than Significant Impact]**

[79] Envision PEIR.
[80] Envision PEIR.
[81] To evaluate worst-case conditions, Cumulative plus Project conditions were used to determine future traffic volumes on Auzerais Avenue. The cumulative analysis is discussed in Section 4.2.4 below. **Source:** Robert Del Rio, Hexagon Transportation Consultants. Email communication. July 18, 2012.

4.2.4 Cumulative Impacts

Project-related traffic has the potential to combine with traffic from existing and planned development and future reasonably forseeable projects to affect the performance of the transportation system in the greater Downtown area. In addition, the DSAP is a subset of planned growth in San José under the 2040 General Plan and would contribute to traffic impacts at the citywide level. The project's contribution to significant impacts identified in the Envision PEIR is discussed below.

The Envision PEIR represents the most recent analysis of citywide traffic impacts and supersedes the Strategy 2000 analysis of development-related traffic impacts. Furthermore, the BART and proposed baseball stadium projects have identified their own specific impacts. The HSR EIR identified a potentially significant impact on localized traffic conditions around stations. The effect of HSR-related traffic in the Plan area will be further evaluated in the project-level EIRs to be prepared by the CHRSA.

To evaluate the potential for the DSAP to result in or contribute to impacts on intersection operations, the TIA evaluated Cumulative conditions vs. Cumulative plus Project conditions incorporating traffic expected to be generated by the BART and HSR projects. The methodology and results of the cumulative analyses are summarized in the following discussion (refer to Appendix C for the complete analysis). A freeway level of service analysis was not completed for Cumulative plus Project conditions because the traffic model would not adequately reflect the redistribution of regional traffic resulting from BART and HSR due to their large scale.

The combination of tiering from the Envision PEIR analysis and completing level of service analyses for the Downtown area adequately addresses potential cumulative impacts resulting from the DSAP and other planned projects in the area, including BART, HSR, Strategy 2000 development, and the proposed baseball stadium.

4.2.4.1 *Cumulative Level of Service Analyses*

The cumulative scenario takes into account the same transportation improvements assumed under the Strategy 2000 plus DSAP Build-out scenarios.

Intersection Operations Analysis

The Cumulative conditions scenario includes traffic associated with BART and HSR. Trips associated with BART were taken from the traffic study completed for the BART EIS (2010).[82] The HSR project is currently undergoing its environmental review and the necessary traffic studies for the HSR project are only in the preliminary stages of preparation. Therefore, it was necessary to make assumptions regarding the potential ridership, trip generation, and parking facilities associated with the HSR project. For example, the parking supply serving HSR in the vicinity of Diridon Station was assumed to be 1,432 spaces, based on guidance from the CHSRA.[83]

[82] The Travel Demand Forecasts were prepared for the Draft EIS by Hexagon Transportation Consultants, Inc., in February 2008.
[83] CHSRA. *California High-Speed Train Project, Station Parking Guidance, Technical Memorandum.* 2008.

The results of the intersection level of service analysis show that 18 of the study intersections would operate at LOS E or F during at least one peak hour under Cumulative plus Project conditions (see Table 4.2-5). The proposed project would result in the degradation of levels of service at 12 intersections over Cumulative conditions. Eight of these intersections are located within the Downtown Core and are exempt from the Level of Service Policy. Therefore, traffic associated with the project would make a cumulatively considerable contribution towards the cumulative impact at four intersections located outside of the Downtown Core. These intersections include:

- (67) Park Avenue and Naglee Avenue
- (76) The Alameda and Hedding Street
- (77) The Alameda and Naglee Avenue
- (83) Lincoln Avenue and San Carlos Street

As identified under DSAP Build-out plus Strategy 2000 project conditions, there are no feasible improvements that can be implemented at the Park Avenue/Naglee Avenue and The Alameda/Naglee Avenue intersections. There are also no feasible improvements that can be implemented at the intersection of Lincoln Avenue/San Carlos Street. The intersection of The Alameda and Hedding Street is already a protected intersection and offsetting improvements will be required.

The BART and HSR projects would result in their own impacts at intersections in and around the Plan area, as identified in their respective reports. In compliance with the City's Protected Intersections Program, VTA and CHSRA will contribute to the implementation of bicycle and pedestrian improvements in and around Diridon Station.

Impact TRAN-4: Build-out of the DSAP would make a substantial contribution to significant cumulative impacts at the intersections of Park Avenue/Naglee Avenue, The Alameda/Naglee Avenue, and Lincoln Avenue/San Carlos Street under Cumulative plus Project conditions. Because there are no feasible mitigation measures that would reduce the identified impacts to a less than significant level, these intersections would be added to the City's List of Protected Intersections and offsetting improvements will be required. **[Significant Unavoidable Cumulative Impact]**

4.2.4.2 *Envision San José 2040 General Plan*

The Envision PEIR used the transportation demand forecasting model and CUBE software to provide a long range impact analysis for the 2040 General Plan. The analysis did not address the level of service of intersections or freeway segments; rather, the Envision PEIR evaluated screenlines, mode split, vehicle miles travelled (VMT), transit priority corridors, and congestion in other jurisdictions to measure the performance of the circulation system and identify potential conflicts with adopted policies, plans, or programs such as the CMP.

Table 4.2-6:
Results of the Intersection Operations Level of Service Analysis: Cumulative Conditions

Intersection		Peak Hour	Cumulative	Cumulative plus Project		
			LOS	LOS	Incr. in Crit. Delay[1]	Incr. in Crit. V/C[2]
Within the Downtown Core						
4	Montgomery Street and Santa Clara Street*	AM	D	**F**	**71.9**	**0.157**
		PM	E	**F**	**106.5**	**0.280**
6	Montgomery Street and Park Avenue	AM	F	**E**	**-14.4**	**-0.033**
		PM	F	**F**	**73.6**	**0.178**
7	Coleman Avenue and Taylor Street	AM	D	D	0.2	0.008
		PM	F	**F**	**14.7**	**0.035**
9	Autumn Street and Julian Street	AM	C	C	0.5	0.109
		PM	E	**E**	**13.3**	**0.039**
10	Autumn Street and Santa Clara Street	AM	F	**F**	**49.5**	**0.121**
		PM	E	**F**	**48.7**	**0.140**
11	Autumn Street and San Fernando Street	AM	D	C	-8.2	-0.047
		PM	F	**F**	**-2.0**	**-0.003**
12	Bird Avenue and San Carlos Street*	AM	D	D	3.6	0.014
		PM	F	**F**	**14.8**	**0.036**
16	Delmas Avenue and San Fernando Street	AM	B	B	-1.0	-0.53
		PM	B	**F**	**99.6**	**0.601**
17	Delmas Avenue and Park Avenue	AM	D	D	5.8	0.025
		PM	D	**E**	**29.4**	**0.167**
22	Woz Way and San Carlos Street	AM	D	D	0.7	0.021
		PM	E	**E**	**-12.5**	**-0.035**
26	SR 87 and Julian Street (E)*	AM	E	**E**	**0.5**	**0.013**
		PM	D	D	5.9	0.109
30	Almaden Boulevard and San Carlos Street*	AM	D	D	-0.9	-0.006
		PM	E	**E**	**-6.5**	**-0.026**
Outside of Downtown Core						
67	Park Avenue and Naglee Avenue	AM	C	C	0.7	0.022
		PM	E	**E**	**9.5**	**0.058**
69	Meridian Avenue and San Carlos Street	AM	D	D	0.3	0.013
		PM	E	**E**	**-1.6**	**-0.006**
76	The Alameda and Hedding Street*	AM	E	**E**	**10.1**	**0.037**
		PM	C	D	4.2	0.099
77	The Alameda and Naglee Avenue*	AM	D	D	1.9	0.030
		PM	E	**F**	**17.9**	**0.053**
80	Race Street and Park Avenue	AM	E	D	-29.3	-0.079
		PM	D	D	-10.4	-0.034

Table 4.2-6:
Results of the Intersection Operations Level of Service Analysis: Cumulative Conditions

	Intersection	Peak Hour	Cumulative	Cumulative plus Project		
			LOS	LOS	Incr. in Crit. Delay[1]	Incr. in Crit. V/C[2]
83	Lincoln Avenue and San Carlos Street	AM	D	D	0.7	0.017
		PM	D	**E**	**1.9**	**0.015**
93	First Street and Taylor Street	AM	D	D	0.0	0.000
		PM	E	**E**	**1.1**	**0.008**

* CMP Intersection
[1] In Seconds
[2] Total Critical V/C can be found in the TIA in Appendix C
Entries denoted in **bold** indicate conditions that exceed the current level of service standard.
Bold and highlighted indicates cumulatively considerable contribution to a significant impact.

The Envision PEIR determined that implementation of the General Plan would increase the percentage of alternative transportation modes for commute trips ("journey to work"), supporting the City's goals for decreasing the share of "drive alone" trips. Therefore, the 2040 General Plan would not result in a significant impact related to mode split. It was concluded, however, that growth allowed under the 2040 General Plan would result in a significant increase in traffic that could cause:

- increases in congestion on already congested roadways that cross most of the 27 screenlines evaluated in the Envision PEIR;[84]
- significant increase in VMT per service population over existing conditions;[85]
- significant impacts on 12 of 14 designated Transit Priority Corridors; and
- impacts to congested roadways in 13 of 14 neighboring cities and on County and Caltrans facilities.

Implementation of the General Plan policies and actions listed in Table 4.2-2 above will serve to reduce these impacts, but not to less than significant levels. These impacts are cumulative in nature given that all development throughout the City would generate vehicle trips and contribute to increases in traffic congestion. The increase in VMT can be attributed in part to the shift in the jobs-housing balance in San José, which would require some housing for new employees to be located outside of the city, increasing commute distances. The VMT increase is also a function of planned growth in areas with low or no access to transit. As described in Section 4.2.3.2 above, the model reflects a "worst-case" outcome because it does not account for many observed cultural and urban design factors that have been documented to influence the commute mode choices. Accordingly, the

[84] A screenline is a manmade (such as a freeway) or natural (such as a river) barrier to transportation that affects multiple roadways and create a significant constraint on roadway capacity. The volume and capacity across each screenline is the sum of the volumes and capacities of each congested roadway segment that crosses the screenline. If there is a significant increase in the aggregated volume-to-capacity (V/C) ratio of congested roadway links, there is virtually always a significant increase in the aggregated volume-to-capacity ratio of all links. This type of analysis captures regional travel characteristics at a citywide level.
[85] The VMT analysis is based on VMT generated per service population (residents + employment), which is described as "land use-based VMT".

model does not accurately quantify the benefits that can be achieved from all policies and programs that would increase use of alternative transportation modes and reduce VMT per service population.

Future development under the DSAP would generate traffic that contributes to significant unavoidable impacts related to screenlines, VMT, and adjacent jurisdictions. Based on the results of the level of service analyses described above, the DSAP would not cause a substantial change in traffic patterns in relation to planned growth. Project-related traffic would mainly be localized to the Downtown area and would not substantially affect traffic in neighboring cities.

Furthermore, the project would support the General Plan policies for shifting the mode split and reducing vehicle travel. For example, the Transportation Improvement Strategies proposed by the DSAP are intended to maximize the efficiency, safety, and connectivity of the circulation system, emphasizing increased access and mobility for alternative modes of transportation (i.e., pedestrian, bicycle, and transit). When combined with the planned BART extension, HSR project, and other improvements to transit, pedestrian, and bicycle network, the DSAP would further reduce VMT and traffic congestion.

Currently, the Plan area is well-served by a variety of transit services, with Diridon Station as the main hub. With the completion of the planned San Carlos Street LRT station, the entire Plan area would be located within 2,000 feet of existing fixed rail transit (LRT, Caltrain, etc.). In addition, the proposed DSAP includes expansion of Diridon Station to accommodate BART and HSR, enhancing the transit center as one of the most well-connected hubs in the Bay area. Based on preliminary projections, approximately 72,600 boardings and alightings could occur at Diridon Station on a daily basis by 2035, as shown in Table 4.2-7. This would represent an 820 percent increase over transit ridership in 2009 (refer to Table 4.2-1 above).

Table 4.2-7:
Projected Ridership at Diridon Station under Future Conditions (2035)

Transit Service	Average Weekday Boardings and Alightings
VTA – Light Rail	2,300
Caltrain	20,200
ACE	3,600
Amtrak – Capitol Corridor	900
BART	21,000
HSR	24,600
TOTAL	**72,600**

Source: DSAP

The intensification of housing and employment in the Plan area, in accordance with the proposed Land Use Diagram, would increase the number of residents and employees within walking distance to the Diridon Station and other transit services. When compared to growth in locations that are served by fewer transit services (just LRT or bus for example), the DSAP would maximize opportunities for commuting by transit and minimize the need for commuting by car. Due to its location and high level of transit service (even without the extension of BART and HSR), it can be argued that the DSAP has the highest potential to reduce automobile travel and increase transit use.

In addition, the DSAP would encourage increased walking and biking through compact, mixed use development, which shortens the distance between origins (homes, offices, etc.) and destinations (restaurants, retail, etc.). As described in Section 4.2.3.3 above, implementation of the proposed strategies would make pedestrian and bicycling travel safer. New street connections and shorter blocks will be provided to make walking and biking more convenient. Adherence to the Design Guidelines would create a vibrant and inviting streetscape, further encouraging walking and biking.

Future projects in the Plan area will be evaluated for conformance with the proposed Design Guidelines, Transportation Improvement Strategy, and General Plan policies listed in Table 4.2-2 above. Future development will be required to implement a transportation demand management (TDM) program to support alternative transportation modes and reduce emissions (refer to Section 4.4.3.2). The development and implementation of a Transportation and Parking Management Plan for the DSAP will help to balance the supply and demand of parking and transportation resources to meet travel needs, while supporting goals for minimizing VMT. The use of Transportation Demand Measures currently available for densely developed infill sites near transit such as the Plan area could help reduce VMT by up to 35 percent.[86]

Overall, the proposed project would support the General Plan policies for shifting the mode split and reducing vehicle travel through improving access to transit, creating a pedestrian- and bicycle-friendly environment, and enhancing connectivity to Downtown, commercial areas, and residential neighborhoods. The DSAP exemplifies the type of project with the most potential to reduce VMT due to its location, mix of land uses, proposed improvements, and transit-oriented nature. The combination of the DSAP and planned improvements to transit and the pedestrian/bicycle networks would result in a net benefit to the performance of the transportation system. For these reasons, the DSAP is essentially self-mitigating in terms of VMT and traffic congestion.

As a key strategy for reducing vehicle travel at a citywide scale and in the greater Downtown area, the DSAP would not make a substantial contribution to the cumulative impacts related to screenlines, VMT, and adjacent jurisdictions.

Transit Priority Corridors

Future development under the DSAP could contribute to traffic impacts on transit priority corridors, particularly on The Alameda/Santa Clara Street and San Carlos Street (Bascom Avenue to SR 87). Given that The Alameda/Santa Clara Street and San Carlos Street serve as the primary east-west roadways through the Plan area, many of the new trips associated with DSAP development would use these streets. The cumulative increase in traffic congestion on these streets could adversely affect travel times for local and express bus service.

Planned BRT upgrades would likely improve travel times and may ultimately reduce the cumulative impact on these transit corridors to a less than significant level. The DSAP supports and accommodates the planned BRT upgrades. As described above, the DSAP also incorporates various strategies and measures intended to reduce vehicle travel, which could reduce impacts on bus service

[86] Envision PEIR.

overtime. Implementation of General Plan policies to facilitate transit operations would further reduce impacts from congestion on the efficiency of transit.[87]

However, given the localized nature of project-related traffic and the magnitude of direct effects on The Alameda/Santa Clara Street and San Carlos Street, the project's contribution to the cumulative impact would be considered significant.[88] No measures beyond those already incorporated into the project would be guaranteed to reduce this cumulative impact to a less than significant level.

Future development under the DSAP would not make a cumulatively considerable contribution to the significant impacts related to screenlines, VMT, and adjacent jurisdictions identified in the Envision PEIR. **[Less than Significant Cumulative Impact]**

Impact TRAN-5: The project would make a substantial contribution to significant impacts on transit priority corridors. Although General Plan policies, DSAP strategies, and planned BRT improvements are intended to reduce traffic congestion and improve transit efficiency, these measures may not reduce the cumulative impact or the DSAP's contribution to a less than significant level. This conclusion is consistent with the analysis in the Envision PEIR. **[Significant Unavoidable Cumulative Impact]**

4.2.5 Conclusion

Build-out of the DSAP would not result in a significant impact to intersection operations or conflict with adopted policies or plans regarding public transit, bicycle, or pedestrian facilities. The project would not change air traffic patterns or affect emergency access. **[Less than Significant Impact]**

Impact TRAN-1: When compared to existing conditions, build-out of the DSAP would result in a significant impact on 15 directional mixed flow freeway segments and four directional HOV lane freeway segments during at least one peak hour when compared to the existing condition. **[Significant Unavoidable Impact]**

Impact TRAN-2: Build-out of the DSAP would result in a significant impact to the intersections of The Alameda/Naglee Avenue and Park Avenue/Naglee Avenue under Strategy 2000 plus Project Build-out conditions. The project proposes to add these two intersections to the List of Protected Intersections. **[Significant Unavoidable Impact]**

Impact TRAN-3: The proposed project would result in a significant impact on mixed flow lanes of one additional freeway segment under Strategy 2000 plus Project Build-out conditions. Although the DSAP is intended to reduce vehicle travel over the long-term, particularly at a citywide and regional level, it is not possible to know if the contribution to freeway impacts would be reduced to a less than significant level. **[Significant Unavoidable Impact]**

[87] Ibid.
[88] Robert Del Rio, Hexagon Transportation Consultants. Personal Communication. July 2012.

Impact TRAN-4: Build-out of the DSAP would make a substantial contribution to significant cumulative impacts at the intersections of Park Avenue/Naglee Avenue, The Alameda/Naglee Avenue, and Lincoln Avenue/San Carlos Street under Cumulative plus Project conditions. Because there are no feasible mitigation measures that would reduce the identified impacts to a less than significant level, these intersections would be added to the City's List of Protected Intersections and offsetting improvements will be required. **[Significant Unavoidable Cumulative Impact]**

Impact TRAN-5: The proposed project would make a substantial contribution to significant impacts on transit priority corridors. Although General Plan policies, DSAP strategies, and planned BRT improvements are intended to reduce traffic congestion and improve transit efficiency, these measures may not reduce the cumulative impact or the DSAP's contribution to a less than significant level. This conclusion is consistent with the analysis in the Envision PEIR. **[Significant Unavoidable Cumulative Impact]**

4.3 NOISE AND VIBRATION

This section is primarily based upon the Envision PEIR and a Noise Assessment prepared by Illingworth & Rodkin, Inc. in July 2012. The Noise Assessment is included as Appendix D. This PEIR provides project-level clearance for future projects in the Plan area for traffic noise impacts, as described in Section 4.3.4, below.

4.3.1 Background Information

4.3.1.1 *Noise Concepts and Measurements*

Noise may be defined as unwanted or harmful sound. Noise is measured on a "decibel" scale which serves as an index of loudness. Because the human ear cannot hear all pitches or frequencies, sound levels are frequently adjusted to correspond to human hearing. This adjusted unit is known as the "A-weighted" decibel or dBA. Noise is also expressed using one of several time-averaged noise descriptor methods. L_{eq} (Equivalent Noise Level) is a measurement of the average energy level intensity of noise over a given period of time. DNL and CNEL describe daily average noise levels, with penalties added for sound occurring during nighttime hours when people are typically the most sensitive to loud noises.

Sounds from various sources such as traffic and industrial activities combine to create the "ambient noise environment" or background noise. Typically, no particular noise is identifiable other than the occasional noisy events of relatively brief duration, such as noise from an airplane flying over or the sound of a horn. Freeway noise, for example, has a relatively constant sound level with intermittent increases when heavy trucks, motorcycles, or diesel buses pass. The ability for a particular source to stand out relative to the ambient noise environment depends on how loud the sound is and the background noise levels.

4.3.1.2 *Ground-borne Vibration and Noise*

Vibration is commonly measured in vibration decibels (VdB) or peak particle velocity (PPV). The minimum threshold for human perception is 65 VdB. Ground-borne vibration causes the movement of the building floors, rattling of windows, and shaking of items on shelves or hanging on walls. Excessive vibration has the potential to annoy people and cause structural damage. Land uses that tend to have higher sensitivity to vibration include historic buildings, residences, certain institutional uses, and high tech businesses that involve sensitive operations. The rumbling sound caused by vibration of room surfaces is referred to as ground-borne noise.

4.3.2 Existing Setting

Noise levels in the Plan area currently range from 60 to 75 dBA DNL.[89] The predominant sources of noise affecting the Plan Area include vehicle traffic, rail operations, and aircraft over-flights associated with Mineta San José International Airport. Other noise sources include: truck loading

[89] Envision PEIR.

activity, mechanical equipment, outdoor dining areas, gas stations, car washes, auto repair facilities, air conditioning units, and pedestrian activity associated with the San José Arena.

4.3.2.1 *Noise associated with Rail*

As shown on Figure 1-5, light and heavy rail lines run through the Plan area. The Vasona Corridor LRT line runs along Delmas Avenue, adjacent to the Park/San Carlos subarea, then through the Station East subarea to Diridon Station. South of the station, the LRT line forms the eastern boundary of the Dupont/McEvoy subarea. In addition, a heavy rail line serving Caltrain and freight operations runs southeast and crosses over Los Gatos Creek and I-280, while a UPRR line runs southwest along the Vasona light rail line. North of the station, the Caltrain/freight line runs parallel to Stockton Avenue to the east. In 2004, there were approximately 70 train pass-bys per day on the main line south of Diridon Station.[90]

Noise levels near rail stations and corridors depend on the number, timing, and duration of train pass-by events, and if trains must sound their warning horns or whistles.[91] Day-night average noise levels commonly range from 60 to 75 dBA DNL at land uses adjoining a railroad right-of-way (within approximately 350 feet). The DNL level measured at 65 feet west of the rail line and 175 feet south of San Carlos Street was 74 dBA.[92] The UPRR line carries freight trains with infrequent service (less than 10 pass-bys per week).[93] At 10 feet from the UPRR line, the noise level was 64 dBA DNL.[94]

Development located adjacent to at-grade rail crossings are subject to maximum instantaneous noise levels (Lmax) from train warning whistles that range from approximately 90 to 110 dBA Lmax. Within the Plan area, there is an at-grade crossing over Auzerais Avenue.

In areas with relatively high ambient noise levels such as the Plan area, LRT operations add up to three dBA DNL to ambient noise at adjoining land uses.[95] Light rail trains do not sound horns at the at-grade crossings of Sunol Street and Auzerais Avenue. Therefore, within the Plan area, LRT is not considered a substantial source of noise relative to vehicle traffic and rail operations.

4.3.2.2 *Vibration*

Common sources of ground-borne vibration include construction activities, light and heavy rail transit, and heavy trucks and buses. Vibration levels resulting from commuter rail lines vary by site, but are generally perceptible within 100 feet of the tracks. Light rail operations generate less vibration and are generally barely perceptible just outside the right-of-way. Buses and trucks typically generate ground-borne vibration levels of approximately 63 VdB at a distance of 25 feet when traveling at a speed of 30 mph.

[90] City of San José. *KB Home Monte Vista Residential Planned Development Zoning Project Draft EIR*. 2004.
[91] Railroad trains are required to use their warning horn when approaching other passenger or freight trains, a passenger station, "at-grade" crossing, curves, or other points where view may be obscured. In the vicinity, light rail trains do not sound horns at the at-grade crossings of Sunol Street and Auzerais Avenue.
[92] City of San José. *KB Home Monte Vista Residential Planned Development Zoning Project Draft EIR*. 2004.
[93] Trains leave Milpitas on Mondays, Wednesdays, and Fridays at 9:00 am and 11:00 am, with the trains returning around 2:00 pm.
[94] City of San José. *KB Home Monte Vista Residential Planned Development Zoning Project Draft EIR*. 2004.
[95] Based on projected increases identified in the *Vasona Corridor Light Rail Transit Project EIR/EIS* prepared by the VTA and FTA in October 1999.

4.3.2.3 *Noise-Sensitive Land Uses*

Residential development is sensitive to community noise both outdoors and indoors, particularly during the nighttime. Hotels, hospitals, schools, libraries, museums, meeting halls, and churches are also considered to be noise-sensitive. Commercial and industrial development is less sensitive to community noise because these uses are primarily indoors and noise impacts can be more easily mitigated with building design and construction.

Existing noise-sensitive land uses in the Plan area include single-family and multi-family residential developments, particularly in the Park/San Carlos subarea. Sunol Community School is located on Sunol Street in the Dupont/McEvoy subarea. In addition, there are several multi-family residential developments located adjacent to existing hard rail and light rail lines near the Plan area, including Monte Vista, Plant 51, and Cahill Station. There are no daycare centers, hospitals, or senior care facilities within or adjacent to the DSAP boundary.

4.3.3 Regulatory Framework

Excessive noise levels can adversely affect human health and activities (e.g., hearing loss, sleep disruption, speech interference, etc.). Therefore, federal, state, and local governmental agencies have set forth criteria or planning goals to minimize or avoid these effects.

4.3.3.1 *Federal Transit Administration*

The Federal Transit Administration (FTA) has established impact criteria for ground-borne noise and vibration for rail transit and railroads, summarized in Table 4.3-1 below. Frequent events are defined as more than 70 events of the same source per day, while infrequent events occur fewer than 70 times per day. Ground-borne noise criteria are lower than for airborne noise to account for the annoying low-frequency character of ground-borne noise.

Table 4.3-1:
FTA Ground-Borne Noise and Vibration Criteria By Land Use Category

	Ground-Borne Noise		Ground-Borne Vibration	
Land Use Category	**Frequent Events**	**Infrequent Events**	**Frequent Events**	**Infrequent Events**
Buildings where low ambient vibration is essential for operation	NA	NA	65 VdB	65 VdB
Residences and buildings where people normally sleep.	35 dBA	43 dBA	72 VdB	80 VdB
Institutional land uses with primarily daytime use.	40 dBA	48 dBA	75 VdB	83 VdB

4.3.3.2 *California Department of Transportation*

Guidance developed by the California Department of Transportation (Caltrans) is used to assess construction-related vibration impacts in San José. A vibration limit of 12.7 mm/sec (0.5 inches/sec), PPV for buildings structurally sound and designed to modern engineering standards. A conservative vibration limit of 0.2 inches/sec PPV has been used for buildings that are found to be structurally sound but structural damage is a major concern. For historic buildings or buildings that are documented to be structurally weakened, a conservative limit of 0.08 inches/sec PPV is used to provide the highest level of protection.

4.3.3.3 *Airport Land Use Commission*

As described in Section 4.1 *Land Use*, approximately 110 acres of the Plan area are located in the Airport Influence Area (AIA) for the Mineta San José International Airport.[96] All areas within the AIA should be regarded as potentially subject to aircraft over-flights and are subject to noise and land use compatibility policies in the Comprehensive Land Use Plan (CLUP). The CLUP includes noise contours to identify the areas of likely community response to noise generated by aircraft activity and to serve as the basis for land use compatibility determinations. According to the CLUP, the maximum allowable noise level considered compatible with residential uses is 65 dBA CNEL, while the "conditionally acceptable" range for multi-family residential uses is 60-65 dBA CNEL. Office buildings and hotels are "generally acceptable" where airport noise is less than 65 dBA CNEL and are "conditionally acceptable" in the 65-70 dBA range.

As shown on Figure 4-7, only the northeastern corner of the Plan area is within the 65 CNEL noise contour for the airport.

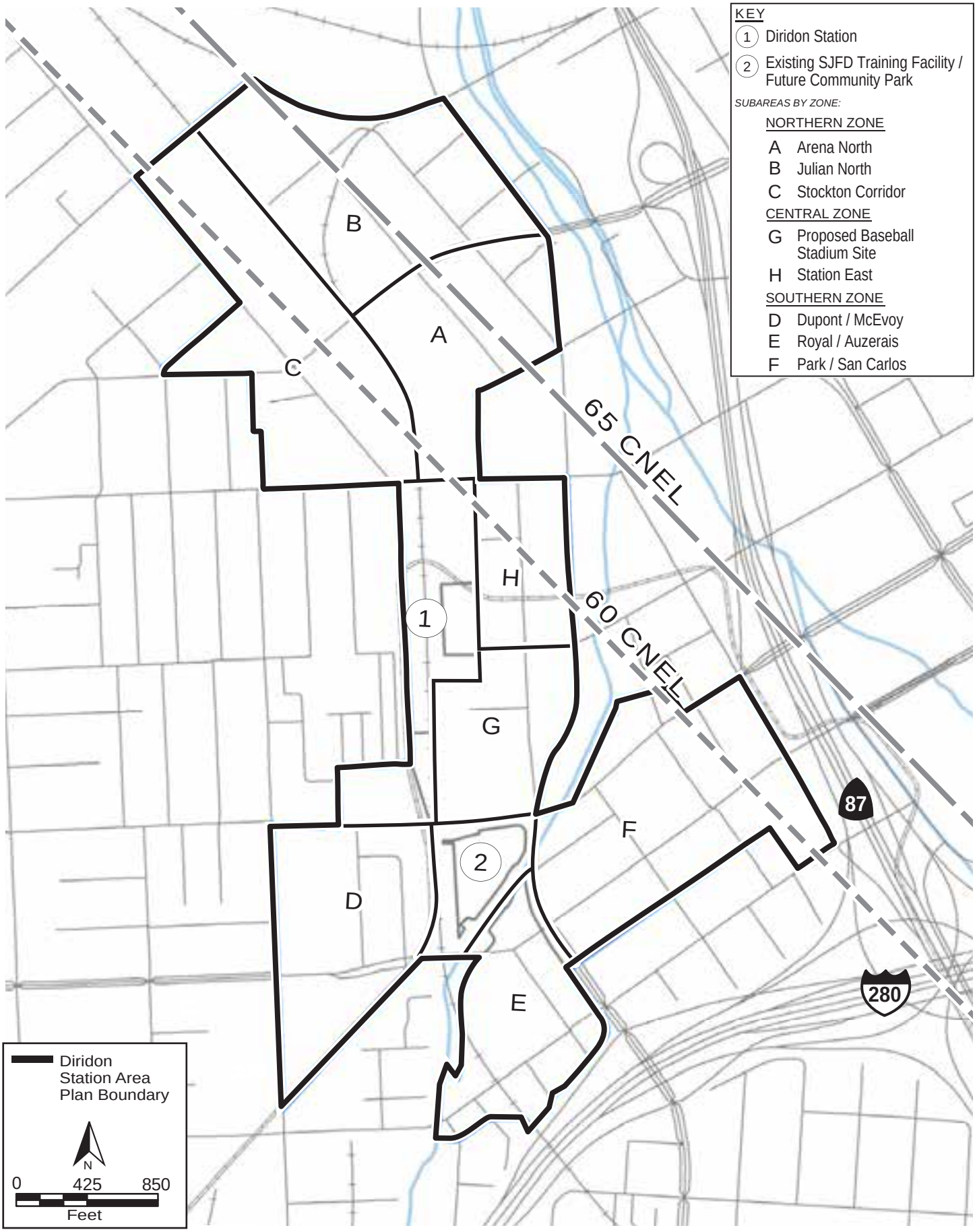
4.3.3.4 *City of San José Policies*

Municipal Code

The Municipal Code restricts construction hours within 500 feet of a residential unit to the hours of 7:00 a.m. to 7:00 p.m. Monday through Friday, unless otherwise expressly allowed in a Development Permit or other planning approval.[97]

The Zoning Ordinance limits noise levels at any property line of residential, commercial, or industrial properties, as shown in Table 4.3-2. The Zoning Ordinance also limits noise emitted by stand-by/backup and emergency generators to 55 decibels at the property line of residential properties. The testing of generators is limited to 7 a.m. to 7 p.m., Monday through Friday.

[96] Santa Clara County Airport Land Use Commission. *Comprehensive Land Use Plan, Norman Y. Mineta San Jose International Airport*. 2010.
[97] The Municipal Code does not establish quantitative noise limits for demolition or construction activities occurring in the City.



AIRPORT NOISE CONTOURS FIGURE 4-7

Table 4.3-2:
City of San José Zoning Ordinance Noise Standards

Land Use Types	Maximum Noise Level in Decibels at Property Line
Residential, open space, industrial or commercial uses adjacent to a property used or zoned for residential purposes	55
Open space, commercial, or industrial use adjacent to a property used or zoned for commercial purposes or other non-residential uses	60
Industrial use adjacent to a property used or zoned for industrial or use other than commercial or residential purposes	70

Envision San José 2040 General Plan

The 2040 General Plan includes noise compatibility guidelines for various land uses. For reference, these guidelines are provided in Table 4.3-3 below.

Table 4.3-3
General Plan Land Use Compatibility Guidelines (GP Table EC-1)

Land Use Category	Exterior DNL Value in Decibels					
	55	60	65	70	75	80
1. Residential, Hotels and Motels, Hospitals and Residential Care						
2. Outdoor Sports and Recreation, Neighborhood Parks and Playgrounds						
3. Schools, Libraries, Museums, Meeting Halls, and Churches						
4. Office Buildings, Business Commercial, and Professional Offices						
5. Sports Arena, Outdoor Spectator Sports						
6. Public and Quasi-Public Auditoriums, Concert Halls, and Amphitheaters						

Normally Acceptable:
Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.

Conditionally Acceptable:
Specified land use may be permitted only after detailed analysis of the noise reduction requirements and noise mitigation features included in the design.

Unacceptable:
New construction or development should generally not be undertaken because mitigation is usually not feasible to comply with noise element policies. Development will only be considered when technically feasible mitigation is identified that is also compatible with relevant design guidelines.

In addition, various policies in the City's General Plan have been adopted for the purpose of reducing or avoiding impacts related to noise, as listed in the table below.

Table 4.3-4:
General Plan Policies: Noise

Noise and Vibration	
EC-1.1	Locate new development in areas where noise levels are appropriate for the proposed uses. Consider federal, state and City noise standards and guidelines as a part of new development review. Applicable standards and guidelines for land uses in San José include: Interior Noise Levels • The City's standard for interior noise levels in residences, hotels, motels, residential care facilities, and hospitals is 45 dBA DNL. Include appropriate site and building design, building construction and noise attenuation techniques in new development to meet this standard. For sites with exterior noise levels of 60 dBA DNL or more, an acoustical analysis following protocols in the City-adopted California Building Code is required to demonstrate that development projects can meet this standard. The acoustical analysis shall base required noise attenuation techniques on expected General Plan traffic volumes to ensure land use compatibility and General Plan consistency over the life of this plan. Exterior Noise Levels • The City's acceptable exterior noise level objective is 60 dBA DNL or less for residential and most institutional land uses (Table EC-1). The acceptable exterior noise level objective is established for the City, except in the environs of the San José International Airport, the Downtown Core Area, and along major roadways. For the remaining areas of the City, the following standards apply: – For new multi-family residential projects and for the residential component of mixed-use development, use a standard of 60 dBA DNL in usable outdoor activity areas, excluding balconies and residential stoops and porches facing existing roadways. There will be common use areas available to all residents that meet the 60 dBA exterior standard. Use noise attenuation techniques such as shielding by buildings and structures for outdoor common use areas. – For single-family residential uses, use a standard of 60 dBA DNL for exterior noise in private usable outdoor activity areas, such as back yards.
EC-1.2	Minimize the noise impacts of new development on land uses sensitive to increased noise levels (Categories 1, 2, 3 and 6) by limiting noise generation and by requiring use of noise attenuation measures such as acoustical enclosures and sound barriers, where feasible. The City considers significant noise impacts to occur if a project would: • Cause the DNL at noise sensitive receptors to increase by five dBA DNL or more where the noise levels would remain "Normally Acceptable"; or • Cause the DNL at noise sensitive receptors to increase by three dBA DNL or more where noise levels would equal or exceed the "Normally Acceptable" level.

EC-1.3	New nonresidential land uses will mitigate noise generation to 55 dBA DNL at the property line when located adjacent to existing or planned noise sensitive residential and public/quasi-public land uses.
EC-1.7	Require construction operations within San José to use best available noise suppression devices and techniques and limit construction hours near residential uses per the City's Municipal Code. The City considers significant construction noise impacts to occur if a project located within 500 feet of residential uses or 200 feet of commercial or office uses would: • Involve substantial noise generating activities (such as building demolition, grading, excavation, pile driving, use of impact equipment, or building framing) continuing for more than 12 months. For such large or complex projects, a construction noise logistics plan that specifies hours of construction, noise and vibration minimization measures, posting or notification of construction schedules, and designation of a noise disturbance coordinator who would respond to neighborhood complaints will be required to be in place prior to the start of construction and implemented during construction to reduce noise impacts on neighboring residents and other uses.
EC-1.8	Commercial drive-through uses will be allowed only when consistency with the City's exterior noise level guidelines and compatibility with adjacent land uses can be demonstrated.
EC-1.9	Noise studies are required for land use proposals where known or suspected loud intermittent noise sources occur which may impact adjacent existing or planned land uses. For new residential development affected by noise from heavy rail, light rail, BART or other single-event noise sources, mitigation will be implemented so that recurring maximum instantaneous noise levels do not exceed 50 dBA Lmax in bedrooms and 55 dBA Lmax in other rooms.
EC-1.11	Continue to require safe and compatible land uses within the Mineta International Airport noise zone (defined by the 65 CNEL contour as set forth in State law) and encourage aircraft operating procedures that minimize noise.
EC-1.13	Update noise limits and acoustical descriptors in the Zoning Code to clarify noise standards that apply to land uses throughout the City.
EC-1.14	Require acoustical analyses for proposed sensitive land uses in areas with exterior noise levels exceeding the City's noise and land use compatibility standards to base noise attenuation techniques on expected General Plan traffic volumes to ensure land use compatibility and General Plan consistency.

4.3.4 Noise Impacts

4.3.4.1 *Thresholds of Significance*

For the purposes of this PEIR, a noise impact is significant if implementation of the proposed DSAP would:

- Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;
- Exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels;
- A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project;
- A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project;
- For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels; or
- For a project located within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels.

4.3.4.2 *Noise and Land Use Compatibility*

The proposed project would involve the development of new land uses in areas where existing or future noise levels exceed the noise and land use compatibility guidelines established by the City of San José (shown in Table 4.3-3 above) or the CLUP. Noise levels at specific development sites would depend on the proximity to noise sources such as major roadways, heavy and light rail lines, and airport flight path. Existing and planned commercial, industrial, and institutional uses can also contribute to community noise levels. Example noise sources include: industrial operations, truck loading activity, mechanical equipment, gas stations, car wash and auto repair facilities, and pedestrian activity associated with retail uses, public parks, and San José Arena. The primary noise sources by zone and subarea are summarized in the following table. Future noise sources are discussed in detail in Section 4.3.5 below.

Table 4.3-5:
Primary Noise Sources By Zone and Subarea

Zone/Subarea	Main Roadways	Transit	Airport	Stationary
Northern				
*Stockton Corridor**	The Alameda, Stockton Ave.	Heavy rail	60 CNEL (east of Stockton Ave.)	Existing industrial uses to the north
Julian North and Arena North	Julian St., Autumn St., The Alameda, Santa Clara St.	Heavy rail	65 CNEL (east of Montgomery St.)	San José Arena
Central				
*Station East***	The Alameda, Santa Clara St., Autumn St.	Heavy rail, Light rail	60 CNEL Contour (northeast portion)	San José Arena, Diridon Station
Southern				
*Dupont/McEvoy**	San Carlos St.	Heavy rail, Light rail	-	-

*Park/San Carlos**	Autumn St., Bird Ave., San Carlos St., SR 87	Light rail (northeast corner)	60 CNEL Contour (east of Gifford Ave.)	-
*Royal/Auzerais***	Autumn St., Bird Ave., San Carlos St., I-280	Heavy rail	-	Industrial uses
Community Park Site	Autumn St., San Carlos St.	Heavy rail, Light rail	-	-
* Subarea designated for residential and/or hotel uses. ** Hotel uses allowed in these employment-oriented subareas.				

Traffic Noise

Traffic noise represents the primary source of noise in the Plan area. According to the 2035 Noise Contours shown in the Envision PEIR, noise levels in the Plan area would range from 55 to 75 dBA DNL. Traffic noise would be highest adjacent to I-280 in the Royal/Auzerais subarea, which is planned for industrial/commercial uses. The Park/San Carlos subarea is expected to be located outside of the 70 dBA DNL contour of SR 87 (approximately 250 feet from the centerline).[98] Traffic noise levels are expected to range up to 70 dBA DNL along San Carlos Street and The Alameda (east of Julian Street). Traffic noise along Autumn Street between Santa Clara Street and Park Avenue may reach up to 73 dBA DNL.[99] Noise levels along Julian Street and Stockton Avenue would range from 65-70 dBA DNL.[100] It is anticipated that traffic noise along Park Avenue, Sunol Street, and other smaller roadways in the Plan area would be less than 65-70 dBA DNL due to the relatively lower traffic volumes.

Rail Noise

Within the Plan area, heavy rail would have the largest affect on the ambient noise environment in the Dupont/McEvoy subarea, which is proposed for residential use under the DSAP. In addition, noise from LRT operations would contribute to the ambient noise environment. New development between Park Avenue and San Carlos would be exposed to similar noise levels as those at existing and approved housing developments to the north and south (i.e., Monte Vista, Park Avenue Townhomes, Plant 51, and Cahill Station). North of San Carlos Street, noise levels from train operations would be approximately 74 dBA DNL at a distance of 65 feet from the track centerline, while south of San Carlos Street, train noise would be approximately 67 dBA DNL at a distance of 10 feet from the UPRR/LRT corridor.[101]

North of the station, the Caltrain/freight line forms the eastern boundary of the Stockton Corridor subarea. Transit employment center uses within 350 feet of the line would be exposed to noise levels ranging from 60 to 75 dBA DNL, depending on the distance to the tracks. Train pass-bys may be

[98] City of San José. *San José Downtown Strategy 2000 EIR.* 2005.
[99] City of San José. *Coleman Avenue/Autumn Street Improvement Project Final Integrated Focused EIR.* 2008.
[100] City of San José. *Morrison Park Residential Project Recirculated Initial Study.* March 2008.
[101] These measurements were taken 175 feet and 130 feet south of San Carlos Street, respectively. **Source:** City of San José. *KB Home Monte Vista Residential Planned Development Zoning Project Draft EIR.* 2004.

audible at the properties proposed for residential development on the west side of Stockton Avenue, although it is not considered a substantial source of noise in relation to traffic at this location.[102]

A small portion of the Park/San Carlos subarea is bounded by the LRT line. While LRT operations contribute to the ambient noise environment, traffic noise from SR 87 and Santa Carlos Street and aircraft over-flights are the predominant sources.

Aircraft Noise

The entire Plan area would be subject to noise from aircraft over-flights, particularly the areas within the AIA for the Mineta San José International Airport. The subareas located entirely or partly in the AIA include: Stockton Corridor, Julian North, Arena North, Station East, and Park/San Carlos. As shown on Figure 4-7, only the eastern portions of the Julian North and Arena North subareas are within the 65 CNEL noise contour. These subareas are designated as *Transit Employment Center* under both the DSAP and 2040 General Plan. No residential uses are proposed within the 65 dBA CNEL noise contour.

Noise-generating Land Uses

Industrial uses that involve fabrication, large mechanical equipment, and/or loading areas can make a substantial contribution to community noise levels. The DSAP Land Use Diagram generally separates areas designated for residential uses from planned light industrial uses, which would reduce potential impacts from stationary sources. Depending on the timing and location of redevelopment, however, new noise-generating uses may be located near existing noise-sensitive uses, or new noise-sensitive uses may be located near existing noise-generating uses. For example, in the Northern Zone of the Plan area, new light industrial facilities may be located near residential uses that are currently located along Autumn, Montgomery, and Julian Streets. Conversely, new residential development in the Dupont/McEvoy subarea may occur near existing industrial uses. (Refer to Section 4.1.3.2 for additional discussion on long-term and interim land use conflicts).

Consistency with City Standards by Land Use Type

When considering the primary sources of noise, existing and future ambient levels are not expected to exceed 75 dBA DNL at development sites in the Plan area. Based on the General Plan Land Use Compatibility Guidelines, summarized in Table 4.3-3 above, noise levels of 75 dBA DNL or less would be within the normally or conditionally acceptable range for all land uses proposed by the DSAP.

Future Residential Uses

New residential development may be located in areas with conditionally acceptable noise levels for category 1 uses (60-75 dBA DNL). All residential development projects in the Plan area would be subject to the interior noise level objective of 45 dBA DNL, while residential development outside of the Downtown Core would be subject to both the interior and exterior noise level objectives. In

[102] City of San José. *Morrison Park Residential Project Recirculated Initial Study.* 2008.

addition, all properties near single-event noise sources such as planned/existing rail lines and aircraft operations would also be subject to the instantaneous noise objective of 50 dBA Lmax in bedrooms and 55 dBA Lmax in other rooms (Policy EC-1.9).

At the time future projects with a residential or other noise-sensitive component are proposed, preparation of a site-specific noise analysis by an acoustical consultant will be required to verify consistency with the City's noise standards and identify necessary design features and noise reduction measures, based on projected General Plan traffic volumes. Projections of future noise exposure would also take into account existing and planned commercial/industrial operations and transit facilities.

Where exterior day-night average noise levels are 60 to 70 dBA DNL, interior noise levels can typically be maintained below 45 dBA DNL with the incorporation of adequate forced air mechanical ventilation systems in the units, which allow residents the option of controlling noise by keeping the windows closed. In areas with noise levels exceeding 70 dBA DNL, the inclusion of windows and doors with high Sound Transmission Class (STC) ratings may also be necessary to meet the interior noise standard of 45 dBA DNL. Noise reduction techniques may also include the incorporation of noise barriers, although new developments should avoid the use of long stretches of walls at street level (page 3-21 of the DSAP Guidelines).

Future Commercial Uses

New office, commercial, and light industrial development may be located in areas with conditionally acceptable noise levels for category 4 uses (70-80 dBA DNL). Standard office and commercial construction methods typically provide approximately 25 to 30 decibels of noise reduction in interior spaces. Where exterior noise levels have the potential to exceed 70 dBA, preparation of a design-level analysis will be required to identify additional noise attenuation features to be included in the project design. As described below, supplemental analysis may also be required at the time new office uses are proposed within the 65 dBA CNEL contour for the airport. Adherence to the General Plan and CLUP compatibility standards and policies would ensure that employees would not be exposed to excessive interior noise levels.

In accordance with Municipal Code standards and GP Policy EC-1.3, new noise generating uses would be required to reduce noise levels to 55 dBA DNL at the property line when adjacent to noise-sensitive uses. Future development of non-residential uses may be required to prepare a detailed analysis if there is potential for intermittent or stationary noise sources to impact existing or planned noise-sensitive land uses (GP Policy EC-1.9).

Mixed Use Development

Mixed use development often involves residential uses located above or near office, commercial, and/or retail uses. Offices uses generally do not generate elevated noise levels. Disturbances to nearby residences may result from noise-generating activities and functions associated with retail, such as outdoor dining areas, nightclubs or bars, truck loading areas, and public address systems. Retail can be incorporated in a manner to minimize noise at nearby receptors, in combination with restrictions on operating hours. Therefore, the mixing of retail and office uses with residential uses

at the building or block level would not be expected to expose new residences to excessive noise levels.

Community Park

Given the proximity to San Carlos Street and rail lines, noise levels at the community park site (existing SJFD Training Facility) may exceed the normally acceptable noise level for category 2 uses (65 dBA DNL). Operation of the future HSR and proposed baseball stadium would further increase ambient noise levels. It is unlikely, however, that future noise levels would exceed the conditionally expectable level of 80 dBA DNL. A detailed analysis may be required during the design phase to determine the necessary noise reduction features to be included in the park.

Consistency with CLUP Standards

The entire Plan area would be subject to noise from aircraft over-flights, particularly the areas within the AIA for the Mineta San José International Airport. The subareas that are located entirely or partly in the AIA include: Stockton Corridor, Julian North, Arena North, Station East, and Park/San Carlos. As shown on Figure 4-7, only the northeastern corner of the Plan area is within the 65 CNEL noise contour for the airport. New residential would not be allowed in this location under the DSAP Land Use Diagram (and 2040 General Plan). The DSAP does not propose any other land use that would be exposed to "generally unacceptable" or "unacceptable" airport-related noise levels (refer to Section 4.3.3.3 above). Locations where planned land uses could be exposed to "conditionally acceptable" noise levels include:

- Residential development in the Park/San Carlos subarea (roughly east of Gifford Avenue), within the 60 CNEL noise contour.[103]
- Office buildings in the Julian North and Arena North subareas (roughly east of Montgomery Street), within the 65 CNEL noise contour.

To be consistent with the CLUP, future development in these locations would need to prepare a detailed noise analysis and incorporate noise insulation features into project design.

Future Required Project-Level Analysis

To summarize the discussion above, site-specific analyses will be required at the time development is proposed for:

- Projects with a residential or other noise-sensitive component.
- New office projects or noise/vibration sensitive industrial uses, where exterior noise levels have the potential to exceed 70 dBA.
- New office projects or noise/vibration sensitive industrial uses located within the 65 dBA CNEL contour for the airport.

Supplemental analysis may be required for:

[103] The proposed General Plan amendments would allow higher density residential development in the Park/San Carlos subarea, where airport noise is calculated to be 60-65 dBA CNEL, although the 2040 General Plan currently allows residential uses in this area.

- Noise-generating uses that could cause noise levels to exceed 55 dBA DNL at the property line of noise-sensitive land uses.
- Design of the community park.

The purpose of the supplemental analyses would be to identify design features and noise reduction measures necessary to achieve the City's noise standards.

Implementation of General Plan policies and other applicable regulations will ensure that future development allowed under the DSAP would not be exposed to interior and exterior noise levels in excess of City standards. This conclusion is consistent with the analyses in the Envision PEIR regarding noise and land use compatibility. **[Less than Significant Impact]**

With implementation of General Plan and CLUP policies, future development under the DSAP would not expose people residing or working in the Plan area to excessive noise levels associated with aircraft operations. The proposed project would not conflict with CLUP standards related to noise and land use compatibility. **[Less than Significant Impact]**

4.3.4.3 *Traffic Noise Impacts*

Traffic noise throughout San José is expected to increase over the long-term, as future development causes traffic volumes to increase on local roadways. According to the Envision PEIR, development allowed under the 2040 General Plan (including growth in the Plan area) would result in a significant unavoidable impact at noise-sensitive land uses adjacent to heavily traveled roadways and roadways planned for expansion throughout the City due to increased traffic noise. Given that the 2040 General Plan accounted for growth in the Plan area, project-related traffic is generally reflected in the Envision PEIR noise analysis. The Envision PEIR, however, only analyzed traffic noise increase on select segments of major roadways and freeways.

The proposed project may result in a substantial permanent increase in ambient noise levels in the project vicinity above existing levels. CEQA does not define what noise level increase would be considered substantial. For the purposes of this EIR, a significant noise impact would occur if existing noise-sensitive land uses would be subject to permanent noise level increases of three dBA DNL or more where noise levels would equal or exceed the "Normally Acceptable" level, or five dBA DNL or more where noise levels would remain "Normally Acceptable".

A Traffic Noise Assessment was prepared for the proposed project to evaluate all roadways in the vicinity of the Plan area and identify the specific traffic noise increases resulting from DSAP implementation. The assessment was based on traffic data used for the TIA (Hexagon Transportation Consultants, 2012). No measurements were taken to determine the existing noise levels along the roadways; rather, the assessment calculated the relative increase in traffic noise based solely on the projected increase in traffic volumes over existing conditions. Without factoring in other noise sources, the assessment may over-estimate the increases in traffic noise relative to the ambient noise environment. Noise associated with ballpark traffic was included in the analysis.

Consistent with the TIA, the traffic noise assessment assumed completion of the Autumn Street Improvement Project, which includes the extension, widening, realignment and conversion to a two-way street between Coleman and Park Avenues (refer to Section 1.2.1.3 for additional information).

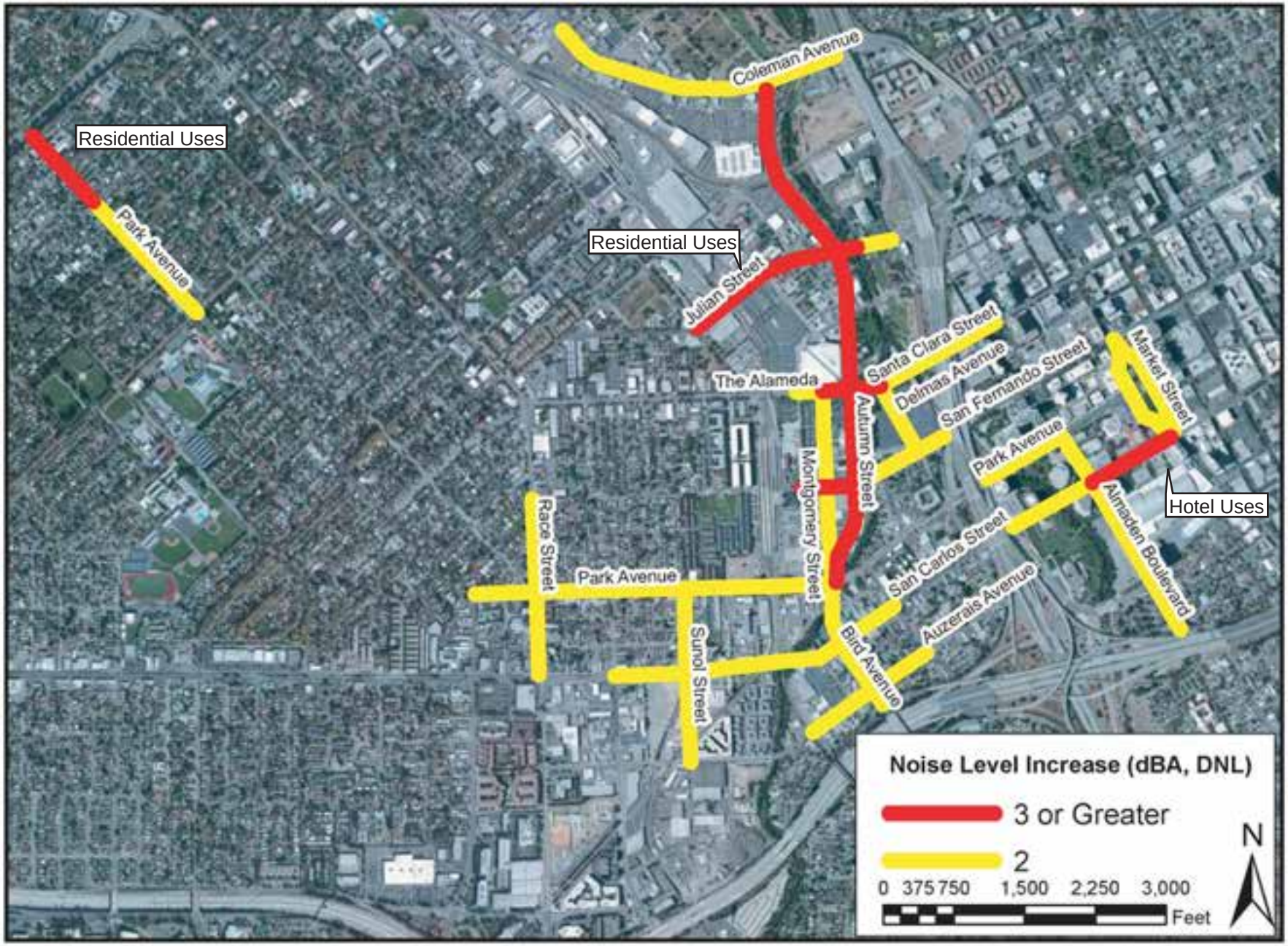
The assessment determined that build-out of maximum development levels under the DSAP would substantially increase traffic noise levels over existing conditions (by three dBA DNL or more) along several roadway segments within and outside the Plan area. These segments are summarized in Table 4.3-6 below and shown on Figure 4-8. The increase in traffic noise along all other roadway segments in the study area was calculated to be two dBA DNL or less.

There are no existing noise-sensitive uses on the affected segments of The Alameda/Santa Clara Street or San Fernando Street. Residential uses are located along Autumn Street and Julian Street in areas designated for redevelopment with industrial/commercial uses under the DSAP (and 2040 General Plan). Although these residences are planned for replacement, they could remain under full or partial build-out of the DSAP and may be exposed to substantial traffic noise increases resulting from the project.

Table 4.3-6:
Roadway Segments Projected to Have a Substantial Traffic Noise Increase over Existing Conditions

Roadway	Segment	Estimated Increase (dBA DNL)
Within the Plan Area		
Autumn Street[1]	Coleman Avenue to Julian Street	7-10
	Julian Street to Santa Clara Street	7-10
	The Alameda to San Fernando Street	10
	San Fernando Street to Park Avenue	9
Julian Street	Stockton Avenue to Guadalupe River Trail	4
The Alameda	Montgomery Street to Autumn Street	3
San Fernando Street	Cahill Street to Montgomery Street	6
	Montgomery Street to Autumn Street	5
Outside of the Plan Area		
Santa Clara Street	Autumn Street to Delmas Avenue	3
San Carlos Street	Almaden Boulevard to Market Street	3
Park Avenue	I-880 to Hedding Street	3

The estimated increase in traffic noise levels on Autumn Street is primarily a function of the planned roadway extension/widening project and is not a direct result of project-related trips. The EIR



EXISTING PLUS DSAP PROJECT TRAFFIC NOISE INCREASES

FIGURE 4-8

prepared for the Autumn Street Improvement Project identified a significant increase in traffic noise at three existing residences and included mitigation measures to reduce traffic noise impacts to a less than significant level.[104] Furthermore, the Envision PEIR identified a significant unavoidable impact to noise-sensitive land uses along roadways planned for expansion, including Autumn Street. Therefore, the proposed project would not result in a new traffic noise impact at residential uses on Autumn Street.

Outside of the Plan area, there are residential uses along Park Avenue between Hedding and I-880 and hotels along San Carlos Street between Almaden Boulevard and Market Street. Traffic noise could be reduced along these segments through noise reduction measures such as the following:

- Replace the roadway surface with "quieter" pavement types such as rubberized concrete;
- Install new or larger noise barriers to shield sensitive outdoor use areas;
- Incorporate sound insulation treatments at affected buildings (e.g., sound rated windows and doors); and/or
- Implement traffic calming measures to slow traffic.

The DSAP does not propose to implement any noise reduction measures along affected roadway segments. The ambient noise environment is already high along San Carlos Street and an increase in three dBA due to traffic noise would likely not be audible. Furthermore, the existing hotels were designed with noise attenuation techniques due to their Downtown location. Therefore, implementation of the DSAP would not result in a significant traffic noise impact at hotels along San Carlos Street.

The City may consider including noise reduction measures at residences along the affected segment of Park Avenue as part of a capitol improvement program into which future developers in the Plan area would contribute. A detailed analysis would be required to identify specific measures to reduce traffic noise levels at affected properties along Park Avenue, although it may not be possible to reduce the impacts to a less than significant level. Therefore, the traffic noise impact at existing noise-sensitive receptors along segments of Julian Street, Park Avenue, and San Carlos Street would be significant and unavoidable.

Impact NV-1: Build-out of the DSAP would result in a significant unavoidable impact at existing noise-sensitive land uses adjacent to segments of Julian Street, Park Avenue, and San Carlos Street due to substantial increases in traffic noise. Although the Envision PEIR did not identify noise increases at these specific locations, this conclusion is consistent with the analysis in the Envision PEIR, which acknowledged that future development would result in a significant traffic noise impact at noise-sensitive uses throughout the City. **[Significant Unavoidable Impact]**

[104] The affected residences include 35 and 75 South Autumn Street and 456 Autumn Court. For mitigation, the City will construct a soundwall at 456 Autumn Court and will provide acoustical treatments at 35 and 75 South Autumn Street such as acoustically-rated windows, solid core doors, and mechanical ventilation, if not currently in place and determined necessary.

4.3.4.4 *Short-Term Noise Impacts*

Construction of new buildings and infrastructure throughout the Plan area would generate noise that could affect nearby residences and businesses. Noise impacts resulting from construction depend on the noise generated by various pieces of construction equipment, the timing and duration of noise-generating activities, and the distance between construction noise sources and noise sensitive receptors. Noise levels would vary based on the stage of construction. The highest noise levels are normally generated during demolition, grading, excavation, and construction of building foundations, when heavy equipment is used. Lower noise levels occur during construction of building interiors and finishing work such as painting and landscaping. Typical hourly average construction-generated noise levels are approximately 80 to 85 dBA measured at a distance of 50 feet from the site during busy construction periods. Construction noise drops off at a rate of six dBA per doubling of distance between the noise source and receptor.

Most construction noise is temporary and generally limited to daylight hours during weekdays. Construction noise impacts primarily result when construction activities occur during noise-sensitive times of the day (early morning, evening, or nighttime hours), when construction occurs in areas immediately adjoining noise-sensitive land uses, or when construction durations last over extended periods of time. For temporary construction-related noise to be considered significant, construction noise levels would have to exceed ambient noise levels by five dBA Leq or more and exceed the normally acceptable levels of 60 dBA Leq at the nearest noise-sensitive land uses or 70 dBA Leq at office or commercial land uses for a period of more than 12 months.

Measures Included in the Project to Reduce and Avoid Construction-related Noise Impacts

As described above, the Municipal Code requires that reasonable noise reduction measures be incorporated into the construction plan and implemented during all phases of construction activity. Accordingly, future projects under the DSAP would be required to implement the following standard noise control measures:

- Construction will be limited to the hours of 7:00 a.m. to 7:00 p.m. Monday through Friday for any on-site or off-site work within 500 feet of any residential unit. Construction outside of these hours may be approved through a development permit based on a site-specific "construction noise mitigation plan" and a finding by the Director of Planning, Building and Code Enforcement that the construction noise mitigation plan is adequate to prevent noise disturbance of affected residential uses.
- The contractor shall use "new technology" power construction equipment with state-of-the-art noise shielding and muffling devices. All internal combustion engines used on the project site shall be equipped with adequate mufflers and shall be in good mechanical condition to minimize noise created by faulty or poorly maintained engines or other components.
- The unnecessary idling of internal combustion engines shall be prohibited.
- Staging areas and stationary noise-generating equipment shall be located as far as possible from noise-sensitive receptors such as residential uses (a minimum of 200 feet).
- The surrounding neighborhood shall be notified early and frequently of the construction activities.

- A "noise disturbance coordinator" shall be designated to respond to any local complaints about construction noise. The disturbance coordinator would determine the cause of the noise complaints (e.g., beginning work too early, bad muffler, etc.) and institute reasonable measures warranted to correct the problem. A telephone number for the disturbance coordinator would be conspicuously posted at the construction site.

Adherence to the Municipal Code requirements would minimize impacts to neighboring properties from temporary increases in ambient noise levels resulting from future construction activities. Small projects allowed under the DSAP are not anticipated to generate noise levels exceeding the City's acceptable noise standard beyond one construction season. Larger projects that last over one year in duration may result in a substantial temporary noise increase at adjacent land uses. Projects that would exceed the City's standard would be required to prepare a "construction noise logistics plan", in accordance with GP Policy EC-1.7.[105]

With implementation of GP Policy EC-1.7 and Municipal Code requirements, the proposed project would not result in a significant short-term noise impact. This conclusion is consistent with the analysis in the Envision PEIR. **[Less than Significant Impact]**

4.3.4.5 *Ground-borne Vibration and Noise Impacts*

The proposed project does not involve the construction of new sources of ground-borne vibration or noise, although truck traffic associated with future development would incrementally add to ambient levels. Implementation of the DSAP, however, could expose new residential uses and vibration-sensitive employment uses such as R&D facilities to ground-borne vibration.

Although light rail, heavy buses, and trucks are considered sources of vibration, ground-borne vibration levels are not generally perceptible at adjacent uses. Future development within 100 feet of heavy rail tracks has the most potential to be exposed to excessive ground-borne vibration.

The City of San José uses the FTA's vibration impact criteria for evaluating land use development near rail lines. Consistent with GP Policy EC-2.1, new development within 100 feet of heavy or light rail lines must demonstrate that vibration experienced by residents and vibration-sensitive uses would not exceed FTA guidelines. Vibration impacts can be minimized through the use of setbacks and/or structural design.

For these reasons, future development allowed under the DSAP would not expose persons to excessive ground-borne vibration or noise. This conclusion is consistent with the analysis in the Envision PEIR.

Construction Vibration

Development allowed under the DSAP would generate vibration during demolition and construction activities. The use of heavy equipment or impact tools (e.g. jackhammers, pile drivers, hoe rams) could generate vibration levels that exceed Caltrans criteria. Heavy tracked vehicles (e.g., bulldozers

[105] A construction noise logistics plan is required for large projects, while a "construction noise mitigation plan" is prepared when an applicant proposes construction hours outside of the Municipal Code limits.

or excavators) can generate perceptible ground-borne vibration levels within approximately 25 feet of the source. The use of impact pile drivers may exceed building damage thresholds within 25 feet of any building or within 50 to 100 feet of buildings that are old or in poor condition.

In accordance with GP Policy EC-2.3, projects with the potential to result in construction-related vibration impacts will be required to demonstrate that vibration levels would not exceed Caltrans criteria. Therefore, construction activities associated with the DSAP would not expose persons to excessive ground-borne vibration or noise. With implementation of General Plan policies, the proposed project would not result in a significant impact due to ground-borne vibration or noise. This conclusion is consistent with the analysis in the Envision PEIR. **[Less than Significant Impact]**

4.3.5 Cumulative Impacts

Given the nature of noise, the proposed project has the potential to contribute to cumulative noise impacts, when combined with the BART extension, HSR project, proposed stadium, and planned development in Downtown San José and the surrounding area. Based on the analysis above and previously prepared reports, the following impacts are discussed below:

- Traffic noise increases
- Impacts to noise-sensitive uses from stadium events
- Compatibility of new sensitive uses with future noise environment
- Ground-borne noise and vibration
- Construction-related noise

4.3.5.1 *Cumulative Traffic Noise Impacts*

As described in Section 4.3.4.3 above, the Envision PEIR analyzed citywide traffic movements and identified impacts on specific segments along major roadways. It was determined that growth allowed under the 2040 General would result in a significant unavoidable impact due to increased traffic-related noise at sensitive uses, particularly where roadways will be expanded in accordance with the Transportation Diagram. In addition, the Traffic Noise Assessment prepared for the project concluded that build-out of the DSAP, would result in a significant traffic noise increase along segments of Julian Street, Park Avenue, and San Carlos Street when compared to existing conditions.

To determine the potential for cumulative traffic noise increases in the study area, the Traffic Noise Assessment also compared "Strategy 2000 conditions" to "Strategy plus Project conditions". As described in Section 4.2.4.1, Strategy 2000 conditions includes the Autumn Street Improvement Project, build-out of planned growth in Downtown, the proposed stadium, and other large development projects in the surrounding area. "Strategy plus Project conditions" reflects development proposed by the DSAP and the reallocation of planned land uses within the remaining portion of the Downtown Core.

For the purposes of the assessment, a significant cumulative impact would occur if noise levels at existing sensitive receivers would be substantially increased over existing levels (i.e., three dBA DNL or more). The proposed project would make a considerable contribution to the impact if it would cause an increase of one dBA DNL or more over cumulative conditions without the project.

As shown in Table 4.3-7 below, the cumulative analysis identified 13 roadways that would experience a substantial increase in noise levels (3 dBA DNL or more) along certain segments. The project, however, would not represent one dBA DNL or more of the cumulative increase on any of these segments. The largest increase attributable to the project is 0.9 dBA along The Alameda/Santa Clara Street between Montgomery Street and Autumn Street, although the remaining increases attributable to the project are 0.5 dBA or less.

Table 4.3-7:
Traffic Noise Increases under Strategy 2000 plus Project Conditions

Roadway	Segment	Increase over Existing Conditions (dBA, DNL)	Increase attributable to DSAP (dBA, DNL)
Autumn Street	Coleman Avenue to Julian Street	7-10	0.3
	Julian Street to Santa Clara Street	7-10	-0.1
	The Alameda to San Fernando Street	11	0.3
	San Fernando Street to Park Avenue	10	0.0
Julian Street	Stockton Avenue to Autumn Street	5	0.5
	Autumn Street to Guadalupe River Trail	4	0.0
	SR 87 to Market Street	3	0.0
	Market Street to First Street	3	0.0
The Alameda	Montgomery Street to Autumn Street	3	0.9
Santa Clara Street	Autumn Street to Delmas Avenue	3	0.9
	Market Street to First Street	3	0.1
	First Street to Third Street	3	0.1
San Fernando Street	Cahill Street to Montgomery Street	5	-0.3
	Montgomery Street to Autumn Street	5	-0.2
	Autumn Street to Delmas Avenue	3	-0.4
	Delmas Avenue to SR 87	3	-0.4
San Carlos Street	Race Street to Sunol Street	3	-0.1
	Sunol Street to Bird Avenue	3	0.1
	Bird Avenue to Delmas Avenue	3	0.1
	Delmas Avenue to SR 87	3	0.0
	Almaden Boulevard to Market Street	3	0.0
	Market Street to First Street	4	0.0
Park Avenue	I-880 to Hedding Street	4	0.1

Table 4.3-7: Traffic Noise Increases under Strategy 2000 plus Project Conditions			
	Hedding Street to Naglee Avenue	3	0.1
	Meridian Avenue to Race Street	3	-0.1
	Race Street to Lincoln Avenue	3	-0.1
Bird Avenue	San Carlos Street to Auzerais Street	3	0.1
Delmas Avenue	San Carlos Street to Auzerais Avenue	3	0.0
Auzerais Avenue	Bird Avenue to Delmas Avenue	3	-0.4
Almaden Boulevard	Park Avenue to San Carlos Street	3	-0.1
	San Carlos Street to I-280	3	-0.1
Race Street	San Fernando Street to Park Avenue	3	-0.1
	Park Avenue to San Carlos Street	3	-0.1
Sunol Street	Park Avenue to San Carlos Street	3	-0.1
	San Carlos Street to Auzerais Avenue	3	-0.1
Coleman Avenue	West of Autumn Street	4	0.2
	East of Autumn Street	3	0.1

Based on this analysis, there would be no substantial differences in traffic volumes or noise levels between DSAP build-out and Strategy 2000 build-out conditions.

Although build-out of the DSAP would contribute to traffic noise increases resulting from growth allowed under the 2040 General Plan, the project would not make a substantial contribution to traffic noise when considered in combination with planned growth in the Downtown Core and surrounding area. **[Less than Significant Cumulative Impact]**

4.3.5.2 *Cumulative Noise Impacts related to Land Use Compatibility*

The DSAP, combined with approved and pending projects in the Plan area, would contribute to permanent increases in the ambient noise environment. The combined increase could cause levels to exceed noise standards for existing and planned land uses in the Plan area. In addition, future development under the DSAP would increase the number of sensitive receptors that would be exposed to noise from approved and pending projects, when compared to the existing baseline evaluated in the previously prepared reports. The following discussion summarizes the contribution of the major pending projects to ambient noise.

Baseball Stadium

The stadium would add a source of periodic noise and effectively contribute to daily noise levels from March through September. Based on the noise exposure maps prepared in 2010, the only area planned for residential uses under the DSAP that would be exposed to noise from baseball games

would be the Park/San Carlos subarea. North of Park Avenue, the worst-case hourly average noise levels were estimated to be 65 dBA Leq. The majority of the subarea would be within the 50 dBA Leq contour.

During concerts, almost the entire Plan area would be within the 50 dBA Leq contour, with hourly average noise levels reaching up to 70 dBA Leq in the Park/San Carlos subarea. Hourly average noise levels could reach approximately 55 dBA Leq in the other subareas designated for residential use: Stockton Corridor and Dupont/McEvoy subareas.

The Supplemental EIR prepared for the proposed major league baseball stadium (2010) determined that noise from baseball games and concerts would result in a significant unavoidable impact at nearby residential uses. Sources of noise would include crowd cheering, operation of the public address system, music, and fireworks displays. The SEIR analysis used a computer model to estimate noise levels that would emanate from the stadium site. The model takes into account various factors, including the characteristics of the noise source and conditions that affect sound propagation. To represent the intermittent nature of stadium noise, the analysis reported noise levels in terms of dBA Lmax and Leq.

As mitigation for the baseball stadium project, a detailed acoustic study will be prepared at the time of final design to verify projected noise levels in the surrounding area. The stadium project will include distributed speakers for the public address system and limitations will be placed on sound levels for various activities, including a maximum level of 95 dB Leq at the sound board for concerts. Noise control measures may be implemented at existing residences within the 60 dBA Leq contour for a baseball game, with the property owner's consent. Even with these mitigation measures, it was concluded that the proposed baseball stadium project would result in a significant unavoidable impact to noise-sensitive receptors. Future residential development allowed under the DSAP would also be exposed to this previously identified cumulative impact; however, the DSAP, which includes employment and residential uses, would not make a cumulatively considerable contribution towards this impact. It is also anticipated that all new residential development would be built according to all applicable Title 20 and Municipal Code requirements to mitigate for ballpark noise.

There is concern that development allowed under the proposed project could alter the projected noise patterns during stadium events, thus increasing noise levels at existing sensitive uses. Under the DSAP, new buildings up to 130 feet in height (7-9 stories) would be constructed in the Central Zone, north of the stadium. The proposed stadium is designed in such a way that sound would primarily propagate from the stadium toward the northeast. The primary path of reflected sound from the new buildings would be to the southeast.

According to the Noise Assessment prepared for the DSAP, a "perfect reflection" of the noise could result in a three dBA increase in noise levels when compared to the noise levels emanating directly from the noise source. In reality, however, the reflected noise increase would be minor when considering the ambient noise environment, the percentage of acoustical energy reflected directly toward a receptor, and the attenuation that would result due to the additional distance that sound must travel from the source to the reflecting surface and back to the receptor. The reflected component of stadium noise toward neighborhoods to the west would be even lower. Therefore, future

development allowed under the DSAP would not cause a significant increase in cumulative noise at nearby residential uses during events at the baseball stadium.

BART

As described in Section 1.2.1.2, BART would be constructed in an underground tunnel through the Plan area, running parallel to Santa Clara Street then adjacent to the Stockton Avenue as it runs northwest to the Santa Clara Station. A BART station would be constructed in the Plan area, between Diridon Station and Santa Clara Street. Because the BART line will be underground through the Plan area, train operations would not generate airborne noise. Aboveground noise sources associated with the BART station would include vehicle traffic, pedestrian activity, and operation of ancillary equipment, including the substations and ventilation systems. It was determined that operation of the vent shafts at the planned BART station would not result in a significant noise impact due to the high ambient noise levels and the lack of nearby sensitive receptors.[106]

High Speed Rail

The following discussion is based upon the *High-Speed Train Sound Fact Sheet* prepared by the California High-Speed Rail Authority (CHSRA) in 2010 and the *Bay Area to Central Valley HST Final Program EIR/EIR* prepared by the CHSRA and Federal Rail Administration (FRA) in 2008.

As described in Section 1.2.1.2, HSR service is currently planned to operate on an elevated structure through the Plan area, using the existing rail right-of-way from just north of Santa Clara Street to just south of Park Avenue. The HSR line would travel approximately 1.3 miles through the Plan area (approximately 3,000 feet from the station to either edge of the Plan). Passenger service is assumed to run between 5:00 AM and midnight, with most occurring between 6:00 AM and 8:00 PM. The average train frequency on a given alignment segment would be approximately 10 trains per hour per direction, although the frequency of pass-bys would vary throughout the day.[107]

The type of noise generated by HSR depends on the speed at which the train is travelling, since noise levels increase as speed increases, particularly in the range of 60 to 150 mph. In developed urban areas such as the Plan area, trains are expected to operate at speeds of approximately 125 mph or less. High speed trains generate significantly less noise than commuter and freight trains at similar speeds. This is primarily because of the use of electric power, higher quality track interface, and smaller, lighter, more aerodynamic trains.[108]

In addition to train speed, the distance between the tracks and the receptor, the topography and type of ground surface, and the presence of buildings or sound barriers also influence the noise level perceived at any given location near the HSR track. At a distance of 100 feet, HSR trains travelling at 100 mph would generate a noise level of approximately 80 dBA L_{max}. Every doubling of distance

[106] VTA. *Silicon Valley Rapid Transit Corridor, BART Extension to Milpitas, San Jose and Santa Clara, Draft EIR*. 2007.
[107] Caltrain/Californis HSR Blended Operations Analysis. March 2012. www.caltrain.com/Assets/Caltrain+Modernization +Program/Documents/Final-Caltrain-California+HSR+Blended+Operations+Analysis.pdf
[108] CHSRA. *High-Speed Train Sound Fact Sheet*. 2010.

from the HSR train to the receptor would reduce the noise level by approximately three dBA to 4.5 dBA, depending on the ground conditions.[109]

Using the daily average descriptor, the FRA estimates that a HSR train operating at ground level and travelling 90 mph would generate noise levels of approximately 74 dBA DNL at a distance of 50 feet and 64 dBA DNL at a distance of 250 feet.[110] HSR trains operating on aerial structures would generate noise levels one to two dBA higher than trains at ground level due to the loss of sound absorption by the ground and the extra sound radiation from the bridge structure.[111]

The program-level EIRs prepared for the HSR system rated the San Francisco to San José and San José to Gilroy segments as having a medium level of potential noise impacts, based on the number and type of sensitive noise receptors within established screening distances that could be exposed to noise levels exceeding FRA criteria.[112]

It is not possible at this time to quantify HSR impacts to future development under the DSAP or determine the cumulative increase in ambient noise levels at specific location. Therefore, the remainder of this cumulative analysis will *qualitatively* address the potential for HSR operations to result in noise impacts at land uses within the Plan area, based on existing information.

The noise environment in the Plan area is currently dominated by freeway and traffic noise, with intermittent single-event noises such as aircraft over-flights. The HSR trains would be heard as a short-duration, single-event sound. The maximum noise from HSR pass-bys would be similar to or less than existing single-event sounds occurring in the area such as train pass-bys. The projected noise level from HSR operations (60-70 dBA DNL) is consistent with existing noise sources such as traffic and is within the range of ambient noise levels in the Plan area. As an additional source of single-event noise, the HSR will incrementally increase ambient noise levels in the vicinity of the tracks, although it is currently unknown if the permanent increase would be substantial at nearby properties.

Based on the current HSR alignment, future residential development in the Stockton Corridor and Park/San Carlos subareas would be located beyond the FTA screening distance of 375 feet from the tracks. The Dupont/McEvoy subarea, which is designated for residential uses, is adjacent to the planned HSR alignment, as well as existing hard and light rail lines. As with all future projects with a residential component, new development at this location will be required to complete a design-specific analysis to verify consistency with the City's noise standards, in accordance with General Plan policies. When factoring in noise from HSR operations, projects immediately adjacent to the

[109] Soft, grassy ground coverage would attenuate more noise than hard concrete or asphalt surfaces. **Source:** CHSRA. *High-Speed Train Sound Fact Sheet*. 2010.
[110] The noise level is based on 258 trains operating during the hours of 7:00 AM to 10:00 PM and 14 trains during the nighttime hours (between 10:00 PM and 12:00 AM and between 5:00 AM and 7:00 AM). **Source:** CHSRA. *High-Speed Train Sound Fact Sheet*. 2010.
[111] CHSRA. *High-Speed Train Sound Fact Sheet.* 2010.
[112] The screening distances are dependent on train speed (greater or less than 125 mph), existing ambient noise environment (noisy or quiet), and location of the train alignment (within an existing rail or highway corridor or on a new alignment). For example, when the train would travel at less than 125 mph through urban/noisy suburban environments, a screening distance of 375 feet was applied from the centerline of the track to determine the residential population, acres of parkland and number of schools and hospitals that would be exposed to HSR noise. **Source:** CHSRA and FRA. *Bay Area to Central Valley High-Speed Train Program EIR/EIS.* 2008.

tracks may have to incorporate additional noise reduction measures to meet the objective for instantaneous noise.

The current HSR alignment also passes through the planned community park site and the Royal/Auzerais subarea. With the contribution of HSR, it is unlikely that future noise levels at these locations would exceed the conditionally ~~expectable~~ acceptable level of 80 dBA DNL, based on existing ambient conditions (up to 74 dBA DNL), HSR travel speeds (less than 125 mph), and estimated noise level along the HSR alignment (approximately 70 dBA DNL at a distance of 50 feet). Appropriate noise reduction features will be included in the park design to minimize noise from traffic and intermittent sources to the extent feasible.

As described in Section 4.1.4, the HSR EIR prepared by the CHSRA and FRA in 2008 determined that the proposed San José station location would be highly compatible with the planned high density, transit-oriented development in the area. The subsequent project-level EIRs to be prepared by the CHSRA and FRA will address potential impacts to the north and south of the Diridon Station and at the station itself. The analyses will evaluate site-specific noise impacts and identify appropriate mitigation to be incorporated into engineering design, considering the visual effects of noise barriers as needed.

For these reasons, the operation of the HSR system in the Plan area is not expected to expose future residential uses to noise or vibration levels in excess of City of San José standards, although supplemental analysis to be completed by the CHSRA will be required to verify this conclusion.

When combined with the proposed baseball stadium, HSR, and BART projects, the proposed project would contribute to permanent increases in the ambient noise environment. With implementation of General Plan policies, future development under the DSAP would not result in or contribute to a significant cumulative impact related to noise and land use compatibility. **[Less than Significant Cumulative Impact]**

4.3.5.3 *Cumulative Ground-borne Noise and Vibration Impacts*

In terms of rail operations, ground-borne vibration refers to the fluctuating motion experienced by people on the ground and in buildings near railroad tracks, while ground-borne noise is the rumbling sound caused by vibration of building surfaces. Airborne noise often masks ground-borne noise for aboveground (i.e., at-grade or elevated) rail systems, while ground-borne noise criteria are primarily applied to underground operations where airborne noise is not a factor. Therefore, future development under the DSAP could be exposed to ground-borne noise associated with BART and vibration associated with both BART and HSR. As with aboveground noise, the DSAP would also increase sensitive uses in proximity to the alignments, potentially resulting in new impacts.

BART

The BART line would be constructed under the Central Zone and adjacent to the Stockton Corridor subarea. The Central Zone is designated for commercial uses under both the DSAP and 2040 General Plan, while the portion of the Stockton Corridor subarea adjacent to the BART alignment is planned for mixed residential/commercial development.

Previous ground-borne noise and vibration analyses were completed for the BART project. The most recent environmental document (EIS prepared by VTA/FTA in 2010) is based on the assumptions that the trains would have an operating speed of 67 mph and the trains would operate from 4:00 AM to 1:30 AM with six-minute headways during peak service and 20-minute headways during off-peak service. The EIS did not identify any vibration impacts based on FTA criteria for the tunnel portion of the BART alignment, including the segment through the Plan area.[113]

The EIS identified locations along the BART alignment where sensitive receptors would be exposed to ground-borne noise exceeding FTA criteria. The mitigation strategies for ground-borne noise include highly resilient direct fixation rail fasteners (HRDF) and rail suspension fasteners (RSF).[114] The BART EIS did not identify any sensitive receptors within 350 feet of the alignment in the Plan area; therefore, it is assumed that mitigation measures for ground-borne noise will not be incorporated into the design of the segment through the Plan area.

Based on estimates for adjacent segments, ground-borne noise levels from BART operations could range from 36 to 39 dBA in the Plan area. Although these levels exceed FTA criteria for sensitive land uses such as residences, the DSAP proposes non-residential uses in the Central Zone. It is possible, however, that ground-borne noise would exceed the 35 dBA threshold at future residential development sites in the Stockton Corridor.

Based on projections for adjacent segments, vibration levels in the Plan area could range from 69 to 72 VdB at distances of 40-60 feet from the BART line. It was determined that vibration levels at the historic Del Monte Cannery buildings and the historic San José Water building, located on either side of the Plan area, are not expected to exceed residential annoyance levels for frequent events (72 VdB).[115] Based on this finding and the distance to the planned BART station (over 250 feet), it can be concluded that operation of BART would not result in vibration that would substantially affect the historic Diridon Station.

The FTA threshold for ground-borne vibration in buildings where low ambient vibration is essential for interior operations is 65 VdB. Therefore, the BART project could limit the types of businesses that would locate in the new buildings constructed in the Central Zone above the BART line, because some manufacturing and research methods are sensitive to vibration.

High Speed Rail

The ground-borne vibration caused by HSR trains is relatively lower when compared to conventional passenger and freight trains, due to advanced track technology, smooth track and wheel surfaces, and maintenance standards required for high-speed operation.[116] The potential for vibration impacts increase with proximity between the buildings and tracks. Where speeds are expected to be low, the vibration is confined to within 100 feet of the track. At top speeds, the potential impacts extend to

[113] VTA. *Silicon Valley Rapid Transit Corridor, BART Extension to Milpitas, San Jose and Santa Clara, Draft EIR.* 2007.
[114] VTA and FTA. *Silicon Valley Rapid Transit Corridor, BART Extension to Milpitas, San Jose and Santa Clara, Final EIS.* 2010.
[115] The BART line would pass directly underneath or just south of these buildings.
[116] CHSRA and FRA. *Bay Area to Central Valley High-Speed Train Program EIR/EIS.* 2008.

200 feet.[117] The effects of ground-borne vibration in a building located close to a rail line could at worst include perceptible movement of the floors, rattling of windows, shaking of items on shelves or hanging on walls, and rumbling sounds. None of these effects are great enough to cause damage, but could result in annoyance if repeated many times daily.[118]

In the program-level EIR prepared for the HSR project, the San Francisco to San José and San José to Gilroy segments (separated by Diridon Station) were rated as having a medium level of potential vibration impacts due to the proximity of residential structures to the alignment.[119]

As described above, the HSR line would be constructed through and adjacent to subareas designated for employment uses under the DSAP, with the exception of the Dupont/McEvoy subarea. Ground-borne vibration from HSR operations would be perceptible within approximately 100 feet of the track, potentially affecting future mixed use residential development in the Dupont/McEvoy subarea. Future light industrial development in the Royal/Auzerais subarea should also consider vibration levels in the event vibration-sensitive operations are proposed.

During supplemental environmental review of the HSR project, several track treatments will be considered for reducing train vibrations, depending on the site-specific ground conditions. The project-level EIRs should also address the potential for vibration impacts at the planned park and future residential development sites in the Plan area.

Consistent with GP Policy EC-2.1, new development within 100 feet of BART and/or HSR line must demonstrate that vibration experienced by residents and vibration-sensitive uses would not exceed FTA guidelines. Vibration impacts can be minimized through the use of setbacks and/or structural design. Ensuring lower vibration levels in a building often requires special HVAC systems and stiffened floors.[120] With implementation of this policy, the proposed project would not result in a new impact related to vibration from BART or HSR operations. Supplemental analysis may also be required to verify that ground-borne noise from BART operations would not exceed FTA thresholds at future residential development in the Stockton Corridor subarea.

Future development under the DSAP could be exposed to ground-borne noise and vibration associated with BART and HSR operations. With implementation of General Plan policies, the proposed project would not result in or contribute to a significant cumulative impact related to ground-borne noise and vibration. **[Less than Significant Cumulative Impact]**

4.3.5.4 *Cumulative Construction-related Noise and Vibration Impacts*

Construction noise associated with future development under the DSAP could combine with construction noise from other approved or planned projects in the area, which may result in temporary cumulative noise impacts at nearby sensitive receptors. Implementation of standard noise

[117] Ibid.
[118] Ibid.
[119] Ibid.
[120] VTA and FTA. *Silicon Valley Rapid Transit Corridor, BART Extension to Milpitas, San Jose and Santa Clara, Final EIS.* 2010.

control measures and General Plan policies listed in Section 4.3.4.4 above would reduce the potential for temporary noise impacts at noise-sensitive receptors.

Given the long-term timeframe anticipated for DSAP build-out and HSR/BART construction, it is not anticipated that any single receptor would be exposed to a significant impact cumulative noise impact due to construction activities. With implementation of General Plan policies, future development under the DSAP would not result in or contribute to significant cumulative impact related to construction noise. **[Less than Significant Cumulative Impact]**

4.3.6 Conclusion

Implementation of General Plan policies and other applicable regulations will ensure that future development allowed under the DSAP would not be exposed to interior and exterior noise levels in excess of City standards in the long- or short-term. Future development under the DSAP would not expose people residing or working in the Plan area to excessive noise levels associated with aircraft operations, nor would it conflict with CLUP standards related to noise and land use compatibility. The proposed project would not result in a significant impact due to ground-borne vibration or noise. **[Less than Significant Impact]**

The project would not make a substantial contribution to traffic noise when considered in combination with planned growth in the Downtown Core and surrounding area. With implementation of General Plan policies, future development under the DSAP would not result in or contribute to a significant cumulative impact related to noise and land use compatibility. **[Less than Significant Cumulative Impact]**

Impact NV-1: Build-out of the DSAP would result in a significant unavoidable impact at existing noise-sensitive land uses adjacent to segments of Julian Street, Park Avenue, and San Carlos Street due to substantial increases in traffic noise. Although the Envision PEIR did not identify increases at these specific locations, this conclusion is consistent with the analysis in the Envision PEIR, which acknowledged that future development would result in a significant traffic noise impact at noise-sensitive uses throughout the City. **[Significant Unavoidable Impact]**

4.4 AIR QUALITY

This section is primarily based upon the Envision PEIR and an Air Quality Assessment prepared by Illingworth & Rodkin, Inc. in July 2012. The Air Quality Assessment is included as Appendix E of this PEIR. This PEIR provides project-level clearance for future projects in the Plan area for operational emissions of criteria pollutants, as described in Section 4.4.3, below.

4.4.1 Background and Setting

Air quality is affected by natural factors such as topography, meteorology, and proximity to sources of air pollution. The project site is located in the Santa Clara Valley within the San Francisco Bay Air Basin. The Bay Area typically has moderate ventilation, frequent inversions that restrict vertical dilution, and terrain that restricts horizontal dilution, which give the Bay Area a relatively high atmospheric potential for pollution. As winds blow southward down the Bay, air pollutant emissions from urbanized areas are transported to the Santa Clara Valley.

The primary pollutants of concern in the Bay Area are: ozone, particulate matter, and carbon monoxide. These pollutants can have health effects such as respiratory impairment and heart/lung disease symptoms.

Motor vehicle use is the largest source of ozone precursors, carbon monoxide, and particulates in the Bay Area. Other sources of particulate matter include factories, construction, grading, demolition, agriculture, and wood burning. Consumer products such as aerosol sprays and paint applications are sources of ozone precursors.

Ozone and particulate matter are considered regional pollutants in that concentrations are not determined by proximity to individual sources, but show a relative uniformity over a region. Carbon monoxide tends to be concentrated at the source such as congested intersections.

Ozone, also called photochemical smog, is formed by a chemical reaction between ozone precursors, primarily reactive organic gases (ROG) and nitrogen oxides (NOx), in the presence of sunlight.

Particulate matter consists of solid and liquid particles of dust, soot, aerosols and other matter which are small enough to remain suspended in the air for a long period of time. Respirable particulate matter has a diameter of 10 micrometers or less and is referred to as PM_{10}. $PM_{2.5}$ is a subgroup of finer particles with a diameter of 2.5 micrometers or less.

Carbon monoxide (CO) is an odorless, colorless gas formed by the incomplete combustion of fuels.

Toxic Air Contaminants

Toxic Air Contaminants (TACs), which include carcinogenic and non-carcinogenic compounds, are known to cause a wide range of acute health effects (e.g., throat irritation) and chronic effects including morbidity or mortality. These compounds are generated by industry, agriculture, fuel combustion, backup generators, and commercial operations (e.g., dry cleaners). TACs occur in ambient air but are typically found in low concentrations, even near their source. Diesel particulate matter is the predominant TAC in urban environments in the Bay Area. Other common TACs such as benzene are found in gasoline vapors and vehicle exhaust.

4.4.2 Regulatory Framework

The Plan area is within the San Francisco Bay Area Air Basin. The Bay Area Air Quality Management District (BAAQMD) is responsible for monitoring air quality and regulating sources of air pollution in the region.

As required by the Federal Clean Air Act and the California Clean Air Act, ambient air quality standards have been established for ozone, particulate matter, carbon monoxide, nitrogen dioxide (NO_2), sulfur dioxide (SO_2), and lead. These are considered "criteria pollutants" by the U.S. Environmental Projection Agency (USEPA) and the California Air Resources Board (CARB). California's standards for criteria pollutants are the same or more stringent than the national standards. Based on air quality monitoring data, CARB is required to designate areas that do not meet the national or state ambient air quality standards as "non-attainment areas". The Bay Area does not meet state or federal ambient air quality standards for ground level ozone, or state standards for PM_{10} and $PM_{2.5}$. The region is considered attainment or unclassified for all other pollutants. Recent measurements at the nearest monitoring in San José indicate that carbon monoxide concentrations are well below ambient air quality standards.[121]

CARB diesel vehicle regulations require construction equipment engines to be replaced and equipment fleets managed in the next several years, which will lead to an overall decrease in emissions of exhaust particulate matter and ozone precursor emissions.

4.4.2.1 *Clean Air Plan*

BAAQMD is required to adopt a clean air plan (CAP) on a triennial basis that shows progress towards meeting state air quality standards. The Bay Area 2010 Clean Air Plan, which was adopted in September 2010, serves as the region's current CAP. In addition to attaining air quality standards, the core goals of the CAP are to protect public health by reducing exposure to air pollutants and protect the climate by reducing greenhouse gas emissions.

The CAP establishes emission control measures to be adopted or implemented in the 2010-2012 timeframe. The 2010 CAP organizes control measures into five categories:

1. **Stationary Source Measures (SSMs):** reduce emissions from individual facilities such as refineries and manufacturing plants and from area sources such as residential furnaces, water heaters, and consumer products (e.g., paints, solvents, and cleaners).
2. **Mobile Source Measures (MSMs):** reduce emissions by accelerating the replacement of older, dirtier vehicles and equipment.
3. **Transportation Control Measures (TCMs):** reduce emissions from automobiles by reducing vehicle trips, vehicle miles traveled, vehicle idling, and/or traffic congestion.
4. **Land Use and Local Impact Measures (LUMs):** promote mixed-use, compact development to reduce motor vehicle travel and emissions, and ensure that planned growth is focused in a way that protects people from exposure to air pollution from stationary and mobile sources of emissions.

[121] The highest eight-hour average CO concentration recorded at the San José – Jackson station between 2009 and 2011 was 2.5 ppm. **Source:** CARB. iADAM Air Quality Statistics. 2012. Accessed: August 26, 2012. <http://www.arb.ca.gov/adam>.

5. **Energy and Climate Measures (ECMs):** reduce ambient concentrations of criteria pollutants and greenhouse gases through promoting energy conservation and efficiency in buildings and renewable forms of energy production.[122]

4.4.2.2 *BAAQMD CEQA Air Quality Guidelines*

The BAAQMD CEQA Air Quality Guidelines are intended to serve as a guide for those who prepare or evaluate air quality impact analyses for projects and plans in the San Francisco Bay Area. In June 2010, the Air District's Board of Directors adopted CEQA thresholds of significance and an update of their CEQA Guidelines. The updated CEQA Guidelines review and describe assessment methodologies, and mitigation strategies for criteria pollutants, toxic air contaminants, odors, and greenhouse gas emissions.

As part of an effort to attain and maintain ambient air quality standards for ozone and particulate matter, BAAQMD has established thresholds of significance for $PM_{2.5}$, PM_{10}, and ozone precursors (ROG and NOx). The thresholds of significance are intended to accommodate a level of growth within the air basin that would still allow the region to attain air quality standards. The thresholds under the 2010 BAAQMD Guidelines are shown in Table 4.4-1 below.

Table 4.4-1:
Criteria Air Pollutants BAAQMD Thresholds of Significance

Pollutant	Average Daily Emissions (pounds/day)	Maximum Annual Emissions (tons/year)
ROG	54	10
NO_X	54	10
PM_{10}	82	15
$PM_{2.5}$	54	10
CO	9.0 ppm (8-hour average), 20.0 ppm (1-hour average)	

4.4.2.3 *Community Air Risk Evaluation (CARE) Program*

BAQQMD established the Community Air Risk Evaluation (CARE) program to evaluate and reduce health risks associated with exposures to outdoor toxic air contaminants (TACs) in the Bay Area. Under the program, BAAQMD identifies locations that have both high levels of risk from TACs and sensitive populations, referred to as "priority communities". The Plan area is within the priority community boundary identified for San José and is identified as having a high level of TAC sources,

[122] Other ECMs include increasing reflectivity of roofs and parking lots to reduce the "urban heat island" effect and planting trees to lower air temperatures, provide shade, and absorb air pollutants.

although it is not within the top 50 percent quartile for TAC exposure. As recommended by BAAQMD, the City of San José is currently preparing a Community Risk Reduction Plan to reduce the overall exposure to TAC and $PM_{2.5}$ emissions and concentrations from new and existing sources.

4.4.2.4 *Sensitive Receptors*

BAAQMD defines sensitive receptors as facilities where sensitive receptor population groups (children, the elderly, the acutely ill and the chronically ill) are likely to be located. These land uses include residences, elementary schools, child-care centers, retirement homes, convalescent homes, hospitals, medical clinics, and parks. As described in Section 4.1 *Land Use*, existing residential uses and a school are located within the Plan area and residential neighborhoods are located in the surrounding area.

4.4.2.5 *Odors*

Odors are generally regarded as an annoyance rather than a health hazard. The ability to detect odors varies considerably among the population and people may have different reactions to the same odor.

The BAAQMD CEQA Guidelines provide a list of recommended odor screening distances for specific odor-generating facilities. The Envision PEIR does not identify any potential odor sources in the Central/Downtown Planning Area, which includes the DSAP area.

4.4.2.6 *City of San José Plans and Policies*

Envision San José 2040 General Plan

Various policies in the City's General Plan have been adopted for the purpose of reducing or avoiding impacts related to air quality, as listed in the following table. In addition, goals and policies throughout the Envision San José 2040 General Plan encourage a reduction in vehicle miles traveled through land use, pedestrian, bicycle, and access to transit improvements, parking strategies that reduce automobile travel through parking supply and pricing management, and requirements for Transportation Demand Management programs for large employers. Additional policies have been adopted to reduce energy use (and thus emissions from fuel use). Refer to Sections 4.2 *Transportation*, 4.11 *Energy*, and 4.12 *Greenhouse Gas Emissions* for these policies.

Table 4.4-2:
General Plan Policies: Air Quality

Air Pollutant Emission Reduction Policies	
Policy MS-10.1	Assess projected air emissions from new development in conformance with the Bay Area Air Quality Management District (BAAQMD) CEQA Guidelines and relative to state and federal standards. Identify and implement feasible air emission reduction measures.

Policy MS-10.5	In order to reduce vehicle miles traveled and traffic congestion, require new development within 2,000 feet of an existing or planned transit station to encourage the use of public transit and minimize the dependence on the automobile through the application of site design guidelines and transit incentives.
Policy MS-10.8	Minimize vegetation removal required for fire prevention. Require alternatives to discing, such as mowing, to the extent feasible. Where vegetation removal is required for property maintenance purposes, encourage alternatives that limit the exposure of bare soil.
Action MS-10.10	Actively enforce the City's ozone-depleting compound ordinance and supporting policy to ban the use of chlorofluorocarbon compounds (CFCs) in packaging and in building construction and remodeling to help reduce damage. The City may consider adopting other policies or ordinances to reinforce this effort to help reduce damage to the global atmospheric ozone layer.
Action MS-10.11	Enforce the City's wood-burning appliance ordinance to limit air pollutant emissions from residential and commercial buildings.
Action MS-10.12	Increase the City's alternative fuel vehicle fleet with the co-benefit of reducing local air emissions. Implement the City's Environmentally Preferable Procurement Policy (Council Policy 4-6) and Pollution Prevention Policy (Council Policy 4-5) in a manner that reduces air emissions from municipal operations. Support policies that reduce vehicle use by City employees.
Toxic Air Contaminants Policies and Actions	
Policy MS-11.1	Require completion of air quality modeling for sensitive land uses such as new residential developments that are located near sources of pollution such as freeways and industrial uses. Require new residential development projects and projects categorized as sensitive receptors to incorporate effective mitigation into project designs or be located an adequate distance from sources of toxic air contaminants (TACs) to avoid significant risks to health and safety.
Policy MS-11.2	For projects that emit toxic air contaminants, require project proponents to prepare health risk assessments in accordance with BAAQMD-recommended procedures as part of environmental review and employ effective mitigation to reduce possible health risks to a less than significant level. Alternatively, require new projects (such as, but not limited to, industrial, manufacturing, and processing facilities) that are sources of TACs to be located an adequate distance from residential areas and other sensitive receptors.
Policy MS-11.3	Review projects generating significant heavy duty truck traffic to designate truck routes that minimize exposure of sensitive receptors to TACs and particulate matter.
Policy MS-11.4	Encourage the installation of air filtration, to be installed at existing schools, residences, and other sensitive receptor uses adversely affected by pollution sources.
Policy MS-11.5	Encourage the use of pollution absorbing trees and vegetation in buffer areas between substantial sources of TACs and sensitive land uses.
Action MS-11.6	Develop and adopt a comprehensive Community Risk Reduction Plan that includes: baseline inventory of toxic air contaminants (TACs) and particulate matter smaller than 2.5 microns ($PM_{2.5}$) emissions from all sources, emissions reduction targets, and enforceable emission reduction strategies and performance measures. The Community

	Risk Reduction Plan will include enforcement and monitoring tools to ensure regular review of progress toward the emission reduction targets, progress reporting to the public and responsible agencies, and periodic updates of the plan, as appropriate.
Action MS-11.8	For new projects that generate truck traffic, require signage which reminds drivers that the State truck idling law limits truck idling to five minutes.
Objectionable Odor Policies	
Policy MS-12.1	For new, expanded, or modified facilities that are potential sources of objectionable odors (such as landfills, green waste and resource recovery facilities, wastewater treatment facilities, asphalt batch plants, and food processors), the City requires an analysis of possible odor impacts and the provision of odor minimization and control measures as mitigation.
Policy MS-12.2	Require new residential development projects and projects categorized as sensitive receptors to be located an adequate distance from facilities that are existing and potential sources of odor. An adequate separate distance will be determined based upon the type, size and operations of the facility.
Construction Air Emission Minimization Policies	
Policy MS-13.1	Include dust, particulate matter, and construction equipment exhaust control measures as conditions of approval for subdivision maps, site development and planned development permits, grading permits, and demolition permits. At a minimum, conditions shall conform to construction mitigation measures recommended in the current BAAQMD CEQA Guidelines for the relevant project size and type.
Policy MS-13.2	Construction and/or demolition projects that have the potential to disturb asbestos (from soil or building material) shall comply with all the requirements of the California Air Resources Board's air toxic control measures (ATCMs) for Construction, Grading, Quarrying, and Surface Mining Operations.
Policy MS-13.3	Require subdivision designs and site planning to minimize grading and use landform grading in hillside areas.
Action MS-13.4	Adopt and periodically update dust, particulate, and exhaust control standard measures for demolition and grading activities to include on project plans as conditions of approval based upon construction mitigation measures in the BAAQMD CEQA Guidelines.
Action MS-13.5	Prevent silt loading on roadways that generates particulate matter air pollution by prohibiting unpaved or unprotected access to public roadways from construction sites.
Action MS-13.6	Revise the grading ordinance and condition grading permits to require that graded areas be stabilized from the completion of grading to commencement of construction.

4.4.3 Air Quality Impacts

4.4.3.1 *Thresholds of Significance*

For the purposes of this PEIR, an air quality impact is significant if implementation of the proposed DSAP would:

- Conflict with or obstruct implementation of the applicable air quality plan;
- Violate any air quality standard or contribute substantially to an existing or projected air quality violation;
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors);
- Expose sensitive receptors to substantial pollutant concentrations; or
- Create objectionable odors affecting a substantial number of people.

It should be noted that BAAQMD recommends that local agencies use different approaches for evaluating impacts from specific development projects when compared to long-range plans subject to program-level analysis under CEQA (including general plans and area plans).[123] Although the DSAP is a long-range, area-wide plan, it also proposes a maximum level of development. To analyze future development as a whole, the DSAP is considered a "project" for the purposes of this EIR. The evaluation of plan-level impacts tiers from the Envision PEIR, as discussed in Section 4.4.4 below.

Build-out of the DSAP would generate pollutants that could affect local and regional air quality during both operational and construction phases of development. Regional air quality impacts would result if the project would contribute substantially to an air quality violation for criteria pollutants, as discussed in Section 4.4.3.2 below. Local air quality impacts would result if the project would cause local emissions of carbon monoxide to exceed ambient air quality standards (refer to Section 4.4.3.2) or expose sensitive receptors to substantial pollutant concentrations (refer to Section 4.4.3.3).

4.4.3.2 *Air Quality Standards*

As described above, the Bay Area is in violation of California and/or national ambient air quality standards for ozone and particulate matter. BAAQMD has established thresholds of significance for $PM_{2.5}$, PM_{10}, and ozone precursors (ROG and NOx), which represent the levels at which a project's individual emissions would result in a cumulatively considerable contribution to the region's existing air quality violations. The thresholds under the 2010 BAAQMD Guidelines are shown in Table 4.4-1 above.

Operational Emissions of Regional Criteria Pollutants

Operation of the project would generate emissions mainly through vehicle trips associated with future development. In addition to mobile source emissions, "area sources" such as consumer

[123] To meet the thresholds of significance for operational-related criteria air pollutants, a proposed plan's projected increase in VMT or vehicle trips must be less than or equal to its projected population increase.

product use, paint applications, and natural gas combustion for water and space heating would also contribute to operational emissions.

The Envision PEIR concluded that development allowed under the 2040 General Plan would result in a significant unavoidable impact due to an increase in air pollutant emissions and concentrations within the air basin. To evaluate regional emissions associated with future development under the DSAP, an air quality assessment was completed. The methodology and results of the assessment are summarized below. Please refer to Appendix E for the complete report.

Methodology

The California Emissions Estimator Model 2011.1.1 (CalEEMod) was utilized to predict average daily and annual emissions. Trip generation rates, adjusted for the mode share split, were used in CalEEMod to determine area plan mobile emissions.[124] Given that full build-out of the Plan Area is assumed to occur over 25-30 years, the model used emissions factors for 2035, which is the latest year currently available from the ARB.

For area sources, it was assumed that no residences would use wood-burning stoves or fireplaces, although natural gas stoves may be used. Additionally, the model was adjusted to account for current BAAQMD regulations pertaining to architectural coatings (Reg. 8, Rule 3), which limits most paints to less than 150 grams of volatile organic compounds per liter. To account of the Green Building Ordinance and Policies of the City, all new building construction was assumed to exceed Title 24 requirements by 20 percent.

Results of Modeling

As shown in the table below, the DSAP is expected to generate substantial emissions of regional criteria pollutants that exceed the BAAQMD thresholds for ROG and NOx. The project is not projected to generate operational emissions that exceed PM_{10} or $PM_{2.5}$ thresholds.

Table 4.4-3:
Operational Emissions of Criteria Pollutants

	ROG	**NOx**	**PM_{10}**	**$PM_{2.5}$**
Annual Emissions (tons per year)				
BAAQMD Thresholds	10	10	15	10
Project Emissions	**64.71**	**38.06**	3.08	2.69
Daily Emissions (pounds per day)				
BAAQMD Thresholds	54	54	82	54
Project Emissions	**355**	**209**	17	15
Bold indicates a significant impact.				

[124] The TIA found that approximately 80 percent of people would drive as their main mode of commuter transportation.

A large percentage of the ROG emissions can be attributed to consumer product use (i.e., aerosol sprays). There are no other feasible mitigation measures for reducing these emissions at the Plan level.

Conformance with General Plan policies, particularly those related to the Greenhouse Gas Reduction Strategy (refer to Section 4.12 *Greenhouse Gases*), would serve as mitigation for long-term air quality impacts associated with vehicle travel and building operations. For example, the City has adopted a Green Building Ordinance to improve energy efficiency associated with new development, as described in Section 4.11 *Energy*. In addition, the proposed project supports the replacement of vehicle trips with walking, biking, and transit trips and is intended to reduce VMT over the long-term (refer to Section 4.2.4.2).

Measures Included in the Project to Reduce and Avoid Impacts related to Regional Air Quality

To reduce emissions associated with vehicle travel, future development will be required to implement a transportation demand management (TDM) program, consistent with the Transportation and Parking Management Plan (TPMP) to be prepared for the DSAP. The TDM Programs may incorporate the following Transportation Control Measures (TCMs):[125]

- **Rideshare Measures:**
  - Implement carpool/vanpool program (e.g., carpool ride matching for employees, assistance with vanpool formation, provision of vanpool vehicles, etc.)
- **Transit Measures:**
  - Construct transit facilities such as bus turnouts/bus bulbs, benches, shelters, etc.
  - Design and locate buildings to facilitate transit access (e.g., locate building entrances near transit stops, eliminate building setbacks, etc.)
- **Services Measures:**
  - Provide on-site shops and services for employees, such as cafeteria, bank/ATM, dry cleaners, convenience market, etc.;
  - Provide on-site child care or contribute to off-site childcare within walking distance.
- **Shuttle Measures:**
  - Establish mid-day shuttle service from work site to food service establishments/commercial areas;
  - Provide shuttle service to transit stations/multimodal centers
- **Parking Measures:**
  - Provide preferential parking (e.g., near building entrance, sheltered area, etc.) for carpool and vanpool vehicles;
  - Implement parking fees for single occupancy vehicle commuters;
  - Implement parking cash-out program for employees (i.e., non-driving employees receive transportation allowance equivalent to value of subsidized parking);
- **Bicycle and Pedestrian Measures:**
  - Provide secure, weather-protected bicycle parking for employees;
  - Provide safe, direct access for bicyclists to adjacent bicycle routes;
  - Provide showers and lockers for employees bicycling or walking to work;

[125] These measures are recommended by BAAQMD for reducing emissions associated with vehicle travel and are identified in the Strategy 2000 EIR as mitigation measures for regional air quality impacts.

  - Provide secure short-term bicycle parking for retail customers or non-commute trips;
  - Provide direct, safe, attractive pedestrian access from Planning Area to transit stops and adjacent development;
- **Other Measures:**
  - Implement compressed work week schedule (e.g., 4 days/40 hours, 9 days/80 hours);
  - Implement home-based telecommuting program.

During supplemental review of future projects, the TDM programs will be evaluated for consistency with the DSAP and General Plan policies. All feasible and applicable measures will be required as part of project design or as conditions of approval.

Although the DSAP could substantially reduce emissions of regional air pollutants over the long-term, it cannot be determined whether implementation of General Plan policies and proposed measures would reduce the impact to a less than significant level. Therefore, the impact would remain significant and unavoidable.

Impact AQ-1: Build-out of the DSAP would result in a net increase in ROG and NOx in the Bay area, contributing to existing violations of ozone standards. This conclusion is consistent with the analysis in the Envision PEIR and Strategy 2000 EIR. **[Significant Unavoidable Impact]**

Operational Emissions of Local Criteria Pollutants (Carbon Monoxide)

In addition to regional criteria pollutants, vehicles emit carbon monoxide (CO), which is considered a local pollutant because it tends to concentrate near the source. As a result, CO "hot spots" are generally found at congested intersections with a large volume of traffic. The BAAQMD threshold for operational emissions of carbon monoxide is equivalent to the California ambient air quality standards of 9.0 ppm (8-hour average) or 20.0 ppm (1-hour average).

The air quality analysis evaluated the potential for the project to violate state standards for CO. Modeling was completed for three intersections in the study area with the highest traffic volumes, based on the traffic analysis prepared for the project. The three intersections include: 1) Coleman Avenue and Taylor Street; 2) Coleman Avenue and Hedding Street; and 3) Bird Avenue and San Carlos Street. Note that only the Bird Avenue/San Carlos Street intersection is within the Plan area.

For purposes of providing a conservative analysis, the ambient CO concentration at these locations is considered to be 2.5 ppm, which is the highest eight-hour average CO concentration recorded at the San José – Jackson station between 2009 and 2011.[126]

The California Line Source Dispersion Model (CALINE4) was used to predict the 8-hour concentrations at these intersections. The 2035 emissions factors were applied to traffic volumes under cumulative conditions (refer to Section 4.2.4.1). Based on the modeling, the 8-hour average concentration would be 2.9 ppm at the two Coleman Avenue intersections and 2.8 ppm at the Bird Avenue/San Carlos Street intersection. Compared to existing conditions, CO concentrations would increase by only 0.3-0.4 ppm and would not exceed the standard of 9.0 ppm. Based on existing and

[126] CARB. iADAM Air Quality Statistics. 2012. Accessed: August 26, 2012. <http://www.arb.ca.gov/adam/>

future traffic volumes, CO concentrations would be even lower at all other intersections in the study area under project conditions. Build-out of the DSAP would not result in a violation of carbon monoxide standards. **[Less than Significant Impact]**

Construction Emissions

Construction and demolition activities generate criteria pollutants. The operation of diesel-powered construction equipment generates fine particulates (PM2.5), carbon monoxide, and ozone precursors. Vehicle travel on unpaved surfaces and ground-disturbing activities such as grading generate fugitive dust, which generally consists of larger, "coarse" particles (PM10). In addition to contributing to regional concentrations of criteria pollutants, construction activities can affect local air quality and expose sensitive receptors to dust and TAC emissions, as described in Section 4.4.2.3 below.

The BAAQMD Guidelines recommend different approaches for evaluating construction-related air quality impacts, as summarized in the following table.

Table 4.4-4:
BAAQMD Guidelines for the Evaluation of Construction Emissions

Criteria Pollutants

- Establishes thresholds for average daily emissions of regional criteria pollutants. (No threshold for carbon monoxide – a local criteria pollutant.)
- Provides screening criteria for projects based on land use type and size, to determine need for detailed analysis. For reference, the screening levels for applicable land uses are:
  - **240 dwelling units**: "condo/townhouse, general" and mid-rise apartments[127]
  - **554 rooms**: hotel
  - **277,000 square feet**: office building, day care center, library, and retail (restaurant, drug store, convenience market, etc)
- Includes lists of "Basic Construction Mitigation Measures" for all projects and "Additional Construction Mitigation Measures" for projects that would generate construction-related emissions exceeding the daily emission thresholds.

For the purposes of this analysis, it is estimated that maximum build-out of the DSAP would include construction of approximately 8.54 million square feet of building space.[128] When averaged over a 30-year period, this would equate to construction of approximately 284,000 square feet of building

[127] BAAQMD does not define "mid-rise" or high-rise", although according to the Institute of Transportation Engineers (ITE) trip generation rates, which BAAQMD refers to throughout the Guidelines, "mid-rise" is defined as a building with 3-12 stories, while "high-rise" is taller than 12 stories.

[128] For purposes of evaluating construction emissions, the proposed development levels for hotels and mid-rise housing were converted to square feet of commercial space using the screening levels (277,000 square feet of commercial space = 240 dwelling units = 554 hotel rooms).

space per year. This is close to the BAAQMD Guidelines general screening level of 277,000 square feet.

Measures Included in the Project to Reduce Construction Emissions

All future projects would be evaluated for construction-related impacts at the time development is proposed. In conformance with 2010 BAAQMD CEQA Guidelines, GP Policy MS-13.1, and current City requirements, all projects will be required to implement the following control measures:

- All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
- All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
- All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- All vehicle speeds on unpaved roads shall be limited to 15 mph.
- All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
- Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations). Clear signage shall be provided for construction workers at all access points.
- All construction equipment shall be maintained and properly tuned in accordance with manufacturer‘s specifications. All equipment shall be checked by a certified visible emissions evaluator.
- Post a publicly visible sign with the telephone number and person to contact at the lead agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District‘s phone number shall also be visible to ensure compliance with applicable regulations.

Future projects under the DSAP that incorporate these measures and are below the screening levels would not result in a significant impact related to construction emissions of regional criteria pollutants.

Future projects that exceed the screening levels would be required to complete additional analysis of construction-related emissions of criteria pollutants. Additional measures may be required to ensure that construction emissions would not exceed the threshold for average daily emissions. According to the 2010 BAAQMD Guidelines, additional measures that would further reduce emissions include:

- Water all exposed surfaces at a frequency adequate to maintain minimum soil moisture of 12 percent (verified by lab samples or moisture probe).
- Suspend all excavation, grading, and/or demolition activities when average wind speeds exceed 20 mph.
- Install wind breaks with a maximum 50 percent air porosity (e.g., trees, fences) on the windward side(s) of actively disturbed areas of construction.
- Plant vegetative ground cover (e.g., fast-germinating native grass seed) in disturbed areas as soon as possible and watered appropriately until vegetation is established.

- Limit the simultaneous occurrence of excavation, grading, and ground-disturbing construction activities on the same area at any one time. Phase activities to reduce the amount of disturbed surfaces at any one time.
- Wash off all trucks and equipment, including their tires, prior to leaving the site.
- Treat site access points with a 6-12 inch compacted layer of wood chips, mulch, or gravel, to a distance of 100 feet from the paved road.
- Install sandbags or other erosion control measures to prevent silt runoff to public roadways from sites with a slope greater than one percent.
- Minimize the idling time of diesel powered construction equipment to two minutes.
- Develop a plan demonstrating that the off-road equipment (more than 50 horsepower) to be used in the construction project (i.e., owned, leased, and subcontractor vehicles) would achieve a project wide fleet-average 20 percent NOX reduction and 45 percent PM reduction compared to the most recent ARB fleet average. Acceptable options for reducing emissions include the use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, add-on devices such as particulate filters, and/or other options as such become available.
- Use low VOC (i.e., ROG) coatings beyond the local requirements (i.e., Regulation 8, Rule 3: Architectural Coatings).
- Equip all construction equipment, diesel trucks, and generators with Best Available Control Technology for emission reductions of NOx and PM.
- Use equipment that meets CARB's most recent certification standard for off-road heavy duty diesel engines.

For the purposes of this EIR, it is assumed that all future projects under the DSAP would not exceed the average daily emissions during construction, with incorporation of appropriate measures. In the event a future project would exceed the average daily emission threshold or otherwise result in a significant impact based on current BAAQMD Guidelines and City requirements, supplemental environmental review may be required prior to project approval or implementation.

4.4.3.3 *Impacts to Sensitive Receptors*

Long-term Impacts

The DSAP includes development of new residences and other sensitive uses, which would be exposed to ambient concentrations of toxic air contaminants (TACs). Future development under the DSAP may also involve new sources of TACs that could contribute to community risks and hazards.

Exposure of New Sensitive Uses to Toxic Air Contaminants

As described above, the Plan area is within the priority community boundary identified for San José under BAAQMD's CARE Program. TAC concentrations at specific development sites in the Plan area would vary based on wind direction, screening, and other factors, but would generally be highest near freeways, high volume roadways, railroad lines, and stationary sources.[129]

[129] BAAQMD considers roadways with over 10,000 average daily trips (ADT) as high volume roadways.

Based on a review of BAAQMD's 2009 Toxic Contaminant Inventory (latest version available), there are no reported stationary sources of TACs within the Plan area boundaries.[130] Three stationary sources, including the Caltrain maintenance facility, are located off Stockton Avenue north of Lenzen Avenue, approximately 0.25 miles from the nearest proposed residential uses in the Stockton Corridor subarea. These facilities are upwind and may cause elevated concentrations of TACs at the future development sites. A fourth stationary source is a dry cleaner located at 398 West San Carlos Street, adjacent to residentially designated properties in the Park/San Carlos subarea.

Much of the Plan area is within 1,000 feet of a freeway (I-280 or SR 87), high volume roadway (Santa Clara Street or the Autumn Street/Montgomery Street/Bird Avenue corridor), and/or railroad line.[131] Although the Plan area is identified as having a high level of TAC sources on the CARE map, it is not within the top 50 percent quartile for TAC exposure, primarily because the freeways are downwind. Based on the distance to mobile and stationary sources of TACs, the Dupont/McEvoy subarea appears to have the lowest risk for exposure to substantial pollutant concentrations.

The City of San José is currently working with BAAQMD to develop a Community Risk Reduction Plan to reduce exposures of residents within the priority community boundary to TAC and $PM_{2.5}$ emissions. The Community Risk Reduction Plan will include enforcement and monitoring tools and a means to update community risk reduction measures based upon new information or changed conditions. Until the Community Risk Reduction Plan is in place, site-specific standard construction management and best management practices will continue to be required of individual projects that impact sensitive receptors. In addition, site-specific modeling will be required prior to development of residential uses that could be affected by TACs associated with roadways or stationary sources, in accordance with BAAQMD and City requirements and GP Policy MS-11.1. If impacts are identified, projects would be required to incorporate mitigation into project design or be located an adequate distance from TAC sources to avoid significant risks to health and safety. Design measures may include the installation of indoor air quality filters and ventilation and the planting of pollution absorbing trees and vegetation in buffer areas. The Envision PEIR concluded that this mechanism for screening and mitigating the effects of TACs would reduce potential impacts to sensitive receptors to a less than significant level.

New Sources of TACs

Future development of industrial, manufacturing, and processing facilities may emit TACs. In accordance with GP Policy MS-11.2, future development projects that would emit TACs would be required to: 1) prepare health risk assessments in accordance with BAAQMD-recommended procedures as part of environmental review, and 2) employ effective mitigation to reduce possible health risks to a less than significant level. Alternatively, the City may require new emitters of TACs to be located an adequate distance from residential areas and other sensitive receptors.

Projects that would generate heavy truck traffic will be required to: 1) designate truck routes that minimize exposure of sensitive receptors to TACs, and 2) post signage on-site that reminds drivers that the State truck idling law limits truck idling to five minutes (GP Policy MS-11.3 and Action MS-

[130] BAAQMD. *Toxic Contaminant Inventory for 2009*. December 31, 2009. Available at: http://www.baaqmd.gov/pmt/air_toxics/annual_reports/index.htm.
[131] Refer to Figure 3.4-3 in the Envision PEIR.

11.8). Additional measures may be required as part of the Community Risk Reduction Plan that is currently under preparation.

With implementation of General Plan policies, best management practices, and the Community Risk Reduction Plan, once adopted, future development under the DSAP would not expose sensitive receptors to a significant risk associated with TACs. This conclusion is consistent with the analysis in the Envision PEIR. **[Less than Significant Impact]**

Construction-related Impacts

In addition to generating pollutants that affect regional air quality, construction activities can also affect local air quality. Ground-disturbing activities such as grading, vehicle travel on unpaved surfaces, and the tracking of soil from construction sites onto paved roads can generate fugitive dust. The rate of dust emissions varies based on the type and size of the disturbance, meteorological conditions, and soil conditions. If uncontrolled, dust fall could disturb land uses that are downwind from the construction site.

In addition, diesel-powered trucks and equipment used during construction generate diesel particulate matter and other TACs.[132] Short-term exposure to TACs in diesel exhaust could cause acute effects such as eye watering, respiratory irritation (a cough), running nose, throat pain, and headaches. Construction exhaust emissions are difficult to predict due to the variability in the type, age, and duration of equipment used. Demolition also generates PM_{10} emissions and is of particular concern if the building(s) have any asbestos-containing materials, given that inhalation of asbestos fibers could result in health impacts.

Given that existing residential uses are scattered throughout the Plan area and surrounding neighborhoods, future development projects could expose existing and proposed sensitive receptors to substantial concentrations of TACs. The most sensitive interfaces would include the Stockton Corridor, Dupont/McEvoy, and Park/San Carlos subareas. Development in the Northern Zone (east of the railroad tracks), the Central Zone, and Royal/Auzerais subarea would have the lowest potential to significantly impact on residential uses, especially as the small amount of existing residences in these areas are replaced with industrial/commercial uses as proposed by the DSAP.
The generation of construction emissions is generally temporary, especially when considering the duration that equipment is typically operated within an influential distance of sensitive receptors. Furthermore, concentrations of TAC emissions decrease with distance from the source. For example, concentrations of diesel particulate matter are typically reduced by 70 percent at a distance of approximately 500 feet.[133]

The control measures required under GP Policy MS-13.1 (listed in Section 4.4.3.2 above) would reduce both dust and exhaust emissions at nearby land uses. Additional measures may be considered for further reducing exhaust emissions, depending on the distance between the project site and nearest receptors.

[132] BAAQMD. *Screening Tables for Air Toxics Evaluation During Construction*. 2010.
[133] BAAQMD. *CEQA Air Quality Guidelines.* 2010 (updated in 2012).

To avoid health risks, construction and/or demolition projects that have the potential to disturb asbestos (from soil or building material) shall implement CARB's air toxic control measures (ATCMs) for Construction, Grading, Quarrying, and Surface Mining Operations, in accordance with GP Policy MS-13.2.

Implementation of these General Plan policies would minimize air quality impacts to sensitive receptors. This conclusion is consistent with the approach recommended in the BAAQMD Guidelines and the analysis in the Envision PEIR. With implementation of General Plan policies, construction activities associated with the DSAP would not expose sensitive receptors to substantial concentrations of TACs, based on the BAAQMD Guidelines. **[Less than Significant Impact]**

4.4.3.4 *Odors*

According to the Envision PEIR, there are no potential odor sources in the Central/Downtown Planning Area. Therefore, future residential development would not be within the screening distance of existing odor sources established by BAAQMD. In the event that new odor sources are constructed in the surrounding area, future projects that involve residential uses or other sensitive receptors shall be located an adequate distance from the odor-generating facilities, in accordance with GP Policy MS-12.2.[134] For these reasons, the proposed project would not expose new sensitive receptors to localized sources of odors.

No new sources of odor are explicitly included in the proposed DSAP, although future industrial/commercial uses may involve odor-generating activities. Examples of land uses known to emit odor include coffee roasters, food processing facilities, green waste and recycling facilities, and manufacturing plants.[135] If new odor sources are proposed within BAAQMD screening distances to new or existing residential uses, supplemental environmental review may be required to assess potential odor impacts and identify appropriate odor minimization and control measures (GP Policy MS-12.1).

Operation of construction equipment at development sites associated with the proposed DSAP could also create objectionable odors that may be perceptible at nearby uses. Due to the localized and temporary nature of construction-related odors, future development under the DSAP is not expected to generate odors that would affect a substantial number of people.[136] With implementation of General Plan policies, future development under the DSAP would not expose sensitive receptors to significant odor impacts. This conclusion is consistent with the analysis in the Envision PEIR. **[Less than Significant Impact]**

4.4.3.5 *Consistency with the Bay Area Clean Air Plan*

As described above, the applicable air quality plan for the region is the Bay Area 2010 Clean Air Plan (CAP). According to BAAQMD's CEQA Guidelines, a development project would be considered as consistent with the 2010 CAP if:

[134] The adequate separate distance will be determined based upon the type, size and operations of the facility.
[135] BAAQMD. *CEQA Air Quality Guidelines.* 2010 (updated in 2012).
[136] BAAQMD does not have a threshold of significance for construction-related odor impacts.

- the project is consistent with the CAP goals and BAAQMD thresholds of significance;
- the project incorporates all feasible CAP control measures; and
- the project would not hinder the implementation of any CAP control measure.

CAP Goals and BAAQMD Thresholds

As described above in Section 4.4.3.2, build-out of the DSAP would generate emissions that exceed the BAAQMD-approved thresholds of significance for regional criteria pollutants. This is a result of the size of the redevelopment area (approximately 250 acres) and high intensity of proposed development. It is possible that when considered individually, many of the future development project anticipated under the DSAP would not generate emissions above the thresholds for criteria pollutants.

When viewed as a whole, future development under the DSAP would generate a substantial amount of emissions; however, the project is consistent with the goals of the CAP to attain air quality standards, would reduce exposure of residents to air pollutants, and would reduce greenhouse gas emission by supporting alternative transportation and energy-efficient development.

Control Measures

The Envision PEIR determined that the General Plan policies support and reasonably implement the control measures in the 2010 CAP. The DSAP incorporates General Plan policies adopted for the purpose of minimizing vehicle trips and associated air quality impacts through its Land Use Diagram, Design Guidelines, and Transportation Strategies. As a result, the DSAP also incorporates CAP measures. Future development in the Plan area would be reviewed for conformance with the DSAP, General Plan policies, and CAP measures. The project would not hinder the implementation of any CAP control measure. Although future development under the DSAP would exceed thresholds for ozone precursors when viewed as a whole, the project would not conflict with or obstruct implementation of the 2010 CAP. **[Less than Significant Impact]**

4.4.4 Cumulative Impacts

4.4.4.1 *Operational Emissions of Regional Criteria Pollutants*

The proposed project has the potential to contribute to cumulative air quality impacts within the San Francisco air basin (i.e., regional criteria pollutants). Air quality analyses are cumulative by nature because the thresholds of significance are intended to accommodate a level of growth within the air basin that would still allow the region to attain air quality standards. According to BAAQMD Guidelines, it can be concluded that development projects that are consistent with the CAP and thresholds of significance would not result in a significant cumulative impact to regional air quality.

The Envision PEIR concluded that development allowed under the 2040 General Plan would result in a significant increase in air pollutant emissions and concentrations within the air basin. It was also determined that the 2040 General Plan is inconsistent with the assumptions in the CAP because projected rates of both VMT and vehicle trip growth could be greater than the projected rate of

population growth.[137] As described in Section 4.2.4.2, the projected increase in VMT per capita is partly a function of the shift in the jobs-housing balance in San José that could increase commute distances, planned growth in areas with low or no access to transit, and the conservative modeling approach that does not reflect the benefits from General Plan policies and programs. Although implementation of General Plan policies and existing regulations and programs would reduce emissions per capita over the long-term, the air quality impacts would be significant and unavoidable. Conversely, it was determined that the HSR and BART projects would have a net benefit on regional air quality due to the reduction in VMT.[138]

As described in Section 4.4.3.2 above, build-out of the DSAP would exceed the BAAQMD operational thresholds for ROG and NOx, resulting in a cumulatively considerable net increase in ozone precursors. The DSAP, however, would support the use of transit by intensifying development in proximity to Diridon Station and Downtown. When combined with the planned improvements to the pedestrian, bicycle, and trail networks, the Transportation Strategies proposed by the DSAP would further support the replacement of vehicle trips with walking, biking, and transit trips. As described above, future development will be required to implement a transportation demand management (TDM) program. For these reasons, the DSAP is considered a key strategy for reducing VMT and vehicle trips in the city over the long-term.

Impact AQ-2: Although the DSAP is intended to reduce emissions of regional air pollutants over the long-term, it cannot be determined whether implementation of General Plan policies and proposed measures would reduce the project's contribution to the significant cumulative impact to a less than significant level. Therefore, build-out of the DSAP would result in a cumulatively considerable contribution to the significant impact to regional air quality identified in the Envision PEIR. **[Significant Unavoidable Cumulative Impact]**

4.4.4.2 *Operational Emissions of Carbon Monoxide*

Future development under the DSAP could contribute to cumulative increases in carbon monoxide concentrations at local intersections due to increases in traffic. The CO hot spot analysis described in Section 4.4.3.2 above is based on the Cumulative conditions scenario in the TIA to evaluate the highest traffic volumes that could occur at the study intersections in the long-term.[139] Given that the concentrations would not approach or exceed state standards for CO concentrations, the proposed project would not result in or contribute to a cumulative impact associated with carbon monoxide.

Build-out of the DSAP would not result in or contribute to a significant cumulative impact related to carbon monoxide standards. **[Less than Significant Cumulative Impact]**

[137] BAAQMD recommends that local agencies use different approaches for evaluating impacts from long-range plans when compared to specific development projects. To meet the thresholds of significance for operational-related criteria air pollutants, a proposed plan's projected increase in VMT or vehicle trips must be less than or equal to its projected population increase.
[138] *Bay Area to Central Valley High-Speed Train Program EIR/EIS* (CHSRA and FRA, 2008) and *Silicon Valley Rapid Transit Corridor Final Environmental Impact Study* (VTA and FTA, 2010).
[139] The Cumulative Conditions scenario takes into account traffic from planned growth in Downtown under Strategy 2000, the proposed baseball stadium, BART, HSR, and other major projects in the area.

4.4.4.3 *Construction-related Impacts*

The project could contribute to cumulative impacts on sensitive receptors by generating substantial construction emissions (i.e., dust, TACS, and odors) that affect sensitive receptors within and surrounding the Plan area. When combined with emissions from other construction sites in the vicinity, the DSAP could result in average daily emissions that exceed BAAQMD's significance thresholds for criteria pollutants. Construction emissions could also combine to result in significant short-term impacts to sensitive receptors due to dust fall or elevated concentrations of TACs. The potential for construction activities to cause a local air quality impact would be greatest if multiple construction projects occur simultaneously in the vicinity.

The timing of construction projects will be considered during supplemental review to ensure that a given sensitive receptor will not be significantly affected by multiple projects. Furthermore, all future development and transportation projects will be required to implement dust and exhaust control measures during demolition and construction activities (per GP Policy MS-13.1 and BAAQMD CEQA Guidelines). For these reasons, the proposed project would not result in a new cumulative impact or make a cumulatively considerable contribution to a previously identified construction-related air quality impacts. **[Less than Significant Cumulative Impact]**

4.4.5 Conclusion

Build-out of the DSAP would not result in a violation of carbon monoxide standards. With implementation of GP Policy MS-13.1 and the Community Risk Reduction Plan, once adopted, future development under the DSAP would not result in a significant impact due to construction-related emissions of criteria pollutants or expose sensitive receptors to a significant risk associated with TACs or odors. Although future development under the DSAP would exceed thresholds for ozone precursors when viewed as a whole, the project would not conflict with or obstruct implementation of the 2010 CAP. These conclusions are consistent with the analysis in the Envision PEIR. **[Less than Significant Impact]**

Build-out of the DSAP would not result in or contribute to a significant cumulative impact related to carbon monoxide standards. The proposed project would not result in a new cumulative impact or make a cumulatively considerable contribution to a previously identified construction-related air quality impacts. **[Less than Significant Cumulative Impact]**

Impact AQ-1: Build-out of the DSAP would result in a net increase in ROG and NOx in the Bay area, contributing to existing violations of ozone standards, which is a significant impact. This conclusion is consistent with the analysis in the Envision PEIR and Strategy 2000 EIR. **[Significant Unavoidable Impact]**

Impact AQ-2: Although the DSAP is intended to reduce emissions of regional air pollutants over the long-term, it cannot be determined whether implementation of General Plan policies and proposed measures would reduce the project's contribution to the significant cumulative impact to a less than significant level. Therefore, build-out of the DSAP would result in a cumulatively considerable contribution

to the significant impact to regional air quality identified in the Envision PEIR. **[Significant Unavoidable Cumulative Impact]**

4.5 CULTURAL RESOURCES

This section is based primarily upon the Envision PEIR, except where noted.

4.5.1 Existing Setting

4.5.1.1 *Archaeological Resources*

The Native American people who originally inhabited the Santa Clara Valley belong to a group known as the "Costanoan" or Ohlone. Prehistoric era sites associated with Native Americans include habitation sites (e.g., large villages or temporary campsites) and non-habitation sites such as stone tool and other manufacturing areas, cemeteries, isolated burial locations, rock art sites, and trails. Most prehistoric archaeological sites have been found along or very near fresh water sources, adjacent to the major Native American trails, and near stone sources in the foothills.

The archaeological (subsurface) sensitivity is moderate to high in the Plan area due to its proximity to Los Gatos Creek and Guadalupe River. There are seven recorded prehistoric sites within the Downtown Core, including a significant village site located approximately 0.5 miles east of the Plan area and five sites in the College Park neighborhood, north of the DSAP area.[140] Based on information review for the proposed project, no Native American sites have been identified in or adjacent to the Plan area, although a trail may have been located along the west side of Los Gatos Creek.[141]

There are two recorded historic era archaeological sites within the Plan area.[142] The potential for additional buried historic resources is high due to the past residential and commercial uses in the area. Such deposits may include trash pits, wells, foundations, privies, or other structural remnants of former businesses and homes. At the same time, it is probable that prior disturbance from grading, excavation, filling, and other construction and development activities over the past 100+ years may have impacted the integrity of any such deposits.

4.5.1.2 *Paleontological Resources*

Paleontological resources are the fossilized remains of organisms from prehistoric environments found in geologic strata. They range from mammoth and dinosaur bones to impressions of ancient animals and plants, trace remains, and microfossils. These are valued for the information they yield about the history of the earth and its past ecological settings.

Potentially sensitive areas for the presence of paleontological resources are based on the underlying geologic formation. The Plan area is situated on Holocene age alluvial deposits, which are underlain by Pleistocene age sediments at unknown depths.[143] Holocene age soil is generally not considered sensitive for paleontological resources, because biological remains younger than 10,000 years are not

[140] City of San José. *San José Downtown Strategy 2000 EIR.* 2005.
[141] City of San José. *Coleman Avenue/Autumn Street Improvement Project, Final Integrated Focused EIR* (2008), *Whole Foods Market Initial Study* (2007), *Baseball Stadium in the Diridon/Arena Area Draft EIR* (2006), and *KB Home Monte Vista Residential Planned Development Zoning Project Draft EIR* (2004).
[142] Basin Research Associates, Inc. *Cultural Resources Impacts, Envision San José 2040 General Plan.* Map of Landmarks, Districts, and Architectural and Archaeological Resources in the Central Planning Area. 2010.
[143] Envision PEIR.

usually considered fossils. However, remains of a mammoth (*Mammuthus columbi*) were recently found along the Guadalupe River in San José within a geologic strata mapped as Holocene, indicating that Holocene materials in the Santa Clara Valley may have some level of sensitivity for paleontological resources.

4.5.1.3 *Historic Resources*

Pursuant to Section 15064.5(a) of the CEQA Guidelines, a resource is generally considered by a lead agency to be "historically significant" if the resource is listed in, or determined to be eligible for listing in, the California Register of Historical Resources (California Register); or the resource is included in a local register of historic resources as defined by State law or identified as significant in an historical resource survey meeting the requirements of State law. A historic resource listed in, or formally determined to be eligible for listing in, the National Register of Historic Places (National Register) is, by definition, included in the California Register. The eligibility criteria for listing on the National and California Registers are summarized in Section 4.5.2 below.

The City of San José Historic Resources Inventory (HRI) identifies known historic resources of varying significance, including properties listed on or eligible for listing in the California and National Registers, City Landmarks, Candidate City Landmarks, Structures of Merit, Contributing Structures, and Identified Sites/Structures. A City Landmark is a highly significant historic resource meeting the qualifications for landmark designation as defined in the Historic Preservation Ordinance. A Structure of Merit is a special historic resource that does not merit City Landmark designation, but contributes to the historic fabric of the City or neighborhood. The preservation of Structures of Merit should be a high priority, but these structures are not considered significant resources for the purposes of CEQA. The category of Identified Site/Structure (IS) is applied when further evaluation of the significance of the structure should be undertaken. A Contributing Structure may be less significant individually than it is as an element located within a National Register Historic District, City Landmark Historic District, or Conservation Area.

As listed in Table 4.5-1, the Plan area includes four properties that are listed on or eligible for listing on the National Register and/or the California Register. Two of these properties are City of San José Landmarks, while the other two are Candidate City Landmarks. In addition, there are two Contributing Sites/Structures, 16 Structures of Merit, and 13 Identified Structures listed on the City's HRI within the Plan area.

Table 4.5-1:
Properties within the Plan Area listed on the
City of San José Historic Resources Inventory

ID #	Resource Name/ Architectural Style	APN	Address	Status
1	Vernacular bungalow	259-29-043	436 Autumn Court	SM
2	Vernacular bungalow	259-29-042	446 Autumn Court	SM
3	Vernacular bungalow	259-29-041	456 Autumn Court	SM

4	Vernacular bungalow	259-29-081	465 Autumn Court	SM
5	Vernacular bungalow	259-29-040	466 Autumn Court	SM
6	Queen Anne residence	259-29-025	195 N. Autumn Street	IS
7	Queen Anne residence	259-29-024	199 N. Autumn Street	IS
8	Queen Anne residence	259-29-023	203 N. Autumn Street	IS
9	Neo Classical	259-29-022	211 N. Autumn Street	IS
10	Dennis Residence (built in 1870 in the Greek revival style)	259-29-021	237 N. Autumn Street	ENR, ECR, CLS
11	Holeman's Auto Repair	259-29-020	255 N. Autumn Street	SM
12	Vernacular	259-29-087	263 N. Autumn Street	IS
13	NA	259-38-015	75 S. Autumn Street	IS
14	Victor Buron Residence (Poor House Bistro)	259-38-088	91 S. Autumn Street	IS
15	Diridon Station	261-34-020	65 Cahill Street	NRD, ENR, ECR, CLS
16	Hartung Residence	259-48-029	169 Gifford Avenue	CS
17	Spanish Colonial Revival	259-29-067	428-430 W. Julian Street	SM
18	Italianate	259-25-037	541 W. Julian Street	IS
19	Queen Anne	259-29-004	160 N. Montgomery Street	IS
20	Italianate	259-29-008	210 N. Montgomery Street	IS
21	Vernacular	259-29-013	270 N. Montgomery Street	IS
22	Patty's Inn	259-48-012	102 S. Montgomery Street	SM
23	Sunlite Bakery Company	261-35-027	145 S. Montgomery Street	SM
24	Harold Hellwig Ironworks	259-48-053	150 S. Montgomery Street	SM
25	Modern	259-45-080	445 Park Avenue	SM
26	Modern	259-45-074	457 Park Avenue	SM
27	NA	259-48-038	491 Park Avenue	IS
28	KNTV Broadcast Facility	261-35-014	645 Park Avenue	ECR, CCL
29	Chiem Lumber	264-15-001	800 W. San Carlos Street	IS
30	San Carlos Street Viaduct	261-37-000	Right-of-way of W. San Carlos Street	SM
31	Santa Clara Street RR Overpass	259-28-000	in R.O.W. of W. Santa Clara Street	SM

32	Forman's Arena	259-29-032	447 W. St. John Street	ENR, ECR, CCL
33	Smith Manufacturing	259-28-003	120 Stockton Avenue	SM
34	Western Elevator Manufacturing	259-28-004	138 Stockton Avenue	SM
NRD= National Register District; ENR= Eligible for National Register (individually); ECR= Eligible for Calif. Register (individually); CLS= City Landmark Site/Structure; CCL= Candidate City Landmark; CS= Contributing Site/Structure; SM= Structure of Merit; IS= Identified Site/Structure				

The bungalows on Autumn Court are part of a 1920's tract that originally contained 22 lots and now consists of 14 remaining structures. It has been determined that the bungalows are not part of a CRHR or NRHP eligible district.[144]

Diridon Station

Construction of the railroad tracks that are now used by Caltrain was completed in 1864. Diridon Station was built in 1935 to serve the Southern Pacific Railroad and was originally named the Cahill Depot. The main depot building was designed by the Southern Pacific Architect John Christie, who later worked on Union Station in Los Angeles. The depot building was constructed in the Italian renaissance revival style with Streamline Modern elements and consists of a central section containing the passenger waiting room with two-story side wings. The roofs are covered with terra cotta tile and the exterior walls are covered with a tapestry brick. The main facade includes three tall arches that frame the main entry and large windows. In 1994, the depot building underwent a substantial rehabilitation, which included a seismic upgrade and the addition of concrete shear walls. Accessibility improvements were made in 2003.

Diridon Station is part of the Cahill Station Historic District, also known as the Southern Pacific Depot, which is listed on the National Register of Historic Places. As shown on Figure 4-9 below, the 12.5-acre district includes the multi-level passenger and freight railroad depot, the depot building, a Car Cleaners' Shack, a wall and fence system, Santa Clara Street underpass, two butterfly passenger sheds, and tracks. Three original structures have since been either relocated or demolished, including a water tower, herder's shack, and compressor structure.

Diridon Station is also listed as a City Landmark Site and is individually eligible for the National and California Registers. The station and surrounding 4.7 acres are covered by a Preservation Covenant between the Peninsula Corridor Joint Powers Board and the South Bay Historical Railroad Society. The covenant requires the Joint Powers Board to preserve and maintain the station in accordance with the recommended approaches in the *Secretary of the Interior's Standards for Rehabilitation.* Any demolition, destruction, or significant alteration cannot occur without approval of the California Legislature.

[144] City of San José. *Coleman Avenue/Autumn Street Improvement Project, Final Integrated Focused EIR.* 2008.

Figure 4-9: Diridon Station National Register Historic District

Contributing Sites/Structures

The "Hartung Residence" was built in 1896 and is listed as a Contributing Structure to the Lakehouse Historic District, a City Landmark Historic District (HD07-158). The district is generally bounded by West San Fernando Street, the Winchester - Mountain View light rail line, Los Gatos Creek, and properties along Park Avenue, Sonoma Street, and Lakehouse Avenue. The district consists of mostly single story, Queen Anne-style houses (along with some Craftsman and Period Revival houses) constructed from 1885-1925. A subset of the district, called the Lakehouse Historic District/Delmas Historic District, was determined eligible for the National Register in 1999 due to the unique concentration of single story Queen Anne-style houses built in the area between 1892 and 1898.

Former Historic Sites

Several structures listed in the City's HRI have since been demolished, including the following:

- 139 N. Autumn Street (APN 259-29-029)
- 143 N. Autumn Street (APN 259-29-028)
- 551-555 W. Julian Street (APN 259-27-008)
- 92-98 S. Montgomery Street (APN 259-38-019)
- 217 Delmas Avenue (APN 259-46-109)
- 115 S. Autumn Street (APN 259-48-011 and 259-48-013)
- 530 W. San Fernando Street (APN 259-48-012)
- 460 Park Avenue (259-46-097)

The Evangelical church formerly located at 217 Delmas Avenue was a City Landmark and was determined to be eligible for both the National Register and California Register of Historic

Resources, but was recently destroyed in a fire. The Builders Exchange Building at 460 Park Avenue and the Butcher Electric Company Warehouse at 115 S. Autumn Street were listed as Structures of Merit on the City's HRI, while the other five properties were listed as Identified Structures.[145]

Historic Resources in the Surrounding Area

There are numerous historic resources in the general vicinity of the Plan area, including Del Monte Plant #51 (west of Diridon Station at 88 Bush Street) and the San Jose Water Works building (374 West Santa Clara Street). In addition to the Lakehouse Historic District (described above), the "Hanchett and Hester Park Conservation Area" and "River Street City Landmark Historic District" are also located in the project area.

The Alameda street right-of-way is designated a City Landmark Historic District (from Race Street to I-880) under the theme of Communication and Transportation for the Spanish period (1777-1822).[146] The Alameda/West Santa Clara Street is part of the El Camino Real, California Historical Landmark #784.[147] El Camino Real (The King's Highway) connected the missions in San Diego to Mission San Francisco de Asis in San Francisco. In San José, The Alameda was the most important road in the region, connecting the Pueblo de San José with Mission Santa Clara. Between the 1850's and 1939, The Alameda was used as a stagecoach route, horse-drawn trolley thoroughfare, and electric trolley route.[148]

4.5.2 Regulatory Framework

4.5.2.1 *National Register of Historic Places*

The National Register is a comprehensive inventory of known historic resources throughout the United States. The National Register is administered by the National Park Service and includes buildings, structures, sites, objects, and districts that possess historic, architectural, engineering, archaeological, or cultural significance at the national, state, or local level. Historic places are nominated to the National Register by the State Historic Preservation Officer (SHPO) of the state in which the property is located. Any person or agency can propose a nomination (e.g., property owner, local government, citizens), but a nomination must be processed through SHPO.

There are four basic criteria under which a structure, site, building, district, or object can be considered eligible for listing in the National Register. These criteria are:

- Criterion A (Event): Buildings that are associated with events that have made a significant contribution to the broad patterns of our history.
- Criterion B (Person): Buildings that are associated with the lives of persons significant in our past.

[145] Other addresses associated with the former Butcher Electric Co. Warehouse property (APN 259-48-011) include 114 S. Montgomery Street and 510 W. San Fernando Street.
[146] This district includes trees within the right-of-way but excludes adjacent parcels.
[147] California State Office of Historic Preservation. "California Historical Landmarks." 2012. http://ohp.parks.ca.gov/?page_id=21478.
[148] City of San José. *San José Downtown Strategy 2000 EIR.* 2005.

- Criterion C (Design/Construction): Buildings that embody the distinctive characteristics of a type, period or method of construction, or that represent the work of a master.
- Criterion D (Information Potential): Buildings that have yielded, or may be likely to yield, information important in prehistory or history.

For a property to qualify for listing in the National Register, it must also retain "historic integrity of those features necessary to convey its significance." To determine if a property retains the physical characteristics corresponding to its historic context, seven aspects of historic integrity are evaluated. The aspects of historic integrity include: location, design, setting, materials, workmanship, feeling, and association between the property and an important historic event or person.

4.5.2.2 *California Register of Historic Resources*

The California Register is an inventory of significant architectural, archaeological, and historical resources in the State of California. Resources can be listed in the California Register through a number of methods. As mentioned above, resources determined eligible for the National Register are automatically listed on the California Register. State Historical Landmarks are also automatically listed in the California Register. Properties can also be nominated to the California Register by local governments, private organizations, or citizens. The evaluative criteria used for determining eligibility for the California Register are closely based on those developed by the National Park Service for the National Register of Historic Places. The California Register criteria include the following:

- Criterion 1 (Events): Resources that are associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States.
- Criterion 2 (Persons): Resources that are associated with the lives of persons important to local, California, or national history.
- Criterion 3 (Architecture): Resources that embody the distinctive characteristics of a type, period, region, or method of construction, or represent the work of a master, or possess high artistic values.
- Criterion 4 (Information Potential): Resources or sites that have yielded or have the potential to yield information important to the prehistory or history of the local area, California, or the nation.

As with the National Register, a resource is eligible for listing in the California Register if it meets any one of the criteria of significance and sufficiently retains historic integrity. A resource that has lost its historic character or appearance may still have sufficient integrity for the California Register if it maintains the potential to yield significant scientific or historical information or specific data.

4.5.2.3 *Secretary of the Interior's Standards for the Treatment of Historic Properties*

The 1995 U.S. Secretary of the Interior's Standards for the Treatment of Historic Properties outlines specific standards and guidelines for the preservation, rehabilitation, restoration, and reconstruction of historic properties. Each set of standards provides specific recommendations for the proper treatment of specific building materials, as well as parts of building construction. The California

Environmental Quality Act (CEQA) references these standards relative to consideration of the significance of project impacts, or lack thereof, on historic resources.

4.5.2.4 *Native American Burials*

California law protects Native American burials, skeletal remains, and associated grave materials and provides for the sensitive treatment and disposition of those remains (Section 7050.5(b) of the California Health and Safety code). CEQA Guidelines section 15064.5(e) requires that excavation activities be stopped whenever human remains are uncovered and that the county coroner or medical examiner be contacted to assess the remains. If the county coroner or medical examiner determines that the remains are those of Native Americans, the Native American Heritage Commission (NAHC) must be contacted within 24 hours. The property owner is required to consult with the appropriate Native Americans identified by the NAHC as a "most likely descendant" to develop an agreement for the treatment and disposition of the remains.

4.5.2.5 *City of San José Policies*

Historic Preservation Ordinance

The City of San José Historic Preservation Ordinance (Chapter 13.48 of the Municipal Code) is designed to identify, protect, and encourage the preservation of significant resources and foster civic pride in the City's cultural resources. The Historic Preservation Ordinance requires the City to establish a Historic Landmarks Commission, maintain a Historic Resources Inventory (HRI), preserve historic properties using a Landmark Designation process, require Historic Preservation Permits for alterations of properties designated as a Landmark or within a City historic district, and provide financial incentives through a Mills Act Historical Property Contract.

City Council's Development Policy on the Preservation of Historic Landmarks

The City Council's Development Policy on the Preservation of Historic Landmarks (as amended May 23, 2006) calls for preservation of candidate or designated landmark structures, sites, or districts wherever possible. The City also has various historic design guidelines that suggest various methods for the restoration or rehabilitation of older/historic structures and establish a general framework for the evaluation of applications involving historic preservation issues. The City offers a number of historic preservation incentives, including use of the State Historic Building Code, Mills Act/Historical Property Contract, and various tax credits.

Envision San José 2040 General Plan

Various policies in the City's General Plan have been adopted for the purpose of reducing or avoiding impacts related to cultural resources, as listed in the following table.

Table 4.5-2:
General Plan Policies: Cultural Resource Impacts

Landmarks and Districts	
Policy LU-13.1	Preserve the integrity and fabric of candidate or designated Historic Districts.
Policy LU-13.2	Preserve candidate or designated landmark buildings, structures and historic objects, with first priority given to preserving and rehabilitating them for their historic use, second to preserving and rehabilitating them for a new use, or third to rehabilitation and relocation on-site. If the City concurs that no other option is feasible, candidate or designated landmark structures should be rehabilitated and relocated to a new site in an appropriate setting.
Policy LU-13.3	For landmark structures located within new development areas, incorporate the landmark structures within the new development as a means to create a sense of place, contribute to a vibrant economy, provide a connection to the past, and make more attractive employment, shopping, and residential areas.
Policy LU-13.4	Require public and private development projects to conform to the adopted City Council Policy on the Preservation of Historic Landmarks.
Policy LU-13.6	Ensure modifications to candidate or designated landmark buildings or structures conform to the Secretary of the Interior's Standards for Treatment of Historic Properties and/or appropriate State of California requirements regarding historic buildings and/or structures, including the California Historical Building Code.
Policy LU-13.7	Design new development, alterations, and rehabilitation/remodels within a designated or candidate Historic District to be compatible with the character of the Historic District and conform to the Secretary of the Interior's Standards for the Treatment of Historic Properties, appropriate State of California requirements regarding historic buildings and/or structures (including the California Historic Building Code) and to applicable historic design guidelines adopted by the City Council.
Policy LU-13.8	Require that new development, alterations, and rehabilitation/remodels adjacent to a designated or candidate landmark or Historic District be designed to be sensitive to the character of the nearby Historic District or landmark.
Policy LU-13.10	The City's public works projects (street lights, street tree plantings, sidewalk design, etc.) shall promote, preserve, or enhance the historic character of Historic Districts.
Policy LU-13.11	Maintain and update an inventory of historic resources in order to promote awareness of these community resources and as a tool to further their preservation. Give priority to identifying and establishing Historic Districts.
Policy LU-13.13	Foster the rehabilitation of buildings, structures, areas, places, and districts of historic significance. Utilize incentives permitting flexibility as to the uses; transfer of development rights; tax relief for designated landmarks and districts; easements; alternative building code provisions for the reuse of historic structures; and financial incentives.

Policy LU-13.15	Implement City, State, and Federal historic preservation laws, regulations, and codes to ensure the adequate protection of historic resources.
Policy LU-13.20	Explore funding options and techniques to proactively conduct additional historic surveys and to maintain and update the City's Historic Resources Inventory. As funding allows, undertake comprehensive area-wide surveys of the city to identify potential Historic Districts, Cultural Landscapes at the City's edge, and significant buildings and/or structures, including Traditional Cultural Properties.
Action LU-13.21	Implement strategic General Plan and zoning changes as indicated by federal, state or municipal "historic" or "conservation area" designations, in order to maintain neighborhood vitality and character and to preserve the integrity of historic structures located within those neighborhoods. To preserve predominantly single-family historic neighborhoods, rezone residential structures located in these areas to a single-family zoning designation.
Historic Structures of Lesser Significance	
Policy LU-14.1	Preserve the integrity and enhance the fabric of areas or neighborhoods with a cohesive historic character as a means to maintain a connection between the various structures in the area.
Policy LU-14.3	Design new development, alterations, and rehabilitation/remodels in conservation areas to be compatible with the character of the Conservation Area. In particular, projects should respect character defining elements of the area that give the area its identity. These defining characteristics could vary from area to area and could include density, scale, architectural consistency, architectural variety, landscape, etc.
Policy LU-14.3	Discourage demolition of any building or structure listed on or eligible for the Historic Resources Inventory as a Structure of Merit by pursuing the alternatives of rehabilitation, re-use on the subject site, and/or relocation of the resource.
Policy LU-14.5	Continue and strengthen enforcement programs, such as those addressing vacant buildings, to promote the maintenance and survival of all classes of the city's historic and cultural resources.
Policy LU-14.6	Consider preservation of Structures of Merit and Contributing Structures in Conservation Areas as a key consideration in the development review process.
Site Development	
Policy IP-10.3	In addition to a Site Development permit, require an Historic Preservation permit for modifications to a designated Historic Landmark structure. This permit process fosters the implementation of the Historic Preservation goals and policies of this General Plan.
Archaeology and Paleontology	
Policy ER-10.1	For proposed development sites that have been identified as archaeologically or paleontologically sensitive, require investigation during the planning process in order to determine whether potentially significant archeological or paleontological

	information may be affected by the project and then require, if needed, that appropriate mitigation measures be incorporated into the project design.
Policy ER-10.2	Recognizing that Native American human remains may be encountered at unexpected locations, impose a requirement on all development permits and tentative subdivision maps that upon their discovery during construction, development activity will cease until professional archaeological examination confirms whether the burial is human. If the remains are determined to be Native American, applicable state laws shall be enforced.
Policy ER-10.3	Ensure that City, State, and Federal historic preservation laws, regulations, and codes are enforced, including laws related to archaeological and paleontological resources, to ensure the adequate protection of historic and pre-historic resources.

4.5.3 Cultural Resources Impacts

4.5.3.1 *Thresholds of Significance*

For the purposes of this PEIR, a cultural resources impact is significant if implementation of the proposed DSAP would:

- Cause damage to an important archaeological resource as defined in §15064.5 of the CEQA Guidelines;
- Disturb any human remains, including those interred outside of formal cemeteries.
- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature; or
- Cause a substantial adverse change in the significance of a historic resource as defined in §15064.5 of the CEQA Guidelines:
  - A resource listed in, or determined to be eligible by the State Historical Resources Commission for listing in the California Register of Historic Resources (CRHR);
  - A resource included in a local register of historic resources, as defined in §5020.1(k) of the Public Resources Code (PRC) or identified as significant in a historical resource survey meeting the requirements of §5024.1(g) of the PRC, unless the preponderance of evidence demonstrates that it is not historically or culturally significant;
  - Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California, provided the lead agency's determination is supported by substantial evidence in light of the whole record (generally, a resource shall be considered to be historically significant if the resource meets the criteria for listing on the CRHR); and/or
  - A resource defined in PRC §5020.1(j) or §5024.1.

CEQA Guidelines §15126.4(b)(3) states that public agencies should, whenever feasible, seek to avoid damaging effects on any historical resources of an archaeological nature. Preservation in place is the preferred manner of avoiding impacts to archaeological sites, although data recovery through excavation is acceptable if preservation is not feasible. If data recovery through excavation is the only feasible mitigation, a data recovery plan, which makes provisions for adequately recovering the

scientifically consequential information from and about the historic resource, needs to be prepared and approved by the City prior to any excavation being undertaken.

4.5.3.2 *Archaeological and Paleontological Resources*

The Envision 2040 PEIR concluded that development allowed under the 2040 General Plan would not result in significant disturbance of buried materials, including archaeological and paleontological resources, with implementation of General Plan policies.[149]

Archaeological Resources

As described above, there are no recorded archaeological sites within the Plan area. Given the archaeological sensitivity of the Plan area, previously unknown unrecorded archaeological deposits could be discovered during ground disturbing construction activities, including public improvement projects, the Diridon Station expansion, and future land use development. Construction activities such as grading and excavation may result in the accidental destruction or disturbance of archaeological sites, which could convey important information about San José's history. Therefore, implementation of the DSAP may result in substantial adverse effects on prehistoric or historic archaeological resources.

Paleontological Resources

Future development allowed under the proposed DSAP has a low potential to impact undiscovered paleontological resources, based on the age and type of surface soils. It is possible, however, that deeper soils may contain older Pleistocene sediments, which have a higher sensitivity for paleontological materials. Activities that involve substantial excavation (such as construction of below-ground parking garages) would have a higher potential for encountering paleontological deposits. Therefore, construction activities may result in the accidental destruction or disturbance of paleontological sites, which could convey important information. Although not anticipated, construction activities associated with implementation of the DSAP could result in a significant impact to paleontological resources, if encountered.

Measures Included in the Project to Reduce and Avoid Impacts to Archaeological and Paleontological Resources

The following measures would apply to all future development and improvement projects that require ground disturbance to reduce and avoid impacts to as yet unidentified archaeological resources:

- **Appropriate Prior Review.** For projects involving ground-disturbing activities, the City may require preparation of a site-specific archaeological resources report to address the potential for archaeological resources to be affected by the project. At a minimum, this effort should include a records search at the NWIC and a field inventory. The report shall be

[149] It should be noted that the Strategy 2000 EIR identified significant unavoidable impacts to archaeological resources. With implementation of the new 2040 General Plan policies, however, the impact would be less than significant.

prepared by a qualified archaeologist. The report may recommend archaeological monitoring during construction.

- **Stop Work and Evaluate Unanticipated Finds.** If buried cultural deposits are encountered during project activities, all work within 50 feet of the find should be redirected. A qualified archaeologist shall: (1) evaluate the find to determine if it meets the CEQA definition of a historical or archaeological resource; and (2) provide project-specific recommendations regarding the disposition of the find. The results of any archaeological investigation will be submitted to the NWIC.

  If the find does not meet the definition of a historical or archaeological resource, then no further study or protection is necessary prior to project implementation. If the find does meet the definition of a historical or archaeological resource, then it should be avoided by project activities. Avoidance may be accomplished through redesign, conservation easements, or site capping.

  If avoidance is not feasible, adverse effects to such resources should be mitigated in accordance with the recommendations of the evaluating archaeologist. Upon completion of the archaeological evaluation, a report documenting the methods, results, and recommendations of the archaeologist shall be prepared and submitted to the NWIC.

- **Follow Statutory Procedures if Human Remains are Encountered.** Pursuant to Health and Safety Code § 7050.5 and Public Resources Code § 5097.94 of the State of California, in the event of the discovery of human remains during construction, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains. The Santa Clara County Coroner shall be notified and shall make a determination as to whether the remains are Native American. If the remains are of Native American origin, the Coroner shall notify the Native American Heritage Commission (NAHC) who shall attempt to identify descendants of the deceased Native American to inspect the site and provide recommendations for the proper treatment of the remains and associated grave goods. The archaeologist should recover scientifically valuable information, as appropriate and in accordance with the recommendations of the Native Americans. Upon completion of analysis, as appropriate, the archaeologist will prepare a report documenting the methods and results of the investigation. This report will be submitted to the NWIC.

  If no satisfactory agreement can be reached as to the disposition of the remains pursuant to this State law, then the landowner shall re-inter the human remains and items associated with Native American burials on the property in a location not subject to further subsurface disturbance.

If the site-specific archaeological resources report recommends monitoring during construction, the following standard measures would apply:

- If no resources are discovered, the consulting archaeologist shall submit a report to the City's Environmental Principal Planner verifying that the required monitoring occurred and that no further mitigation is necessary.

- If evidence of any archaeological, cultural, and/or historical deposits is found, hand excavation and/or mechanical excavation will proceed to evaluate the deposits for determination of significance as defined by CEQA guidelines. In the event that human remains are found, the project shall comply with the procedures set forth by Health and Safety Code § 7050.5 and Public Resources Code § 5097.94 of the State of California.

- The archaeologist shall submit a report(s) describing the testing program and subsequent results, to the satisfaction of the City's Environmental Principal Planner. The report(s) shall identify any program mitigation that the developer shall complete in order to mitigate archaeological impacts (including resource recovery and/or avoidance testing and analysis, removal, reburial, and curation of archaeological resources).

- A final report verifying completion of the mitigation program shall be submitted to the City's Environmental Principal Planner for approval prior to release of a Certificate of Occupancy. This report shall contain a description of the mitigation programs and its results including a description of the monitoring and testing program, a list of the resources found, a summary of the resources analysis methodology and conclusions, and a description of the disposition/curation of the resources.

The following measures will be considered at the time future projects are proposed to reduce and avoid impacts to as yet unidentified paleontological resources:

- **Provide Preconstruction Worker Awareness Training.** The City will ensure that all construction personnel receive paleontological resources awareness training that includes information on the possibility of encountering fossils during construction; the types of fossils likely to be seen, based on past finds in the project area; and proper procedures in the event fossils are encountered. Worker training will be prepared and presented by a qualified paleontologist.

- **Stop Work.** If vertebrate fossils are discovered during construction, all work on the site will stop immediately until a qualified professional paleontologist can assess the nature and importance of the find and recommend appropriate treatment. Treatment may include preparation and recovery of fossil materials so that they can be housed in an appropriate museum or university collection and may also include preparation of a report for publication describing the finds. The City will be responsible for ensuring that the recommendations of the paleontological monitor regarding treatment and reporting are implemented.

With implementation of standard measures and General Plan policies, future development under the DSAP would not result in a significant impact to archaeological and paleontological resources. This conclusion is consistent with the analysis in the Envision PEIR. **[Less than Significant Impact]**

4.5.3.3 *Historic Resources*

Generally a resource is considered to be historically significant by the City of San José if it is listed or meets the criteria for listing on the National Register, California Register, or as a City Landmark on the City's Historic Resources Inventory (HRI). While Structures of Merit and Identified Sites/Structures contribute to the historic fabric of the City and are eligible for inclusion on the City's HRI, they are not considered a historic resource under CEQA.

As previously described, there are currently four historically significant properties within the Plan area: Diridon Station, KNTV Broadcast Facility, Forman's Arena, and the Dennis Residence. Impacts to Diridon Station and the KNTV Broadcast Facility (645 Park Avenue), which is located on the site of the proposed Major League Baseball Stadium Project, are discussed in Section 4.5.4 below.[150] For purposes of this analysis, the Hartung Residence is considered a historic resource because it is a contributing structure to a City Landmark Historic District (Lakehouse). In addition, there are two Contributing Sites/Structures, 16 Structures of Merit, and 13 Identified Structures listed on the City's HRI.

Given the high concentration of older buildings and designated historic structures in the Central/ Downtown Planning Area, there may be other properties within the Plan area that are eligible for the National Register, California Register, or City's HRI that have not been identified or evaluated. For example, the area roughly bounded by Montgomery Street, Julian Street, St. John Street, and Guadalupe River has a high concentration of structures listed on the City's HRI. It is possible that this area may qualify as a City Landmark Historic District or Conservation Area.

Future development and infrastructure improvement projects in the Plan area could directly or indirectly affect historic resources, including those that are currently listed and those that have yet to be identified and evaluated. Examples of direct impacts include demolition, relocation, or inappropriate or unsympathetic modification (e.g., use of incompatible materials, designs, or construction techniques in a manner that alters character-defining features). Indirect impacts could occur if:

- new construction conflicts with or isolates historic buildings or structures;
- changes to the historic fabric or setting materially impair the resource's ability to convey its significance; and/or
- there is deliberate incremental deterioration due to inaction/neglect, lack of occupancy, or inappropriate uses.

Physical changes to a historic resource or its immediate surroundings such that the resource's ability to convey its significance is materially impaired would be considered a significant impact. The anticipated effects on historic resources resulting from the conceptual station expansion plan and future land use development within the Plan area are described below.

Forman's Arena

Forman's Arena (447 St John Street) is within the alignment of the Coleman Avenue/Autumn Street Improvement Project; however, the City has since modified the alignment to avoid demolition of the historic portion of the structure.[151] Upon completion of the roadway extension project, Forman's Arena will be located on the east side of Autumn Parkway, outside of the Plan area. While the proposed DSAP would not directly affect the resource, future development has the potential to indirectly affect its setting. According to the DSAP's Land Use Diagram, the properties located across Autumn Street from Forman's Arena would be redeveloped with commercial, industrial, and/or retail uses. Given that the building is currently surrounded by a mix of older and modern

[150] The DSAP does not propose any other development on the KNTV Broadcast Facility property.
[151] City of San José. *Coleman Avenue/Autumn Street Improvement Project, Final Integrated Focused EIR.* 2008.

development, including San José Arena, future projects would not be expected to adversely affect its setting such that the resource's ability to convey its significance would be materially impaired. Therefore, the proposed project would not result in a significant impact to Forman's Arena.

Dennis Residence

The Dennis Residence, a City Landmark, is located at 237 N. Autumn Street in the Northern Zone of the DSAP, which is planned for redevelopment with *Transit Employment Center* uses. Although the DSAP does not propose removal of any structures at this time, it is assumed that future redevelopment would result in the demolition of the Dennis Residence, based on the DSAP's maximum build-out scenario. Removal of this structure would be considered a significant impact. If the structure is preserved at its existing original location, future development on adjacent properties could adversely affect its setting and feeling.

Hartung Residence and the Lakehouse Historic District

The contributing structure to the Lakehouse Historic District (Hartung Residence at 169 Gifford Avenue) is located within the Southern Zone on a block planned for redevelopment with *Urban Residential* uses. Removal, relocation, or inappropriate modifications of the Hartung Residence could result in a significant impact to the Lakehouse Historic District, which would conflict with GP Policy LU-13.1 to preserve the integrity and fabric of designated historic districts. Indirect impacts could occur if new construction conflicts with the historic buildings or otherwise changes the historic fabric or setting such that the district's ability to convey its significance is materially impaired.

Structures of Merit

The proposed project could affect up to 16 Structures of Merit currently listed on the City's HRI. Although Structures of Merit are not significant resources under CEQA, they contribute to the historic fabric of the City. Therefore, it is the City's goal to preserve and enhance historic structures of lesser significance (General Plan Goal LU-14). The City requires standard measures to address the loss of Structures of Merit. Projects that would affect an Identified Site/Structure would be required to complete additional analysis to verify the significance of the resource.

Traditional Cultural Properties or Cultural Landscapes

According to the Envision PEIR, a "Traditional Cultural Property" is defined generally as one that is eligible for inclusion in the National Register because of its association with cultural practices or beliefs of a living community that (a) are rooted in that community's history, and (b) are important in maintaining the continuing cultural identity of the community. Currently there are no Traditional Cultural Properties identified within the City of San José. The DSAP area is not identified as a neighborhood with strong ties to local ethnic or immigrant communities (e.g., Japantown, Chinatown, Alviso, Alum Rock) or a landscape that reflects the region's historical land uses, settlement patterns, or town development strategies (i.e., Alviso, Coyote Valley, and Almaden).

Nonetheless, Traditional Cultural Properties and Cultural Landscapes could be identified and adversely affected as development proceeds within the Plan area.[152]

Measures Included in the Project to Reduce and Avoid Impacts to Historic Resources

Future projects would be subject to a variety of existing local, state and federal regulations, plans, and policies that would reduce or avoid impacts to historic resources, as summarized in Section 4.5.1 above. Consistent with current requirements, future projects would be subject to the following measures, depending on the potential for affecting historic structures:

- **Supplemental Review.** Supplemental evaluation will be required for future projects that would impact properties that may meet the CEQA definition of historic resources, including properties greater than 45 years of age. If the property is less than 45 years of age, seek the comment of the San José Historic Preservation Officer regarding any concerns the City may have regarding the proposed action and its effects on the property.

  - At a minimum, the supplemental review effort shall include preparation of a site-specific historic resources report that involves a records search at the Northwest Information Center (NWIC), a review of the San José Historic Resources Inventory, and where there is no evaluation within the last five years (using the Department of Parks and Recreation 523A and B forms), evaluation by a qualified historian or architectural historian to determine if the property meets the CEQA definition of a historic resource.

  - If the supplemental review effort does not identify any site or structure that meets the definition of a historic resource and could be affected by construction activities, then no further study or protection is necessary prior to project implementation.

  - The evaluations would include consideration of criteria for Traditional Cultural Properties and Cultural Landscapes.

- **Evaluate Potential Districts.** At the time redevelopment is proposed for the area bounded by North Montgomery Street, West Julian Street, West St. John Street, and Guadalupe River (including the Dennis Residence), the area will be evaluated for its potential to be considered a historic district or Conservation Area. Other areas with a concentration of historic buildings will also be evaluated for potential district status.

- **Secretary of the Interior's Standards.** New construction within historic districts or adjacent to a historic resource will be required to conform to the Secretary of the Interior's *Standards for the Treatment of Historic Properties*, California Historic Building Code, and other applicable regulations.

- **Conform To Guidance.** A qualified historian or architectural historian should review all plans for any development within the Lakehouse Historic District to ensure conformity with applicable design guidelines, and, if necessary, provide technical assistance to achieve such conformity.

[152] This is consistent with the analysis in the Envision PEIR.

Structure of Merit

The following standard measures would apply to projects that involve demolition of one or more Structure of Merit as listed in the City's Historic Resources Inventory:

- **Documentation.** Prior to the demolition of any Structure of Merit, the structure will be photo-documented to an archival level utilizing 35 mm photography and consisting of selected black and white views of the building to the following standards:

  - *Cover sheet* - The documentation shall include a cover sheet identifying the photographer, providing the address of building, common or historic name of the building, date of construction, date of photographs, and photograph descriptions.
  - *Camera* - A 35mm camera.
  - *Lenses* - No soft focus lenses. Lenses may include normal focal length, wide angle and telephoto.
  - *Filters* – Photographer's choice. Use of a pola screen is encouraged.
  - *Film* - Must use black and white film; tri-X, Plus-X, or T-Max film is recommended.
  - *View* - Perspective view-front and other elevations. All photographs shall be composed to give primary consideration to the architectural and/or engineering features of the structure with aesthetic considerations necessary, but secondary.
  - *Lighting* - Sunlight is usually preferred for exteriors, especially of the front facade. Light overcast days, however, may provide more satisfactory lighting for some structures. A flash may be needed to cast light into porch areas or overhangs.
  - *Technical* - All areas of the photograph must be in sharp focus.

  The project shall coordinate the submission of the photo-documentation, including the original prints and negatives, to History San Jose. Digital photos may be provided as a supplement to the above photo-documentation, but not in place of it. Digital photography shall be recorded on a CD and shall be submitted with the above documentation. The above shall be accompanied by a transmittal stating that the documentation is submitted as a Standard Measure to address the loss of the historic resource which shall be named and the address stated and coordinated with the Historic Preservation Officer.

- **Relocation or Salvage.** Prior to demolition, the City will offer each of the buildings for relocation. If an entity or individual is interested in relocating the building to a new site, the costs and liability of the relocation will be borne entirely by that entity/individual. The City's "offer for relocation" will be placed in a newspaper of general circulation, posted on a website, and posted on the sites for a period of no less than 30 days. In the event that relocation is not possible, prior to demolition the structure and site shall be retained and made available for salvage to the general public and companies facilitating the reuse of historic building materials.

Implementation of these measures would reduce and avoid impacts to historic resources of projects that involve demolition of one or more Structures of Merit as listed in the City's Historic Resources Inventory.

For the purpose of this analysis, it is assumed that impacts to historic resources, including the Dennis Residence, Hartung Residences, and as yet unidentified structures, will be avoided through

implementation of General Plan policies and incorporation of applicable design measures. If a future project could adversely affect historic resources, supplemental analysis would be required to identify mitigation measures necessary to reduce the impact to a less than significant level.

If a future project proposes removal of a historic resource, the supplemental analysis shall address the feasibility of avoiding adverse impacts through project redesign, rehabilitation, or reuse of the resource. Preservation in place is always the preferred measure for mitigating direct impacts to historic resources. If the resource is to be preserved on the property, specific measures to protect the integrity of the structure and its setting will be identified. If impacts to the historic resource cannot be avoid, all feasible measures shall be implemented to reduce the magnitude of the impact. At a minimum, the City would require "Documentation" and "Commemoration" efforts.[153] Additional measures could include relocation, incorporation of the resources into the project, and/or salvage. However, even with implementation of these measures, demolition of a historic resource would result in a significant unavoidable impact. In such cases, additional environmental review will be required.

With implementation of General Plan policies and existing regulations, future development under the DSAP would not result in a significant impact to historic resources. This conclusion is consistent with the analysis in the Envision PEIR. **[Less than Significant Impact]**

4.5.4 Cumulative Impacts

The proposed project has the potential to contribute to cumulative impacts to historic resources at the City level. The Envision 2040 PEIR concluded that new development allowed under the 2040 General Plan would not result in a substantial adverse change in the significance of historic resources, with implementation of General Plan policies and existing regulations. The Strategy 2000 EIR, however, determined that redevelopment of properties within Downtown (including the majority of the Plan area) could result in a significant cumulative impact to architectural resources.

Downtown San José has the highest concentration of historic era buildings in the city. Construction of SR 87 and I-280 and modern development have destroyed many of the 19th and early 20th century homes in the Plan area, although there are some surviving structures.[154]

The proposed Major League Baseball Stadium Project includes the removal of the KNTV Broadcast Facility (645 Park Avenue), along with three existing San José Structures of Merit (Sunlite Bakery Company, Patty's Inn, and Harold Hellwig Ironworks). It was concluded that the stadium site does not contain enough cohesive elements to constitute a historic district and none of the structures individually qualify as historic resources, other than the former broadcast facility.[155] According to the Baseball EIR, demolition of the facility would be considered a significant unavoidable impact.[156]

[153] "Documentation" refers to the completion of documentation in conformance with the Secretary of the Interior's Standards for Architectural and Engineering Documentation, Historical American Building Survey (HABS). "Commemoration" refers to the creation of an interpretative exhibit(s) or documentary display(s) that increase public awareness of the resource and its historical significance.
[154] City of San José. *San José Downtown Strategy 2000 EIR.* 2005.
[155] City of San José. *Baseball Stadium in the Diridon/Arena Area Draft EIR.* 2006.
[156] Ibid.

Build-out of the proposed DSAP would also contribute to the on-going demolition and major alteration of historic era buildings within Downtown. As described above, future development projects would be required to evaluate buildings over or near 45 years of age prior to demolition or substantial alteration. It is assumed that future development under the DSAP would not result in significant impacts to historic resources in Downtown, with implementation of General Plan policies and existing regulations that promote preservation of historic landmarks, districts, and properties of lesser significance.

Future development under the DSAP, however, could affect up to 16 Structures of Merit that are currently listed on the City's HRI, which are not significant resources under CEQA but contribute to the historic fabric of the City. Removal of individual Structures of Merit would be less than significant when viewed on a project-by-project basis. However, redevelopment of all or most of the properties currently listed on the City's HRI within the Plan area would be considered a significant cumulative impact due to the collective loss of historical structures and destruction of the area's historic fabric.

Based on the number of historic resources that have been lost within Downtown (and the city in general) and the potential for remaining historic buildings to be replaced or otherwise adversely affected, the proposed project could make a substantial contribution to the significant impacts previously identified in the Strategy 2000 and Baseball Stadium EIRs.

Impact CUL-1: The DSAP would make a cumulatively considerable contribution to previously identified significant impacts to historic resources. **[Significant Unavoidable Cumulative Impact]**

Impacts to Diridon Station

Expansion of Diridon Station to accommodate HSR and BART would affect the Cahill Station Historic District (i.e., Southern Pacific Depot), listed on the National Register. The expansion would also affect the station building itself, which is listed as a City Landmark Site and is individually eligible for the National and California Registers.

The BART EIS (2010) concluded that the planned BART station elements (including the parking structure) would not diminish the linkage of the contributing elements of the historic district and would not require demolition or alteration of contributing elements; therefore, the BART project would not result in a significant impact to Diridon Station historic district. The HSR Program EIR (2008) determined that the project has the potential to result in adverse impacts to historic resources such as Diridon Station and mitigation measures will be included in the subsequent project-level EIR to be prepared by the CHSRA. In addition, the proposed baseball stadium would result in a significant unavoidable impact to Diridon Station, by affecting the setting and feeling of the City Landmark and National Register historic district.[157]

[157] City of San José. *Baseball Stadium in the Diridon/Arena Area Draft EIR.* 2006.

According to the conceptual station plan included in the DSAP, the existing historic depot building would remain in its current location and would continue to be used for passenger rail functions.[158] Light rail operations would remain in their current location along the west side of Diridon Station. The following elements would be constructed within the historic district:

- HSR tracks and platforms, elevated approximately 60 feet above existing grade
- New station building north of the existing depot to accommodate HSR service
- Intermediate mezzanine level to provide access to the rail platforms from the station and across the tracks and W. Santa Clara Street
- Below-ground BART station connected to the new station building
- Outdoor plaza and portico between the new station and existing depot

Proposed modifications to the historic depot building include:

- Reconfiguration of the existing depot to provide improved passenger circulation, including improvements to the existing pedestrian tunnel to meet ADA requirements
- Creation of a new entrance at the southern end of the building
- Relocation of station support facilities to the new station building

The expansion plan is intended to celebrate the historic character of Diridon Station. The historic depot building would remain a central component of the station. It is assumed that the historic integrity of the depot building would be maintained.

New construction (including the HSR and BART terminals) would primarily occur on land currently developed with parking lots, which are not contributing elements of the historic district. The elevated HSR platforms, however, would be located above the existing butterfly sheds (steel butterfly-shaped canopies that cover the existing platforms). The station expansion may involve removal of the butterfly sheds and the car cleaner's shack, which are both contributing elements to the district. Removal of these elements would result in a significant impact under CEQA.

In addition, the new station elements, circulation improvements, and future development in the Central Zone could alter the historic district's setting and feeling. New construction within and adjacent to the district could cause a substantial adverse change in the significance of the historic district.

For purposes of this PEIR, it is assumed that the following measures will be implemented to reduce impacts to the Diridon Station:

- **Secretary of The Interior's Standards and Guidelines:** Consistent with the Preservation Covenant between the Joint Powers Board and the South Bay Historical Railroad Society, any modifications or additions to Diridon Station will be completed in accordance with the Secretary of the Interior's *Standards for the Treatment of Historic Properties*. New construction within the National Register/City Landmark historic district will be required to

[158] As described in Section 2.5, the conceptual station expansion plan included in the proposed DSAP represents the City's preferred configuration for accommodating HSR and BART. The proposed project does not include the actual physical implementation of the station expansion plan.

conform to the Secretary of the Interior's Standards, California Historic Building Code, and other applicable regulations.

- **Supplemental Analysis:** During the final design phase of the station expansion, a supplemental analysis will be completed by a professional architectural historian to evaluate the effects on the historic building and district. The analysis will recommend design treatments that would reduce impacts to a less than significant level to the building and minimize impacts to the historic district to the extent feasible.

- **Additional Review:** Consistent with the Preservation Covenant, the South Bay Historical Railroad Society will review the final design of the station expansion to ensure the historic character of the station is maintained. The final design will also be reviewed by the California Legislature/SHPO prior to implementation of the station expansion plan.

These measures are intended to complement any measures identified for the HSR and BART projects to reduce or avoid impacts to the historic district of Diridon Station. Additional measures may be required as design of the station is finalized. The CHSRA will be responsible for evaluating the design-level impacts of the HSR project on historic resources in the subsequent project-level EIR for the San José to Merced segment, taking into account the analysis in this PEIR.

Impact CUL-2: Implementation of the conceptual station expansion plan would not directly affect Diridon Station as an individual resource, but would result in a significant impact to the historic district directly through the potential removal of contributing elements and indirectly through new construction and circulation improvements that affect its setting and character. Because the station expansion design has not been finalized and the City is not the lead agency for the HSR project, it cannot be determined if the proposed measures listed above will reduce the impact to a less than significant level. Therefore, the impact to the district would be considered significant and unavoidable. **[Significant Cumulative Unavoidable Impact]**

4.5.5 Conclusion

With implementation of standard measures, General Plan policies, and existing regulations, future development under the DSAP would not result in a significant impact to archaeological, paleontological, or historic resources. This conclusion is consistent with the analysis in the Envision PEIR. **[Less than Significant Impact]**

Impact CUL-1: The DSAP would make a cumulatively considerable contribution to previously identified significant impacts to historic resources. **[Significant Unavoidable Cumulative Impact]**

Impact CUL-2: Implementation of the conceptual station expansion plan would not directly affect Diridon Station as an individual resource, but would result in a significant impact to the historic district directly through the potential removal of contributing elements and indirectly through new construction and circulation improvements that affect its setting and character. Because the station expansion design has not

been finalized and the City is not the lead agency for the HSR project, it cannot be determined if the proposed measures listed above will reduce the impact to a less than significant level. Therefore, the impact to the district would be considered significant and unavoidable. **[Significant Unavoidable Cumulative Impact]**

4.6 HAZARDS AND HAZARDOUS MATERIALS

This section is based primarily upon the Envision 2040 PEIR, except where noted.

4.6.1 Existing Setting

The Plan area is currently developed with a range of commercial and industrial uses, including facilities that may use hazardous materials or generate hazardous wastes such as dry cleaners, gas stations, automotive repair/service facilities, machine shops, and industrial/construction supply businesses. Other industrial uses in the area include warehouses, the PG&E service and fueling center on Stockton Avenue, an electric substation just south of Diridon Station, and an asphalt reprocessing facility on Sunol Street south of the Plan area.

There are no large scale manufacturing facilities that are likely to store or use toxic gases or significant quantities of hazardous materials within or adjacent to the Plan area, although there may be aboveground fuel tanks, high pressure natural gas transmission lines, and/or facilities that generate small quantities of hazardous wastes in the Downtown area.[159] As described in Section 4.4 *Air Quality*, there are four facilities that generate emissions of toxic air contaminants in proximity to the Plan area, including a dry cleaner located at 398 West San Carlos Street and three sources north of Lenzen Avenue.

Past uses in the Plan area have included a range of industrial and commercial businesses such as blacksmiths, iron works, manufacturing facilities, and a medical laboratory.

4.6.2 Regulatory Framework

Hazardous materials encompass a wide range of substances, some of which are naturally-occurring and some of which are man-made. Examples include pesticides, herbicides, petroleum products, metals (e.g., lead, mercury, arsenic), asbestos, and chemical compounds used in manufacturing and industrial processes. Due to the fact that hazardous substances have properties that are toxic to humans and/or the ecosystem, there are multiple regulatory programs designed to minimize the chance for unintended releases and/or exposures to occur. Other programs establish remediation requirements where soils and/or groundwater contamination has occurred. The net result of regulatory control programs and institutional controls is reduced likelihood of chemical releases and reduced likelihood of off-site migration of hazardous materials in the event of a release.

The U.S. Environmental Protection Agency (US EPA) is the federal administering agency for hazardous waste regulations. State agencies include the California Environmental Protection agency (Cal EPA), Department of Toxic Substances Control (DTSC), State Water Resources Control Board (SWRCB), and the California Air Resources Board (CARB). Regional agencies include the San Francisco Bay Regional Water Quality Control Board (RWQCB) and the Bay Area Air Quality Management District (BAAQMD). Local agencies including the San José Fire Department (SJFD) and the Santa Clara County Department of Environmental Health (SCCDEH) have been granted responsibility for implementation and enforcement of many hazardous materials regulations under

[159] Cornerstone Earth Group. *Current Conditions Report Hazards and Hazardous Materials, Envision San José 2040 General Plan Update*. 2010.

the Certified Unified Program Agency (CUPA) program. The Santa Clara Valley Water District (SCVWD) monitors groundwater quality and supports groundwater clean-up efforts.

Existing federal, state and local regulations that reduce or avoid impacts associated with hazards and hazardous materials, which are described in the Envision PEIR, include:

- Federal Comprehensive Environmental Response and Liability Act (CERCLA, "Superfund")
- Federal Resource Conservation and Recovery Act (RCRA)
- Federal Hazardous Materials Transportation Act (HMTA)
- Natural Gas Pipeline Safety Act of 1968 (CFR, Title 49)
- Federal Aviation Administration (FAA) Regulations (Title 14 of the Code of Federal Aviation Regulations, Federal Aviation Regulations Part 77)
- Federal Process Safety Management of Highly Hazardous Chemicals (CFR, Title 29)
- State Aeronautics Act (California Public Utilities Code, Sections 21658 and 21659)
- Cal/OSHA Worker Health and Safety Regulations (California Code of Regulations, Title 8)
- California Pipeline Safety Regulations (California Government Code, Section 51010-51019.1)
- California Health and Safety Code and CUPA Program
- California Accidental Release Prevention (CalARP) Program
- California Fire Code
- California's Porter-Cologne Water Quality Control Act
- CEQA Requirements for Hazardous Materials Users within One-Fourth of a Mile of School (Section 21151.4 of the Public Resources Code)
- City of San José Hazardous Materials Release Response Plans and Inventory
- City of San José Hazardous Materials Storage Ordinance and Toxic Gas Ordinance
- City of San José Building and Fire Codes
- City of San José Municipal Code (Chapters 6.14, 17.12, 17.88, and 20.80).

4.6.2.1 *Government Code §65962.5 (Cortese List)*

Section 65962.5 of the Government Code requires Cal EPA to develop and update (at least annually) a list of hazardous waste and substances sites, known as the Cortese List. The Cortese List is used by the State, local agencies, and developers to comply with CEQA requirements. The Cortese List includes hazardous substance release sites identified by the DTSC, SWRCB, and the Department of Resources Recycling and Recovery (CalRecycle).[160]

Potential On-site Sources of Contamination

As a result of historic and existing industrial/commercial development, contaminants could be present in the soil and groundwater at various locations within the Plan area. Soil contaminated with lead or other chemicals may also occur near existing or historic railroad tracks. The Plan area likely contains artificial fill (also referred to as undocumented or man-made fill), which may include contaminated materials.

[160] CalRecycle was formally called the California Integrated Waste Management Board (CIWMB).

Regulatory databases were reviewed to identify known or suspected sources of contamination. According to CalRecycle's list, the Plan area does not contain any solid waste facilities or disposal sites, including landfills, transfer stations, material recovery facilities, composting sites, or closed disposal sites.[161]

There are three properties on DTSC's portion of the Cortese list within the Plan area, including Circuit Link (804A Park Avenue), State Radiator (331 Gifford Avenue), and San Jose Arena. Circuit Link, a circuit board manufacturing facility closed in 2000, was referred to DTSC to oversee corrective action. Surface soil contamination was identified and remediated under DTSC oversight, and a "No Further Action" letter was issued in December 2005. At the State Radiator site, excavation of contaminated soils was completed in 1989-1990. RWQCB issued a letter confirming the completion of the site investigation and remediation action, and DTSC issued a "No Further Action" letter in December 2001.

The Arena and associated parking lot was formerly developed with a PG&E coal gasification plant, various automobile repair and service businesses, underground storage tanks, oil/water clarifiers, and drums.[162] In 1991, contaminated soil was excavated from the site or encapsulated in the parking lots. A Deed Restriction was placed on the site in 2003 to limit the future use of property and prohibit disturbance of the encapsulated areas. Groundwater treatment was performed in accordance with San Francisco RWQCB requirements and the case was closed in 1997 with land use restrictions.

There are 41 properties listed on the SWRCB Geotracker list within the Plan area.[163] Of these properties, 34 properties are listed as closed cases since the regulatory agencies determined that no further action is required because actions were taken to adequately remediate the release or the release was minor, presents no environmental risk, and no remedial action is necessary. All of the closed cases in the Plan area are listed for having leaking underground storage tanks (LUST), with the exception of the NBC Universal property, located at the northwest corner of Park Avenue and Autumn Parkway.[164] The 34 closed cases are listed in Appendix F and the seven open cases are summarized in Table 4.6-1 below.

[161] CalRecycle. "Solid Waste Information System (SWIS), Facility/Site Listing." Accessed October18, 2011. http://www.calrecycle.ca.gov/SWFacilities/Directory/search.aspx

[162] California Department of Toxic Substances Control. "EnviroStor". Accessed October 17, 2011. http://www.envirostor.dtsc.ca.gov/public/

[163] California State Water Resources Control Board. "GeoTracker." Accessed October 18, 2011. http://geotracker.waterboards.ca.gov/

[164] Elevated concentrations of arsenic and lead were detected on the NBC Universal property during investigations completed in May 2005. In 2008, the contaminated soil was removed and the RWQCB issued a "No Further Action" letter. Although this property is part of the planned baseball stadium site, it was not identified as a known hazardous materials release site in the Stadium EIR or Strategy 2000 EIR.

Table 4.6-1:
SWRCB Geotracker Results: Open Cases within the Plan Area

Site Name	Address	Hazardous Material (Affected Medium)	Cleanup Status*
AC Label Co/ Berryman Products	350 N. Montgomery St.	Various chemicals (soil and groundwater)	Verification Monitoring
Dariano & Sons	638 Auzerais Ave.	Petroleum hydrocarbons (groundwater)	LUST: Site Assessment
Diridon Caltrain Station	65 Cahill St.	Petroleum hydrocarbons (soil and groundwater)	Site Assessment
Marian Johnson	59 S. Autumn St.	Gasoline leak (unknown)	Reported in 1995 - Inactive
Perrucci Properties	53 S. Montgomery St.	Gasoline leak (soil)	Reported in 1992 - Inactive
San Jose Foundry	525 W. Saint John St.	Gasoline (groundwater)	LUST: Site Assessment

* "Site assessment" applies when characterization or clean-up activities are on-going, while "verification monitoring" generally applies when groundwater monitoring is occurring to verify that remediation goals have been achieved.

Diridon Station

The Peninsula Corridor Joint Powers Board (PCJPB), as owner of the Caltrain commuter rail system, is currently completing improvements to the existing Diridon Station, including the construction of two new platforms, canopies, station amenities, and tracks. In 2007, the PCJPB conducted soil and groundwater investigations in the area of the proposed improvements. Some of the soil samples collected contained concentrations of petroleum hydrocarbons in excess of environmental regulatory screening levels. Soil remediation (excavation and off-site disposal) was completed in 2010 in accordance with a Remedial Action Workplan.[165] Groundwater monitoring is ongoing at the site.

[165] RWQCB. Letter from Bruce H. Wolfe, Executive Officer to Stacey Ingersoll of the Peninsula Corridor Joint Powers Board. "Approval of Remedial Action Workplan Implementation Summary Report and Groundwater Investigation Workplan, and Requirement for Completion Report, Diridon Station, 65 Cahill Street, San Jose, Santa Clara County." April 5, 2010.

Potential Off-site Sources of Contamination

There are numerous closed LUST cases in the surrounding area. There are five open cases listed on the SWRCB Geotracker list in the immediate vicinity of the Plan area, as summarized in Table 4.6-2.

Table 4.6-2:
SWRCB Geotracker Results: Open Cases Near the Plan Area

Site Name	Address	Contaminants of Concern (Affected Medium)	Cleanup Status
College Park Yard (Former UPRR Maintenance Facility)	483 Coleman Ave.	Petroleum, volatile organic compounds, diesel, and lead (groundwater and soil)	Verification Monitoring
Del Monte Plant 51	50 Bush St.	Solvents (soil)	Site Assessment
Floor Service Supply Co	861 Auzerais Ave.	Benzene, gasoline, toluene, xylene (groundwater and soil)	LUST: Site Assessment
Guadalupe River	NA	Unknown	Inactive as of 1993
San Carlos Site	860 San Carlos St.	Benzene, diesel, fuel oxygenates, gasoline, lead, toluene, xylene, waste/motor/hydraulic/ lubricating oil (unknown)	Inactive as of 2009

4.6.2.2 *Airport Regulations*

The primary hazard associated with airport facilities is the potential for accidents to occur as aircraft approach and depart the airport. The risk associated with accidents increase with the presence of tall buildings, high concentrations of people, and low-mobility uses that cannot respond quickly to emergencies. The principal means of reducing risks is to restrict land uses so as to minimize obstructions to aircraft and limit the number of people who might gather in areas most susceptible to aircraft accidents.[166]

Aviation hazards are addressed at the federal level by the Federal Aviation Administration (FAA), at a state level by Caltrans under the State Aeronautics Act, and at the local level by the Santa Clara County Airport Land Use Commission (ALUC) and City policies and plans. These regulations focus on the protection people on the ground and in the air.

[166] Santa Clara County Airport Land Use Commission. *Comprehensive Land Use Plan, Norman Y. Mineta San Jose International Airport*. 2010.

Federal Aviation Regulations Part 77

Federal Aviation Regulation Part 77 sets forth standards and review requirements for the protection of airspace. Part 77 is administered by the Federal Aviation Administration (FAA) and includes the restrictions on the height of potential structures, use of reflective surfaces and flashing lights, electronic interference, and other potential hazards to aircraft in flight. Building height restrictions are intended to keep flight paths clear of structures that could interfere with takeoff and landing movements.

Under Federal Aviation Regulations Part 77, the FAA must be notified of proposed structures within an extended zone defined by imaginary surfaces that radiate out for several miles from an airport's runways. Any proposed structure (including buildings, poles, antennae, and temporary construction cranes) that would penetrate the imaginary surface or which would stand 200 feet or more in height, must be submitted to the FAA for an aeronautical study. The FAA typically makes one of three determinations based on its aeronautical study: (a) the structure as proposed would not be an airspace obstruction or hazard; (b) the structure as proposed would be an airspace obstruction but not a hazard if subject to specified conditions, such as roof-top lighting/marking and subsequent notification to the FAA of completed construction; or (c) the structure as proposed would be an airspace hazard and should not be approved.

As the FAA does not have authority to approve or disapprove a proposed off-airport land use, it is the responsibility of the City and other local land use jurisdictions to ensure that new development complies with the Part 77 notification requirements and resulting FAA-issued determinations. The FAA does have the authority to protect the airspace by modifying flight procedures if feasible and/or by restricting use of the airport.

As shown on Figure 4-3, the entire Plan area is located within the Part 77 imaginary surfaces for the Mineta San José International Airport. The surfaces are lowest in the Northern Zone, closest to the airport.

Part 25

~~As described in Section 4.2 *Transportation,*~~ Part 25 of the Federal Aviation Regulations requires airlines to design emergency flight procedures in the event of a total power loss in one engine during takeoff. The One-Engine Inoperative (OEI) procedures are designed such that the aircraft would gain some altitude and follow a simple flight path over the lowest terrain that would allow a return to the airport.[167] OEI heights are generally not considered by the FAA in its Part 77 reviews. Accordingly, the City applies FAA Part 77 height criteria during review of proposed development projects under CEQA.

Comprehensive Land Use Plan

In accordance with the California State Aeronautics Act, the Santa Clara County ALUC adopted a Comprehensive Land Use Plan (CLUP) for the Mineta San José International Airport. The CLUP

[167] Although aircraft are designed to fly safely with one engine inoperative, their rate of climb is substantially reduced and obstacles need to be lower than for a normal departure. Heavier planes ascend at a slower rate.

establishes provisions for the regulation of land use, safety, and noise within the airport's Airport Influence Area (AIA) to minimize the public's exposure to safety hazards and excessive noise. All areas within the AIA should be regarded as potentially subject to aircraft over-flights and are subject to land use compatibility policies in the CLUP.[168] The CLUP also establishes a Height Restriction Area, based on the FAA Part 77 imaginary surfaces and safety zones with appropriate land use types and density limitations for each zone. The ALUC determined that the City of San José 2040 General Plan is consistent with the CLUP.

4.6.2.3 *ABAG Hazard Mitigation Plan*

The City of San José has joined with 60 jurisdictions in the San Francisco Bay Area and participated in the development of a multi-jurisdictional hazard plan by ABAG. The hazard mitigation plan, *Taming Natural Disasters*, includes mitigation activities and strategies for dealing with hazards that are likely to impact the Bay Area, including flooding, landslides, wildfires, drought, and earthquake-related hazards (i.e., faulting, shaking, earthquake-induced landslides, liquefaction, and tsunamis). All of the hazards, except for tsunamis, could impact San José. These hazard mitigation planning efforts are intended to reduce risks to people and property in San José.

4.6.2.4 *City of San José Policies*

The San José Municipal Code contains several regulations regarding hazardous materials and hazardous wastes, including requirements for automobile dismantlers, hazardous materials storage permits, and zoning regulations prohibit land uses requiring a hazardous materials storage permit on residential parcels.

To address potential hazards to daycare facilities, churches, schools and other sensitive developments in or near areas where hazardous materials are used or stored, the City of San José has developed the following guidance documents that are used during the development review and approval process:

- Draft Guidelines for the Placement of Daycare Facilities, Churches and Schools in or adjacent to Industrial Zones
- Draft Guideline for Preparation of Risk Assessments
- Development Guideline for Land in Proximity to High Pressure Natural Gas Pipelines

The City of San José controls land uses or types of business (such as hazardous materials storage or hazardous waste facilities) through the Conditional Use Permit process. These permits are approved by the Planning Commission and may be appealed to the City Council. As part of the Conditional Use Permit process, the San José Environmental Services Department (ESD) may be requested to review site-specific environmental documentation. When contamination is present on a site, the city requires the applicant to obtain regulatory oversight from the appropriate agencies that regulate the cleanup of toxic contamination.

[168] Santa Clara County Airport Land Use Commission. *Comprehensive Land Use Plan, Norman Y. Mineta San Jose International Airport*. 2010.

Emergency Operations and Evacuation Plans

The City of San José's Emergency Operations Plan includes standard operating procedures for flood events, heat waves, off-airport aviation accidents, power outages, terrorism, and urban/wildland interface fires. The Citywide Emergency Evacuation Plan sets forth the responsibilities of City personnel and coordination with other agencies to ensure the safety of San José citizens in the event of a fire, geologic, or other hazardous occurrence.

Envision San José 2040 General Plan

Various policies in the City's General Plan have been adopted for the purpose of reducing or avoiding impacts related to hazards and hazardous materials, as listed in the following table.

Table 4.6-3:
General Plan Policies: Hazards and Hazardous Materials

Hazardous Materials	
Policy EC-6.1	Require all users and producers of hazardous materials and wastes to clearly identify and inventory the hazardous materials that they store, use or transport in conformance with local, state and federal laws, regulations and guidelines.
Policy EC-6.2	Require proper storage and use of hazardous materials and wastes to prevent leakage, potential explosions, fires, or the escape of harmful gases, and to prevent individually innocuous materials from combining to form hazardous substances, especially at the time of disposal by businesses and residences. Requires proper disposal of hazardous materials and wastes at licensed facilities.
Policy EC-6.4	Require all proposals for new or expanded facilities that handle hazardous materials that could impact sensitive uses off-site to include adequate mitigation to reduce identified hazardous materials impacts to less than significant levels.
Policy EC-6.5	The City shall designate transportation routes to and from hazardous waste facilities as part of the permitting process in order to minimize adverse impacts on surrounding land uses and to minimize travel distances along residential and other non-industrial frontages.
Policy EC-6.6	Address through environmental review all proposals for new residential, park and recreation, school, day care, hospital, church or other uses that would place a sensitive population in close proximity to sites on which hazardous materials are or are likely to be located, the likelihood of an accidental release, the risks posed to human health and for sensitive populations, and mitigation measures, if needed, to protect human health.
Policy EC-6.7	Land uses and development that use hazardous materials that could impact existing residences, schools, day care facilities, community or recreation centers, senior residences, or other sensitive receptors if accidentally released shall not be approved without the incorporation of adequate mitigation or separation buffers between uses.
Action EC-6.8	The City will use information on file with the County of Santa Clara Department of

	Environmental Health under the California Accidental Release Prevention (CalARP) Program as part of accepted Risk Management Plans to determine whether new residential, recreational, school, day care, church, hospital, seniors or medical facility developments could be exposed to substantial hazards from accidental release of airborne toxic materials from CalARP facilities.
Action EC-6.9	Adopt City guidelines for assessing possible land use compatibility and safety impacts associated with the location of sensitive uses near businesses or institutional facilities that use or store substantial quantities of hazardous materials by September 2011. The City will only approve new development with sensitive populations near sites containing hazardous materials such as toxic gases when feasible mitigation is included in the projects.
Action EC-6.12	Regulate new development on or in proximity to high pressure natural gas pipelines to promote public safety and reduce risks from land use incompatibility.
Environmental Contamination	
Policy EC-7.1	For development and redevelopment projects, require evaluation of the proposed site's historical and present uses to determine if any potential environmental conditions exist that could adversely impact the community or environment.
Policy EC-7.2	Identify existing soil, soil vapor, groundwater and indoor air contamination and mitigation for identified human health and environmental hazards to future users and provide as part of the environmental review process for all development and redevelopment projects. Mitigation measures for soil, soil vapor and groundwater contamination shall be designed to avoid adverse human health or environmental risk, in conformance with regional, state and federal laws, regulations, guidelines and standards.
Policy EC-7.3	Where a property is located in proximity to known groundwater contamination with volatile organic compounds or within 1,000 feet of an active or inactive landfill, evaluate and mitigate the potential for indoor air intrusion of hazardous compounds to the satisfaction of the City's Environmental Compliance Officer and appropriate regional, state and federal agencies prior to approval of a development or redevelopment project.
Policy EC-7.4	On redevelopment sites, determine the presence of hazardous building materials during the environmental review process or prior to project approval. Mitigation and remediation of hazardous building materials, such as lead-paint and asbestos-containing materials, shall be implemented in accordance with state and federal laws and regulations.
Policy EC-7.5	On development and redevelopment sites, require all sources of imported fill to have adequate documentation that it is clean and free of contamination and/or acceptable for the proposed land use considering appropriate environmental screening levels for contaminants. Disposal of groundwater from excavations on construction sites shall comply with local, regional, and state requirements.
Action EC-7.8	Where an environmental review process identifies the presence of hazardous materials on a proposed development site, the City will ensure that feasible mitigation measures that will satisfactorily reduce impacts to human health and safety and to the environment are required of or incorporated into the projects. This

	applies to hazardous materials found in the soil, groundwater, soil vapor, or in existing structures.
Action EC-7.9	Ensure coordination with the County of Santa Clara Department of Environmental Health, Regional Water Quality Control Board, Department of Toxic Substances Control or other applicable regulatory agencies, as appropriate, on projects with contaminated soil and/or groundwater or where historical or active regulatory oversight exists.
Action EC-7.10	Require review and approval of grading, erosion control and dust control plans prior to issuance of a grading permit by the Director of Public Works on sites with known soil contamination. Construction operations shall be conducted to limit the creation and dispersion of dust and sediment runoff.
Action EC-7.11	Require sampling for residual agricultural chemicals, based on the history of land use, on sites to be used for any new development or redevelopment to account for worker and community safety during construction. Mitigation to meet appropriate end use such as residential or commercial/industrial shall be provided.
Safe Airport	
Policy TR-14.2	Regulate development in the vicinity of airports in accordance with Federal Aviation Administration regulations to maintain the airspace required for the safe operation of these facilities and avoid potential hazards to navigation.
Policy TR-14.3	For development in the vicinity of airports, take into consideration the safety and noise policies identified in the Santa Clara County Airport Land Use Commission (ALUC) comprehensive land use plans for Mineta San José International and Reid-Hillview airports.
Policy TR-14.4	Require avigation and "no build" easement dedications, setting forth maximum elevation limits as well as for acceptance of noise or other aircraft related effects, as needed, as a condition of approval of development in the vicinity of airports.
Community Health, Safety, and Wellness	
Policy CD-5.8	Comply with applicable Federal Aviation Administration regulations identifying maximum heights for obstructions to promote air safety.
Policy CD-5.9	To promote safety and to minimize noise and vibration impacts in residential and working environments, design development that is proposed adjacent to railroad lines to provide the maximum separation feasible between the rail line and dwelling units, yards, or common open space areas, offices and other job locations, facilities for the storage of toxic or explosive materials and the like. To the extent possible, devote areas of development closest to an adjacent railroad line to use as parking lots, public streets, peripheral landscaping, the storage of non-hazardous materials and so forth. In industrial facilities, where the primary function is the production, processing or storage of hazardous materials, for new development follow the setback guidelines and other protective measures called for in the City's Industrial Design Guidelines when such facilities are to be located adjacent to or near a main railroad line.

4.6.3 Hazards and Hazardous Materials Impacts

4.6.3.1 *Thresholds of Significance*

For the purposes of this PEIR, a hazards and hazardous materials impact is significant if implementation of the proposed DSAP would:

- Create a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials;
- Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment;
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances or waste within one-quarter mile of an existing or proposed school;
- Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment;
- For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area;
- For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area;
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; or
- Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

The Envision PEIR determined that, with implementation of General Plan policies and existing regulations, development allowed under the 2040 General Plan would not expose people and the environment to significant health or safety risks associated with hazards and hazardous materials.

4.6.3.2 *Soil and Groundwater Contamination*

As described above, there are reported hazardous materials spills and releases within the Plan area. New development under the proposed DSAP could occur in areas with soil contamination with adequate mitigation. The soil may contain a variety of chemical compounds associated with fuels, oils, solvents, metals, or other hazardous substances originating from historical and/or current land uses. In addition, contaminants may have migrated via shallow groundwater to properties in the Plan area. If not appropriately managed, contamination from past releases could present health risks to construction workers and/or the public during the site preparation, dewatering, construction, and maintenance activities.

Soil and groundwater contamination can also expose future users of redevelopment sites to health risks through direct contact and/or inhalation of soil or groundwater vapors of volatile organic compounds. Vapors can pass through cracked or porous foundations and impact indoor air quality.

To establish thresholds for future exposure to soil and groundwater contamination, the RWQCB developed Environmental Screening Levels (ESLs) for various land uses. Direct exposure to contamination levels above the residential ESL may pose a significant health risk to future sensitive uses in the area.

While the majority of reported releases within the Plan area are considered closed cases by the regulatory agencies such as the RWQCB, a reevaluation of potential hazards and soil or groundwater management may be warranted when changes in land use or excavation into contaminated areas is proposed. The presence of open/active cases would not preclude redevelopment, assuming the completion of required remediation activities or implementation of mitigation to meet applicable ESLs.

Measures Included in the Project to Reduce and Avoid Impacts related to Contamination

Adherence to existing regulations, programs, and General Plan policies, as described above and in the Envision 2040 PEIR, would substantially reduce hazards associated with contaminated soil and groundwater. Consistent with current regulations, future projects under the proposed DSAP may be required to complete one or more of the following measures, depending on the extent and magnitude of contamination and regulatory agency requirements:[169]

- **Subsequent Analysis.** Prior to development or redevelopment of any parcel as part of implementation of DSAP, a Phase I site assessment shall be conducted by a qualified professional in conformance with latest standards adopted by the American Society for Testing and Materials (ASTM). The Phase I site assessments shall identify:

  - current or historical land uses that involve the storage or generation of hazardous materials,
  - the potential for past releases of hazardous materials to have affected the site,
  - regulatory listed sites in the vicinity that might have impacted the site, and
  - any recognized environmental conditions and include recommendations for further investigation of the site, if necessary.

- **Phase II Environmental Site Assessment.** If a Phase I site assessment were to indicate that a release of hazardous materials could have affected the site, additional soil and/or groundwater investigations would be completed to assess the presence and extent of contamination at the site.

- **Human Health Risk Assessment.** If the results of the subsurface investigation(s) indicate the presence of hazardous materials in excess of Environmental Screening Levels (ESLs) for the applicable land use, a Human Health Risk Assessment may be performed by a qualified environmental professional. The assessment shall describe measures that must be implemented to ensure that any health risks to future users of the site are reduced to an acceptable level.

[169] These measures are based on those described in the Strategy 2000 EIR and Stadium EIR (2006).

- **Remedial Action Workplan.** For sites where contamination has been identified, the City or regulatory agencies may require preparation of a remedial action workplan (RAW or RAP) or similar documents. The plan will detail the specific remediation activities to be completed and the timing of the work, based on the results of the Phase II investigation and/or Human Health Risk Assessment. Typical remedial actions include:

  - removal of contaminated soils and off-site disposal,
  - groundwater remediation,
  - institutional/engineering controls such as the use of hardscape or imported soil to serve as a cap, and/or
  - modification to site planning and building design to eliminate exposure pathways.

- **Operations and Maintenance Program.** If institutional/engineering controls are used to remediate contamination, an Operations and Maintenance Program must be prepared and implemented to ensure health and safety measures for future construction, utility trenching, and maintenance are enforced throughout the life of the project.

- **Soil Management Plan.** For any site with the potential for encountering subsurface hazardous materials and/or where soil removal is required, the City or regulatory agencies may require preparation of a site-specific Soil Management Plan (or Waste Disposal Plan) to address the handling of impacted soils during site development. The plan would include the following elements:

  - procedures for transporting and disposing the waste material generated during removal activities,
  - procedures for stockpiling soil on-site,
  - provisions for collecting additional soil samples in previously inaccessible areas to confirm the extent of soil contamination, following demolition activities,
  - confirmation soil sampling to verify achievement of remediation goals,
  - procedures to ensure that fill and cap materials are verified as clean,
  - truck routes, and/or
  - staging and loading procedures and record keeping requirements.

It is assumed that impacted soils will be appropriately characterized and transported off-site for disposal at a facility licensed to receive such waste.

- **Health and Safety Plan.** For any site where contamination has been identified, construction shall occur in accordance with a site-specific Health and Safety Plan (or "Construction Risk Management Plan") prepared by an environmental professional. The Health and Safety Plan may be separate from or part of the Soil Management Plan or Removal Action Workplan and shall include the following elements, as applicable:

  - provisions for personal protection and monitoring exposure to construction workers,
  - procedures to be undertaken in the event that contamination is identified above action levels or previously unknown contamination is discovered,
  - procedures for the safe storage, stockpiling, and disposal of contaminated soils,
  - provisions for the on-site management and/or treatment of contaminated groundwater during extraction or dewatering activities, and
  - emergency procedures and responsible personnel.

If construction were to take place on sites adjacent to sensitive receptors, the plan shall also include air monitoring at the perimeter of the construction site and performance standards to minimize the effects of airborne contaminants (i.e., stopping work in dusty conditions, limiting excavation areas, or wetting down of surfaces). Construction workers at contaminated sites will be required to use proper protective equipment and receive hazardous materials training in accordance with state and federal regulations. Untrained workers and members of the public will be excluded from the area during work that involves contamination.

- **Groundwater.** To avoid the spread of harmful levels of contamination, the discharge of any water from dewatering activities will be required to comply with NPDES permit requirements or wastewater discharge permit conditions to the sanitary sewer, which may involve installation of a treatment system(s) at the dewatering location.

- **Review for Conformance.** All investigations and plans would be completed by a qualified hazardous materials consultant, in conformance with state and local guidelines and regulations. The investigations and plans would be subject to review and approval by the appropriate regulatory oversight agencies and the City's Environmental Compliance Officer through the City's development review process.

Specific requirements for future development projects within the DSAP area will be determined during the supplemental review phase in accordance with current regulations. Any required investigations and/or clean-up actions will be incorporated as conditions of approval for any grading, demolition, or building permit.

With implementation of General Plan policies, appropriate clean-up actions, and precautionary measures, future development under the proposed DSAP would not expose construction workers, the public, or environment to significant hazards related to soil or groundwater contamination. This conclusion is consistent with the analysis in the Envision PEIR. **[Less than Significant Impact]**

4.6.3.3 *Hazardous Materials Use, Transport, and Disposal*

As described above, the Plan area is currently developed with a mix of residential, commercial, industrial, and institutional uses. The proposed DSAP would result in the development of office/light industrial uses in two areas: the majority of the Northern Zone and the Royal/Auzerais subarea. A third area (the Central Zone) is also designated for high intensity non-residential uses. The remaining subareas would primarily be redeveloped with mid- to high-density residential development. Groundfloor retail uses would be mixed with development throughout the Plan area.

Build-out of the proposed DSAP Land Use Diagram would generally provide an adequate buffer between users of hazardous materials and sensitive uses such as residences, minimizing potential risks. In the interim, however, redevelopment under the DSAP could locate new industrial uses in proximity to existing residential/sensitive uses and/or locate new residential/sensitive uses in proximity to existing hazardous materials users. For example, existing residential uses are scattered throughout the areas designated for light industrial uses, with a high concentration in the Arena North subarea, while the areas designated for mixed use residential uses are mainly developed with a mix of commercial and industrial uses, particularly in the Dupont/McEvoy subarea.

Impacts to New Sensitive Uses

Industrial and commercial facilities are known to use and store hazardous materials. Improper use, storage, transport, or disposal of hazardous materials could result in the accidental release of toxic gas, explosions, or leaks into the surrounding environment. The release of acutely hazardous chemicals such as concentrated ammonia could significantly affect people off-site. Populations that are especially susceptible to the effects of hazardous materials include children, the elderly, and those with compromised immune systems. Thus, the health effects could be magnified if hazardous materials were released or emitted near residential areas, hospitals, day care facilities, nursing homes, and/or schools.

A previous records search identified three facilities in proximity to the Northern Zone of the DSAP area that have aboveground tanks posing an explosion/release hazard.[170] These facilities include Airgas (located at 414 Hobson Street), U-Haul (located at 1027 The Alameda), and PG&E service center (located at 308 Stockton Avenue, within the DSAP area). According to the worst case explosion/release analysis, the DSAP area is outside the impact zones modeled for the Airgas and U-haul facilities.[171] Therefore, explosions and/or releases at these facilities would not affect future development under the DSAP.

It was determined that a propane tank explosion at the PG&E service center could have off-site consequences under worst-case conditions and the alternate scenario conditions (e.g., normal wind patterns).[172] Given that PG&E must comply with very specific local and state regulatory requirements to maintain permits for their current operations, it is highly improbable that all existing safety systems would fail, resulting in an off-site explosion hazard. Therefore, this facility would not pose a significant risk to future development in the Northern Zone, including the planned residential uses in the Stockton Corridor subarea. As a condition of approval for future residential development, however, the City shall require the applicant to disclose the presence of the propane tanks at the PG&E facility to potential residents.[173] This measure would not be necessary if the PG&E facility is replaced with a new Transit Employment Center use, as proposed by the DSAP.

There are no other manufacturing or processing facilities within or near the Plan area known to use hazardous materials with the potential for significant off-site health consequences if accidentally released, such as semiconductor fabrication plants or refrigerated food storage facilities.[174, 175]

Industrial and commercial facilities may also generate hazardous emissions during routine operations, which could expose the public to health risks. As described in Section 4.4 *Air Quality*, there are three existing stationary sources of toxic air contaminants (TACs) north of the Plan area, approximately 0.25 miles (upwind) from the nearest proposed residential uses in the Stockton Corridor subarea, and one TAC source on San Carlos Avenue adjacent to the Plan area (a dry

[170] City of San José. *Morrison Park Residential Project Recirculated Initial Study*. 2008.
[171] The approximate distances from these facilities to the closest planned residential use within the Plan area are 0.5 and 0.14 miles, respectively. A release at the Airgas facility is estimated to have an impact zone of 0.18 miles for ammonia and 0.045 miles for propylene, while a release of propane at the U-Haul facility would have an impact zone of 0.016 miles.
[172] City of San José. *Morrison Park Residential Project Recirculated Initial Study*. 2008.
[173] The City previously made this conclusion and required this avoidance measure in the *Morrison Park Residential Project Recirculated Initial Study* (March 2008).
[174] City of San José. *KB Home Monte Vista Residential Planned Development Zoning Project Draft EIR*. 2004.
[175] City of San José. *Morrison Park Residential Project Recirculated Initial Study*. 2008.

cleaner). The avoidance measures listed for TAC impacts in Section 4.4 *Air Quality* would minimize exposure of future residential uses to existing sources of potentially hazardous emissions.

Adherence to existing regulations, programs, and General Plan policies, as described above and in the Envision 2040 PEIR, would further reduce hazards to people and the environment. For example, the City will only approve new development with sensitive populations near sites containing hazardous materials such as toxic gases when feasible mitigation is included in the projects (Action EC-6.9). Given that conditions change and the context for each development site is different, future projects that include residential uses will be required to prepare a Human Health Risk Assessment to address the likelihood of an accidental release, determine the risks posed to human health and sensitive populations, and identify mitigation measures to protect human health as needed (GP Policy EC-6.6).

For these reasons, the project would not expose new sensitive uses to a substantial risks associated with hazardous materials users.

Impacts from New Uses

New businesses allowed under the DSAP could involve the routine transport, use, or storage of hazardous materials, while some new uses such as dry cleaners or medical facilities could generate hazardous wastes. In effect, the existing supply of commercial/industrial uses (dominated by auto service businesses) would be replaced with a wider variety of neighborhood-serving commercial uses such as restaurants and shops. This would likely result in an overall reduction in facilities that use or generate small quantities of hazardous materials or wastes.

Redevelopment of lands designated *Combined Industrial/Commercial* could locate facilities that emit hazardous emissions or handle hazardous materials, substances, or waste within one-quarter mile of the existing Sunol Community School and/or the Gardner Academy.[176] New and existing industrial facilities within DSAP boundaries could also affect future schools, if proposed in or adjacent to the Plan area.

Based on the land use designations established in the DSAP Land Use Diagram, new facilities are not expected to involve the use of *substantial* quantities of hazardous materials or involve processes that would create a significant hazard to the public or environment under accidental release conditions. Adherence to existing regulations, programs, and General Plan policies, as described above and in the Envision 2040 PEIR, would further reduce hazards to people and the environment. In general, requirements for hazardous materials users, including mechanical controls, security measures, and monitoring by regulatory agencies, reduces the probability of an accidental release *and* the magnitude of a release, should one occur.

[176] The Sunol Community School is located on Sunol Street within the Plan area, while the Gardner Academy is located on Illinois Avenue, southwest of the Plan area.

Measures Included in the Project to Reduce and Avoid Impacts related to the Use or Generation of Hazardous Materials

Consistent with current regulations, future projects that involve the use or generation of hazardous materials would be subject to the following measures:[177]

- **Hazardous Materials Business Plan.** Facilities that use, store, or handle hazardous materials in quantities greater than 500 pounds, 55 gallons, or 200 cubic feet are required to prepare a Hazardous Materials Business Plan (HMBP). The HMBP would contain facility maps, up-to-date inventories of all hazardous materials for each area, emergency response procedures, equipment, and employee training.

- **Hazardous Waste Generator Requirements.** Facilities that generate more than 100 kilograms per month of hazardous waste or more than one kilogram per month of acutely hazardous waste must be registered with the U.S. EPA. DTSC administers hazardous waste generator registration in California.

- **Contingency Plan.** All facilities that generate hazardous waste must prepare a Contingency Plan that establishes the duties of the facility's Emergency Coordinator, identification and location of emergency equipment, and reporting procedures to follow after an incident.

- **California Accidental Release Prevention Program (CalARP).** Facilities that use significant quantities of acutely hazardous materials must prepare a Risk Management Program (RMP) if there may be a significant likelihood that this use could pose an accident risk. The RMP must include a description of acutely hazardous material accidents occurring at the facility within the past three years, a description of equipment, procedures, and training to reduce the risk of acutely hazardous materials accidents, and an off-site consequence analysis that models potential impacts from an accidental release to surrounding areas.

- **Injury and Illness Prevention Plan.** The California General Industry Safety Order requires that all employers in California shall prepare and implement an Injury and Illness Prevention Plan, which should contain a code of safe practice for each job category, methods for informing workers of hazards, and procedures for correcting identified hazards.

- **Emergency Action Plan.** The California General Industry Safety Order requires that all employers in California prepare and implement an Emergency Action Plan. The Emergency Action Plan designates employee responsibilities, evacuation procedures and routes, alarm systems, and training procedures.

- **Fire Prevention Plan.** The California General Industry Safety Order requires that all employers in California prepare and implement a Fire Prevention Plan. The Fire Prevention Plan specifies areas of potential hazard, persons responsible for maintenance of fire prevention equipment or systems, fire prevention housekeeping procedures, and fire hazard training procedures.

[177] City of San José. *San José Downtown Strategy 2000 EIR.* 2005.

- **Hazard Communication Plan.** Facilities involved in the use, storage, and handling of hazardous materials are required to prepare a Hazard Communication program. The purpose of the Hazard Communication program is to provide methods for safe handling of hazardous materials, ensure proper labeling of hazardous materials containers, and ensure employee access to Material Safety Data Sheets (MSDSs).

- **Supplemental Review.** Prior to issuance of building permits for development or redevelopment in the project area that may involve the use, storage, or disposal of hazardous materials, the City shall determine that the proposed use has adhered to current regulations and programs concerning hazardous waste. The City may impose additional avoidance measures through the Conditional Use Permit process.

  – In accordance with GP Policy EC-6.4, all proposals for new or expanded facilities that handle hazardous materials that could impact sensitive uses off-site will be required to include adequate mitigation to reduce and avoid hazardous materials impacts.

  – In accordance with GP Policy EC-6.7, land uses and development that use hazardous materials that could impact existing residences, schools, day care facilities, community or recreation centers, senior residences, or other sensitive receptors if accidentally released shall not be approved without the incorporation of adequate mitigation or separation buffers between uses.

Implementation of these measures, if included in future industrial/commercial projects as applicable, would minimize potential risks to future and existing sensitive uses associated with new hazardous materials users. The specific studies, plans, and control measures required to manage risks will vary depending on the type and quantity of hazardous materials to be used.

With implementation of General Plan policies, future development under the DSAP would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials or through reasonably foreseeable accident conditions. Additionally, the project does not currently propose the development of new facilities that emit hazardous emissions or handle hazardous or acutely hazardous materials, substances or waste within one-quarter mile of an existing or proposed school. This conclusion is consistent with the analysis in the Envision PEIR. **[Less than Significant Impact]**

4.6.3.4 *Demolition and Construction Activities*

Given the age of development in the Plan area, existing structures on properties planned for redevelopment may contain asbestos-containing building materials and lead-based paint. If improperly controlled, airborne dust could migrate off-site during future demolition activities, affecting nearby land uses. Inhalation of asbestos fibers and lead particles could result in health impacts to workers and the general public.

Construction activities would involve the use and transport of hazardous materials such as fuels, chemicals, and demolition debris. Demolition of structures would generate materials that could be re-used for construction, as well as solid and hazardous waste that would require off-site disposal. Minor spills of substances could occur, which could adversely affect the public and environment. However, the potential for construction activities to result in accidental releases or spills of hazardous

materials is considered to be low, given that the handling and disposal of hazardous materials is subject to construction worker health and safety regulations (i.e., Title 8 of the California Code of Regulations).

Construction activities could also uncover buried structures, wells, burn areas, debris, or contaminated soil, based on the long industrial/commercial history of the project vicinity. If encountered, these materials may require special handling and disposal to avoid impacts to construction workers, the public, and the environment.

Enforcement of existing regulations would minimize risks to the public and environment resulting from hazardous materials use, transport, and storage during construction activities. For example, future projects that involve disposal of contaminated soils or treatment of contaminated groundwater will be required to implement safety measures to minimize the risk of exposure to workers and the public, in accordance with a Health and Safety Plan or Construction Risk Management Plan (refer to Section 4.6.3.2 above).

Measures Included in the Project to Reduce and Avoid Impacts related to Construction-related Hazards

Consistent with current requirements, future projects would be subject to the following measures during demolition and construction activities:

- In accordance with National Emissions Standards for Hazardous Air Pollutants (NESHAP) guidelines, an asbestos survey shall be performed on all structures proposed for demolition that are known or suspected to have been constructed prior to 1980. If asbestos-containing materials are determined to be present, the materials shall be abated by a certified asbestos abatement contractor in accordance with the regulations and notification requirements of BAAQMD. Demolition and disposal of ACM will be completed in accordance with the procedures specified by BAAQMD's Regulation 11, Rule 2.

- A lead-based paint survey shall be performed on all structures proposed for demolition that are known or suspected to have been constructed prior to 1980. If lead-based paint is identified, then federal and state construction worker health and safety regulations shall be followed during renovation or demolition activities. If loose or peeling lead-based paint is identified at the building, it shall be removed by a qualified lead abatement contractor and disposed of in accordance with existing hazardous waste regulations. Requirements set forth in the CALIFORNIA CODE OF REGULATIONS will be followed during demolition activities, including employee training, employee air monitoring, and dust control. Any debris or soil containing lead-based paint or coatings will be disposed of at landfills that meet acceptance criteria for the waste being disposed.

With implementation of General Plan policies, future development under the DSAP would not create a significant impact associated with the handling of hazardous materials during the demolition and construction activities. This conclusion is consistent with the analysis in the Envision PEIR. **[Less than Significant Impact]**

4.6.3.5 *Airport Hazards*

As previously described, the Plan area is subject to airport-related hazards due to its proximity to the Mineta San José International Airport. In 2012, the airport served 8.3 million passengers with over 200 flights a day (landings and take-offs) on domestic and international air carriers.[178] The City's Airport Master Plan anticipates activity to increase to 17.6 million passengers and approximately 500 air carrier flights per day by the Year 2027. The primary hazard related to airport operations is the potential for accidents.

The Envision PEIR concluded that development allowed under the 2040 General Plan could occur in areas subject to airport-related building height restrictions and other land use or density limitations, but would not result in significant aviation hazards to people and property, with implementation of General Plan policies and existing regulations.

Federal Aviation Regulations Part 77

The maximum building heights proposed over most of the DSAP Area would comply with FAA obstruction standards to protect the airspace around the Mineta San José International Airport. Individual mid- or high-rise buildings, depending on specific proposed heights and locations, will be subject to required FAA regulatory review and modified if necessary prior to City approval.

Comprehensive Land Use Plan

As shown on Figure 4-3, the majority of the Northern Zone, Central Zone, and Park/San Carlos subarea are within the Airport Influence Area (AIA), as defined by the Santa Clara County ALUC in the San José Airport's CLUP. Of the three areas that include GP amendments, only the Park/San Carlos subarea is partially within the AIA. Future development within the AIA would be subject to land use compatibility policies in the CLUP. As further described in Section 4.3 *Noise and Vibration*, the DSAP does not propose any noise-sensitive residential uses within the 65 dB CNEL noise contour.

Approximately 13 acres of the Plan area is located within the Outer Safety Zone. In this zone, the CLUP limits population density to 300 people per acre, requires 20 percent of the site area to be open, discourages residential development, prohibits certain land uses, and prohibits some assembly and aboveground fuel storage. This portion of the Plan area is designated as *Transit Employment Center* under both the 2040 General Plan and proposed DSAP. According to the Envision 2040 PEIR, employment center uses are consistent with the land use parameters for the Outer Safety Zone, although the degree of intensification may be limited to the lower end of permissible densities.

The DSAP proposes the development of approximately 850,000 square feet of office/light industrial uses and 40,000 square feet of retail space in this 13-acre area, which would equate to a daily employment population of about 3,500 at a density of 270 people per acre.[179] With the addition of

[178] City of San Jose, Department of Aviation. "About SJC". Accessed August 5, 2013. http://www.flysanjose.com/fl/about.php?page=index

[179] This estimate is based on the ratios of one employee per 250 square feet of office/light industrial uses and one employee per 400 square feet of retail uses.

retail patrons, the daily population may approach or exceed the population density limit of 300 people per acre. Based on the proposed land use intensity, it is possible that future development in the Outer Safety Zone could also approach or exceed the open area requirement of 20 percent of the gross site area. The City will review future development proposals in this area for consistency with the CLUP.

The DSAP would not conflict with any other land use compatibility or safety policies in the CLUP. Furthermore, the conversion of existing residential uses within the Outer Safety Zone would be consistent with CLUP Policy G-4 to encourage the conversion of land uses that are currently incompatible to uses that are compatible.

For these reasons, the DSAP Land Use Diagram and Design Guidelines are generally consistent with the CLUP. The DSAP will be submitted to the ALUC for determination of whether specific land use amendments and development actions are consistent with the CLUP. The ALUC would then have 60 days to provide a consistency determination.

Measures Included in the Project to Reduce and Avoid Impacts related to Airport Hazards

Implementation of General Plan policies and existing regulations substantially reduces aviation hazards to people and property. Consistent with current regulations, future development projects within the Plan area would be subject to the following measures:

- Prior to the issuance of a development permit for any project structures that would exceed the FAA imaginary surface applicable to the project site, the following actions shall be accomplished (General Plan Polices TR-14.2 and CD-5.8):

  – The applicant shall comply with the notification requirements of Federal Aviation Regulations, Part 77, and receive a "Determination of No Hazard" from the FAA.
  – Conditions set forth in the required FAA determination of No Hazard regarding roof-top lighting or marking shall be incorporated into the final design of the structure.
  – Avigation and/or "no build" easements shall be dedicated to the City of San Jose as a condition of approval (GP Policy TR-14.4).[180]

- Comply with safety and noise policies identified in the CLUP for San José International Airport (GP Policy TR-14.3).

- Design all new exterior lighting within the AIA in a manner that avoids interference with aircraft operations. Such lighting shall be constructed and located so that only the intended area is illuminated and off-site glare is fully controlled. The lighting shall be arrayed in such a manner that it cannot be mistaken for airport approach or runway lights by pilots (CLUP Policy G-7).

[180] Avigation easements are intended to establish maximum elevation limitations, prevent other flight hazards, and minimize noise impacts to future occupants, as well as to ensure that prospective property owners are informed about airport hazards.

The following measures apply to future development within the CLUP Outer Safety Zone:

- Limit the storage of fuel or other hazardous materials (CLUP Policy S-4).

- Prohibit schools, hospitals, nursing homes, and other uses that involve very high concentrations of people or which the majority of occupants are children, elderly, and/or disabled (CLUP Policies S-2 and S-3).

- Prohibit any use that would:
  - direct a steady light or flashing light of red, white, green, or amber colors associated with airport operations toward an aircraft engaged in an takeoff or final approach to the airport;
  - cause sunlight to be reflected towards an aircraft engaged in an takeoff or final approach to the airport;
  - generate electrical interference that may be detrimental to the operation of aircraft and/or aircraft instrumentation, communication or navigation equipment; or
  - generate smoke or water vapor, attract large concentrations of birds, or may otherwise negatively affect safe air navigation within the area (CLUP Policy S-7).

With incorporation of applicable measures and compliance with existing regulations, future development projects would not expose people or property to significant impact risks associated with airport operations. Adherence to FAA imaginary surfaces would ensure that future structures would not be considered an airspace hazard. Future development projects that would exceed the FAA imaginary surfaces or potentially conflict with CLUP policies would be subject to supplemental environmental review.

Future development under the DSAP would not result in a safety hazard for people residing or working in the Plan area. This conclusion is consistent with the analysis in the Envision PEIR. **[Less than Significant Impact]**

4.6.3.6 *Other Hazards*

The proposed DSAP would not interfere with the City's Emergency Operations Plan or other emergency response plans. Given the urban setting, the project would not expose people or structures to a significant risk involving wildland fires.

EMF

The Envision PEIR included a discussion on potential hazards associated with electromagnetic fields (EMF). EMFs are invisible fields of force created by electric voltage (electric fields) and by electric current or charge (magnetic fields). EMFs occur naturally, including those caused by the earth's magnetic field, and as a result of the generation and transmission of electricity. Commonly human-made sources of EMF are electronics, telecommunications, electric motors, and other electrically powered devices. Although EMF sources are abundant, EMF levels in most urban environments are very low.

Short-term exposure to elevated levels of EMFs has been shown to cause health effects on the central nervous system and heating of the body; however, numerous studies have addressed but failed to establish any significant health effects of long-term exposure to low-level EMFs. As a result, there are no regulatory limits for EMF exposure, although several regulatory agencies have considered guidelines and the California Department of Education has developed restrictions on school uses in the vicinity of high-voltage power lines. Various industry, government, and scientific organizations, including the California Public Utilities Commission (CPUC), have created voluntary standards that represent their best judgment of what levels are considered safe.

The primary concern is the potential for health effects as exposure to EMF sources increase. There is also concern over the potential for electromagnetic interference (EMI), which occurs when the addition of new EMF sources adversely affect operation of electronic devices such as sensitive scientific instruments found in laboratories and hospitals.

Under the proposed DSAP, construction of new electrical transmission lines, if required, would increase EMF sources in the Plan area. In accordance with the CPUC's EMF Decision (D.93-11-013) and PG&E developed Transmission and Substation EMF Design Guidelines, PG&E is required to prepare an EMF Field Management Plan ("FMP") that specifically delineates the "no cost" and "low cost" magnetic field reduction steps in the design of new facilities.[181] With these cautionary measures, development of new electrical transmission lines would minimize possible hazards to the public from increased exposure to EMF.

With implementation of General Plan policies, future development under the DSAP would not create a significant impact associated with emergency response, wildland fires, or EMF. **[Less than Significant Impact]**

4.6.4 Cumulative Impacts

As described above, the Envision PEIR determined that with implementation of General Plan policies and existing regulations, development allowed under the 2040 General Plan would not expose people or the environment to significant risks associated with:

- the placement of sensitive uses in proximity to hazardous materials users,
- accidental release of hazardous materials,
- soil or groundwater contamination,
- demolition of buildings containing hazardous building materials, or
- airport-related hazards.

Construction of the baseball stadium, planned transportation projects (Autumn Parkway extension, HSR, BART, etc.), and approved but not yet built development projects in the area would result in similar effects as the proposed DSAP in relation to hazardous materials use, storage, and transport. The environmental reports prepared for the other projects determined that adherence to existing regulations and programs would reduce impacts related to hazardous materials to a less than significant level.

[181] Envision PEIR.

The expansion of Diridon Station would involve work on a site with past reports of contamination. Although the station site is currently undergoing remediation, additional investigations may be needed as part of the design-level environmental review. Contamination would not be a concern for the proposed minor accessibility modifications to the interior of the station and exterior improvements that do not involve ground disturbance. The project-level EIR to be prepared for the San José to Merced segment of the HSR system should address the potential for encountering soil and groundwater contamination during construction of the HSR-portion of the expanded station and tracks within the Plan area.

For these reasons, the DSAP would not result in a new cumulatively considerable impact related to hazardous materials use, storage, and transport.[182]

Emergency Response and Evacuation Planning

The baseball stadium, combined with DSAP development and planned increases in transit service, would substantially increase the amount of people visiting the Plan area, especially during the infrequent occasions when both the stadium and arena are hosting events. The City will develop an emergency operation plan for the baseball stadium to ensure appropriate response in the event of a natural disaster, hazardous materials incident, or other emergency.[183] The roadway network will be designed to accommodate emergency vehicles. For these reasons, the proposed DSAP would not combine with other projects to cumulatively interfere with an adopted emergency response plan.

EMF

As described above, the Envision PEIR concluded that with implementation of cautionary measures by PG&E, development of new electrical transmission lines associated with planned development would minimize possible hazards to the public from increased exposure to EMF. The HSR and BART would result in new sources of EMF, including train power distribution systems, substations, and various electrical systems for lighting, communications, and other systems. The greatest potential for exposure would be for people onboard the trains. The environmental impact reports prepared for the BART and HSR projects determined that the EMF strengths onboard trains, as well as in the surrounding area, would be substantially below any standards examined by experts, and therefore, operation of the trains would not result in health risks from exposure to EMF. In addition, the EMFs generated by the HSR project would have an extremely low potential to interfere with biomedical devices, and there are no EMI-sensitive uses in proximity to the BART alignment. While the lead agencies concluded that EMF generation would not result in a significant impact, out of an abundance of caution, they have adopted design practices and standards to minimize potential EMF/EMI effects from both the BART and HSR projects.[184]

For these reasons, the DSAP would not result in or contribute to a cumulative impact related to EMF exposure. With implementation of General Plan policies and existing regulations, the DSAP would not result in a new cumulative impact related to hazards and hazardous materials. **[Less than Significant Cumulative Impact]**

[182] Envision PEIR.
[183] City of San José. *Baseball Stadium in the Diridon/Arena Area Draft EIR.* 2006.
[184] The mitigation strategies for the HSR project will be refined at the project-level.

4.6.5 Conclusion

With implementation of General Plan policies, appropriate clean-up actions, and precautionary measures, future development under the proposed DSAP would not expose construction workers, the public, or environment to significant hazards related to soil or groundwater contamination. Future development under the DSAP would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials or through reasonably foreseeable accident conditions. Additionally, the project does not currently propose the development of new facilities that emit hazardous emissions or handle hazardous or acutely hazardous materials within one-quarter mile of an existing or proposed school. The project would not create a significant impact associated with the handling of hazardous materials during demolition and construction activities or safety hazards for people residing or working in the Plan area. The project would not create a significant impact associated with emergency response, wildland fires, or EMF. **[Less than Significant Impact]**

The DSAP would not result in a new cumulative impact related to hazards and hazardous materials. **[Less than Significant Cumulative Impact]**

4.7 BIOLOGICAL RESOURCES

This section is based primarily upon the Envision PEIR, except where noted.

4.7.1 Existing Setting

The majority of the Plan area is paved, with some small pockets of vegetated or bare ground. Mature native and ornamental trees are scattered throughout the Plan area, particularly along streets and within parking lots. Developed habitats typically support common wildlife species that are tolerant of periodic human disturbance such as Rock Dove, squirrel, and raccoon. Native bird species commonly found in developed habitats in San José include the house finch, northern mockingbird, Anna's hummingbird, and California towhee. San José is also located along the Pacific Flyway for migratory birds.

The only natural habitats in the vicinity of the Plan area are the riparian corridors of Los Gatos Creek and the Guadalupe River. Los Gatos Creek runs through the Plan area between San Carlos Street and Montgomery Street, where the creek enters a culvert and passes beneath Montgomery Street and Park Avenue. South of San Carlos Street, the creek runs adjacent to the DSAP boundary. Between Park Avenue and Santa Clara Street, the Plan area is separated from Los Gatos Creek by Autumn Street (future "Autumn Parkway" alignment). Guadalupe River runs adjacent to the eastern boundary of the Plan area, north of St. John Street. The Los Gatos Creek/Guadalupe River corridor runs adjacent to the Plan area for a linear distance of approximately 1.1 miles.

View of Los Gatos Creek corridor, from Auzerais Avenue.

The creek/river corridors include mixed riparian forest, aquatic, and shaded riverine aquatic habitats. Shaded riverine aquatic habitat consists of overhanging and in-stream vegetation, which provides organic matter and insects to the aquatic food chain, protective cover from predators, and shade that helps maintain water temperatures. Riparian habitats generally support exceptionally rich animal communities and serve as important corridors of movement, particularly for birds and fish. Native fish species that could occur in Los Gatos Creek and Guadalupe River include Pacific Lamprey, steelhead, Chinook salmon, Sacramento sucker, prickly sculpin, riffle sculpin, California roach, and hitch.[185]

4.7.2 Regulatory Framework

[185] City of San José. *San José Downtown Strategy 2000 EIR.* 2005.

Existing federal, state, and local regulations adopted for the purpose of reducing or avoiding impacts to biological resources are described in the following subsections and in the Envision PEIR.

4.7.2.1 *Special Status Species*

Special status plant species are plants that are legally protected under the federal Endangered Species Act (ESA), the California Endangered Species Act (CESA), or species that are considered sufficiently rare and may qualify for such listing (CEQA Guidelines Section 15380). The Plan area is highly urbanized with very little undisturbed habitat and does not support any special status plant species.[186]

The federal ESA and CESA protect listed wildlife species from harm or "take," which can include habitat modification or degradation that directly results in death or injury to a listed wildlife species. The special status species that could occur in the Plan area are summarized below. The Plan area lacks suitable habitat for other special status wildlife species such as the California red-legged frog, California tiger salamander, and burrowing owl. It is possible that the western pond turtle, a California species of special concern, may occur in the vicinity of Downtown, although the Plan area has poor quality aquatic and upland nesting habitat near Los Gatos Creek and Guadalupe River.[187]

Fish

The Central California Coast steelhead (federally threatened) and Central Valley Fall-run Chinook salmon (a California species of special concern) are known to spawn in Guadalupe River and Los Gatos Creek.[188] Steelhead and Chinook salmon are anadromous and migrate between the San Francisco Bay and spawning grounds via the Guadalupe River. Migratory adult steelhead are typically present in the river between mid-December and late April and juvenile steelhead can occur at any time during the year. Adult Chinook salmon could occur from mid-June to mid-October, while juvenile Chinook salmon could occur from January through May.[189]

These species require highly specified conditions for migration, spawning, and rearing young. Currently, temperatures within the Guadalupe River can regularly exceed lethal limits for juvenile steelhead and Chinook. Shaded riverine aquatic cover vegetation is considered to be extremely important for maintaining cooler water temperatures needed to sustain populations. Although considered suitable habitat, the reach of Guadalupe River through Downtown provides less than optimal conditions for steelhead and Chinook salmon due to water temperatures, velocity and depth of flow, sandy gravel substrate, pollution, and barriers to migration (e.g., culverts, stream crossings, gabions, and dams).

The National Marine Fisheries Service protects and enhances habitat for Central Valley Fall-run Chinook salmon through the "essential fish habitat" provisions of the Magnuson-Stevens Fishery Conservation and Management Act. Other special status fish that may occur in the Guadalupe River watershed include Pacific Lamprey, green sturgeon, and longfin smelt.

[186] City of San José. *Baseball Stadium in the Diridon/Arena Area Draft EIR.* 2006.
[187] City of San José. *San José Downtown Strategy 2000 EIR.* 2005.
[188] Envision PEIR.
[189] City of San José. *San José Downtown Strategy 2000 EIR.* 2005.

Nesting Raptors and Birds

The federal Migratory Bird Treaty Act (MBTA) prohibits killing, possessing, or trading of migratory birds and their nests, except in accordance with regulations prescribed by the Secretary of the Interior. All native bird species in the city are protected under the MBTA. Raptors (i.e., eagles, falcons, hawks, and owls) are specifically protected under the California Fish and Game Code. In San José, raptors such as red-shouldered hawks and Cooper's hawks are known to nest within riparian corridors and forage in adjacent habitats. Protected bird species that may occur as occasional or infrequent foragers or transients in the Plan area include: Sharp-shinned hawk, Red-tailed hawk, Peregrine falcon, White-tailed kite, American kestrel, Willow flycatcher, Loggerhead shrike, and Bryant's savannah sparrow.

Bats

There are three bat species that are designated as California Species of special concern that may occur in San José as occasional foragers or transients, but are not known or expected to breed within city limits.[190] The western red bat may roost in the foliage of trees throughout the city, especially in or near riparian habitat. Pallid bats could forage over many habitats, but are more likely to occur in or near less developed areas or open spaces around the periphery of the city (not in Downtown). Individual Townsend's big-eared bats are expected to occur very infrequently and in small numbers, with greater potential to occur in the southern portion of the City. The likelihood for occurrence of any of these species in Downtown is low.[191] Additionally, other native bat species protected under the California Fish and Game Code may be present in the Plan area. Old buildings, bridges, and hollow trees provide potential roosting habitat for bats.

4.7.2.2 *Draft Santa Clara Valley Habitat Conservation Plan*

The Plan area is covered by the Santa Clara Valley Habitat Conservation Plan/Natural Community Conservation Plan (HCP/NCCP). The HCP/NCCP has been developed through a partnership between Santa Clara County, the Cities of San José, Morgan Hill, and Gilroy, Santa Clara Valley Water District (SCVWD), Santa Clara Valley Transportation Authority (VTA), U.S. Fish and Wildlife Service (USFWS), and California Department of Fish and Game (CDFG). The HCP/NCCP is intended to promote the recovery of endangered species and enhance ecological diversity and function, while accommodating planned growth in approximately 500,000 acres of southern Santa Clara County.[192]

[190] H. T. Harvey & Associates. *Envision San José 2040 General Plan Update Biological Resources Report*. 2010.
[191] Envision PEIR.
[192] An HCP is a document that supports issuance of an incidental take permit consistent with the federal Endangered Species Act, while a NCCP is the state counterpart and provides a means of complying with the California Endangered Species Act. The approved Santa Clara Valley Habitat Plan is available at: http://www.scv-habitatplan.org.

4.7.2.3 *City of San José Policies*

Tree Removal Ordinance

The City of San José Tree Removal Controls (San José Municipal Code, Sections 13.31.010 to 13.32.100) serve to protect all trees having a trunk that measures 56 inches or more in circumference (18 inches in diameter) at the height of 24 inches above the natural grade of slope. The ordinance protects both native and non-native tree species. A tree removal permit is required from the City of San José for the removal of ordinance-sized trees. On private property, tree removal permits are issued by the Department of Planning, Building and Code Enforcement. Tree removal or modifications to all trees on public property (e.g., street trees within a parking strip or the area between the curb and sidewalk) are handled by the City Arborist.

In addition, any tree found by the City Council to have special significance can be designated as a Heritage Tree, regardless of tree size or species. It is unlawful to vandalize, mutilate, remove, or destroy such Heritage Trees. Under the City's Tree Removal Ordinance, specific criteria or findings must be made before a permit for removal of a live or dead Heritage Tree would be granted. There is one Heritage Tree within the Plan area: a 52-inch diameter American elm tree located at 764 Clinton Place (HT-06-003).[193]

Riparian Corridor Policy Study

The City of San José developed the Riparian Corridor Policy Study (updated in 1999) to guide the City's treatment of riparian corridors. The policy establishes development guidelines for site design, buildings, and landscaping to limit direct and indirect effects from development. The policy includes guidelines for setback areas to provide a buffer between development and the riparian corridor. There is no minimum setback for passive recreational uses, but the guidelines state that trails should have a setback of at least 10 feet. Urban development and active recreational facilities (including sports fields, parking, and recreation-related buildings that generate human activity) should have a setback of at least 100 feet, although the absolute minimum setback for new buildings in existing urban infill areas and within Downtown is 30 feet. Night-lighted facilities should have a setback of 200-300 feet. The setback for a particular project is typically determined on a case-by-case basis.

Other examples of site planning guidelines that limit the effects of urban development on riparian corridors include the following:

- Orient development to provide views of the riparian corridor, while drawing noise-generating activity away from the creek (i.e., entrances and loading/delivery areas).
- Install split rail fencing, barrier plantings, and/or signage at the edge of the riparian corridor to discourage people and pets from entering the sensitive habitat, while allowing wildlife movement and visibility.
- Use proper stormwater control measures to treat and manage runoff that enters the creek, especially from parking lots and lawns treated with chemicals.

[193] City of San José. "Heritage Trees in the City of San José." Accessed March 1, 2011. <http://www.sanjoseca.gov/tree/trees_heritage_map.asp >

- If lighting is proposed within the riparian setback for public safety purposes, place low-glare lights as close to the ground as possible and directed downward or away from the creek to avoid direct illumination of the riparian corridor.

Envision San José 2040 General Plan

Various policies in the City's General Plan have been adopted for the purpose of reducing or avoiding impacts related to biological resources, as listed in the following table.

Table 4.7-1:
General Plan Policies: Biological Resources

Riparian Corridors	
Policy ER-2.1:	Ensure that new public and private development adjacent to riparian corridors in San José are consistent with the provisions of the City's Riparian Corridor Policy Study and any adopted Santa Clara Valley Habitat Conservation Plan/Natural Communities Conservation Plan (HCP/NCCP).
Policy ER-2.2:	Ensure that the 100-foot setback from riparian habitat is the standard to be achieved in all but a limited number of instances, only where no significant environmental impacts would occur.
Policy ER-2.3:	Design new development to protect adjacent riparian corridors from encroachment of lighting, exotic landscaping, noise, and toxic substances into the riparian zone.
Policy ER-2.4:	When disturbances to riparian corridors cannot be avoided, implement appropriate measures to restore and/or mitigate damage and allow for fish passage during construction.
Policy ER-2.5:	Restore riparian habitat through native plant restoration and removal of non-native/invasive plants along riparian corridors and adjacent areas.
Special Status Plants and Animals	
Policy ER-4.1	Preserve and restore habitat areas that support special-status species. Avoid development in such habitats unless no feasible alternatives exist and mitigation is provided of equivalent value.
Policy ER-4.2	Limit recreational uses in wildlife refuges, nature preserves and wilderness areas in parks to those activities which have minimal impact on sensitive habitats.
Policy ER-4.3	Prohibit planting of invasive non-native plant species in natural habitats that support special-status species.
Policy ER-4.4	Require that development projects incorporate mitigation measures to avoid and minimize impacts to individuals of special-status species.
Action ER-4.5	Where implementation of the General Plan would result in impacts to burrowing owl habitat occupied by breeding owls in 2008 or later, providing mitigation of equivalent value shall consist of securing, protecting and managing nesting and foraging habitat

	in perpetuity for burrowing owls within the South Bay area such that there is no reduction in the local burrowing owl population. Mitigation shall be required for the largest number of breeding burrowing owls that have been identified nesting or foraging on a site in burrowing owl surveys since 2008. These measures are required to be implemented by individual projects unless the City develops an independent plan or participates in a regional conservation strategy (such as the Santa Clara Valley HCP) that would maintain or increase South Bay area burrowing owl populations.
Migratory Birds	
Policy ER-5.1	Avoid implementing activities that result in the loss of active native birds' nests, including both direct loss and indirect loss through abandonment, of native birds. Avoidance activities that could result in impacts to nests during the breeding season or maintenance of buffers between such activities and active nests would avoid such impacts.
Policy ER-5.2	Require that development projects incorporate measures to avoid impacts to nesting migratory birds.
Urban Natural Interface	
Policy ER-6.2	Design development at the urban/natural community interface of the Greenline/Urban Growth Boundary (UGB) to minimize the length of the shared boundary between urban development and natural areas through clustering of development and locating development closest to existing development. Key areas where natural communities are found adjacent to the UGB include the Baylands in Alviso, the Santa Teresa Hills, Alum Rock Park, and Evergreen.
Policy ER-6.3	Lighting in developed areas adjacent to natural areas will consist of low-glare lighting. Any high-intensity lighting used near natural areas will be placed as close to the ground as possible and directed downward or away from natural areas.
Policy ER-6.4	Site public facilities such as ballparks and fields that require high-intensity night lighting at least 0.5 miles from sensitive habitats to minimize light pollution, unless it can be demonstrated that lighting systems will not substantially increase lighting within natural areas (e.g., due to screening topography or vegetation).
Policy ER-6.5	Prohibit use of invasive species, citywide, in required landscaping as part of the discretionary review of proposed development.
Policy ER-6.7	Include barriers to animal movement within new development and, when possible, within existing development, to prevent movement of animals (e.g., pets and wildlife) between developed areas and natural habitat areas where such barriers will help to protect sensitive species.
Policy ER-6.8	Design and construct development to avoid changes in drainage patterns across adjacent natural areas and for adjacent native trees, such as oaks.
Wildlife Movement	
Policy ER-7.2	In areas important to terrestrial wildlife movement, design new or improved existing roads so that they allow wildlife to continue to move across the roads (e.g., either over the road surface or through undercrossings or overcrossings designed for the animals

	moving through the areas). Enhance undercrossings used for wildlife movement (e.g., by enlargement) when roads are improved.
Policy ER-7.3	Where new road crossings of streams are constructed, or existing culverts are replaced or improved, design all culverts to allow movement of aquatic species present in any watercourse crossed by the road. Use clear-span bridges in place of culverts where feasible.
Sustainable Parks and Recreation	
Policy PR-6.5	Design and maintain park and recreation facilities to minimize water, energy and chemical (e.g., pesticides and fertilizer) use. Incorporate native and/or drought-resistant vegetation and ground cover where appropriate.
Policy PR-6.8	Encourage development of public and private recreational uses in rural and hillside areas that is low intensity and sensitive to geologic hazards, water resources, natural habitats, and visual impacts.
Community Forest	
Policy MS-21.4	Encourage the maintenance of mature trees, especially natives, on public and private property as an integral part of the community forest. Prior to allowing the removal of any mature tree, pursue all reasonable measures to preserve it.
Policy MS-21.5	As part of the development review process, preserve protected trees (as defined by the Municipal Code), and other significant trees. Avoid any adverse affect on the health and longevity of protected or other significant trees through appropriate design measures and construction practices. Special priority should be given to the preservation of native oaks and native sycamores. When tree preservation is not feasible, include appropriate tree replacement, both in number and spread of canopy.
Policy MS-21.6	As a condition of new development, require, where appropriate, the planting and maintenance of both street trees and trees on private property to achieve a level of tree coverage in compliance with and that implements City laws, policies or guidelines.
Policy MS-21.7	Manage infrastructure to ensure that the placement and maintenance of street trees, streetlights, signs and other infrastructure assets are integrated. Give priority to tree placement in designing or modifying streets.
Policy MS-21.8	For Capital Improvement Plan or other public development projects, or through the entitlement process for private development projects, require landscaping including the selection and planting of new trees to achieve the following goals: 1. Avoid conflicts with nearby power lines. 2. Avoid potential conflicts between tree roots and developed areas. 3. Avoid use of invasive, non-native trees. 4. Remove existing invasive, non-native trees. 5. Incorporate native trees into urban plantings in order to provide food and cover for native wildlife species. 6. Plant native oak trees and native sycamores on sites which have adequately sized landscape areas and which historically supported these species.
Policy MS-21.9	Where urban development occurs adjacent to natural plant communities (e.g., oak woodland, riparian forest), landscape plantings shall incorporate tree species native to

	the area and propagated from local sources (generally from within 5-10 miles and preferably from within the same watershed).
General Provision of Infrastructure	
Policy IN-1.11	Locate and design utilities to avoid or minimize impacts to environmentally sensitive areas and habitats.
Community Design Policies – Attractive City	
Policy CD-1.24	Within new development projects, include preservation of ordinance-sized and other significant trees, particularly natives. Any adverse affect on the health and longevity of such trees should be avoided through design measures, construction, and best maintenance practices. When tree preservation is not feasible include replacements or alternative mitigation measures in the project to maintain and enhance our Community Forest.
Note: Some of the policies in this table were slightly modified for applicability to the proposed DSAP.	

4.7.3 Biological Resources Impacts

4.7.3.1 *Thresholds of Significance*

For the purposes of this PEIR, a biological resources impact is significant if implementation of the proposed DSAP would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service; or
- Have a substantial adverse effect on any aquatic, wetland, or riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service; or
- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act, including, but not limited to marshes, vernal pools, or shorelines through direct removal, filling, hydrological interruption, or other means; or
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites; or
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

4.7.3.2 *Impacts to Sensitive Habitats*

The Envision PEIR concluded that development allowed under the 2040 General Plan would not result in a significant impact to natural communities and sensitive wildlife habitat, with implementation of General Plan policies and existing regulations and programs.

The only sensitive natural communities in the vicinity of the Plan area are the riparian forest and aquatic habitats within the corridors of Los Gatos Creek and the Guadalupe River. The waterways have moderate to steep banks with moderately dense vegetation consisting of a mix of native and non-native understory and trees. The most common plant species in the project reach of Los Gatos Creek is arroyo willow.[194]

Within the Plan area, Los Gatos Creek runs adjacent to the San José Fire Department Training Facility ~~through~~ an approximately eight-acre property ~~that is owned by the City of San José and~~ north of West San Carlo Street. The property is designated as *Open Space, Parklands, and Habitat* on the 2040 General Plan Land Use/Transportation Diagram and DSAP Land Use Diagram. The DSAP proposes redevelopment of the property as a community park as part of the open space network strategy. According to the DSAP, conceptual uses of the planned community park include multiple sports fields and informal play areas, with restrooms, urban gardening spaces, a café, and a community center. In addition, a segment of the Los Gatos Creek Trail will be constructed prior to or during development of the park.[195] In the long-term, the City hopes to expand the community park to include the properties located at the northwest corner of San Carlos Street and Montgomery Street.[196]

In addition to the community park site, the Royal/Auzerais and Park/San Carlos subareas include properties that are directly adjacent to Los Gatos Creek. These properties are proposed for redevelopment with *Urban Residential* or *Combined Industrial/Commercial* uses.

Aquatic Habitat

The DSAP does not propose any direct modifications to the creek or river, with the possible exception of replacing or installing outfalls or siphons, if required to serve new development. Any work within the banks of Los Gatos Creek or the Guadalupe River would require permits from the SCVWD, USACE, RWQCB, and/or CDFG.

Construction work could adversely affect aquatic habitat if sediments or chemicals are allowed to discharge into the waterways. It is assumed that temporary impacts to the waterways would be avoided by restricting all work within the banks to the dry season, staging construction equipment in upland and/or currently developed areas, and implementing water quality BMPs and any permit conditions. The long-term impacts to aquatic habitat from urban development are discussed further in Section 4.9 *Hydrology and Water Quality*.

[194] City of San José. *KB Home Monte Vista Residential Planned Development Zoning Project Draft EIR*. 2004.
[195] Construction of the Los Gatos Creek Trail (Reach 5) is a separate City project and was evaluated in the Los Gatos Creek Trail Master Plan Initial Study (City of San José, 2008).
[196] The land use designation of this area would remain as *Combined Industrial/Commercial* under the DSAP and the 2040 General Plan.

Riparian Habitat

According to the Envision 2040 PEIR, development within Growth Areas could affect natural communities and sensitive wildlife habitat, especially adjacent to riparian corridors. Potential impacts to riparian corridors were also previously evaluated in the Strategy 2000 EIR.

The wildlife currently inhabiting the riparian corridors in Downtown is habituated to high levels of disturbance due to the proximity of urban development. Even though the riparian habitat is relatively degraded, these areas are important because they offer natural cover, food, water, and nest sites for a variety of birds and mammals, as well as protect, cool, and enrich aquatic habitats.[197] The riparian habitats also support special status species and serve as important migration corridors for birds and fish (refer to Sections 4.7.3.4 and 4.7.3.5 below). Due to the sensitivity of riparian habitat, intensification of urban development in the vicinity of the Guadalupe River and Los Gatos Creek could result in a substantial adverse effect.

In general, the intensity, proximity, and duration of human activity determine the magnitude of effects on riparian resources, including vegetation, wildlife, and water quality.[198] Potential disturbances resulting from human activity could include increased litter, noise, inadvertent trampling of native vegetation, harassment of wildlife, and predation from pets (mainly cats). Increased night lighting from new development could affect the quality of riparian habitats by changing the behavior of wildlife (e.g., causing them to avoid well-lighted areas or alter dispersal routes) and amplifying predation pressure on some species. Although the Plan area is currently urbanized and nocturnal animals are habituated to some night lighting, the proposed intensification of land uses would increase the sources of artificial light.

Additionally, homeless persons are known to live or camp in urban riparian corridors in San José, trampling sensitive habitat, disrupting wildlife, and leaving behind trash.[199] The project's effect on the homeless population within the Plan area is uncertain. While it could increase as a function of overall population growth, construction of mid-rise buildings adjacent to the creek and an increase in trail use could cause homeless people to relocate to more isolated areas. A reduction in people living in the riparian corridors could make the area more suitable for nocturnally active wildlife and reduce habitat degradation, although adverse effects of adjacent urban development could offset this benefit.

Riparian corridors may also experience invasions of common landscaping species, such as iceplant, ivies, and periwinkle, from nearby developments. These plants are lower quality sources of food and tend to limit the growth of other plants in the understory that are better sources of food and cover for wildlife.

Implementation of the General Plan policies and existing regulations described in Section 4.7.2 above would substantially reduce direct and indirect impacts to riparian habitat resulting from increased human activity. For example, prohibiting the use of species known to be invasive to riparian habitats in new landscaping throughout the Plan area, in accordance with GP Policy ER-6.5,

[197] Ibid.
[198] City of San José. *Riparian Corridor Policy Study*. 1999.
[199] Envision PEIR.

would help maintain the quality of riparian habitat in the Los Gatos Creek and Guadalupe River corridors.

For specific projects adjacent to the riparian corridor, a setback would be established in accordance with the development guidelines in the Riparian Corridor Policy and GP Policy ER-2.2.[200] Setbacks protect riparian corridors by buffering the effects of adjacent activities.[201] Incorporating other site planning measures set forth in the Riparian Corridor Policy development guidelines would further minimize human-induced disturbances such as lighting, noise, and use of toxic substances. A detailed evaluation may be required to determine impacts to riparian habitat and identify any necessary mitigation.

Shade/Shadow Impacts

In addition to disturbances related to increased human activity, the construction of new buildings could increase shading of the riparian corridors, as previously described in the Strategy 2000 EIR. Increasing the duration of shadows on a daily and/or seasonal basis is not anticipated to substantially affect the quality of riparian habitat for wildlife use and movements because animals using the corridor are adapted to the shaded conditions provided by the vegetation itself. Although riparian vegetation is generally shade tolerant as well, prolonged periods of shading can preclude some species from growing.[202] While increased shading can decrease the abundance of some nonnative plants such as fennel and ripgut frome, the increased moisture from a shadier environment can also increase the abundance of invasive species such as English ivy.[203]

The specific shade/shadow effects of new development would generally depend on the building height, distance from the riparian edge, and orientation to the creek relative to solar position (path of sunlight).[204] Along the 1.1-mile interface with Los Gatos Creek/Guadalupe River, development under DSAP would range from three to 12 stories, with a maximum height of 65-130 feet depending on the block (refer to Figure 2-3 and the DSAP Urban Design Guidelines). Based on the shade/shadow analysis completed for the baseball stadium, new buildings located on the west side of the creek/river corridors in the Central and Northern Zones could increase afternoon winter shade, but would not cast shadows on the creek corridor for the majority of the year due to the separation created by Autumn Parkway.[205] Increasing shade for part of the day for one season of the year (winter) is not likely to significantly affect the survival or growth of riparian habitat in the Central and Northern Zones.

New buildings adjacent to Los Gatos Creek in the Southern Zone would be more likely to cast shadows on the corridor for longer durations throughout the day and year, based on their proximity and orientation to the creek relative to sunlight. While increased shading in warm summer months could help keep water temperatures down, shadows casted by buildings are shortest during this time due to the high position of the sun. Thus, the buildings would mostly increase shading during non-

[200] City of San José. *San José Downtown Strategy 2000 EIR.* 2005.
[201] City of San José. *Riparian Corridor Policy Study.* 1999.
[202] City of San José. *San José Downtown Strategy 2000 EIR.* 2005.
[203] City of San José. *Baseball Stadium in the Diridon/Arena Area Draft EIR.* 2006.
[204] The southern sides of buildings receive the most sunlight at any given time of the year, meaning the north sides experience the most shade. Shadows are longest during the winter and shortest during the summer. On a daily basis, shadows would move from west to east as the sub moves across the sky.
[205] City of San José. *Baseball Stadium in the Diridon/Arena Area Draft EIR.* 2006.

summer months and are not expected to provide beneficial shading during the warm season. However, the majority of the properties abutting the creek in the Southern Zone would have a maximum building height of 65 feet, which reduces the potential for shading when compared to taller buildings that would cast longer shadows. The enforcement of Riparian Corridor Policy setbacks would further reduce potential shading of the riparian habitat.

While an individual development project is not expected to substantially affect the growth of riparian vegetation, the combined effects of new buildings along Los Gatos Creek could be significant. The degradation of shaded riverine aquatic habitat may cause localized increases in water temperature and impacts to special status fish species (refer to Section 4.7.3.4 below for additional discussion).

Community Park

Construction of a community park on the SFFD Training Facility site would replace urban development with a passive recreational use that is more compatible with riparian corridors.[206] While disturbances associated with truck and vehicle traffic would decrease, greater recreational use may lead to increases in vegetation trampling, soil compaction, and erosion in the riparian corridor.[207] To limit direct and indirect impacts to riparian habitat resulting from recreational use, the City would incorporate setbacks, barrier plantings, signage, and other site planning measures into the design of the new park, as described in Guideline 4 of the Riparian Corridor Policy (Public Recreation Facilities).[208]

Under existing conditions, the Training Facility property is almost entirely paved, with structures and vehicle parking abutting the riparian corridor. In accordance with the Riparian Corridor Policy and General Plan policies, redevelopment of the property with a community park would include preservation of all native riparian vegetation, a 100-foot setback for active recreational facilities and support buildings, and enhancement of riparian habitat through the planting of native species within the setback and possible removal of invasive plants. Although passive uses (i.e., lawns and trails) could be constructed within the setback area, these features would be at least 10 feet from the corridor edge. When compared to existing conditions, redeveloping this property with a park would augment the riparian buffer along Los Gatos Creek and substantially increase pervious surfaces on the site. For these reasons, the planned replacement of existing urban development with a community park would incrementally improve the quality of the riparian corridor in the Plan area.

During the design or "Master Plan" phase, the community park will be subject to supplemental environmental review to verify compliance with the City's Riparian Corridor Policy, General Plan policies, and other applicable regulations.

With implementation of General Plan policies and existing regulations such as the Riparian Corridor Policy, future development under the proposed DSAP would not result in a significant impact to sensitive riparian and aquatic habitats. For future projects on properties within 100 feet of the edge of the riparian corridor, a detailed evaluation may be required to determine impacts to habitat and identify any necessary mitigation. Any work within the banks of Los Gatos Creek or the Guadalupe River such as the replacement of outfalls would require permits from regulatory agencies. This

[206] City of San José. *Riparian Corridor Policy Study.* 1999.
[207] Envision PEIR. Page 462.
[208] City of San José. *Riparian Corridor Policy Study.* 1999.

conclusion is consistent with the discussions in the Envision 2040 PEIR and the Strategy 2000 EIR. **[Less than Significant Impact]**

Day-lighting of Los Gatos Creek

The DSAP Urban Design Guidelines for the future community park recommend day-lighting of Los Gatos Creek east of the project area. This would involve replacing the existing culvert and roadway with a bridge structure to return the creek corridor to more natural conditions. While the DSAP does not currently propose this improvement, it may be incorporated into the Park Avenue narrowing, future community park, or other planned projects. The daylighting of Los Gatos Creek at this location would result in a net long-term benefit to the ecological and aesthetic value of the riparian corridor, although there could be significant construction-related impacts to water quality and riparian habitat.

4.7.3.3 *Impacts to Trees and the Community Forest*

According to the Envision 2040 PEIR, development within Growth Areas could result in direct and indirect impacts to the city's "community forest," which consists of the ornamental trees, stands of native trees, and remnant orchard trees found in developed areas of San José. While not considered sensitive habitat, the community forest provides biological value in the form of nesting, cover, and foraging habitat for a variety of birds (including raptors) and mammals that are tolerant of humans, as well as beneficial insects such as honeybees. Thus, the City encourages the maintenance of mature trees, especially natives, on public and private property as an integral part of the community forest (GP Policy MS-21.4).

Redevelopment of properties in the Plan area would adversely affect the community forest through the removal of existing trees.[209] Redevelopment could also affect the existing Heritage Tree in the Stockton Corridor subarea. The intensification of development may reduce the ground space available for landscaping and could result in a permanent loss of tree canopy on specific sites. Development could also cause indirect impacts if future projects cover roots with pavement and/or limit water infiltration to tree roots, adversely affecting their health and persistence. Without adequate protection, construction activities may damage the roots or branches of trees designated for preservation, resulting in tree mortality or degraded conditions such that the ecological value is reduced.

In general, redevelopment under the DSAP would not substantially affect the community forest because of the relatively low value of developed habitats for biological resources compared to more natural habitats and the proportionately low magnitude of impacts to native plants and animals likely to occur as one already developed land-use type is converted to another.[210] In addition, the Plan area is highly urbanized and has a relatively small amount of existing trees compared to other neighborhoods in San José.

[209] The specific trees and total number of trees to be removed within the Plan area is unknown.
[210] Envision PEIR.

Implementation of General Plan policies and existing regulations described above in Section 4.7.2 would limit direct and indirect impacts to trees within the community forest. For example, implementation of tree protection measures during demolition and construction activities, as required under the City's Tree Protections (Section 13.28 of the Municipal Code), would minimize the potential for damage to roots and branches of trees designated for preservation.

In compliance with the City's Tree Removal Controls and General Plan policies, replacement trees and additional landscaping would be provided on specific development sites and throughout the Plan area. Tree removal and replacement would be incremental as redevelopment proceeds in the area. The removal of larger, more mature trees and replacement with smaller, young trees would temporarily reduce the total tree canopy until new trees mature. It has been the City's practice to require replacement of mature trees (12 inches in diameter or greater) at a greater than one to one ratio to offset the loss of tree canopy. The proposed open spaces and landscape amenities such as linear parks and neighborhood squares would also offset site-specific decreases in canopy coverage by replacing developed areas with vegetation and trees. The community forest would be enhanced further with the addition of trees and plants to be provided on outdoor patios and rooftops of new multi-story residential, commercial, and even industrial buildings.

The Envision 2040 PEIR concluded that implementation of General Plan policies and existing regulations would reduce community forest impacts to a less than significant level. Likewise, the Strategy 2000 EIR determined that future development would not result in a significant impact related to tree removal with implementation of identified mitigation measures. Consistent with these conclusions, the proposed DSAP includes specific measures that would reduce and avoid impacts to community trees resulting from individual projects and the DSAP as a whole.

Measures Included in the Project to Reduce and Avoid Impacts to the Community Forest

In compliance with current regulations including the San José Municipal Code, all future public and private projects within the Plan area will be required to incorporate the following measures into project design or as conditions of approval:[211]

- **Tree Survey.** For future projects that involve direct removal or indirect impacts to community trees, require preparation of a tree survey by a certified arborist during the development review phase.

- **Preservation.** Incorporate existing trees into the project design to the extent feasible. Special priority should be given to the preservation of mature trees and native oaks.

- **Permits.** For existing trees that cannot be incorporated into new landscaping, require a Tree Removal Permit prior to removal of trees meeting the size criterion of the City's Tree Ordinance (currently greater that 18 inches in diameter).

- **Replacement.** Replace all trees to be removed at the following ratios:

[211] These measures are based on the mitigation measures identified in Strategy 2000 and current City requirements for all projects in San José.

Table 4.7-2:
Tree Replacement Ratios

Diameter of Tree to be Removed	Type of Tree to be Removed		Minimum Size of Each Replacement Tree
	Native	Non-Native	
18 inches or greater	5:1	4:1	24-inch box
12 - 18 inches	3:1	2:1	24-inch box
less than 12 inches	1:1	1:1	15-gallon container
x:x = tree replacement to tree loss ratio			

The species and exact number of replacement trees to be planted on a given project site would be determined at the development permit stage, in consultation with the City Arborist and the Department of Planning, Building, and Code Enforcement. The planting and maintenance of replacement and street trees will be made conditions of development approval.

- **In-lieu Mitigation.** In the event the project site does not have sufficient area to accommodate the required tree mitigation, implement one or more of the following measures, to the satisfaction of the Director of Planning, Building and Code Enforcement, at the development permit stage:

  – The size of a 15-gallon replacement tree may be increased to 24-inch box and count as two replacement trees.

  – An alternative site(s) will be identified for additional tree planting. Alternative sites may include local parks or schools or installation of trees on adjacent properties for screening purposes to the satisfaction of the Director of the Department of Planning, Building, and Code Enforcement.

  – The applicant shall make a donation of $300 per mitigation tree to Our City Forest for in-lieu off-site tree planting in the community. These funds will be used for tree planting and maintenance of planted trees for approximately three years. A donation receipt for off-site tree planting shall be provided to the Planning Project Manager prior to issuance of a development permit.

- **Landscaping Plans.** Prepare landscaping plans to demonstrate conformance with the City of San José landscaping guidelines, zoning specifications, and GP Policy MS-21.8. Landscaping plans shall be submitted the Department of Planning, Building, and Code Enforcement for review and approval during the development review phase.

- **Tree Protection Measures.** Implement the following measures during demolition and construction activities:

Pre-construction Treatments

- Retain a consulting arborist to discuss work procedures and tree protection with the construction superintendent before beginning work.
- Fence all trees to be retained to completely enclose the TREE PROTECTION ZONE prior to demolition, grubbing, or grading. Fences shall be six feet tall and chain link, or equivalent, as approved by the consulting arborist. Fences are to remain until all grading and construction is completed.
- Prune trees to be preserved to clean the crown and to provide clearance. All pruning shall be completed or supervised by a Certified Arborist and adhere to the Best Management Practices for Pruning of the International Society of Arboriculture.

During Construction

- Prohibit grading, construction, demolition or other work within the TREE PROTECTION ZONE. No excess soil, chemicals, debris, equipment or other materials shall be dumped or stored within the TREE PROTECTION ZONE. Any modifications must be approved and monitored by the consulting arborist.
- Any root pruning required during construction shall receive the prior approval of, and be supervised by, the consulting arborist.
- Any additional tree pruning needed for clearance during construction must be performed or supervised by an Arborist and not by construction personnel.
- Apply supplemental irrigation to trees as determined by the consulting arborist.
- If injury should occur to any tree during construction, the consulting arborist shall evaluate the trees as soon as possible so that appropriate treatments can be applied.

- **Heritage Trees.** Avoid impacts to the existing Heritage Tree at 764 Clinton Place. Under the City's Municipal Code Section 13.68, any pruning of Heritage Trees needs to be done in consultation with the City Arborist to ensure that the work done on or around the tree will not endanger its health, structure, or life.[212]

- **Street Trees.** Integrate the placement and maintenance of street trees, streetlights, signs, and other infrastructure in the design of new or modified streets to protect the long-term viability of new trees (GP Policy MS-21.7).

With implementation of the standard measures listed above, General Plan policies, and existing regulations such as the Municipal Code, development allowed under the proposed DSAP would not result in a significant impact to community trees. This conclusion is consistent with the analyses in the Envision 2040 PEIR and the Strategy 2000 EIR. **[Less than Significant Impact]**

4.7.3.4 *Impacts to Special Status and Protected Species*

According to the Envision 2040 PEIR, impacts from future development allowed under the General Plan could affect special status species found in natural areas such as riparian corridors. As discussed above, the Plan area does not provide suitable habitat for any special status plants, although

[212] This measure would apply to any other Heritage Tree, if designated in the Plan area in the future.

several special status wildlife species, as well as protected bird and bat species, are known to occur in the Plan area. Potential impacts to these species are described in the following discussions.

Fish

According to the Strategy 2000 EIR, future development in Downtown could impact the survival rates of steelhead and Chinook salmon by altering the water temperature and quality of Guadalupe River. Similarly, future projects under the proposed DSAP could affect these special status fish species by generating pollution, altering flow conditions, and increasing water temperatures in both the Guadalupe River and Los Gatos Creek. The degradation of water quality could occur if sediment, construction debris, chemicals, and/or other materials are allowed to discharge into the waterways.

As described in Section 4.9 *Hydrology and Water Quality*, the project would not alter the drainage pattern in a manner that would increase sedimentation or the pollutant load of Los Gatos Creek or the Guadalupe River with implementation of regulatory requirements. Potential impacts to water quality resulting from construction activities will be avoided through use of BMPs for erosion control, such as installation of orange and silt fencing to delineate riparian areas and prevent sediment and construction debris from entering the creek.

Reduced shaded riverine aquatic habitat, increased thermal radiation, or the discharge of water from construction sites could cause stream temperatures to rise for prolonged periods, resulting in increased fish mortality.[213] Development under the DSAP would not involve the removal of existing riparian vegetation overhanging the creek. New buildings, however, could increase shading of the creek corridors. A significant impact would occur if increased shade affects the growth of shaded riverine aquatic habitat such that its ability to moderate water temperatures between March and October is impaired.[214] As previously described, planned mid-rise buildings adjacent to Los Gatos Creek in the Southern Zone of the Plan area have the greatest potential to substantially increase shading of the riparian corridor, particularly during non-summer months.[215]

Nesting Raptors and Birds

Hawks, owls, and other tree nesting raptors such as Cooper's Hawks could nest in the larger trees and forage in the riparian corridor and nearby open areas. The on-site trees represent a small portion of the suitable nesting and foraging habitat available for these species regionally. Therefore, it is anticipated that the removal of existing trees resulting from redevelopment activities would have no measurable effect on regional populations. Raptors and migratory birds are, however, protected under the Federal MBTA and/or the California Fish and Game Code. Construction-related disturbances (such as the generation of loud noises) have the potential to "take" nests, eggs, or

[213] City of San José. *San José Downtown Strategy 2000 EIR*. 2005.
[214] The primary period of concern in terms of water temperatures is March through October because juvenile fish may be present during this time and the warmer weather conditions could cause the waterways to reach lethal temperatures (greater than 75 degrees). **Source:** City of San José. *San José Downtown Strategy 2000 EIR*. 2005.
[215] While increased shading in warm summer months could help keep water temperatures down, shadows casted by buildings are shortest during this time due to the high position of the sun. Thus, buildings are not expected to provide a significant amount of beneficial shading.

individuals, and otherwise lead to the abandonment of nests. Disturbance that causes nest abandonment or destruction of nests would be considered a significant impact.

Bats

Although special status bats species (i.e., Western red bat, Pallid bat, and Townsend's big-eared bat) are not likely to occur in the Plan area, impacts to trees or structures such as bridges, overpasses, building attics, or abandoned buildings with large enclosed spaces could adversely affect bats, if present. Direct impacts would include injury to individual bats and indirect disturbances that could lead to the abandonment of roosts or colonies. Effects on western red bats would be less than significant because they are present only as a nonbreeder and there is abundant habitat available in the region.[216] Impacts to populations and available habitat for pallid bats and Townsend's big-eared bats could have a significant effect on local and regional populations of these species.

Measures Included in the Project to Reduce and Avoid Impacts to the Special Status Species

The Envision 2040 PEIR concluded that implementation of General Plan policies and existing regulations would reduce impacts to special status wildlife to a less than significant level. Likewise, the Strategy 2000 EIR determined that future development allowed in Downtown would not adversely affect special status wildlife species, including steelhead and Chinook salmon, with implementation of identified mitigation measures. Consistent with these conclusions, the proposed DSAP includes specific measures that would reduce impacts to special status and protected species to a less than significant level.

Fish: Future projects under the DSAP will be required to implement the following measures:[217]

- Between March 1 and October 31, the discharge of water from new construction sites into the Guadalupe River or Los Gatos Creek either directly or through discharge into local storm drains that discharge to these waterways shall be prohibited if the temperature of the water exceeds 72º F unless modeling studies and monitoring demonstrates that the volume of the discharge will not increase the maximum daily stream temperatures above 75.2º F. Applicants shall be required to monitor discharges and shall be required to stop discharges of water above 75º F if maximum daily stream temperatures in the discharge area are exceeded. Discharges shall be prohibited until the discharged water is cooled below the average daily stream temperature at the discharge point or maximum daily stream temperatures drop below 75º F.

- Future development proposals for parcels within 100 feet of the riparian corridor of Los Gatos Creek shall assess the effects of the proposed structures (shading and thermal radiation) on riparian vegetation and creek temperatures. Projects that will result in a 20 percent or more increase in shade or any increase in average daily temperature within the river corridor shall be required to: 1) alter their design to reducing shading; or 2) implement

[216] Envision PEIR.
[217] These measures are consistent with the mitigation measures identified in the Strategy 2000 EIR General Plan for impacts to steelhead and Chinook salmon.

other measures to reduce instream water temperatures. Such measures could include increasing the setback or planting of additional shaded riverine aquatic habitat.

- For *minor* work that may occur within the creek/river channel (i.e., modification of outfalls), additional measures may be required in compliance with local, state, and federal regulations.

Nesting Raptors and Migratory Birds: Future projects that could directly or indirectly affect trees that provide nesting habitat for raptors and native birds will be required to implement the following measures, in compliance with the Federal MBTA and/or the California Fish and Game Code:[218]

- Tree removal and construction should be scheduled to avoid the nesting season to the extent feasible. The nesting season for most birds, including most raptors in the San Francisco Bay area, extends from February through August.

- If this is not possible, a qualified ornithologist shall complete pre-construction surveys to identify active raptor nests that may be disturbed during project implementation. This survey shall be completed no more than 14 days prior to the initiation of demolition/construction activities during the early part of the breeding season (February through April) and no more than 30 days prior to the initiation of these activities during the late part of the breeding season (May through August), unless a shorter pre-construction survey is determined to be appropriate based on the presence of a species with a shorter nesting period, such as Yellow Warblers. During this survey, the ornithologist will inspect all trees and other possible nesting habitats in and immediately adjacent to the construction areas for nests. If an active nest is found in an area that will be disturbed by construction, the ornithologist will designate a construction-free buffer zone (typically 250 feet) to be established around the nest, in consultation with CDFG. The buffer would ensure that raptor or migratory bird nests will not be disturbed during project construction.

- The applicant shall submit a report indicating the results of the survey and any designated buffer zones to the satisfaction of the Director of Planning, prior to the issuance of any grading or building permit.

Bats: Future projects that involve the demolition of old buildings and/or mature trees will be required to implement the following measures:[219]

- Pre-demolition surveys shall be completed by a qualified bat biologist no more than thirty (30) days prior to any building demolition or removal of mature oak trees. If a colony of bats is found on the project site, and the project can be constructed without disturbance to the roosting colony, a bat biologist shall designate buffer zones (both physical and temporal) as necessary to ensure the continued success of the colony.

- If any active bat nurseries are found within construction areas, CDFG will be notified. Construction-free zones may be required around the bat nursery. If permitted by CDFG, the bats may be removed from the buildings or trees by a bat biologist until demolition is complete.[220] The installation of bat boxes adjacent to the Los Gatos Creek or Guadalupe River corridor may be required to replace roosting habitat.

[218] These measures are based on current City requirements for all projects in San José that could affect nesting raptors.
[219] These measures are based on current City requirements for all projects in San José that could affect bats.
[220] City of San José. *KB Home Monte Vista Residential Planned Development Zoning Project Draft EIR.* 2004.

- A biologist report outlining the results of pre-construction surveys and any recommended buffer zones or other mitigation shall be submitted to the satisfaction of the City's Environmental Principal Planner prior to the issuance of any grading, building, or tree removal permit.

The measures are intended to comply with current regulations such as the California Fish and Game Code and Endangered Species Act. Covered activities in the Plan area will be required to implement additional measures and/or pay fees to fund mitigation for offsetting the cumulative effects of development on covered species such as steelhead and Chinook salmon (refer to Section 4.7.3.6 below).

With implementation of General Plan policies, existing regulations, and measures included in future projects, development allowed under the proposed DSAP would not result in a significant impact to special status species. This conclusion is consistent with the analyses in the Envision 2040 PEIR and the Strategy 2000 EIR. **[Less than Significant Impact]**

4.7.3.5 *Impacts to Wildlife Migration Corridors*

According to the Envision 2040 PEIR, redevelopment in Growth Areas could affect the movement of native fish and wildlife. For example, increased traffic on existing roads and construction of new roads would incrementally affect the movement of wildlife by fragmenting habitat, deterring more sensitive animals from crossing roads, and increasing the potential for mortality from vehicle strikes. Given the urbanized setting of the Plan area, these effects are expected to be minor relative to regional populations and movements of urban-adapted native and nonnative species.

The Plan area is located along the Pacific Flyway for migratory birds. Because birds migrating at night are often attracted to sources of artificial light, they can collide with buildings. Even during the day, birds may collide with windows or with tall, glass-covered buildings.[221] Thus, intensification of development within the Plan area may result in additional bird collisions. Given that the species known to occur in the area are regionally abundant and adapted to urban development, possible collisions with new buildings would not result in substantial impacts on regional bird populations. Furthermore, the planting of replacement trees and additional landscaping could improve the quality of the community forest and ability for birds and wildlife to move through the Plan area. In accordance with General Plan Action ER-7.6, the City may update the Riparian Corridor Policy Study and City design guidelines to reflect best practices for avoiding and minimizing bird strikes at new tall buildings.

As described above, Los Gatos Creek and Guadalupe River and their riparian habitats serve as important migration corridors for birds and fish, including steelhead and Chinook salmon. The proposed DSAP does not include any features that would serve as barriers to fish migration such as culverts or other in-stream structures. Implementation of the General Plan policies, existing regulations, and measures related to riparian habitat and special status species (described above) would minimize indirect effects on wildlife movement in the riparian corridor.

[221] Envision PEIR.

With implementation of the General Plan policies, existing regulations, and measures related to riparian habitat and special status species, development allowed under the proposed DSAP would not substantially interfere with migratory wildlife corridors or with the movement of native fish or birds. This conclusion is consistent with the analysis in the Envision 2040 PEIR. **[Less than Significant Impact]**

4.7.3.6 *Consistency with Local Policies and Ordinances*

As described in Section 4.7.3.3, future projects allowed under the DSAP would be subject to the City's Tree Ordinance. In addition, future development projects on properties adjacent to the creek and the planned community park would be subject to the guidelines of the Riparian Corridor Policy Study. Supplemental environmental and design review processes would ensure compliance with these policies.

Santa Clara Valley Habitat Conservation Plan

The HCP/NCCP covers several species that are known to occur in the Plan area, including steelhead, Chinook salmon, and Pacific lamprey. Future projects in the Plan area may be subject to riparian setbacks and measures for maintaining hydrologic conditions and protecting water quality (Conditions 3 and 11).[222] The anticipated conditions are consistent with the avoidance measures listed above and in Section 4.9 *Hydrology and Water Quality*. In addition, certain "covered" activities will be required to pay fees to fund mitigation for offsetting the effects of development on covered species and natural communities. Therefore, the proposed project would not conflict with the HCP/NCCP.

With implementation of General Plan policies, existing regulations, and measures included in the project to protect special status species, the proposed DSAP would not conflict with local policies or ordinances protecting biological resources or the provisions of an adopted or pending habitat conservation plan. **[Less than Significant Impact]**

4.7.4 Cumulative Impacts

Past and current urban development has resulted in the reduction in the diversity and abundance of native plant and wildlife species and associated habitats. As a result, several species occurring in the project area are designated as threatened or endangered at state and federal levels. Continued degradation of sensitive habitats, including waterways, would result in further losses in biodiversity.

As described throughout this section, the Envision PEIR concluded that implementation of the General Plan would not result in a significant impact to biological resources. Cumulative effects to sensitive habitats and special status plants and animals would be further avoided or offset by measures included in the Santa Clara Valley HCP/NCCP.[223]

[222] County of Santa Clara, City of San José, City of Morgan Hill, City of Gilroy, Santa Clara Valley Water District, and Santa Clara Valley Transportation Authority . *Draft Santa Clara Valley Habitat Plan.* December 2010. Available at: http://www.scv-habitatplan.org/www/site/alias__default/341/public_draft_habitat_plan.aspx.
[223] Envision PEIR.

4.7.4.1 *Indirect Impacts to Sensitive Serpentine Habitats*

The only significant biological impact identified in the Envision 2040 PEIR is the potential for substantial indirect impacts to sensitive serpentine grassland habitats in and outside of San José.[224] Given the unique geologic, soil, and biotic conditions associated with serpentine soils, this habitat type supports rare plants and animals such as the Bay checkerspot butterfly. Due to the infertility of serpentine soils, the deposition of nitrogen (a plant fertilizer) could affect the species composition and viability of serpentine grasslands (e.g., the displacement of rare plants with non-native grasses). Development allowed under the General Plan is expected to substantially increase nitrogen deposition due to the projected increase in vehicle emissions. The indirect impact to serpentine grasslands could be substantial based on the sensitivity of serpentine grassland habitats, as well as the rarity and number of special-status species that depend on the integrity and quality of such habitats.[225]

Implementation of General Plan policies and existing regulations, including planned multi-modal improvements, trip reduction programs, and local land use strategies, would substantially reduce or offset indirect effects from nitrogen oxide deposition from vehicular trips. Overall emissions, however, are anticipated to increase within San José. Since the General Plan was adopted, the Santa Clara HCP/NCCP has been approved and the implementing agency established. The contribution of new development to nitrogen deposition impacts could also be offset by the establishment of managed serpentine grassland preserves.

Although future development under the DSAP would generate vehicle trips that would contribute to this significant unavoidable impact, the DSAP is identified as a key land use strategy of the General Plan and is intended to reduce vehicle travel and associated emissions over the long-term (refer to Section 4.4 *Air Quality*). Therefore, the project will help the City achieve the necessary reductions in nitrogen oxide deposition by participating in the HCP/NCCP. The DSAP would not make a cumulatively considerable contribution to the significant impact to serpentine grasslands previously identified in the General Plan EIR. **[Less than Significant Cumulative Impact]**

4.7.4.2 *Impacts to Riparian Habitats and Wildlife*

Construction of the planned and approved projects in the Plan area would contribute to similar effects on trees, wildlife, and water quality as development under the proposed DSAP. The conceptual station expansion plan, including construction of the BART and HSR terminals, will have minor impacts on biological resources because the station site is currently developed with roads and parking lots and the underground track alignment avoids long-term impacts to biotic habitats.[226]

The alignment for the HSR project is currently shown to pass over Los Gatos Creek in the location of the planned community park. While the specific impacts resulting from construction of the HSR station and tracks will be evaluated in the supplemental project-level EIRs to be prepared for the San José segments, it is assumed that the support columns will be located to avoid the riparian corridor

[224] Serpentine bunchgrass communities occur in the Silver Creek Hills at the north end of Coyote Ridge, on Communications Hill, to the west of Anderson Reservoir, to the north and west of Calero Reservoir, and in the Santa Teresa Hills in the southwest.
[225] Envision PEIR.
[226] Santa Clara Valley Transportation Authority. *Silicon Valley Rapid Transit Corridor Final Environmental Impact Study.* 2010. (This EIS did not identify any impacts to biological resources at Diridon Station.)

and the project will include BMPs for avoiding impacts to riparian and aquatic habitats. Given the disturbed nature of the station site and elevated HSR track alignment, the HSR project is not expected to result in substantial new impacts to biological resources. When compared to roadways, elevated tracks have the following biological advantages: smaller footprint resulting in less long-term impacts to habitats, less effects on wildlife movement as animals can pass under the tracks without risk of collision, and includes drainage infrastructure to control erosion and filter runoff (refer to Section 4.9 *Hydrology and Water Quality*).[227]

Construction of the Los Gatos Creek Trail would contribute to the effects of the planned community park, including potential disturbances from increased recreational use, as well as the expected benefits of redeveloping the SJFD Training Facility with a more compatible use and more pervious surfaces. The Autumn Street Improvement Project, which was planned under Strategy 2000, includes the replacement of existing buildings with an open space buffer along the Guadalupe River and Los Gatos Creek. Given that future DSAP development adjacent to the riparian corridor of Los Gatos Creek would be required to incorporate setback areas, the combined effect of these improvements and the proposed project would be a net increase in riparian habitat and open space.[228]

Operation of the proposed Major League Baseball Stadium would result in similar disturbances to wildlife as the urban development proposed by the DSAP, such as increased noise, trash, and night lighting. Given that wildlife in the Plan area is currently habituated to high levels of disturbance, noise-generating activities associated with the stadium and future development would not substantially affect wildlife use of the riparian corridors.[229]

Increased food trash from stadium events and the open turf field is expected to increase the number of California and ring-billed gulls in the area, although the increase would not significantly affect the existing wildlife community.[230] Intensification of urban development in the Plan area would also increase sources of trash, as described in Sections 4.9 *Hydrology and Water Quality* and 4.10 *Utilities and Service Systems*. With implementation of proper waste management and source control measures, the combined effects would not be cumulatively considerable.

Night Lighting

The proposed baseball stadium would include eight lighting structures and two scoreboards with a maximum height of 155 feet. The night lighting would be used during approximately 40 night games during the spring and summer months, as well as 15-20 additional events per year that would require lower lighting levels. The Ballpark EIR concluded that the intermittent increase in nighttime light levels would not adversely affect wildlife because the species that currently use the corridor are adapted to urban environments and would continue to occupy the corridor after stadium construction.[231] In addition, the stadium project includes operational and design measures to minimize obtrusive light and glare at surrounding land uses, including the riparian corridor.[232] The

[227] CHSRA and the Federal Railroad Administration. *California High-Speed Train Final Program EIR/Environmental Impact Study*. 2005. Page 3.15-23.
[228] City of San José. *Coleman Avenue/Autumn Street Improvement Project Final Integrated Focused EIR*. 2008.
[229] City of San José. *Baseball Stadium in the Diridon/Arena Area Draft EIR*. 2006.
[230] Ibid.
[231] Ibid.
[232] Ibid. Section VL *Shade /Shadow and Light/Glare*.

planned community park south of Park Avenue, across from the baseball stadium, may include lighted playfields. The combined increase in nighttime lighting levels from the stadium, park, and new DSAP development would be considered a significant cumulative impact to the riparian corridor. As previously described, increased night lighting from new development could affect the quality of riparian habitats by changing the behavior of wildlife and amplifying predation pressure on some species.

Adherence to General Plan policies and the design guidelines, setbacks, and lighting controls established in the Riparian Corridor Policy would reduce the magnitude of the cumulative impact. Given the potential increase in light levels, however, the impact would remain significant and unavoidable.

Impact BIO-1: The DSAP would make a cumulatively considerable contribute to a significant increase in nighttime light levels of the Los Gatos Creek corridor. **[Significant Unavoidable Cumulative Impact]**

4.7.4.3 *Impacts to Special Status Fish Species*

As described above, the Strategy 2000 EIR determined that development in Downtown could result in a significant impact to steelhead and Chinook salmon due to possible increases in water temperatures. The DSAP proposes the construction of mid-rise buildings adjacent to Los Gatos Creek, which could increase shading in a manner that impairs growth of shaded riverine aquatic habitat. Similarly, the baseball stadium would increase afternoon shading of Los Gatos Creek during the winter and spring.[233] The HSR crossing over Los Gatos Creek would permanently increase shade at this location year-round, which could incrementally affect riparian vegetation, but would also provide shade during the warm season, helping to keep water temperatures down. (Conversely, the stadium and mid-rise buildings would provide little or no shade during summer months.)

The stretch of Los Gatos Creek that could be affected by development in the Plan area is small relative to the total length of the waterway. With implementation of the avoidance measures listed above (which are consistent with the Strategy 2000 mitigation measures), the combined increase in shading from the stadium, HSR, and future DSAP development would not be considered a significant cumulative impact. Furthermore, the Santa Clara Valley HCP/NCCP would further reduce the magnitude of cumulative effects on steelhead and Chinook salmon populations, given that the planned conservation program would provide a more holistic and ecologically viable method for mitigating combined impacts from development in the San José area.

The DSAP would not make a cumulatively considerable contribution to the previously identified significant impact to special status species. **[Less than Significant Cumulative Impact]**

4.7.5 Conclusion

With implementation of General Plan policies and existing regulations such as the Riparian Corridor Policy and Municipal Code, future development under the proposed DSAP would not result in a

[233] Ibid.

significant impact to sensitive riparian and aquatic habitats, trees, special status species, or wildlife migratory corridors. The proposed DSAP would not conflict with local policies or ordinances protecting biological resources or the provisions of an adopted or pending habitat conservation plan. This conclusion is consistent with the analyses in the Envision 2040 PEIR and the Strategy 2000 EIR. **[Less than Significant Impact]**

The DSAP would not make a cumulatively considerable contribution to the previously identified significant impact to serpentine grasslands or special status species. **[Less than Significant Cumulative Impact]**

Impact BIO-1: The DSAP would make a cumulatively considerable contribution to a significant increase in nighttime light levels of the Los Gatos Creek corridor. **[Significant Unavoidable Cumulative Impact]**

4.8 GEOLOGY AND SOILS

This section is based primarily upon the Envision PEIR and Strategy 2000 EIR, except where noted.

4.8.1 Existing Setting

4.8.1.1 *Geology and Soils*

The project site is located in northern Santa Clara Valley, which is bounded by the Diablo Range to the east and the Santa Cruz Mountains to the west. The Plan area is relatively flat with an average elevation of approximately 100 feet above mean sea level.[234] There is no landslide hazard.

The Santa Clara Valley is underlain by sedimentary and metamorphic rocks of the Franciscan Complex. Overlying these rocks are alluvial sediments deposited by streams draining the adjacent mountains during recent geologic times (Holocene age). The alluvial deposits consist of unconsolidated to semi-consolidated sand, silt, clay, and gravel.

Surface soils in the project area have been mapped as Yolo association soils, which have a slow infiltration rate and a moderate shrink-swell (expansion) potential.[235] Expansive soils occur where a sufficient percentage of certain clay materials are present in the soil. These soil conditions can impact the structural integrity of buildings and other structures.

Artificial Fill

The Plan area likely contains artificial fill, often referred to as undocumented or man-made fill, which includes materials that were placed to fill in naturally low areas or to create building pads and roadways. In some cases, older, non-engineered fills have been placed without standards for fill materials or compaction. Building on non-engineered fills can result in excessive settlement of structures, pavements, and utilities. Artificial fills placed using current engineering practices, however, are likely to avoid impacts from excessive or differential settlement.

4.8.1.2 *Seismic Hazards*

The San Francisco Bay Area is recognized by geologists as one of the most seismically active regions in the United States. Significant earthquakes occurring in the Bay Area are generally associated with the San Andreas Fault system, which spans the Coast Ranges from the Pacific Ocean to the San Joaquin Valley. The closest active fault to the Plan area is the Hayward fault zone, located approximately five miles to the east. Other potentially active faults within ten miles include the San Andreas, Monte Vista-Shannon, and Calaveras faults. There are no active faults in the project area.[236]

Seismic activity can also result in hazards from several forms of ground failure, including fault rupture, soil liquefaction, lateral spreading, and differential settlement. Much of the Santa Clara

[234] Google Earth.
[235] United States Department of Agriculture Soil Conservation Service. *Soil Survey of Santa Clara County, California*. 1958.
[236] City of San José. *San José Downtown Strategy 2000 EIR.* 2005.

Valley, including the Plan area, is located within a Liquefaction Hazard Zone.[237] Liquefaction is the temporary transformation of loose, saturated granular sediments from a solid state to a liquefied state as a result of seismic ground shaking. Lateral spreading typically occurs as a form of horizontal displacement of relatively flat-lying material toward an open face such as a body of water. Differential settlement is associated with loose unsaturated sandy soils, which are generally present along creeks. Seismically induced ground failure can cause damage to structures and paved areas.

4.8.1.3 *Mineral Resources*

Mineral resources found and extracted in Santa Clara County include construction aggregate deposits such as sand, gravel, and crushed stone. The only area in the City of San José that is designated by the State Mining and Geology Board under the Surface Mining and Reclamation Act of 1975 (SMARA) as containing mineral deposits which are of regional significance is Communications Hill, which is located over two miles southeast of the Plan area.[238]

4.8.2 Regulatory Framework

Development within the City of San José is subject to various federal, state, and local regulations aimed at reducing the potential impacts of geologic and seismic hazards to people, property, and the environment. As described in Section 4.9 *Hydrology and Water Quality*, erosion control is regulated by the federal Clean Water Act, State of California Porter-Cologne Water Quality Act, NPDES permit program, and City policies (6-29 and 8-14).

The California Alquist-Priolo Earthquake Fault Zoning Act requires the State Geologist to establish regulatory zones (known as Earthquake Fault Zones) around the surface traces of active faults and to issue appropriate maps. Local agencies must regulate the construction of buildings used for human occupancy in these zones.

The California Building Code (in Title 24, California Code of Regulations) serves as the basis for the design and construction of buildings in the state. Currently, the 2007 California Building Code contains provisions for earthquake safety based on factors including occupancy type, soil and rock profile, the strength of the ground, and distance to seismic sources.

4.8.2.1 *City of San José Policies*

Title 24 of the San José Municipal Code includes the 2007 California Building, Plumbing, Mechanical, Electrical, Existing Building, and Historical Building Codes. Requirements for building safety and earthquake hazard reduction are also addressed in Chapter 17.40 (Dangerous Buildings) and Chapter 17.10 (Geologic Hazards Regulations) of the Municipal Code. Requirements for grading, excavation, and erosion control are included in Chapter 17.10 (Building Code, Part 6 Excavation and Grading). In accordance with the Municipal Code, the Director of Public Works must issue a Certificate of Geologic Hazard Clearance prior to the issuance of grading and building permits within defined geologic hazard zones, including State Seismic Hazard Zones for Liquefaction.

[237] California Geological Survey. *Seismic Hazard Zones, San Jose East Quadrangle.* 2002.
[238] Envision PEIR.

Envision San José 2040 General Plan

Various policies in the City's General Plan have been adopted for the purpose of reducing or avoiding impacts related to geologic and seismic hazards, as listed in the following table.

Table 4.8-1:
General Plan Policies: Geology, Soils, and Seismic Hazards

Emergency Management	
Policy ES-4.9	Permit development only in those areas where potential danger to the health, safety, and welfare of persons in that area can be mitigated to an acceptable level.
Policy ES-4.10	Update, as necessary, the San José Building Code, Fire Prevention Code and Municipal Code to address geologic, fire, flooding and other hazards, and to respond to changes in applicable State Codes.
Seismic Hazards	
Policy EC-3.1	Design all new or remodeled habitable structures in accordance with the most recent California Building Code and California Fire Code as amended locally and adopted by the City of San José, including provisions regarding lateral forces.
Policy EC-3.2	Within seismic hazard zones identified under the Alquist-Priolo Fault Zoning Act, California Seismic Hazards Mapping Act and/or by the City of San José, complete geotechnical and geological investigations and approve development proposals only when the severity of seismic hazards have been evaluated and appropriate mitigation measures are provided as reviewed and approved by the City of San José Geologist. State guidelines for evaluating and mitigating seismic hazards and the City-adopted California Building Code will be followed.
Policy EC-3.3	The City of San José Building Official shall require conformance with state law regarding seismically vulnerable unreinforced masonry structures within the City.
Policy EC-3.4	The City of San José will maintain up-to-date seismic hazard maps with assistance from the California Geological Survey (or other state agencies) under the Alquist-Priolo Earthquake Fault Zoning Act and the California Seismic Hazards Mapping Act.
Policy EC-3.5	Locate, design and construct vital public utilities, communication infrastructure, and transportation facilities in a manner that maximizes risk reduction and functionality during and after an earthquake.
Policy EC-3.6	Restrict development in close proximity to water retention levees or dams unless it is demonstrated that such facilities will be stable and remain intact during and following an earthquake.
Action EC-3.8	Maintain and update Citywide seismic hazard maps for planning purposes on an on-going basis.
Action EC-3.9	Revise and update provisions of the City of San José Geologic Hazard Ordinance, including geologic hazard zones, as new information becomes available from state

	and federal agencies on faults, earthquake induced landsliding, liquefaction, and/or lateral spreading.
Action EC-3.10	Require that a Certificate of Geologic Hazard Clearance be issued by the Director of Public Works prior to issuance of grading and building permits within defined geologic hazard zones related to seismic hazards.
Action EC-3.11	Make information available to residents and businesses on ways to reduce seismic hazards and emergency preparedness for an earthquake in conjunction with regional, state and federal agencies such as the Association of Bay Area Governments (ABAG) and the United States Geological Survey (USGS).
Geologic and Soil Hazards	
Policy EC-4.1	Design and build all new or remodeled habitable structures in accordance with the most recent California Building Code and municipal code requirements as amended and adopted by the City of San José, including provisions for expansive soil, and grading and storm water controls.
Policy EC-4.2	Approve development in areas subject to soils and geologic hazards, including un-engineered fill and weak soils and landslide-prone areas, only when the severity of hazards have been evaluated and if shown to be required, appropriate mitigation measures are provided. New development proposed within areas of geologic hazards shall not be endangered by, nor contribute to, the hazardous conditions on the site or on adjoining properties. The City of San José Geologist will review and approve geotechnical and geological investigation reports for projects within these areas as part of the project approval process.
Policy EC-4.3	Locate new public improvements and utilities outside of areas with identified soils and/or geologic hazards (e.g., deep seated landslides in the Special Geologic Hazard Study Area and former landfills) to avoid extraordinary maintenance and operating expenses. Where the location of public improvements and utilities in such areas cannot be avoided, effective mitigation measures will be implemented.
Policy EC-4.4	Require all new development to conform to the City of San José's Geologic Hazard Ordinance.
Policy EC-4.5	Ensure that any development activity that requires grading does not impact adjacent properties, local creeks and storm drainage systems by designing and building the site to drain properly and minimize erosion. An Erosion Control Plan is required for all private development projects that have soil disturbance of one acre or more, are adjacent to a creek/river, and/or are located in hillside areas. Erosion Control Plans are also required for any grading occurring between October 15 and April 15.
Policy EC-4.7	Consistent with the San José Geologic Hazard Ordinance, prepare geotechnical and geological investigation reports for projects in areas of known concern to address the implications of irrigated landscaping to slope stability and to determine if hazards can be adequately mitigated.
Action EC-4.8	Maintain and update Citywide geologic hazard maps for planning purposes.

Action EC-4.9	Revise and update provisions of the City of San José Geologic Hazard Ordinance, including geologic hazard zones, as new information becomes available from state and federal agencies on landsliding potential and other geologic hazards.
Action EC-4.10	Require a Certificate of Geologic Hazard Clearance to be issued by the Director of Public Works prior to issuance of grading and building permits within defined geologic hazard zones.
Action EC-4.11	Require the preparation of geotechnical and geological investigation reports for projects within areas subject to soils and geologic hazards, and require review and implementation of mitigation measures as part of the project approval process.
Action EC-4.12	Require review and approval of grading plans and erosion control plans (if applicable) prior to issuance of a grading permit by the Director of Public Works.
Action EC-4.13	Use published maps and site specific geotechnical reports to identify possible areas of naturally occurring asbestos within the City of San José's Urban Growth Boundary for use in evaluating proposed development.

4.8.3 Geology and Soils Impacts

4.8.3.1 *Thresholds of Significance*

For the purposes of this PEIR, a geologic or seismic impact is significant if implementation of the proposed DSAP would:

- Expose people or structures to substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, strong seismic ground shaking, seismic-related ground failure (including liquefaction), landslides, or expansive soils;
- Cause substantial erosion or siltation;
- Expose people or property to major geologic hazards that cannot be mitigated through the use of standard engineering design and seismic safety techniques;
- Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state; or
- Result in the loss of availability of a locally-important mineral resource delineated on a local general plan, specific plan, or other land use plan.

The Envision 2040 PEIR determined that implementation of existing programs and regulations and the GP policies would reduce all impacts associated with geologic and seismic hazards to a less than significant level.

4.8.3.2 *Geologic and Soil Impacts*

Expansive Soils and Artificial Fill

New development and redevelopment allowed under the proposed DSAP could occur in areas with identified soil hazards, including expansive soils and artificial fill. Where expansive soils are present, building foundations and pavements can be damaged when soils go through cycles of

wetting and drying.[239] Areas with artificial fill are subject to differential settlement of the land surface, which can also damage foundations and pavements, as well as infrastructure (such as roads, sewer lines, storm drains, and water delivery systems). In addition, differential settlement can affect site drainage patterns and result in water damage to buildings, landscaping, or infrastructure.

As described in Section 4.8.1 above, future project applicants (including the City) would be subject to various federal, state, and local regulations aimed at reducing geologic hazards, including:

- City of San José General Plan policies related to geologic hazards;
- San José Municipal Code: Title 24 (Technical Codes), Chapter 17.40 (Dangerous Buildings); and Chapter 17.10 (Geologic Hazards Regulations);
- City of San José Municipal Code, Chapter 17.10; and
- California Building Code.

Measures Included in the Project to Reduce and Avoid Impacts related to Geologic Hazards

Under current regulations, future development projects in San José are subject to the following measures:

- Consistent with General Plan policies, future projects will be required to complete a design-level geotechnical investigation to verify compliance with applicable regulations.[240] The reports shall determine the site-specific soil conditions and identify the appropriate design and construction techniques to minimize risks to people and structures, including measures for site preparation, compaction, trench excavations, foundation and subgrade design, drainage, and pavement design. Subsurface exploration, laboratory testing, and engineering analyses may be required as part of the investigations. The reports shall be submitted to the City of San José Public Works Department for review prior to issuance of any site-specific grading or building permit.

- Techniques that may be used to minimize hazards include: replacing problematic soils with properly conditioned/compacted fill and designing structures to withstand the forces exerted during shrink-swell cycles and settlements.

- Foundations, footings, and pavements on expansive soils near trees shall be designed to withstand differential displacement.

Implementation of these measures, if included in future projects, would reduce and avoid impacts related to geologic conditions.

Erosion

Development under the proposed DSAP would expose disturbed areas to wind and stormwater during construction and post-construction periods. Grading and ground disturbance increase the

[239] Shrinking of soil is particularly apparent in the vicinity of trees, which withdraw water from the soil, so buildings and pavements should be designed and constructed with sufficient distance from trees.
[240] Geotechnical investigations would not necessarily be required for minor improvement projects (e.g., streetscape enhancements) that are not part of a development or transportation project, unless there is potential for a significant hazard.

potential for accelerated erosion by removing protective vegetation or cover and changing natural drainage patterns. Implementation of erosion control measures, in accordance with General Plan policies and regulations, would prevent substantial erosion and siltation during site development activities.

Measures Included in the Project to Reduce and Avoid Impacts related to Erosion

Under current requirements, future projects under the DSAP would be required to implement the following standard measures during construction:

- Standard erosion control and grading best management practices (BMPs) will be implemented during construction to prevent substantial erosion from occurring during site development. The BMPs shall be included on all construction documents.

- Prior to issuance of a Public Works Clearance, the applicant must obtain a grading permit before commencement of excavation and construction. In accordance with GP Policy EC-4.12, the applicant may be required to submit a Grading Plan and/or Erosion Control Plan for review and approval, prior to issuance of a grading permit.

- Future projects over one acre in size would be required to prepare a Storm Water Pollution Prevention Plan (SWPPP) under the NPDES General Construction Permit and the City's Municipal Code (refer to Section 4.9 *Hydrology and Water Quality* for additional information).

Implementation of these standard measures, if included in future projects, would reduce and avoid construction-related erosion impacts.

Dewatering

Dewatering of the subsurface could be required for construction of below-ground structures (including some foundation elements). Dewatering activities that lower the groundwater level would increase the effective stress on the underlying sediments, potentially resulting in ground settlements and damage to structures, roadways, and/or utilities.[241]

Measures Included in the Project to Reduce and Avoid Impacts related to Dewatering

Consistent with mitigation measures identified in the Strategy 2000 EIR, future projects that involve dewatering will be required to implement the following measure:

- If dewatering is needed, the design-level geotechnical investigations to be prepared for future projects shall evaluate the underlying sediments and determine the potential for settlements to occur. If it is determined that unacceptable settlements may occur, then alternative groundwater control systems shall be required.

[241] City of San José. *San José Downtown Strategy 2000 EIR.* 2005.

Implementation of these measures, if included in future projects that involve dewatering, would reduce and avoid impacts related to ground settlement.

With implementation of the standard measures listed above and implementation of General Plan policies and existing regulations, future development under the DSAP would not result in a significant impact related to geologic hazards. This conclusion is consistent with the analysis in the Envision PEIR and Strategy 2000 EIR. **[Less than Significant Impact]**

4.8.3.3 *Seismic Hazards*

The City of San José and the entire Bay Area is within one of the most seismically active areas in the United States. Therefore, all structures and their occupants within the Plan area are at risk of damage or injury from ground shaking in the event of an earthquake. Damage from ground shaking is generally dependent on the magnitude of an earthquake, distance from the epicenter, duration of shaking, local groundwater and soil conditions, structural design, and quality of construction.

Future development and infrastructure improvement projects under the proposed DSAP would also be exposed to seismic induced liquefaction. Liquefaction can cause structural distress or failure due to ground settlement or deformation and/or a loss of bearing capacity in the foundation soil. Lands adjacent to Los Gatos Creek and the Guadalupe River may also be prone to lateral spreading and differential settlement. Because there are no active faults in the project area, there is no risk for fault rupture.

Measures Included in the Project to Reduce and Avoid Impacts related to Seismic Hazards

Implementation of City policies and existing regulations would substantially reduce seismic hazards to people and structures. Under current regulations, future development projects in San José are subject to the following measures:

- The design-level geotechnical investigations (described above) shall identify site-specific ground failure hazards such as liquefaction and the appropriate techniques to minimize risks to people and structures. Over-excavation and re-compaction is a commonly used method to mitigate soil conditions susceptible to settlement.

- Future projects shall be designed and constructed in accordance with the most recent California Building Code, which contains the regulations that govern the construction of structures in California. Adherence to the California Building Code would ensure the proposed improvements resist minor earthquakes without damage and major earthquakes without collapse.

With implementation of the standard measures listed above and implementation of General Plan policies and existing regulations, future development under the DSAP would not result in a significant impact related to seismic hazards. This conclusion is consistent with the analysis in the Envision PEIR. **[Less than Significant Impact]**

4.8.3.4 *Impacts to Mineral Resources*

The Plan area is not located within a designated area containing mineral deposits of regional or local significance. The DSAP would not result in the loss of availability of a known mineral resource. **[No Impact]**

4.8.4 Cumulative Impacts

Planned growth in San José would increase the number of people exposed to risks related to geology and seismicity. While seismic hazards cannot be completely eliminated even with site-specific geotechnical investigation and advanced building practices, exposure to seismic hazards is a generally accepted part of living in the San Francisco Bay Area.

As described above, the future development under the proposed DSAP will be required to complete design-level geotechnical investigations and conform to current building codes, consistent with General Plan policies. These measures would also apply to the other projects planned for the DSAP area, including the HSR, BART, Baseball Stadium Project, San Carlos Street LRT Station, Los Gatos Creek Trail, and roadway projects. The BART tunnel and underground station would also be designed in accordance with current seismic standards for BART facilities. Therefore, planned infrastructure and development projects and their occupants would not be exposed to a cumulative impact related to geologic and seismic hazards.

Construction of multiple projects at the same time could contribute to cumulative construction-related impacts related to erosion and dewatering. Construction of the BART tunnel and below ground structures associated with development projects could result in ground settlements and movements, particularly if dewatering is required. Implementation of measures such as pre-construction surveys, construction monitoring, and groundwater control systems would minimize damage to structures, roadways, and/or utilities. Therefore, the cumulative effects of construction on geologic conditions would not be considered significant. **[Less than Significant Cumulative Impact]**

4.8.5 Conclusion

With implementation of the standard measures listed above and implementation of General Plan policies and existing regulations, future development under the DSAP would not result in a significant impact related to geologic or seismic hazards, . This conclusion is consistent with the analysis in the Envision PEIR and Strategy 2000 EIR. **[Less than Significant Impact].**

The DSAP would not result in the loss of availability of a known mineral resource. **[No Impact]**

The DSAP would not result in or contribute to a cumulative geologic or seismic hazards impact. **[Less than Significant Cumulative Impact]**

4.9 HYDROLOGY AND WATER QUALITY

This section is based primarily upon the Envision PEIR and Strategy 2000 EIR, except where noted.

4.9.1 Existing Setting

Los Gatos Creek flows through the Plan area, passing through a culvert under Park Avenue and converging with Guadalupe River at Santa Clara Street. Guadalupe River flows north to San Francisco Bay. The SCVWD has jurisdiction over Los Gatos Creek and the Guadalupe River. The SCVWD recently completed a flood control project on the Guadalupe River channel so that it can accommodate a 100-year storm event.

4.9.1.1 *Stormwater Drainage*

Stormwater runoff is rainwater that flows across surfaces without being absorbed into soil. Urban runoff is a combination of stormwater, irrigation, and other sources of water. Urban runoff contains pollutants from various sources (referred to as "nonpoint source pollution"). Runoff flows overland into the City-maintained storm drainage system, which is comprised of a network of inlets, manholes, pipes, outfalls, channels, and pump stations. The system functions to collect, convey, and discharge runoff to receiving water bodies in order to protect infrastructure and the public from flood waters during storm events. Storm drains are inspected and maintained by the Department of Transportation and are installed, rehabilitated, or replaced by the Department of Public Works.

Many of the storm drains in the Plan area are 10 inches or 12 inches in diameter and are designed to accommodate a storm event that would statistically occur every two or three years. Therefore, many of the pipelines are in need of replacement in order to meet current requirements. There are three existing pump stations to drain depressed roadways at the Caltrain rail crossings at Julian Street, Santa Clara Street, and Park Avenue.

Stormwater runoff from the Plan area is conveyed to Guadalupe River either directly or indirectly via Los Gatos Creek through 17 outfalls. City records indicate that the Howard Street/West Julian Street outfall is in disrepair, but is still functioning. It is not currently listed in the Storm Sewer Capital Improvement Program (CIP). However, the District has been in discussions with the City regarding the upsizing and replacement this outfall in the near future as part of the proposed Autumn Parkway improvement project. All other outfalls in the area are in serviceable condition.

4.9.1.2 *Groundwater*

Shallow depths to groundwater (less than 50 feet below the surface) are expected to occur in the Plan area, particularly near the Guadalupe River.[242] Fluctuations in the level of groundwater may occur due to variations in rainfall and local underground drainage patterns.

4.9.1.3 *Seiche and Tsunami Hazards*

[242] City of San José. *San José Downtown Strategy 2000 EIR.* 2005.

A seiche is the oscillation of water in an enclosed body of water. A tsunami is a sea wave generated by an earthquake, landslide, or other large displacement of water in the ocean. The Plan area is not located near large water bodies such as the San Francisco Bay and is not subject to inundation by seiche, tsunami, or mudflow.[243, 244]

4.9.2 Regulatory Framework

The federal Clean Water Act and California's Porter-Cologne Water Quality Control Act are the primary laws related to water quality. Regulations set forth by the U.S. Environmental Protection Agency (US EPA) and the State Water Resources Control Board (SWRCB) have been developed to fulfill the requirements of this legislation. Federal and state regulations are implemented at the regional level by water quality control boards, which for the San José area is the San Francisco Bay Regional Water Quality Control Board (RWQCB).

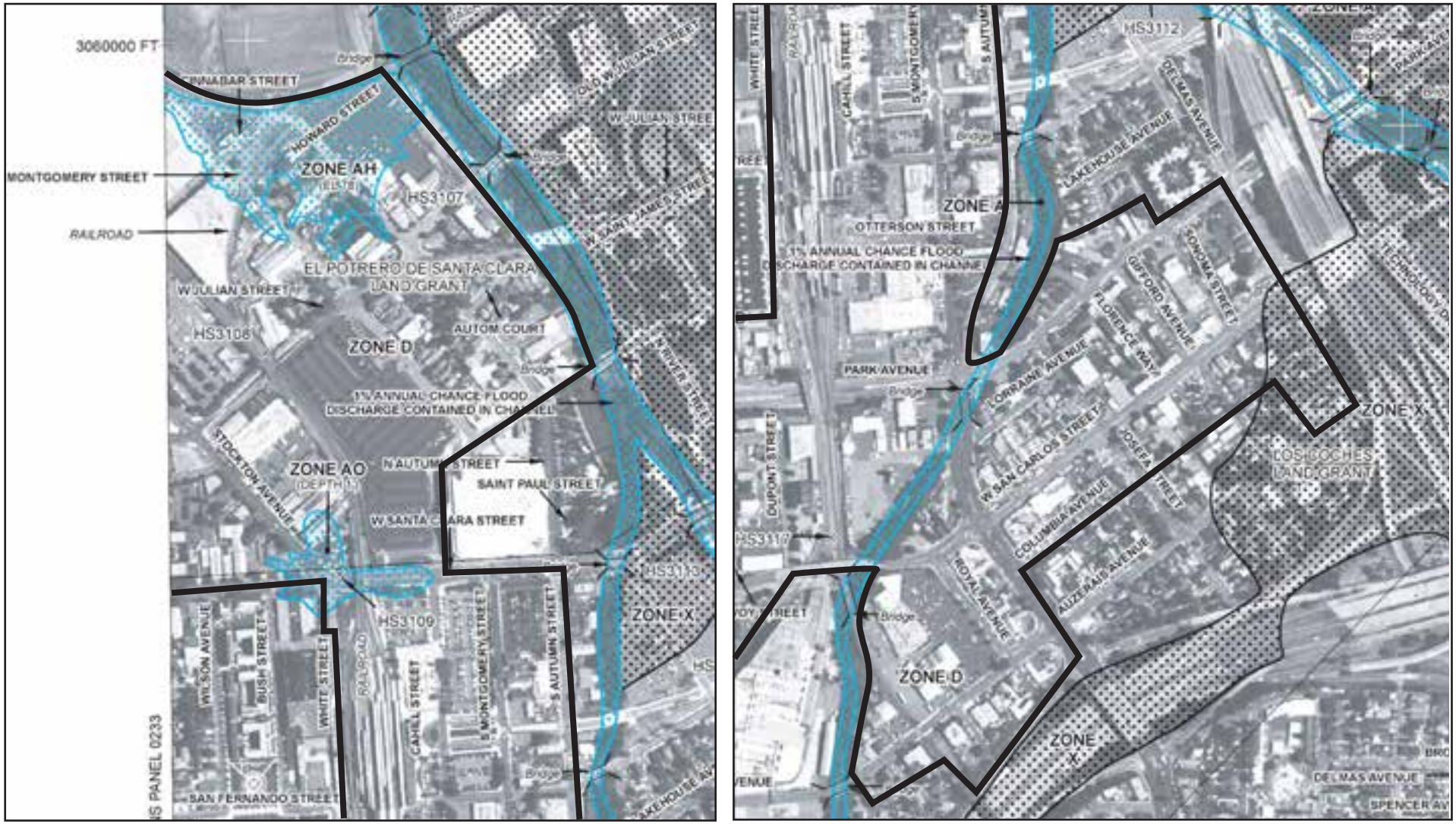
The Santa Clara Valley Water District (SCVWD) operates as the flood control agency for Santa Clara County. The SCVWD is also responsible for creek restoration, pollution prevention efforts, and groundwater recharge. The SCVWD's Water Resources Protection Ordinance and Well Ordinance require permits for all well construction and destruction work, most exploratory borings for groundwater exploration, and projects occurring on any SCVWD property or easement. The SCVWD along with 15 cities, the county, businesses, streamside property owners, and environmental interests set up the Water Resources Protection Collaborative, which has prepared and adopted *Guidelines and Standards for Land Use Near Streams*.

4.9.2.1 *National Flood Insurance Program*

The Federal Emergency Management Agency (FEMA) administers the National Flood Insurance Program (NFIP) to provide subsidized flood insurance to communities that comply with FEMA regulations protecting development in floodplains. As part of this program, FEMA publishes Flood Insurance Rate Maps (FIRMs) that identify flood hazard zones within a community.

The type of flooding most likely to affect the Plan area is storm-related flooding of creeks and storm drains. According to the FEMA maps, the majority of the Plan area is not within a 100-year flood hazard area and the floodplain is primarily confined to the Los Gatos Creek and Guadalupe River channels, as shown on Figure 4-10.[245] The only two areas within the 100-year floodplain are near the intersection of The Alameda and Stockton Avenue (Zone AO) and south of the railroad tracks near Howard and Cinnabar Streets (Zone AH). These areas could experience flood depths of one to three feet during a 100-year storm event.

[243] A seiche is an oscillation of the surface of a lake or landlocked sea varying in period from a few minutes to several hours. Seiches are often generated by small oscillations from earthquakes.
[244] Association of Bay Area Governments. *ABAG Geographic Information Systems, Hazard Maps, Tsunami Evacuation Planning Map for San Francisco Bay Area*. Accessed January 6, 2010. http://www.abag.ca.gov/bayarea/eqmaps/tsunami
[245] The "100-year flood" (also referred to as the "one percent flood or "base flood") is the flow of water that has a one percent chance of being equaled or exceeded in any given year.



DIRIDON STATION PLAN BOUNDARY

SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD

The 1% annual flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V, and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

ZONE A — No Base Flood Elevations determined.

ZONE AH — Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.

ZONE AO — Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.

OTHER FLOOD AREAS

ZONE X — Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

OTHER AREAS

ZONE X — Areas determined to be outside the 0.2% annual chance floodplain.

ZONE D — Areas in which flood hazards are undetermined, but possible.

Source: Flood Insurance Rate Map,
Map number 06085C0234H,
Effective Date: May 18, 2009

N

50 0 500 1000 FEET

FLOOD HAZARD ZONES

FIGURE 4-10

4.9.2.2 *Dam Safety*

Dam failure is the uncontrolled release of impounded water from behind a dam that can result from a variety of causes such as flooding, earthquakes, blockages, landslides, and human error. Dams are under the jurisdiction of the California Division of Safety of Dams (DSOD) and/or the Federal Energy Regulatory Commission (FERC). In accordance with the State Dam Safety Act, detailed evacuation procedures have been prepared for each dam and are contained in San José's Dam Failure Evacuation Plan. As part of its comprehensive dam safety program, the SCVWD routinely monitors and studies the condition of each of its 10 dams. The SCVWD also has its own Emergency Operations Center and a response team that inspects dams after significant earthquakes. These regulatory inspection programs reduce the potential for dam failure.

Dam Failure Hazard

~~The Plan area is located within a dam failure inundation zone for Anderson Dam, which~~ The Plan area is located within a dam failure inundation zone for Lenihan Dam at Lexington Reservoir and Anderson Dam at Anderson Reservoir. Both dams were constructed in the 1950's and are owned and operated by the SCVWD. The SCVWD has received preliminary findings of a seismic study of Anderson Dam that show the material at the base of the dam could liquefy in a 7.25 magnitude earthquake on the nearby Calaveras Fault. The SCVWD is currently studying what corrective measures are needed to ensure public safety and has imposed storage restrictions at Anderson Dam. The SCVWD is planning to complete design and construction of a seismic retrofit by the end of 2018. The operating restriction will remain in place until the project is completed.[246]

It should be noted that the majority of San José is within a dam failure inundation zone for one or more reservoirs. The mapping of inundation zones assumes complete failure of the dams with a full reservoir that is completely emptied. The actual extent and depth of inundation in the event of a failure would depend on the volume of storage in the reservoir at the time of failure. Since 1950, there have been nine dam failures in the state.

4.9.2.3 *Section 303(d) of the Federal Clean Water Act*

Section 303(d) of the federal Clean Water Act requires states to develop a list of water bodies that do not meet water quality standards, establish priority rankings for waters on the list and develop action plans, called Total Maximum Daily Loads (TMDL), to improve water quality. The U.S. EPA lists Guadalupe River as an impaired water body for mercury, diazinon, and trash.[247] Los Gatos Creek is also listed as being impaired from diazinon.

The TMDL for mercury in the Guadalupe River watershed was adopted by the RWQCB and incorporated into the Basin Plan in 2008.[248] The main source of mercury in the watershed is identified as the New Almaden Mining District, the largest-producing mercury mine in North

[246] Santa Clara Valley Water District. "Anderson Dam and Reservoir". 2011. Accessed July 21, 2011. <http://www.valleywater.org/Services/AndersonDamAndReservoir.aspx>.
[247] State Water Resources Control Board. "Impaired Water Bodies." 2011. Accessed January 20, 2012. http://www.waterboards.ca.gov/water_issues/programs/tmdl/integrated2010.shtml
[248] State Water Resources Control Board. "Guadalupe River Watershed Mercury TMDL." 2011. Accessed January 20, 2012. http://www.swrcb.ca.gov/rwqcb2/water_issues/programs/TMDLs/guadaluperivermercurytmdl.shtml

America. Other sources include atmospheric deposition from global and local sources, soil erosion from areas not known to contain mines, urban stormwater runoff, seepage from landfills, and Central Valley Project water inputs to Calero Reservoir. The improper disposal of mercury-containing products is considered the most likely controllable source of mercury in urban runoff in the Bay Area.[249] Household products that may contain mercury include thermometers, batteries, fluorescent lamps, pharmaceuticals, sensors, thermostats, detergents, and cleaners.

Diazinon is being addressed by a US EPA-approved TMDL for pesticide-related toxicity in all urban creeks, while a TMDL for trash has not been completed. The primary source of diazinon and trash has been identified as urban runoff. As of December 2004, it became unlawful to sell non-agricultural products containing diazinon in the U.S.[250]

4.9.2.4 *National Pollutant Discharge Elimination System*

The U.S. EPA's regulations, as called for under Section 402 of the Clean Water Act, also include the National Pollutant Discharge Elimination System (NPDES) permit program, which controls sources that discharge pollutants into waters of the United States (e.g., streams, lakes, bays, etc.).

NPDES General Construction Permit

The SWRCB has implemented a NPDES General Permit for Discharges of Stormwater Associated with Construction Activity ("General Construction Permit") for the State of California. Projects that would disturb more than one acre of land are required to submit a Notice of Intent and a Storm Water Pollution Prevention Plan (SWPPP) to the SWRCB to apply for coverage under the NPDES General Construction Permit. Construction activities subject to this permit include grading, clearing, or any activities that cause ground disturbance such as stockpiling or excavation. The SWPPP will include the site-specific best management practices (BMPs) to control erosion and sedimentation and maintain water quality during the construction phase, as well as BMPs to be implemented during the post-construction period.

NPDES Industrial Discharge Permits

To minimize the impact of stormwater discharges from industrial facilities, the NPDES program includes an industrial stormwater permitting component that covers 29 industrial sectors. Facilities requiring permit coverage include heavy manufacturing, landfills, metal scrap yards, wastewater treatment works, airports, food processors, public warehousing and storage, and light manufacturing such as printers. The NPDES Industrial Discharge permit requires the implementation of management measures that will achieve the performance standard of best available technology economically achievable (BAT) and best conventional pollutant control technology (BCT). The NPDES Industrial Discharge permit also requires the development of a SWPPP and a monitoring plan.

[249] Santa Clara Valley Urban Runoff Pollution Prevention Program. Mercury Pollution Prevention Plan. March 2002. Available at: http://www.scvurppp-w2k.com/pdfs/0102/SC34.03_c9c_Merc_Pol_Prevention_plan.pdf.
[250] U.S. EPA. "Diazinon: Phase Out of all Residential Uses of the Insecticide." Last updated September 6, 2011. Accessed January 20, 2012. http://www.epa.gov/opp00001/factsheets/chemicals/diazinon-factsheet.htm.

Municipal Regional Stormwater NPDES Permit

In 2009, the San Francisco Bay RWQCB issued a regional NPDES permit to all Bay Area municipalities and flood control agencies that discharge directly to San Francisco Bay.[251] The current permit is based in large part on an earlier joint NPDES Permit to Santa Clara County, the Santa Clara Valley Water District, and 13 of the cities within the County, including San José. This collection of municipalities and agencies formed an association called the Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP) to meet NPDES permit regulations by sharing resources and collaborating on projects of mutual benefit.

Under Provision C.3 of the Municipal Regional Stormwater NPDES Permit, development projects that create, add, or replace 10,000 square feet or more of impervious surface area are required to control post-development stormwater runoff through source control, site design, and treatment control BMPs. For special land use categories (e.g., auto services facilities, gas stations, restaurants, parking lots), the impervious surface threshold is 5,000 square feet. Most regulated projects have to treat stormwater runoff using Low Impact Development (LID) measures such as bio-treatment, harvesting and re-use of runoff on-site, infiltration, and evapotranspiration.[252]

The Municipal Regional Stormwater NPDES Permit also includes a Trash Load Reduction provision (C.10) that requires annual clean up of 32 creek Trash Hot Spots and establishes phased goals to dramatically reduce trash loads from the storm sewer system. Provision C.11. establishes "Mercury Controls", including the requirement for permittees to promote, facilitate, and/or participate in collection and recycling of mercury containing devices and equipment at the consumer level (e.g., thermometers, thermostats, switches, bulbs).

Hydromodification

In addition to water quality controls, the Regional Municipal NPDES permit has controls for hydromodification, which is defined as a change in stormwater runoff characteristics of a watershed resulting from changes in land use conditions (i.e., urbanization). For example, increasing impervious surfaces on a development site could increase peak runoff flow, volume, and duration, which can cause increased erosion, silt pollutant generation, or other impacts to beneficial uses of local rivers, streams, and creeks. Projects may be deemed exempt from the permit requirements if they do not meet the size threshold, drain into tidally influenced areas or directly into the Bay, drain into hardened channels, or are projects in sub-watersheds that are 65 percent or more impervious.[253]

Based on the Hydromodification Management Applicability Map (as amended March 2009), the Plan area is located within a sub-watershed that is greater than 65 percent impervious. Therefore, development under the DSAP would be exempt from the HMP requirements in the Municipal Regional Stormwater NPDES Permit.

[251] The current permit is effective for five years, until October 14, 2014.
[252] LID is a stormwater management strategy designed to manage runoff as close to its source as possible by incorporating a variety of natural and built features to reduce the rate of surface water runoff, filter pollutants out of runoff, facilitate infiltration of water into the ground surface, and reuse the water on-site.
[253] Impervious surfaces prevent infiltration of stormwater and generally include rooftops, roadways, and parking lots.

4.9.2.5 *Basin Plan*

The San Francisco Bay RWQCB regulates water quality in the Bay Area in accordance with the Water Quality Control Plan or "Basin Plan". The Basin Plan lists the beneficial uses which the RWQCB has identified for local aquifers, streams, marshes, rivers, and the Bay, as well as the water quality objectives, and criteria that must be met to protect these uses. The RWQCB implements the Basin Plan by issuing and enforcing waste discharge requirements, including permits for "non-point sources" such as the urban runoff discharged by a City's stormwater drainage system. The Basin Plan also describes watershed management programs and water quality attainment strategies.

4.9.2.6 *City of San José Policies*

Post-Construction Urban Runoff Management Policy 6-29

The City of San José's Post-Construction Urban Runoff Management Policy 6-29 was adopted to establish an implementation framework, consistent with Provision C.3 of the Municipal Regional Stormwater NPDES Permit. This policy requires all new and redevelopment projects to implement post-construction BMPs and Treatment Control Measures (TCMs). This policy also established specific design standards for post-construction TCMs for projects that create, add, or replace 10,000 square feet or more of impervious surfaces. Policy 6-29 will need to be updated as changes to the City's NPDES Municipal Permit requirements are made.

Post-Construction Hydromodification Management Policy 8-14

The City of San José's Post-Construction Hydromodification Management Policy 8-14 establishes an implementation framework for projects that are subject to hydromodification controls in the Municipal Regional Stormwater NPDES permit. Policy 8-14 may change based on future permit requirements.

Floodplain Ordinance – Municipal Code 17.08

City of San José Municipal Code 17.08 covers the requirements for building in various types of flood zones. This includes requirements for elevation, fill, flood passage, flood-proofing, maximum flow velocities, and utility placement for development within a floodplain, based on land use type.

Storm Drain Standards Improvement Process

The City does not have a level of service measure for the storm drainage system. It is City policy, however, for stormwater mains to have a minimum pipe size of 15 inches and to convey a storm event that has a 10 percent chance of occurring each year (often referred to as the "ten-year storm"). Up until about 15 years ago, the City's design standard for storm drains was the three-year storm event, which conformed to locally accepted standards at the time. As a result, it is estimated that only five percent of the City's storm drain system meet the current 10-year storm event standard. Storm pump stations (or lift stations) must be designed to accommodate the 100-year storm event. The standard design life of the mechanical and electrical components of a storm pump station is 10-25 years, although the average age of the City's pump stations is over 36 years. Due to undersized

pipes and/or inefficient pump station performance, localized flooding and ponding are fairly common occurrences throughout San José.

In general, rehabilitation of the existing system is implemented through the City's Storm Sewer Capital Improvement Program (CIP). Current financing mechanisms for the Storm Sewer CIP include developer impact fees and storm sewer use fees. Developer impact fees are assessed on new projects to allow connection to the system. These "one-time" fees can only be used for capital improvements. Storm sewer use fees are assessed annually on properties and can be used for capital improvements or operation and maintenance activities.

The Storm Sewer CIP mainly addresses minor neighborhood drainage problems. To determine system-wide infrastructure needs to accommodate planned development based on regulatory requirements and design standards, the City is initiating a Storm Master Plan effort. The Storm Master Plan will include an implementation/priority plan and a financing plan. In the interim, the City will evaluate system capacity as future development is proposed. Although private developers are required to design the on-site storm drain system to meet the 10-year standard, they are only required to upgrade the downstream system if existing capacity is lacking *and* a capital improvement project has not been identified and/or funded for the area within the project timeline.

Envision San José 2040 General Plan

Various policies in the City's General Plan have been adopted for the purpose of reducing or avoiding impacts related to hydrology and water quality, as listed in the following table.

Table 4.9-1:
General Plan Policies: Hydrology and Water Quality

Flooding and Stormwater Runoff	
Policy EC-5.1	The City shall require evaluation of flood hazards prior to approval of development projects within a Federal Emergency Management Agency (FEMA) designated floodplain. Review new development and substantial improvements to existing structures to ensure it is designed to provide protection from flooding with a one percent annual chance of occurrence, commonly referred to as the "100-year" flood or whatever designated benchmark FEMA may adopt in the future. New development should also provide protection for less frequent flood events when required by the State.
Policy EC-5.3	Preserve designated floodway areas for non-urban uses.
Policy EC-5.5	Prepare and periodically update appropriate emergency plans for the safe evacuation of occupants of areas subject to possible inundation from dam and levee failure and natural flooding. Include maps with pre-established evacuation routes in dam failure plans.
Policy EC-5.7	Allow new urban development only when mitigation measures are incorporated into the project design to ensure that new urban runoff does not increase flood risks elsewhere.

Policy EC-5.13	As a part of the City's policies for addressing the effects of climate change and projected water level rise in San Francisco Bay, it requires evaluation of projected inundation for development projects near San Francisco Bay or at flooding risk from local waterways which discharge to San Francisco Bay. For projects affected by increased water levels in San Francisco Bay, the City requires incorporation of mitigation measures prior to approval of development projects. Mitigation measures incorporated into project design or project location shall prevent exposure to substantial flooding hazards from increased water levels in San Francisco Bay during the anticipated useful lifetime of structures.
Action EC-5.14	Implement the requirements of FEMA relating to construction in Special Flood Hazards Areas as illustrated on Flood Insurance Rate Maps. Periodically update the City's Flood Hazard Regulations to implement FEMA requirements.
Action EC-5.18	Maintain City storm drainage infrastructure in a manner that reduces flood hazards. As the storm drainage system is extended or modified, provide capacity to adequately convey the 10-year storm event.
Action EC-5.19	Develop and maintain a Storm Drainage Master Plan and work with other agencies to develop broader Watershed Management Plans to model the City's hydrology.
Action EC-5.20	Monitor information from regional, state, and federal agencies on water level rises in San Francisco Bay on an on-going basis. Use this information to determine if additional adaptive management actions are needed and implement those actions to address flooding hazards from increasing sea levels for existing or new development and infrastructure.
Stormwater	
Policy ER-8.1	Manage stormwater runoff in compliance with the City's Post-Construction Urban Runoff (6-29) and Hydromodification Management (8-14) Policies.
Policy ER-8.3	Ensure that private development in San José includes adequate measures to treat stormwater runoff.
Policy ER-8.4	Assess the potential for surface water and groundwater contamination and require appropriate preventative measures when new development is proposed in areas where storm runoff will be directed into creeks upstream from groundwater recharge facilities.
Policy ER-8.5	Ensure that all development projects in San José maximize opportunities to filter, infiltrate, store and reuse or evaporate stormwater runoff onsite.
Action ER-8.10	Participate in the Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP) and take other necessary actions to formulate and meet regional water quality standards which are implemented through the National Pollution Discharge Elimination System (NPDES) permits and other measures.
Water	
Policy ER-9.5	Protect groundwater recharge areas, particularly creeks and riparian corridors.
Policy ER-9.6	Require the proper construction and monitoring of facilities that store hazardous materials in order to prevent contamination of the surface water, groundwater and

	underlying aquifers. In furtherance of this policy, design standards for such facilities should consider high groundwater tables and/or the potential for freshwater or tidal flooding.
Policy ER-10.2	In Consultation with the SCVWD restrict or carefully regulate public and private development in upland areas to prevent uncontrolled runoff that could impact the health and stability of streams.
Water Conservation and Quality	
Policy MS-3.4	Promote the use of green roofs (i.e., roofs with vegetated cover), landscape-based treatment measures, pervious materials for hardscape, and other stormwater management practices to reduce water pollution.
Policy MS-3.5	Minimize area dedicated to surface parking to reduce rainwater that comes into contact with pollutants.
Policy MS-20.2	Avoid locating new development or authorizing activities with the potential to negatively impact groundwater quality in areas that have been identified as having a high degree of aquifer vulnerability by the Santa Clara Valley Water District or other authoritative public agency.
Policy MS-20.3	Protect groundwater as a water supply source through flood protection measures and the use of stormwater infiltration practices that protect groundwater quality. In the event percolation facilities are modified for infrastructure projects, replacement percolation capacity will be provided.
General Provision of Infrastructure	
Policy IN-1.1	Provide and maintain adequate water, wastewater, and stormwater services to areas in and currently receiving these services from the City.
Policy IN-1.2	Consistent with fiscal sustainability goals, provide and maintain adequate water, wastewater, and stormwater services to areas in the city that do not currently receive these City services upon funding and construction of the infrastructure necessary to provide them.
Water Supply, Sanitary Sewer and Storm Drainage	
Policy IN-3.4	Maintain and implement the City's Sanitary Sewer Level of Service Policy and Sewer Capacity Impact Analysis (SCIA) Guidelines to: • Prevent sanitary sewer overflows (SSOs) due to inadequate capacity so as to ensure that the City complies with all applicable requirements of the Federal Clean Water Act and State Water Board's General Waste Discharge Requirements for Sanitary Sewer Systems and National Pollutant Discharge Elimination System permit. SSOs may pollute surface or ground waters, threaten public health, adversely affect aquatic life, and impair the recreational use and aesthetic enjoyment of surface waters. • Maintain reasonable excess capacity in order to protect sewers from increased rate of hydrogen sulfide corrosion and minimize odor and potential maintenance problems.

	• Ensure adequate funding and timely completion of the most critically needed sewer capacity projects. • Promote clear guidance, consistency and predictability to developers regarding the necessary sewer improvements to support development within the City.
Policy IN-3.7	Design new projects to minimize potential damage due to storm waters and flooding to the site and other properties.
Policy IN-3.8	In designing improvements to creeks and rivers, protect adjacent properties from flooding consistent with the best available information and standards from the Federal Emergency Management Agency (FEMA) and the California Department of Water Resources (DWR). Incorporate restoration of natural habitat into improvements where feasible.
Policy IN-3.9	Require developers to prepare drainage plans for proposed developments that define needed drainage improvements per City standards.
Wastewater Treatment and Water Reclamation	
Action IN-4.8	Prepare, maintain and implement a Master Plan(s) for the ongoing capital improvement, maintenance, and operation of the wastewater treatment and water reclamation facilities.

4.9.3 Hydrology and Water Quality Impacts

4.9.3.1 *Thresholds of Significance*

For the purposes of this PEIR, a hydrology and water quality impact is significant if implementation of the proposed DSAP would:

- Violate any water quality standards or waste discharge requirements;
- Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted);
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site;
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;
- Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff;
- Otherwise substantially degrade water quality;
- Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map;

- Place within a 100-year flood hazard area structures which would impede or redirect flood flows;
- Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam; or
- Result in inundation by seiche, tsunami, or mudflow.

The Envision 2040 PEIR concluded that development under the General Plan would not result in a significant impact related to flooding, drainage, surface water quality, or groundwater, with the implementation of existing regulations, programs, and General Plan policies.

4.9.3.2 *Flooding Impacts*

As described above and shown on Figure 4-10, two areas within DSAP boundaries are designated as 100-year flood hazard zones. The DSAP Land Use Diagram proposes commercial and industrial uses in these locations; therefore, the project would not place housing in flood hazard areas. Structures would not impede flood flow because these two areas are not adjacent to a creek channel. However, placement of structures on fill within these areas, as proposed, may redirect and/or increase the depth of flooding as the fill will displace flood waters. Therefore, f~~F~~uture development in the 100-year floodplain ~~however,~~ could be inundated with flood waters during severe storm events, endangering people and property.

As described above, the City and future project applicants would be subject to the following programs, General Plan policies, and floodplain management regulations intended to minimize risks associated with flooding:

- FEMA National Flood Insurance Program (NFIP)
- City of San José Municipal Code, Chapter 17.08 (Special Flood Hazard Area Regulations)
- Post-Construction Hydromodification Management Policy 8-14
- City of San José Local Hazard Mitigation Plan

Measures Included in the Project to Reduce and Avoid Impacts related to Flood Hazards

The following measures, if included in future projects within a flood hazard area, would reduce impacts related to development within the 100-year floodplain to a less than significant level:

- In accordance with Chapter 17.08 of the San José Municipal Code, the lowest floor of all new structures within flood hazard areas must be elevated above the base flood elevation (BFE) as mapped by FEMA, or for non-residential structures, be flood-proofed one foot above the BFE.[254] Any below-ground parking structures shall be designed and constructed so that the base flood would not inundate these areas. Flood protection of below-ground parking could be achieved either by grade control and/or berms.

[254] City of San José. *Diridon Station Area Plan, Existing Conditions Report.* 2010. Page 8-2.

With implementation of this measure, the DSAP would not place structures that would impede or redirect flood flows or result in a significant risk to property or people due development within a 100-year flood hazard area.

Dam Failure

~~As described in Section 4.9.2.2 above, the potential for dam failure is reduced by several regulatory inspection programs and risks to people and property in San José are reduced by local hazard mitigation planning.~~ ~~Furthermore, the~~ The SCVWD is limiting water levels at Anderson Dam to provide additional safety until further analyses and improvements to the dam are completed. With these precautions, the failure of Anderson Dam is considered unlikely ~~and the extent of inundation would be less severe than predicted by the worst-case analysis~~ though the extent of inundation would remain unchanged as the storage capacity would be restored. Additionally, the DSAP would still be subject to inundation from Lenihan Dam. As described in Section 4.9.2.2 above, the potential for dam failure is reduced by several regulatory inspection programs and risks to people and property in San José are reduced by local hazard mitigation planning. Therefore, future development under the DSAP would not expose people or structures to a significant risk of loss, injury, or death involving flooding as a result of dam failure.

Climate Change Effects in San José

Increases in global temperatures may have multiple effects on the water resources of the City of San José, including sea level rise, increased flooding risk, and the potential for salt water intrusion into groundwater basins. At this time, the scientific community has not reached consensus on quantitative estimates for flood-related factors such as rainfall intensity. Various studies predict that sea level will rise 12-18 inches by 2050, as compared to 2000 levels. Sea level rise is not a concern for Downtown San José, given the distance to San Francisco Bay and ground surface elevations (approximately 100 feet above sea level).

With implementation of the standard measures listed above and implementation of General Plan policies and existing regulations, future development under the DSAP would not expose people or structures to a significant risk of loss, injury or death involving flooding. This conclusion is consistent with the analysis in the Envision PEIR. **[Less than Significant Impact]**

4.9.3.3 *Post-Construction Hydrology and Water Quality Impacts*

Intensifying urban uses can affect the drainage pattern by increasing the coverage of impervious surfaces such as pavement and roofs, which decreases the amount of stormwater runoff that is filtered into the ground and increases the peak volume and rate of runoff entering the storm drainage system. In turn, increasing flows can accelerate erosion and cause flooding depending on the capacity of the receiving water body. Given that runoff picks up pollutants and sediments as it flows overland to the storm drain system, reducing filtration while augmenting the volume of untreated urban runoff would increase the pollutant and sediment load of waterways.

Drainage

Given that the Plan area is highly urbanized and existing surfaces are largely impervious, future development under the proposed DSAP would not alter the existing drainage pattern such that substantial flooding or erosion would occur in the receiving water bodies.[255] Conversely, new development projects would likely include higher percentages of landscaping and stormwater treatment measures to comply with current requirements, since nearly all properties in the Plan area were developed prior to the adoption of stormwater quality requirements. The addition of public open space and landscaping, as proposed by the DSAP, would also increase pervious surfaces throughout the Plan area.[256] Therefore, the project would likely decrease the peak volume of runoff from the Plan area as a whole.

Redevelopment, however, could increase impervious surfaces on specific sites, which would lead to increased runoff volume and peak flows.[257] As described above, many of the storm drains in the Plan area are 10 inches or 12 inches in diameter and are designed to accommodate a storm event that would statistically occur every two or three years. Therefore, future projects could contribute runoff that exceeds the capacity of local storm drainage systems. Exceeding the capacity could adversely impact the operation of the storm drainage system and/or cause localized flooding at storm drain inlets.

Implementation of General Plan policies and existing regulations, as described in Section 4.9.2 above, would substantially reduce drainage impacts. In accordance with General Plan policies, future development projects under the proposed DSAP will be required to design and construct storm drain systems meeting the City's 10-year storm event design standard. Projects may be required to complete specific off-site upgrades to accommodate runoff from the development site. System-wide capacity upgrades could be completed under the City's CIP process, forthcoming Storm Master Plan, or a separate financing mechanism such as a construction tax or connection fee assessed for new development in the Plan area. Consequently, the capacity of the storm drain system will be expanded as redevelopment proceeds in the area. In addition, compliance with the NPDES Municipal Stormwater Permit and associated City policies would reduce the rate and volume of runoff entering the storm drain system from development sites and thus, minimize the need for new or expanded storm drains.

Water Quality

Although the proposed DSAP would not substantially alter the drainage pattern of the Plan area, the intensification of urban uses would increase generation of non-point source pollution typical of urban development. These pollutants would likely include trash (improperly disposed solid waste), pet waste, and vehicle-related byproducts such as oil, grease, fallout from exhaust, and heavy metals (such as zinc from tire wear and copper from brake pad wear). New landscaped areas could contribute additional sources of residual fertilizers, pesticides, and other chemical compounds.

[255] This finding is consistent with the Strategy 2000 EIR.
[256] It should be noted that if the project does not ultimately include the removal of existing urban uses, the properties on the east side of Autumn Street could be redeveloped with new development, consistent with the 2040 General Plan.
[257] This potential impact was previously identified in the Envision PEIR.

Contaminants generated in the Plan area could degrade the water quality of Los Gatos Creek, Guadalupe River, and the San Francisco Bay.

In the absence of adequate control measures, intensifying urban uses could also conflict with implementation of the TMDL's for mercury or trash.[258] Trash materials of particular concern are plastics and hazardous waste (e.g., batteries, paint, and mercury-containing household products such as fluorescent light bulbs). In addition to being rinsed into the storm drain systems via runoff, trash can also enter waterways by wind or direct dumping. "Trash source hotspots" proposed by the DSAP include parks, commercial areas, and public spaces to be used for events due to the increase in pedestrian traffic and associated potential for littering.[259]

To minimize the amount of trash entering Los Gatos Creek and Guadalupe River from public spaces, the City will continue to implement waste management practices, household hazardous waste collection services, and trash load reduction efforts under existing policies and programs such as Provision C.10 of the NPDES permit. Although intensifying development may increase vehicle use and thus the pollutant load of runoff from roadways and parking lots in the short-term, the project aims to reduce reliance on vehicle travel over time, supporting reductions in one of the primary sources of pollution from urban runoff.

Measures Included in the Project to Reduce and Avoid Post-Construction Hydrology and Water Quality Impacts

Consistent with current requirements, the DSAP includes measures to reduce stormwater drainage and water quality impacts to a less than significant level. Future projects will be subject to the following measures:

- New development will be required to design and construct on-site storm drain systems meeting the City's 10-year storm event design standard (GP Policies IN-3.1 and IN-3.7). Applicants shall prepare drainage plans that define needed improvements in accordance with City standards and NPDES permit requirements (IN-3.9 and IN-3.10).

- In accordance with GP Policy IN-3.3, at the time future projects are proposed, the City will evaluate the local storm drain system to determine if runoff from the site would contribute to significant downstream deficiencies and identify the need for specific upgrades (i.e., new or supplemental stormwater lines, catch basins, outfalls, or other infrastructure).[260] If needed, modifications to the storm drain system could be completed either independently, jointly with other developments in the area, or as part of the City's CIP process. The City may also consider financing improvements to the storm drain system in the Plan area through the payment of special taxes or connection fees by development under DSAP (Policy IP-15.2).

- Future projects will be required to implement and maintain BMPs that facilitate the infiltration of water into the ground surface, reduce the rate and volume of runoff to the storm drain system, and minimize pollution in runoff, in accordance with the Municipal Regional Stormwater NPDES Permit and City policies. Under current NPDES requirements,

[258] The project would not generate diazinon because it is no longer used in insecticides for non-agricultural use.
[259] Santa Clara Valley Urban Runoff Pollution Prevention Program. "Trash." http://www.scvurppp-w2k.com/trash.shtml
[260] Outfalls that must be replaced will require permits from the Army Corps of Engineers, the California Regional Water Quality Control Board and the California Department of Fish and Game and other public agencies.

development projects that create, add, or replace 10,000 square feet or more of impervious surface area will be required to control post-development stormwater runoff through LID site design, source control, and treatment control BMPs.

Typical site design measures include protecting natural resources, reducing impervious surfaces, directing roof downspouts to drain to landscaped areas, and incorporating pervious paving, green roofs, and detention areas in landscaping. Source control measures are structural and operational BMPs that limit pollutant generation and prevent pollutants from entering stormwater runoff. Treatment measures are structural or landscaped facilities designed to remove pollutants from runoff and/or reduce the volume or rate of stormwater runoff prior to entering the storm drain system. Typical treatment controls include bio-treatment, infiltration, evapotranspiration, and/or harvesting and re-use of runoff on-site.[261]

- Consistent with the Clean Water Act and RWQCB Basin Plan, projects will be required to implement and maintain BMPs for minimizing the amount of trash and mercury-containing products entering waterways in the area. Example control measures include catch basin inserts, hydrodynamic separators, and outfall netting devices. Institutional measures that may be implemented include: enhanced street sweeping, storm drain signage/marking, education and outreach, trash bin management, and anti-littering enforcement. Additional measures are identified in the SCVURPPP's *Trash BMP Toolbox* (September 2007).

- Industrial facilities requiring NPDES permit coverage will be required to implement management measures that will achieve the performance standard of best available technology economically achievable (BAT) and best conventional pollutant control technology (BCT).

Implementation of these measures would ensure that sufficient storm drainage facilities are incorporated into development plans and new development would not conflict with the use, operation, or maintenance of any existing storm drain lines. With incorporation of these measures in project design or as conditions of approval, future projects would not provide substantial sources of polluted runoff or otherwise degrade water quality. Build-out of the project could result in a net benefit over existing conditions, since the majority of the Plan area was developed prior to stormwater management requirements and the City's current design standards would provide enhanced storm drain capacity. In addition, incorporation of LID design, source, and treatment controls would provide additional water quality protection than current infrastructure.

With implementation of General Plan policies, existing regulations, and the standard measures listed above, the proposed DSAP would not result in a significant impact related to post-construction drainage or water quality. This conclusion is consistent with the analysis in the Envision PEIR and Strategy 2000 EIR. **[Less than Significant Impact]**

4.9.3.4 *Construction-related Impacts*

Construction activities associated with development under the proposed DSAP would include building demolition, ground disturbance, and construction of new structures and pavement. Ground-

[261] LID is a stormwater management strategy designed to manage runoff as close to its source as possible by incorporating a variety of natural and built features to reduce the rate of surface water runoff, filter pollutants out of runoff, facilitate infiltration of water into the ground surface, and reuse the water on-site.

disturbing activities such as grading and excavation could result in accelerated erosion on work sites by exposing soil to runoff. Erosion could adversely affect water quality through sedimentation of runoff. Construction would also involve the use of various hazardous substances such as fuel, lubricants, paving media, paints, and solvents. If improperly controlled, stormwater runoff from construction sites could transport contaminants to Guadalupe River, Los Gatos Creek, and ultimately San Francisco Bay, which could degrade water quality, endanger aquatic life, and/or result in violation of water quality standards.[262]

Construction of projects that involve below-ground structures may require dewatering of groundwater, which is known to occur at depths of less than 50 feet within the Plan area. Groundwater pumped from below the construction site and released into the storm drain system could contain sediment or other contaminants such as toxics and petroleum hydrocarbons.[263] If not properly managed, dewatering activities could pollute surface water.

Measures Included in the Project to Reduce and Avoid Construction-related Impacts to Water Quality

Implementation of General Plan policies and regulatory programs listed in Section 4.9.2 would substantially reduce construction-related water quality impacts. Consistent with current requirements, future projects will be subject to the following standard measures:

- **NPDES Permit Requirements.** Prior to initiating grading activities, the project applicant will file a Notice of Intent (NOI) with the SWRCB and prepare a SWPPP prior to commencement of construction. The project's SWPPP shall include measures for soil stabilization, sediment and erosion control, non-stormwater management, and waste management to be implemented during all demolition, site excavation, grading, and construction activities. All measures shall be included in the project's SWPPP and printed on all construction documents, contracts, and project plans. The following construction BMPs may be included in the SWPPP:

  - Restrict grading to the dry season or meet City requirements for grading during the rainy season.
  - Use effective, site-specific erosion and sediment control methods during the construction periods. Provide temporary cover of all disturbed surfaces to help control erosion during construction. Provide permanent cover as soon as is practical to stabilize the disturbed surfaces after construction has been completed.
  - Cover soil, equipment, and supplies that could contribute non-visible pollution prior to rainfall events or perform monitoring of runoff with secure plastic sheeting or tarps.
  - Implement regular maintenance activities such as sweeping driveways between the construction area and public streets. Clean sediments from streets, driveways, and paved areas on-site using dry sweeping methods. Designate a concrete truck washdown area.
  - Dispose of all wastes properly and keep site clear of trash and litter. Clean up leaks, drips, and other spills immediately so that they do not contact stormwater.

[262] Once construction is complete and all exposed surfaces are planted, erosion from development sites and the associated potential for sedimentation would be minimal.

[263] High sediment content in dewatering discharges is common because of the nature of the operation in which soil and water mixes in the turbulent flow of high volume pump intakes. Chemical pollutants are most commonly found in dewatering effluent in areas with a history of groundwater contamination (e.g. leaks to the subsurface from industrial sites).

– Place fiber rolls or silt fences around the perimeter of the site. Protect existing storm and sewer inlets in the project area from sedimentation with filter fabric and sand or gravel bags.

The SWPPP shall also include a Post-Construction Stormwater Management Plan that includes site design, source control, and treatment measures to be incorporated into the project and implemented following construction (refer to Section 4.9.3.3 above).

When the construction phase is complete, a Notice of Termination (NOT) for the General Permit for Construction will be filed with the RWQCB and the DTSC. The NOT will document that all elements of the SWPPP have been executed, construction materials and waste have been properly disposed of, and a Post-Construction Stormwater Management Plan is in place, as described in the SWPPP for the site.

- **Dewatering.** For future projects that involve dewatering activities, the SWPPP shall include provisions for the proper management of dewatering effluent. At a minimum, all dewatering effluent will be contained prior to discharge to allow the sediment to settle out, and filtered, if necessary, to ensure that only clear water is discharged to the storm or sanitary sewer system. In areas of suspected groundwater contamination (i.e., underlain by fill or near sites where chemical releases are known or suspected to have occurred), groundwater will be analyzed by a State-certified laboratory for the suspected pollutants prior to discharge. Based on the results of the analytical testing, the applicant will work with the RWQCB and/or the local wastewater treatment plant to determine appropriate disposal options.[264]

With implementation of General Plan policies, existing regulations, and the standard measures listed above, future development under the DSAP would not result in a significant construction-related impact on drainage or water quality. This conclusion is consistent with the analysis in the Envision PEIR and Strategy 2000 EIR. **[Less than Significant Impact]**

4.9.3.5 *Groundwater Impacts*

Development of the project area would not contribute to depletion of groundwater supplies or reduce the amount or quality of water available for public water supplies. Development under the proposed DSAP could result in the placement of new development within or near areas where surface water percolates to groundwater.

Groundwater contamination is most likely to occur where the basin is unconfined and the underlying soil and rock materials have higher infiltration rates. Although the Central Planning Area has substantial areas of soils with moderate infiltration rates, the underlying groundwater aquifer is more protected due to the confining layer. In addition, regulations designed to control contaminants in stormwater runoff reduce the potential for contamination of groundwater with compounds found on developed sites. The NPDES program and City Council Policy 6-29 limit the use of infiltration treatment measures for the purpose of groundwater protection, stating that infiltration devices must:

- be implemented at a level appropriate to protect groundwater quality;
- not cause or contribute to degradation of groundwater quality;

[264] This measure is identified in the Strategy 2000 EIR.

- be adequately maintained to maximize pollutant removal capabilities;
- maintain a vertical distance between the base of the infiltration device and seasonal high groundwater of at least 10 feet; and
- be located a minimum of 100 feet horizontally from any known water supply wells.

Unless water is first treated by another means, infiltration devices are not recommended in industrial areas, areas subject to high vehicular traffic, areas with contaminated groundwater from past hazardous materials releases, or for automotive repair shops, car washes, vehicle storage areas (i.e., bus or truck yards), nurseries, or any other land use which may be determined by the City to post a high threat to groundwater quality.

With implementation of existing regulations and General Plan policies, future development under the DSAP would not result in a significant impact to groundwater quality. This conclusion is consistent with the analysis in the Envision PEIR. **[Less than Significant Impact]**

4.9.4 Cumulative Impacts

As described above, the Envision 2040 PEIR concluded that development under the General Plan would not result in a significant impact related to flooding, drainage, surface water quality, or groundwater, with the implementation of existing regulations, programs, and General Plan policies. The proposed project would not result in a new impact. In combination with the other planned and pending projects in the area, future development under the DSAP would contribute runoff to existing deficiencies in the storm drain system; however, the capacity of the system will be upgraded to accommodate a 10-year storm event, as needed to avoid localized flooding hazards.

Development under the DSAP has the potential to contribute to cumulative water quality impacts on Los Gatos Creek, the Guadalupe River, San Francisco Bay, and Pacific Ocean. When factoring all past, present, and future development, the degradation of these water bodies is cumulatively considerable.

4.9.4.1 *Post-construction Impacts*

Completion of the Autumn Street improvement project would incrementally contribute to the volume of polluted runoff from vehicle use by replacing existing surfaces with roadway, although the project will incorporate treatment controls to reduce impacts to surface water quality.[265] Operation of the baseball stadium would also result in increased vehicle use, contributing to the pollutant load of runoff that enters Los Gatos Creek. Conversely, operation of BART, HSR, and other transit projects is expected to reduce vehicle use in the Plan area and region overtime, thus reducing the amount of vehicle-related pollutants currently in runoff. The Autumn Street Improvement Project also includes removal of existing buildings adjacent to Los Gatos Creek for creation of an open space buffer, which would reduce sources of polluted runoff adjacent to the waterway.[266]

[265] City of San José. *Coleman Avenue/Autumn Street Improvement Project, Final Integrated Focused EIR.* 2008.
[266] It should be noted that if the improvement project does not ultimately include the removal of existing urban uses, the properties on the east side of Autumn Street could be redeveloped with new development, consistent with the 2040 General Plan.

Operation of the ballpark would also contribute to potential water quality effects related to trash generation, combining with trash generated by increased retail and pedestrian activity associated with development under the DSAP.[267] In accordance with AB 2176, the stadium would be required to provide adequate facilities for waste reduction, reuse, and recycling activities.[268] With proper waste management, operation of the stadium, combined with the intensification of urban uses in the Plan area, would not result in a significant cumulative impact related to water quality standards for trash.

While the degradation of Los Gatos Creek and Guadalupe River is cumulatively considerable, the proposed project would not make a substantial contribution of polluted stormwater runoff in comparison to the pollutant load of all runoff entering the creeks from development in the watershed.

Construction-related Impacts

Construction-related effects of the HSR, BART, and other transportation projects planned for the Plan area would combine with those of the proposed project. The potential for significant cumulative effects would increase if multiple projects are constructed at the same time, due to possible increase in the concentration of pollutants and sediment in the runoff. These projects, however, will implement BMPs to control erosion on construction sites and prevent contaminated runoff from entering storm drains and water bodies. Therefore, the cumulative effect on hydrology and water quality resulting from construction of all planned and approved projects in the Plan area would not be cumulatively considerable. **[Less than Significant Cumulative Impact]**

4.9.5 Conclusion

With implementation of the standard measures listed above and implementation of General Plan policies and existing regulations, future development under the DSAP would not expose people or structures to a significant risk of loss, injury or death involving flooding. Impacts related to construction-related and long-term drainage or water quality and groundwater quality would also be less than significant. This conclusion is consistent with the analysis in the Envision PEIR. **[Less than Significant Impact]**

The DSAP would not result in a new cumulative impact or make a cumulatively considerable contribution to a previously identified significant impact related to hydrology or water quality. **[Less than Significant Cumulative Impact]**

[267] This impact was not identified in the Baseball Stadium EIR (City of San José, 2006), although the utilities discussion in that EIR stated that the stadium could generate up to eight tons of solid waste per event.
[268] City of San José. *Baseball Stadium in the Diridon/Arena Area Draft EIR.* 2006.

4.10 UTILITIES AND SERVICE SYSTEMS

This section is based primarily upon the Envision PEIR and Strategy 2000 EIR, except where noted.

4.10.1 Existing Setting

4.10.1.1 *Water Service and Supply*

Water service in Downtown San José is provided by the San Jose Water Company (SJWC), which is the largest private water retailer in the city. SJWC obtains its potable water supply through groundwater, imported treated water, and local surface water (collected and stored in reservoirs), with an average of 55 percent purchased from the SCVWD.[269] Approximately 53 percent of the SCVWD's water supply is imported water from the Sacramento-San Joaquin Delta.[270] During droughts, the SJWC has a Water Shortage Contingency Plan that entails specific actions for prohibiting certain uses of water and provides enforcement mechanisms.

The average daily demand for water in Downtown is approximately 29 million gallons per day (mgd), with a projected demand of 34 mgd for year 2020.[271] The water distribution system in the Plan area consists of lines of various sizes (from three to 12 inches in diameter) located within the public right-of-way.

4.10.1.2 *Wastewater*

Wastewater is water containing wastes from residential, commercial, and industrial processes. Municipal wastewater contains sewage, gray water (e.g., water from sinks and showers), and sometimes industrial wastewater.

Wastewater Treatment

The San José/Santa Clara Water Pollution Control Plant (WPCP) provides wastewater treatment for the cities of San José, Santa Clara, Milpitas, Campbell, Cupertino, Los Gatos, Saratoga, and Monte Sereno. The WPCP is located in the Alviso area of San José and is maintained by the City of San José.

The WPCP has an existing treatment capacity to treat 167 million gallons per day (mgd) of wastewater influent. The City's share of the WPCP's treatment capacity is approximately 108.6 mgd. Based on the average daily dry weather flows from sources in San José (approximately 69.8 mgd), the City currently has approximately 38.8 mgd of excess treatment capacity.[272]

[269] San Jose Water Company. *City of San Jose 2040 General Plan Water Supply Assessment*. 2010.
[270] Envision PEIR.
[271] City of San José. *San José Downtown Strategy 2000 EIR.* 2005.
[272] Envision PEIR.

The WPCP is currently operating under a 120 million gallon per day dry weather effluent flow constraint, based on NPDES requirements. Approximately ten percent of the plant's effluent is recycled for non-potable uses and the remainder flows into San Francisco Bay.[273]

Sanitary Sewer System

Wastewater is conveyed to the WPCP through the City's sewer collection system, which consists of lateral lines and main lines in the public right-of-way. The City is currently working on a Sanitary Sewer Master Plan that will be based on a hydraulic model of the trunk sewer system (10-inch and larger pipes), using land use and flow information. The City intends to develop a sewer capacity improvement program to prioritize and construct capital projects that address the needs identified in the Sewer Master Plan Program.

The four main lines that serve the Plan area include the 36-inch Park Avenue/Autumn Street line, 27-inch Sunol Street/Julian Street line, 21-inch Stockton Avenue line, and 21-inch San Carlos Street/Gifford Avenue line. Beyond the Plan area, these lines flow through a series of siphons under Los Gatos Creek, the Guadalupe River, and/or SR 87. The lines then connect to the sewer network in Downtown, which eventually converges in the 84-inch trunk mains in Zanker Road that carry flows to the WPCP.

Based on recent projects completed nearby, it is anticipated that many of the sewer lines in the Plan area are currently in need of repair to prevent infiltration of groundwater into the pipes and obstructions to wastewater flow. The Forest-Rosa 18 line is proposed for expansion and/or improvement in two locations; at the intersection of Cinnabar Street and Stockton Avenue and on Chestnut Street between Asbury Street and West Hedding Street.[274]

Recycled Water

Recycled (reclaimed) water service is provided to the City of San José by South Bay Water Recycling (SBWR). A recycled water pipeline is available on Autumn Street on the north side of the UPRR tracks. This line will provide water for irrigation, toilet flushing, cooling tower make-up water, street cleaning, and many other uses in the Plan area.[275]

4.10.1.3 *Stormwater*

As described in Section 4.9 *Hydrology and Water Quality*, the City's stormwater drainage system is comprised of a network of inlets, manholes, pipes, outfalls, channels, and pump stations that function to collect, convey, and discharge runoff to receiving water bodies, protecting infrastructure and the public from flood waters during storm events.

[273] City of San José, Environmental Services Department. "San José/Santa Clara Water Pollution Control Plant." 2010. Accessed October 12, 2010. http://www.sanjoseca.gov/esd/wastewater/water-pollution-control-plant.asp.
[274] City of San José Department of Public Works, http://www.sanjoseca.gov/publicworks/tds/PDFS/SMP/SJ_Phase_%2011_Sewer_Master_Plan_Report_Draft_Sep2011.pdf.
[275] Trujillo, Cathy, City of San José Environmental Services Department. Letter dated September 28, 2012.

4.10.1.4 *Solid Waste*

The City of San José currently generates approximately 1.7 million tons of solid waste annually.[276] In 2008, approximately 60 percent of the waste generated was diverted from landfill disposal through a variety of programs including residential curbside recycling and yard trimmings collection programs, civic recycling, and the Construction & Demolition Diversion Deposit (CDDD) program.[277]

The City is primarily served by five landfills, nine recycling and transfer stations, five composting facilities, and eight processing facilities for construction and demolition debris.[278] The landfills include Guadalupe Mines, Kirby Canyon, Newby Island, Zanker Road Materials Processing Facility, and Zanker Road. The five landfills have a total permitted capacity (volume of waste that can be received) of 5.3 million tons per year.[279]

Based on available capacity of the landfills (actual physical space), the projected closure dates are 2021 for Guadalupe Mines and 2025 for Kirby Canyon and Newby Island.[280] The Zanker Road landfills have no closure date due to the minimal amount of material landfilled each year. Considering these projected closure dates and current generation rates, there will be adequate landfill capacity to accommodate waste generated in Santa Clara County for at least 15 years.[281] After this time, regional landfills could reach capacity in the absence of additional waste reduction efforts.

4.10.2 Regulatory Framework

Development within the City of San José is subject to various regulations related to the management of utilities and service systems. In addition to those described below, the City's Green Building Policy (8-13) and Private Sector Green Building Policy (6-32) reduce impacts related to water supply, wastewater, and solid waste (refer to Section 4.11 *Energy*). Additional regulations related to stormwater management are described in Section 4.9 *Hydrology and Water Quality*.

4.10.2.1 *California Green Building Standards Code*

In January 2010, the State of California adopted the California Green Building Standards Code (CALGreen) that establishes mandatory green building standards for all buildings in California. The code covers five categories: planning and design, energy efficiency, water efficiency and conservation, material conservation and resource efficiency, and indoor environmental quality. These standards include a mandatory set of minimum guidelines for new construction projects to achieve specific green building performance levels, as well as more rigorous voluntary measures. Mandatory measures include:

[276] Envision PEIR.
[277] The CDDD is an incentive program to encourage the recovery of debris from construction and demolition projects. The City collects a deposit that is fully refundable with proper documentation that the debris was diverted from burial in a landfill. Additional information is available at: http://www.sjrecycles.org/construction-demolition/cddd.asp.
[278] This does not include the numerous facilities that primarily handle a single type of material such as scrap metal. **Source:** City of San José. *Assessment of Infrastructure for the Integrated Waste Management Zero Waste Strategic Plan Development*. 2008.
[279] Ibid.
[280] Envision PEIR. In August 2012, the City approved the expansion of the Newby Island landfill to allow operation through 2025.
[281] County of Santa Clara. *Five-Year CIWMP/RAIWMP Review Report*. 2007.

- Reduce indoor water use by 20 percent;
- Reduce wastewater by 20 percent;
- Develop a construction waste management plan;
- Recycle and/or salvage 50 percent of nonhazardous construction and demolition debris; and
- Provide readily accessible areas for recycling by occupant.

4.10.2.2 *Senate Bill 610 Water Supply Assessment*

Senate Bill (SB) 610, codified as Water Code Section 10910 et seq., requires that certain water supply and demand information be prepared for "projects" which are the subject of an EIR. Water Code Section 10912 defines a "project" as, among other things, a project that would demand an amount of water equivalent to, or greater than, the amount of water required by a 500 dwelling unit project. The SJWC completed a Water Supply Assessment as part of the 2040 General Plan process.

4.10.2.3 *NPDES Permit Program*

As described in Section 4.9 *Hydrology and Water Quality*, the federal Clean Water Act establishes the National Pollutant Discharge Elimination System (NPDES) permit program. Under the NPDES program, the San Francisco Bay Regional Water Quality Control Board (RWQCB) administers a wastewater permit to the WPCP and a Municipal Regional Stormwater NPDES Permit to all Bay Area municipalities and flood control agencies that discharge directly to San Francisco Bay, including the City of San José. The wastewater permit sets limits for two types of pollutants (conventional and toxic) and limits the amount of treated water (effluent) discharged to the San Francisco Bay to 120 mgd.[282]

4.10.2.4 *State's General Waste Discharge Requirements*

The General Waste Discharge Requirements for Sanitary Sewer Systems (Order No. 2006-0003) requires public sewer agencies to develop and implement a Sewer System Management Plan (SSMP). The Order also requires agencies to report all sanitary sewer overflows to the State Water Resources Control Board (SWRCB). The State's SSMP Guidelines require best management practices for sanitary sewer systems, including providing adequate capacity for peak wet weather flows and appropriate design standards for sewer facilities.

4.10.2.5 *Assembly Bills 939 and 2176*

Numerous solid waste laws have been enacted in California since 1927. The primary legislation related to the environmental impacts of land use development is Assembly Bill (AB) 939. AB 939 requires all California counties to prepare integrated waste management plans and all municipalities to divert 50 percent of the waste stream from landfill disposal by the year 2000 and each year thereafter. The City of San José is currently in compliance with AB 939 requirements for 50 percent landfill diversion.

[282] The influent and effluent capacities are based on average dry weather flows, which is the highest average daily flow over any five-weekday period between the months of June and October.

AB 939 also established the California Integrated Waste Management Board, which was recently renamed Department of Resources Recycling and Recovery (CalRecycle). CalRecycle is responsible for reducing waste, promoting the management of all materials to their highest and best use, and protecting public health/safety and the environment.[283] To meet these responsibilities, CalRecycle has enforcement authority in the following programs:

- Solid waste facility operation and closure
- Waste diversion planning, programs, and technical assistance
- Recycled-content newsprint
- Recycled-content trash bags
- Used oil recycling
- Waste tire hauling and storage

AB 2176 established requirements for large venues and events (with average daily attendance of more than 2,000 people) to prepare a waste reduction plan and submit annual monitoring reports to the local government.

4.10.2.6 *Mandatory Commercial Recycling Measure*

As described in Section 4.12 *Greenhouse Gas Emissions*, the California Air Resources Board (CARB) Scoping Plan for the AB 32 included a Mandatory Commercial Recycling measure designed to reduce greenhouse gas emissions by five million metric tons of carbon dioxide equivalents. According to Statewide Waste Characterization data from 2008, the commercial sector currently generates approximately 68 percent of the solid waste in California. To achieve the measure's objective, the commercial sector will need to recycle an additional two to three million tons of material by the year 2020 and beyond.[284] CalRecycle and CARB anticipate that jurisdictions and businesses will be required to implement recycling programs that were developed for this regulation in July 2012.

4.10.2.7 *City of San José Policies*

Urban Environmental Accords

On November 1, 2005, San José's City Council signed on to the Urban Environmental Accords (Accords), a declaration of participating city governments to build ecologically sustainable, economically dynamic, and socially equitable futures for their urban citizens. The Urban Environmental Accords includes 21 actions in seven different areas such as energy, waste, and urban nature. The actions that relate to utilities and service systems are:

Waste Reduction

- Establish a policy to achieve zero waste to landfills and incinerators by 2040.
- Adopt a citywide law that reduces the use of a disposable, toxic, or non-renewable product category by at least fifty percent in seven years.

[283] CalRecycle. "Compliance and Enforcement." Last updated: May 3, 2011. Accessed March 23, 2012. http://www.calrecycle.ca.gov/Enforcement/.
[284] Envision PEIR.

- Implement "user-friendly" recycling and composting programs, with the goal of reducing by 20 percent per capita solid waste disposal to landfill and incineration in seven years.

Water

- Develop policies to increase adequate access to safe drinking water, aiming at access for all by 2015. For cities with potable water consumption greater than 100 liters per capita per day, adopt and implement policies to reduce consumption by ten percent by 2015.
- Protect the ecological integrity of the city's primary drinking water sources (i.e., aquifers, rivers, lakes, wetlands and associated ecosystems).
- Adopt municipal wastewater management guidelines and reduce the volume of untreated wastewater discharges by 10 percent in seven years through the expanded use of recycled water and the implementation of a sustainable urban watershed planning process that includes participants of all affected communities and is based on sound economic, social, and environmental principles.

Green Vision

As described in Section 4.2 *Transportation*, the City of San José adopted the Green Vision as a 15-year plan for implementing environmental sustainability along with economic growth in the City. Green Vision goals applicable to utilities and service systems include:

- Build or retrofit 50 million square feet of green buildings;
- Divert 100 percent of the waste from our landfill and convert waste to energy;
- Recycle or beneficially reuse 100 percent of our wastewater (100 million gallons per day);

Water Conservation Programs

The City's water conservation programs are intended to meet future water needs and minimize flows to the sanitary sewer and sewage treatment systems. The program includes: limited landscape watering hours; restrictions on the use of potable water for construction purposes; ultra-low flow toilet incentives; a showerhead retrofit program; landscape ordinances for non-residential new construction; commercial/industrial water audits; financial incentives for commercial/industrial conservation; water use prohibitions; and a ban on cleaning vehicles without an automatic shut-off valve.

Sanitary Sewer Level of Service Policy

The City of San José has adopted a level of service (LOS) policy for design of wastewater mains. The levels of service range from "A" to "F", with LOS A defined as unrestricted flow, and LOS F defined as being inadequate to convey existing wastewater flow. To meet the City's guidelines, new developments must meet LOS D or better. At LOS D, the sewer main runs full during peak conditions.[285] The City is currently revising the LOS to address State and Federal regulations and best management practices for sanitary sewer systems. Under current City policy, new development is required to avoid or minimize impacts upon existing or anticipated sewer line deficiencies by

[285] Peak wet weather flow assumes rainfall-derived and infiltration flow from a 10-year storm in addition to normal wastewater flows. Sewage flow increases during storm events due to inflow from surface water that enters the system through improper sewer connections and manhole covers and from infiltration of groundwater through leaky sewer pipes and connections.

constructing or contributing to the construction of new lines or by waiting for completion of planned sewer system improvements.

Zero Waste Goals and Strategic Plan

In 2007, the San José City Council adopted the *San José's Green Vision* and a Zero Waste Resolution (No. 74077). The Green Vision is a 15-year plan for implementing environmental sustainability along with economic growth in the City. The resolution set a goal of 75 percent waste diversion by 2013 and a goal of zero waste by 2022 for the City, in support of the Green Vision goal to divert 100 percent of waste from landfills. The resolution is based on the principles of pursing "upstream" strategies to reduce the volume of discarded materials and improving "downstream" reuse/recycling to ensure their highest and best use while stimulating local economic development.

To help reach the waste reduction goals, the City developed a Zero Waste Strategic Plan that identifies polices, programs, and facilities to be implemented in a phased approach over the short- and long-term. Phase I includes voluntary actions, education, and incentives; Phase 2 includes new programs and advocacy; and Phase 3 includes bans, mandates, and legislation. The Plan considers strategies such as food waste composting, reducing packaging, extended producer responsibility, redesigning the commercial solid waste system, improved services for multi-family dwellings, and other programs.[286]

To support the City's Green Vision and comply with AB 2176, the City developed a Zero Waste Event Program to encourage waste prevention and reduction, recycling, and composting at large events held in the City of San José.

Envision San José 2040 General Plan

Various policies in the City's General Plan have been adopted for the purpose of reducing or avoiding impacts associated with utilities and service systems, as listed in the following table.

Table 4.10-1:
General Plan Policies: Utilities and Service Systems

Water Conservation and Quality Policies and Actions	
Policy MS-3.1	Require water-efficient landscaping, which conforms to the State's Model Water Efficient Landscape Ordinance, for all new commercial, institutional, industrial, and developer-installed residential development unless for recreation needs or other area functions.
Policy MS-3.2	Promote use of green building technology or techniques that can help reduce the depletion of the City's potable water supply as building codes permit. For example, promote the use of captured rainwater, graywater, or recycled water as the preferred source for non-potable water needs such as irrigation and building cooling, consistent with Building Codes or other regulations.

[286] City of San José. *Assessment of Infrastructure for the Integrated Waste Management Zero Waste Strategic Plan Development*. 2008.

Policy MS-3.3	Promote the use of drought tolerant plants and landscaping materials for non-residential and residential uses.
Action MS-3.7	Update the Green Building Ordinance to require installation of water efficient fixtures and appliances that are WaterSense certified, Energy Star rated, or equivalent during construction or renovation of bathrooms, kitchens, laundry areas, and/or other areas with water fixtures/appliances that are proposed to be replaced.
Responsible Management of Water Supply Policies and Actions	
Policy MS-17.1	Manage the limited water supply in an environmentally, fiscally, and economically sustainable manner, by working with local, regional and statewide agencies to establish policies that promote water use efficiency programs, including recycled water programs to support the expanded use of recycled water within San José and neighboring jurisdictions.
Policy MS-17.8	Review and provide input to Urban Water Management Plans prepared by water suppliers to ensure that they maximize water conservation and reuse in order to fulfill San José's water supply needs. Consider projected water supplies in updated Urban Water Management Plans as a part of each Major Review of this General Plan.
Water Conservation Policies and Actions	
Policy MS-18.4	Retrofit existing development to improve water conservation.
Policy MS-18.5	Reduce per capita water consumption by 25% by 2040 from a baseline established using the 2010 Urban Water Management Plans of water retailers in San José.
Policy MS-18.6	Achieve by 2040, 50 million gallons per day of water conservation savings in San José, by reducing water use and increasing water use efficiency.
Water Recycling Policies and Actions	
Policy MS-19.1	Require new development to contribute to the cost-effective expansion of the recycled water system in proportion to the extent that it receives benefit from the development of a fiscally and environmentally sustainable local water supply.
Policy MS-19.3	Expand the use of recycled water to benefit the community and the environment.
Policy MS-19.4	Require the use of recycled water wherever feasible and cost-effective to serve existing and new development.
Action MS-19.6	Develop and enact ordinance(s) that require new development to contribute to the improvement and expansion of the South Bay Water Recycling system.
Water Resources	
Policy ER-9.3	Utilize water resources in a manner that does not deplete the supply of surface or groundwater or cause overdrafting of the underground water basin.
Policy ER-9.5	Protect groundwater recharge areas, particularly creeks and riparian corridors.

General Provision of Infrastructure Policies	
Policy IN-1.5	Require new development to provide adequate facilities or pay its fair share of the cost for facilities needed to provide services to accommodate growth without adversely impacting current service levels.
Policy IN-1.6	Ensure that public facilities and infrastructure are designed and constructed to meet ultimate capacity needs to avoid the need for future upsizing. For facilities subject to incremental upsizing, initial design shall include adequate land area and any other elements not easily expanded in the future. Infrastructure and facility planning should discourage over-sizing of infrastructure which could contribute to growth beyond what was anticipated in this General Plan.
Policy IN-1.7	Implement financing strategies, including assessment of fees and establishment of financing mechanisms, to construct and maintain needed infrastructure that maintains established service levels and mitigates development impacts to these systems (e.g., pay capital costs associated with existing infrastructure that has inadequate capacity to serve new development and contribute toward operations and maintenance costs for upgraded infrastructure facilities).
Water Supply, Sanitary Sewer, and Storm Drainage Policies and Actions	
Policy IN-3.1	Achieve minimum level of services: • For sanitary sewers, achieve a minimum level of service "D" or better as described in the Sanitary Sewer Level of Service Policy and determined based on the guidelines provided in the Sewer Capacity Impact Analysis (SCIA) Guidelines. • For storm drainage, to minimize flooding on public streets and to minimize the potential for property damage from stormwater, implement a 10-year return storm design standard throughout the City, and in compliance with all local, State and Federal regulatory requirements.
Policy IN-3.3	Meet the water supply, sanitary sewer and storm drainage level of service objectives through an orderly process of ensuring that, before development occurs, there is adequate capacity. Coordinate with water and sewer providers to prioritize service needs for approved affordable housing projects.
Policy IN-3.4	Maintain and implement the City's Sanitary Sewer Level of Service Policy and Sewer Capacity Impact Analysis (SCIA) Guidelines to: • Prevent sanitary sewer overflows (SSOs) due to inadequate capacity so as to ensure that the City complies with all applicable requirements of the Federal Clean Water Act and State Water Board's General Waste Discharge Requirements for Sanitary Sewer Systems and National Pollutant Discharge Elimination System permit. SSOs may pollute surface or ground waters, threaten public health, adversely affect aquatic life, and impair the recreational use and aesthetic enjoyment of surface waters. • Maintain reasonable excess capacity in order to protect sewers from increased rate of hydrogen sulfide corrosion and minimize odor and potential maintenance problems. • Ensure adequate funding and timely completion of the most critically needed sewer capacity projects.

	• Promote clear guidance, consistency and predictability to developers regarding the necessary sewer improvements to support development within the City.
Policy IN-3.5	Require development which will have the potential to reduce downstream LOS to lower than "D", or development which would be served by downstream lines already operating at a LOS lower than "D", to provide mitigation measures to improve the LOS to "D" or better, either acting independently or jointly with other developments in the same area or in coordination with the City's Sanitary Sewer Capital Improvement Program.
Policy IN-3.9	Require developers to prepare drainage plans that define needed drainage improvements for proposed developments per City standards.
Action IN-3.14	Maintain and implement the Sanitary Sewer Master Plan Program to determine sewer system capacity needs using a computerized hydraulic model of San José's sewer system, supported by sewer flow monitoring at strategic locations within the system.
Action IN-3.15	Develop a sewer capacity improvement program to prioritize and construct improvement projects to address the capacity needs identified in the Sewer Master Plan Program.
Action IN-3.16	Develop a Storm Drainage Infrastructure Master Plan to • Identify facilities needed to prevent 10-year event street flooding and 100-year event structure flooding. • Ensure that public facilities and infrastructure are designed pursuant to approved State, regional and local regulatory requirements. • Ensure that adequate land area and any other elements are provided for facilities subject to incremental sizing (e.g., detention basins and pump stations). • Identify opportunities to meet water quality protection needs in a cost-effective manner.
Wastewater Treatment and Water Reclamation Policies	
Policy IN-4.1	Monitor and regulate growth so that the cumulative wastewater treatment demand of all development can be accommodated by San José's share of the treatment capacity at the San José/Santa Clara Water Pollution Control Plant.
Policy IN-4.2	Maintain adequate operational capacity for wastewater treatment and water reclamation facilities to accommodate the City's economic and population growth.
Policy IN-4.3	Adopt and implement new technologies for the operation of wastewater treatment and water reclamation facilities to achieve greater safety, energy efficiency and environmental benefit.
Policy IN-4.4	Maintain and operate wastewater treatment and water reclamation facilities in compliance with all applicable local, State and federal clean water, clean air, and health and safety regulatory requirements.
Policy IN-4.6	Encourage water conservation and other programs which result in reduced demand for wastewater treatment capacity.

Solid Waste – Materials Recovery/Landfill Policies	
Policy IN-5.1	Monitor the continued availability of long-term collection, transfer, recycling and disposal capacity to ensure adequate solid waste capacity. Periodically assess infrastructure needs to support the City's waste diversion goals. Work with private MRF and Landfill operators to provide facility capacity to implement new City programs to expand recycling, composting and other waste processing.
Policy IN-5.3	Use solid waste reduction techniques, including source reduction, reuse, recycling, source separation, composting, energy recovery and transformation of solid wastes to extend the life span of existing landfills and to reduce the need for future landfill facilities and to achieve the City's Zero Waste goals.
Policy IN-5.4	Support the expansion of infrastructure to provide increased capacity for Materials Recovery Facilities (MRF)/transfer, composting, and Construction and Demolition materials processing (C&D) at privately operated facilities and on lands under City control to provide increased long-term flexibility and certainty.
Policy IN-5.13	Designate no new candidate landfill sites until the need for additional landfill capacity has been established. Source reduction, recycling/composting alternatives, and waste conversion should be taken into account when evaluating the need for a landfill.
Policy IN-5.15	Expand the capacity of existing landfill sites as the preferred method for increasing the City's landfill capacity and monitor the continued availability of recycling, resource recovery and composting capacity to ensure adequate long term capacity.
Development Fees, Taxes, and Improvement Requirements Policies	
Policy IP-15.2	To finance the construction and improvement of facilities and infrastructure systems for which the demand for capacity cannot be attributed to a particular development, consider a series of taxes or fees through which new growth collectively finances those facilities and systems, as follows: 1. Construction Tax and the Conveyance Tax (the latter paid in connection with any transfer of real property, not just new development) provide revenue for parks, libraries, library book stock, fire stations, maintenance yards and communications equipment. 2. The Building and Structures Tax and Commercial/Residential/Mobilehome Park Tax provide revenue for the construction of San José's major street network. 3. Connection Fees provide revenue for the construction of storm sewers, sanitary sewers and expansions of sewage treatment capacity at the Water Pollution Control Plant. 4. Fees and taxes may need to be adjusted from time to time to reflect changing costs and new requirements. Additionally, new fees or taxes may need to be imposed to finance other capital and facility needs generated by growth. 5. Where possible, if a developer constructs facilities or infrastructure for which these taxes are imposed, the developer may be provided with corresponding credits against the applicable taxes or fees.

Environmental Leadership/Stewardship Policies	
Policy IP-17.1[287]	Use San José's adopted Green Vision as a tool to advance the General Plan Vision for Environmental Leadership. San José's Green Vision is a comprehensive fifteen-year plan to create jobs, preserve the environment, and improve quality of life for our community, demonstrating that the goals of economic growth, environmental stewardship and fiscal sustainability are inextricably linked. Adopted in 2007, San José's Green Vision, adopted in 2007, establishes the following Environmental Leadership goals for the City through 2022: 5. Divert 100 percent of the waste from our landfill and convert waste to energy; Although the City has one of the highest waste diversion rates of any large city in the nation, many waste reduction opportunities remain. If San José and other local cities achieve no further waste reduction efforts over the next 15 years, solid waste landfill space in the region could reach capacity.

4.10.3 Utilities and Service Impacts

4.10.3.1 *Thresholds of Significance*

For the purposes of this PEIR, a utility and service systems impact is considered significant if implementation of the proposed DSAP would:

- Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board;
- Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects;
- Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects;
- Need new or expanded entitlements for water supplies;
- Be served by a landfill with insufficient permitted capacity; or
- Conflict with federal, state, and local statutes and regulations related to solid waste.

The Envision PEIR and Strategy 2000 EIR both concluded that planned growth would not result in a significant impact associated with the capacity of the water supply, sanitary sewer, wastewater treatment, storm drainage, or solid waste systems, with implementation of existing programs, regulations, and General Plan policies.

4.10.3.2 *Expansion or Replacement of Existing Facilities*

As described in Section 4.9 *Hydrology and Water Quality*, development allowed under the DSAP projects could contribute runoff that adversely affects operations of the existing stormwater drainage system, given that many of the storm drains in the Plan area have inadequate capacity and/or do not

[287] Policy IP-17.1as shown is modified in this list to reflect only those items relevant to the discussion of solid waste.

meet the City's 10-year storm event design standard. New development will be required to provide on-site storm drain systems meeting the City's design standard and NPDES permit requirements and to construct (or contribute to the construction of) off-site improvements if needed due to significant downstream deficiencies. Capacity-enhancing improvements may also be proposed in the Plan area under the City's Capital Improvement Program (CIP) process or master planning process.

Similarly, many of the water distribution lines and trunk mains in the Plan Area will likely need to be replaced with larger pipes to meet increased fire service demands. Modifications to the water distribution system could also include construction of new lines or extension of existing lines to serve new development within the Plan area. It is also anticipated that the DSAP would also require modifications to the sanitary sewer system. The replacement of existing siphons outside of the Plan area, if needed, would involve work within the banks of Los Gatos Creek or the Guadalupe River, which would require permits from the SCVWD, USACE, RWQCB, and/or CDFG.

Modifications to below ground utilities could include the construction of new lines or the expansion or replacement of existing facilities to serve future development. Proposed roadway improvements could require the relocation of various utility lines within or adjacent to rights-of-way. Utility improvements would likely be completed as a small component of a future development or transportation project and would involve ground disturbance to currently developed land (generally within public roadways and on redevelopment sites). Implementation of construction BMPs, as required by General Plan policies and current regulations, would reduce and avoid impacts related to water quality, erosion, air emissions, and hazardous materials resulting from ground-disturbing activities.[288] In addition, regulatory permits, if required for work within a creek channel, would include conditions for reducing impacts on hydrology and biological resources.

Disruptions to existing service during utility relocations are typically very limited or nonexistent. Utility providers would be contacted to identify potential conflicts, minimize disruptions, and develop strategies to address potential problems. Affected properties would be notified of any temporary interruption of service.

A Utility Master Plan or Capital Improvement Program may be prepared for the Plan area to provide a comprehensive solution to meeting the utilities needs of the project. This would allow future individual projects to contribute to the Plan or Program rather than attempting to provide utilities on a project-by-project basis.

Although the DSAP would require the construction, expansion, or replacement of storm drain, water distribution, and sanitary sewer lines in the Plan area, the completion of these activities as part of future development or transportation projects would not cause significant environmental effects with implementation of construction BMPs and General Plan policies. These conclusions are consistent with the analysis in the Envision PEIR and Strategy 2000 EIR regarding the provision of below ground utilities. **[Less than Significant Impact]**

[288] Refer to Sections 4.9 *Hydrology and Water Quality*, 4.8 *Geology and Soils*, 4.4 *Air Quality*, and 4.6 *Hazards and Hazardous Materials*.

4.10.3.3 *Water Service and Supply*

According to the Envision 2040 PEIR, population growth would increase demand for water, possibly resulting in shortages after 2025. The Strategy 2000 EIR also determined that development in Downtown could result in the need for new or expanded water entitlements. In addition to increased demand, global climate change could decrease the reliability of water supplies in California, as described in Section 4.12 *Greenhouse Gas Emissions*.

The SJWC estimates that total water demand for their service area could reach approximately 233,000 acre-feet per year (AFY) by 2035, based on current usage rates.[289] SJWC is expected to meet future demand through increased groundwater pumping, treated water delivery, recycled water use, and conservation.[290] By 2035, however, water demand is anticipated to exceed historic water supply levels during single-dry and multiple-dry water years by approximately 24,000 AFY.[291] During future droughts, SJWC will continue to enact their Water Shortage Contingency Plan.

Development under the proposed DSAP would contribute to total demand for SJWC and SCVWD water supplies. As shown in Table 4.10-2, water demand from future development in the Plan area would be roughly 3,575 AFY. This increase would represent approximately 1.5 percent of SJWC's total annual water demand in 2035. Irrigation of the planned community park and other landscaped areas in public open spaces and along the street would generate additional demand for water.

Table 4.10-2:
Estimated Daily and Annual Water Usage from Future Development

Population*		**Daily Demand (GPD)****	**Annual Demand (AFY)**
Residents	5,450	425,100	476
Jobs	21,610	2,766,080	3,098
TOTAL	**27,060**	**3,191,180**	**3,575**

* Refer to Section 4.15 *Population and Housing* for assumptions on the population figures. For purposes of the water supply assessment, the jobs category includes hotel uses.
** The daily water demand was estimated using SJWC's 2005 generation rates: 78 gallons per day (GPD) per resident and 128 GPD per job. One acre-foot of water is about 325,850 gallons.

Implementation of General Plan policies and the existing regulations described above would substantially reduce demand for water generated by current and future development. In conformance with the current CALGreen code and the City's goals for reducing per capita water consumption and increasing water use efficiency (GP Policies MS-18.5 and MS-18.6), the City will continue to require new development to incorporate water conservation measures into project design or as conditions of approval. This would include the development of a landscape irrigation budget and use of water-efficient landscaping (i.e., drought tolerant and native species), in conformance with the State's Model Water

[289] Approximately seven percent of total demand is unaccounted for such as fire fighting and public use. **Source:** San Jose Water Company. *City of San Jose 2040 General Plan Water Supply Assessment*. 2010.
[290] Envision PEIR.
[291] The SCVWD (the primary supplier to SJWC) has determined that additional water storage and sources of supply are needed due to the potential for water demand to exceed supply after 2025. The SCVWD has initiated work on a Water Master Plan, which will identify additional sources of water supply and storage to serve development through 2035.

Efficient Landscape Ordinance (GP Policy MS-3.1).[292] Additional techniques that may be used include but are not limited to:

- Use high-efficiency indoor fixtures (e.g., low-flow toilets that use less than 1.6 gallons per flush, urinals that require less than one gallon per flush, showerheads that require less than 2.5 gallons per minute, aerators to reduce flow in lavatory faucets to as low as one gallon per minute, automatic shut-off sensors on lavatory faucets, etc.).
- Use high-efficiency devices for outdoor water uses (e.g., self-adjusting weather-based irrigation controllers and sensors, soaker hoses and drip irrigation technology to minimize evaporative water loss, timers on watering systems, etc.).
- Provide separate meters for indoor and outdoor potable water use.
- Prevent irrigation spray on buildings.

Future development under the DSAP would be subject to City requirements for the use of recycled water wherever feasible and cost-effective (GP Policy MS-19.4). Additionally, new development may be required to contribute to the expansion of the recycled water system to serve the Plan area (GP Policies MS-19.1 and MS-19.6). Implementation of these policies would likely involve the use of recycled water for irrigation, particularly of large landscaped areas, and/or the installation of dual plumbing for both interior and exterior recycled water use.

Implementation of water conservation/efficiency measures and use of recycled water would minimize the long-term potable water demand generated by future development, as well as reduce the vulnerability of development in the case of future water shortages due to global climate change. Additional measures may be required to further minimize water use to the extent feasible and to comply with current regulations. In addition, the City will ensure that the water supply would adequately serve the new development at the time specific projects are proposed.[293] Therefore, it is anticipated that new or expanded entitlements for water supplies would not be required to serve future development under the proposed DSAP. This conclusion is consistent with the discussion in the Envision PEIR and Strategy 2000 EIR. **[Less than Significant Impact]**

4.10.3.4 *Wastewater*

The majority of water used in San José ends up as wastewater and enters the sanitary sewer system. Therefore, as water demand increases, the need for sanitary sewer and wastewater treatment services also increases.

Wastewater Treatment

According to the Envision PEIR, development under the 2040 General Plan is estimated to generate approximately 30.8 mgd of average dry weather *influent* flow. Given that the City has approximately 38.8 mgd of excess treatment capacity, planned growth in San José is not expected to exceed the City's allotted capacity. The Strategy 2000 EIR, however, determined that the increase in wastewater from development in Downtown could cause *effluent* from the WPCP to exceed the

[292] "Landscaping" in this case could exclude natural turf playfields or other recreational functions.
[293] This measure was previously identified as a mitigation measure in the Strategy 2000 EIR.

RWQCB limit of 120 mgd. According to the Envision PEIR, however, it is anticipated that the future average dry weather effluent flow would not exceed 120 mgd under long-term cumulative conditions.[294]

Implementation of the General Plan policies, existing regulations, and local programs described above would ensure that the WPCP has sufficient treatment capacity to accommodate planned growth, as well as reduce the potential for future exceedances of the RWQCB effluent limit. For example, the City has committed to maintaining adequate operational capacity for wastewater treatment to accommodate planned growth, which includes development in the Plan area (Policy IN-4.2). This would involve adoption of new technologies and expansion of water reclamation facilities over time (Policy IN-4.3).

Assuming that 80 percent of water used ends up as wastewater, the DSAP could generate up to 2.5 mgd of sewage, based on current water use rates.[295] This would represent approximately seven percent of the estimated citywide increase in influent.

As described in 4.10.3.2 above, future development will be required to incorporate water conservation measures and to use recycled water whenever feasible. The increased use of recycled water would decrease the amount of effluent discharged to the bay, reducing the potential for exceeding the RWQCB limit, while minimizing water use would decrease the amount of both influent and effluent. In addition, the City will ensure that there is adequate treatment capacity (both in terms of influent and effluent) at the time specific development projects are proposed, in accordance with GP Policy IN-4.1 and the Strategy 2000 EIR.

For these reasons, future development under the proposed DSAP would not require new or expanded wastewater treatment capacity or cause the WPCP to exceed the RWQCB limit. This conclusion is consistent with the analysis in the Envision PEIR.

Sanitary Sewer System

According to the Envision PEIR, the additional wastewater generated by planned growth could adversely affect operations of the sanitary sewer system, which conveys wastewater to the WPCP for treatment. Inadequate capacity may result in sewer overflows, which may violate regulations on wastewater, pollute surface or ground waters, threaten public health, and adversely affect aquatic life.

As part of the 2040 General Plan process and Sanitary Sewer Master Plan update, a hydraulic analysis is being completed to identify specific deficiencies in the sanitary sewer system, based on the City's revised LOS Policy. Preliminary results indicate that new development within Growth Areas would contribute to existing deficiencies in trunk mains throughout the city. Based on these findings, future development under the DSAP would contribute to known deficiencies in the Sunol Street, Stockton Avenue, and Zanker Road mains.[296] Replacement of these mains and possibly other

[294] Envision PEIR. Page 870.
[295] As a general rule, average wastewater flow rates are approximately 70 to 80 percent of domestic water use. **Source:** Envision PEIR.
[296] Previous test data has indicated that the mains in Autumn Street, Julian Street, and Stockton Avenue have capacity to accommodate additional flows. Test data on the San Carlos Street/Gifford Avenue main line was not available. **Source:** City of San José. *Diridon Station Area Plan, Existing Conditions Report*. 2010.

sewer lines serving the Plan area and/or the construction of new lines would be required to serve planned growth.

The Envision PEIR concluded that implementation of General Plan policies requiring future development to provide adequate sewer system capacity would reduce impacts to a less than significant level. Strategy 2000 determined that upgrades to the sewer system, completed under existing City programs at the time specific projects are proposed, would not result in a significant impact.

Measures Included in the Project to Reduce and Avoid Impacts to the Sanitary Sewer System

Consistent with these conclusions, future development under the DSAP will be subject to the following measures:

- At the time future projects are proposed, the City will evaluate the sewer system to determine if there is adequate capacity to serve the development, based on the City's level of service objectives (GP Policies IN-3.1 and IN-3.3).

- New development that could cause downstream level of service to drop below LOS D or would be served by downstream lines already operating at an unacceptable LOS will be required to improve the level of service to "D" or better, either independently, jointly with other developments in the area, or in coordination with the City's Sanitary Sewer CIP (GP Policy IN-3.5).

- The City may consider financing improvements to the sewer system in the Plan area through the payment of special taxes or connection fees by development under DSAP (Policy IP-15.2).

Implementation of these measures would ensure that the system will have capacity to meet the needs of new development. Enforcing the City's Sanitary Sewer Level of Service Policy will prevent sanitary sewer overflows due to inadequate capacity, ensuring compliance with the applicable requirements of the Federal Clean Water Act and State Water Board's General Waste Discharge Requirements for Sanitary Sewer Systems and NPDES permit. With implementation of General Plan policies, future development under the DSAP would not result in the need for additional wastewater treatment facilities. This conclusion is consistent with the analysis in the Envision PEIR. **[Less than Significant Impact]**

4.10.3.5 *Solid Waste*

Landfill Capacity

As previously described, the City currently diverts approximately 60 percent of the waste stream from landfill disposal through various programs, in compliance with AB 939 requirements. According to the Envision PEIR, planned growth under the 2040 General Plan could increase the amount solid waste sent to landfills by approximately 571,500 tons per year through 2035, using

current generation rates.[297] This estimate represents the upper limit of potential landfilling needs given that disposal rates will likely continue to decrease overtime. Based on the upper limit, the existing landfills in San José would have sufficient *permitted* capacity of 5.3 million tons per year to receive the additional waste generated by new development in the city. Without additional waste reduction, however, local landfills could reach *actual* capacity by 2025.[298]

The City intends to extend the lifespan of existing landfills through implementation of the Zero Waste Strategic Plan, which supports the City's goal of 100 percent diversion by 2022. Under the Zero Waste Strategic Plan, the City will utilize techniques such as source reduction, reuse, and composting. Compliance with the CALGreen Code and CARB's Mandatory Commercial Recycling Measure would complement local efforts and further reduce demand for landfill facilities. As redevelopment proceeds and diversion rates increase overtime, the City will ensure adequate landfill capacity through monitoring the availability of collection, transfer, recycling, disposal, and waste processing services; periodically assessing infrastructure needs; and working with Materials Recovery Facilities (MRF) and landfill operators to expand capacity as needed (GP Policies IN-5.1, IN-5.4, and IN-5.15). With implementation of General Plan policies and the Zero Waste Strategic Plan, the Envision PEIR concluded that solid waste generated by future development under the 2040 General Plan would not exceed the permitted or actual capacity of existing landfills.

Using similar assumptions as the Envision PEIR, it is estimated that development under the DSAP could generate approximately 44,000 tons of solid waste per year, as shown in Table 4.10-3.[299] This volume would represent approximately 7.6 percent of the total volume of solid waste generated citywide on an annual basis. In addition to the operation of new businesses and residences, demolition, land clearing, and construction activities associated with redevelopment would also generate a substantial amount of solid waste.

Table 4.10-3:
Estimated Annual Solid Waste Generation

Type*	Generation Rate	Units	Waste Generated
Residential	31.1 pounds per household per week[300]	2,588 households	2,093 tons/year
Employment	10.53 pounds per employee per day[301]	21,610 employees	41,528 tons/year
TOTAL			**43,621 tons/year**

[297] This estimate is based on waste generation rates for land use types provided by the City's Environmental Services Department and CalRecycle's website: http://www.calrecycle.ca.gov/WasteChar/WasteGenRates/default.htm.
[298] Permitted capacity is the volume of waste that can be received at a landfill under regulatory permits, while actual capacity is the physical space available in the landfill to receive waste.
[299] This estimate does not subtract out current waste generation from existing land uses that would be replaced by new development under the DSAP.
[300] This is the same rate used in the Envision PEIR.
[301] Although the Envision PEIR used various rates for industrial, office, retail, and institutional uses to estimate the total waste generated by non-residential uses, this EIR uses the highest rate (commercial) to provide a conservative estimate for the undetermined mix of commercial, light industrial, and office uses proposed by the DSAP, as well as retail and hotel uses.
Source: City of Los Angeles. *City of Los Angeles CEQA Thresholds Guide*. 2006.

Because planned growth in the Plan area was generally evaluated in the Envision PEIR, the DSAP would not generate new waste above projected levels and existing landfills would have capacity to serve the proposed project.

Solid Waste Regulations

Future development under the DSAP would be required to comply with existing local and state programs and regulations. For example, in accordance with the current CALGreen Code, future projects are required to provide on-site recycling facilities, develop a construction waste management plan, salvage at least 50 percent of nonhazardous construction/demolition debris (by weight), and implement other waste reduction measures.[302] Future projects may be required to incorporate additional measures and programs as part of the City's Zero Waste Strategic Plan.

Solid waste (garbage and recyclables) would also be generated in public parks, open spaces, plazas, and the expanded train station. The station would include containers to facilitate the collection of materials in accordance with state and local regulations related to solid waste, including AB 939 and the City's zero waste goal. To facilitate the collection of materials, Public Litter Cans (PLCs) and/or recycling containers will be placed throughout the Plan area, particularly in parks and other high pedestrian areas.[303] Any large events held in public spaces or other locations in the Plan area would be required to develop a waste reduction plan in accordance with the City's Zero Waste Event Program and AB 2176. For these reasons, future development under the DSAP is not expected to conflict with any state and local regulations related to solid waste, including AB 939 and the City's zero waste goal.

With implementation of the existing programs, state regulations, General Plan policies, and the City's Zero Waste Strategic Plan, the DSAP would not result in a significant impact related to the provision of solid waste services. This conclusion is consistent with the analysis in the Envision PEIR. **[Less than Significant Impact]**

4.10.4 Cumulative Impacts

Although the Plan area is currently served by existing utilities and service systems, future redevelopment under the DSAP would increase demand for infrastructure and services over existing conditions. As indicated in the discussions above, effects on utilities and service systems are cumulative in nature because the potential for an individual project to result in a significant impact is based on available capacity in relation to existing and future demand by the service population. The service area for utilities generally includes the entire city, although capacity constraints in the storm drain, sewer, and water distribution systems are more localized.

The Envision PEIR concluded that planned growth would not result in a significant impact associated with the capacity of the water supply, sanitary sewer, wastewater treatment, storm drainage, or solid waste systems, with implementation of existing programs, regulations, and General Plan policies.

[302] Future projects could be required to incorporate additional measures as part of Zero Waste Strategic Plan or other state and local regulations.
[303] City of San José, Environmental Service Department. "Public Area Recycling." Updated July 17, 2009. Accessed March 23, 2012. http://www.sjrecycles.org/civic.asp

Because the maximum development levels proposed by the DSAP were generally accounted for, the proposed project would not result in a new impact related to the capacity of utility systems to accommodate planned growth in the City.

Construction-related Impacts

The Autumn Street Improvement Project and other planned roadway and transit projects would not generate increased demand for utilities or service systems, but may involve the relocation or construction of various utility lines within or adjacent to rights-of-way. During final design of the BART and HSR facilities, utility providers would be contacted to identify potential conflicts and develop strategies to address any constraints. Impacts to utilities could be avoided, minimized, or mitigated by relocating the utility or re-designing the facilities. Although disruptions to existing service during relocations are typically very limited or nonexistent, affected properties would be notified of any temporary interruption of service if required. Utility relocations are considered a small component of infrastructure projects and the implementation of standard construction BMPs would reduce and avoid any environmental effects resulting from utility work.[304]

Water Pressure

As described in the Stadium EIR, the Plan area is located within one of the SJWC's largest water pressure zones, which experiences lower than average water pressure. The estimated peak demand for water of 3,000 gallons per minute at the stadium could affect water pressure at downstream uses. As mitigation, the City will install a new well facility near the stadium (preferred option) or install inter-zone regulators at existing SJWC facilities to supply water from adjacent, higher pressure zones.

The increase in demand generated by future development under the DSAP could exacerbate current water pressure problems. The City will continue to coordinate with the SJWC to determine the need for additional wells and/or inter-zone regulators to ensure adequate water pressure within and downstream of the Plan area. As with other utility work, implementation of standard construction BMPs would reduce and avoid any environmental effects resulting from installation of new wells and inter-zone regulators, although additional measures may be required to prevent long-term and temporary impacts to groundwater.[305]

With implementation of General Plan policies and existing regulations, the combined increase in demand for utilities and service systems resulting from future development under the DSAP and planned development and improvements in the Plan area would not result in a significant cumulative impact related to any utility or service systems. **[Less than Significant Impact]**

[304] This analysis is consistent with the discussions and conclusions in the Coleman Avenue/Autumn Street Improvement Project Final Integrated Focused EIR (2008), BART EIS (2010), and HSR EIR/EIS (2008).
[305] This analysis is consistent with the discussions and conclusions in the Coleman Avenue/Autumn Street Improvement Project Final Integrated Focused EIR (2008), BART EIS (2010), and HSR EIR/EIS (2008).

4.10.5 Conclusion

Although the DSAP would require the construction, expansion, or replacement of storm drain, water distribution, and sanitary sewer lines in the Plan area, the completion of these activities as part of future development or transportation projects would not cause significant environmental effects with implementation of construction BMPs and General Plan policies. The DSAP would not result in a significant impact due to increased demand for water or the need for additional wastewater treatment facilities or solid waste services. This conclusion is consistent with the analysis in the Envision PEIR. **[Less than Significant Impact]**

With implementation of General Plan policies and existing regulations, the combined increase in demand for utilities and service systems resulting from future development under the DSAP and planned development and improvements in the Plan area would not result in a significant cumulative impact related to any utility or service systems. **[Less than Significant Cumulative Impact]**

4.11 ENERGY

This section is based primarily upon the Envision PEIR, except where noted.

4.11.1 Existing Setting

Environmental impacts associated with energy consumption include the depletion of nonrenewable resources (oil, natural gas, coal, etc.) and emissions of pollutants during both the production and consumption phases. Energy is used in buildings to operate electronics and appliances and to provide lighting, heating, and cooling. Energy is also used for transportation and in the distribution and treatment of water and wastewater.

Energy use is typically quantified using the British Thermal Unit (BTU). A BTU is the amount of energy required to raise the temperature of one pound of water by one degree Fahrenheit. As points of reference, the approximate amount of energy contained in a gallon of gasoline, a cubic foot of natural gas, and a kilowatt hour (kWh) of electricity are 123,000 BTU's, 1,000 BTU's, and 3,400 BTU's, respectively. A therm is equal to 100,000 BTU.

4.11.1.1 *Electricity and Natural Gas*

Pacific Gas & Electric (PG&E) transmits and delivers electricity to approximately 15 million people throughout a 70,000 square-mile service area in California, including the City of San José and the Plan area. PG&E's operations are regulated by the California Public Utilities Commission. Supplies are regulated by the California Energy Commission.

Electricity is generated from various sources, including natural gas, nuclear, coal, wind, and hydroelectric generation resources in California and other western states. In addition to power supplied by PG&E, there was approximately 15 MW of solar power generation capacity in San José in 2009. Electricity is delivered to consumers in San José via an electrical grid using high voltage transmission lines (110 kV or above).

In 2008, electricity use in the City of San José across all sectors was approximately 6,274 GWh. PG&E estimates that electricity consumption for its service areas throughout the state will grow at a rate of 1.2 percent per year from 2010-2020, with peak demand projected to grow at a rate of 1.4 percent per year.

The City's natural gas supply comes from basins in California, Canada, and the Western United States via transmission mains. In 2008, City of San José natural gas consumption across all sectors was approximately 217.2 million therms. PG&E estimates that natural gas consumption for its service areas will grow at a rate of 0.5 percent per year from 2010-2018.

4.11.1.2 *Motor Vehicle Fuels*

More than 40 percent of all energy used in California is for the transportation of people and goods. Transportation fuels (including gasoline and diesel) are produced by refining crude oil.

Approximately 38 percent of crude oil used in California is produced in-state, while 14 percent comes from Alaska and 48 percent from foreign sources.
In recent years, Californians consumed approximately 16 billion gallons of gasoline and four billion gallons of diesel annually. Overall, California is experiencing a downward trend in sales for gasoline, diesel, and jet fuel. It is anticipated that this downward trend will continue due to high fuel prices, efficiency gains, competing fuel technologies, and mandated increases of alternative fuel use.

Based on the City's average daily vehicle miles traveled (VMT) of 19,806,977 and an average fuel economy of 20 miles per gallon, approximately 360,000,000 gallons of gasoline (approximately 44.5 trillion BTUs) are consumed for motor vehicle travel in San José each year.

4.11.2 Regulatory Framework

Energy conservation is embodied in many federal, state and local statutes and policies. At the federal level, energy standards apply to numerous products (e.g., the EnergyStar™ program) and transportation (e.g., fuel efficiency standards). At the state level, rebates/tax credits are provided for installation of renewable energy systems and the Flex Your Power program promotes conservation in multiple areas. Additional laws, regulations, and programs are summarized below.

4.11.2.1 *California 2007 Energy Action Plan Update*

The 2007 Energy Action Plan II is the State's principal energy planning and policy document. The plan describes a coordinated implementation strategy to ensure that California's energy resources are adequate, affordable, technologically advanced, and environmentally sound. In accordance with this plan, the state and its electricity providers would invest first in energy efficiency and demand-side resources, followed by renewable resources, and only then in clean conventional electricity supply to meet its energy needs.

4.11.2.2 *Renewable Portfolio Standard Program*

With the adoption of SB 1078 in 2002, California established its Renewable Portfolio Standard (RPS) program to provide a flexible, market-driven policy to ensure that the public benefits of wind, solar, biomass, and geothermal energy continue to be realized as electricity markets become more competitive. Under SB 107 and Executive Order S-14-08, the state's goal is to increase the percentage of renewable energy in the State's electricity mix to 33 percent by 2020.

The CPUC and CEC are jointly responsible for implementing the RPS program. Local land use planning processes can facilitate or hinder the ability of providers to establish the additional renewable energy projects and transmission line connections that will be necessary to meet the requirements of this legislation.

4.11.2.3 *Building Energy Efficiency Standards (Title 24)*

The Energy Efficiency Standards for Residential and Nonresidential Buildings, as specified in Title 24, Part 6, of the California Code of Regulations, were established in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated

periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods. The current version of the standards was adopted on April 23, 2008 and took effect August 1, 2009. Compliance with these standards is mandatory at the time new building permits are issued by City and County governments.

4.11.2.4 *California Utility Efficiency Programs (Senate Bill 1037 and Assembly Bill 2021)*

SB 1037 and AB 2021 require electric utilities to meet their resource needs first with energy efficiency. California Utility Efficiency Programs have also set new targets for statewide annual energy demand reductions.

4.11.2.5 *California Green Building Standards Code*

In January 2010, the State of California adopted the California Green Building Standards Code (CALGreen) that establishes mandatory green building standards for new construction (new buildings and expansions) in California. The code covers five categories: planning and design, energy efficiency, water efficiency and conservation, material conservation and resource efficiency, and indoor environmental quality. These standards include a mandatory set of minimum guidelines, as well as more rigorous voluntary measures, for new construction projects to achieve specific green building performance levels. Local communities may institute more stringent versions of the code if they choose. The code went into effect as part of the City's building code on January 1, 2011.

4.11.2.6 *City of San José Policies*

Green Vision

The Green Vision includes the goal to reduce per capita energy consumption by at least 50% compared to 2008 levels by 2022 and maintain or reduce net aggregate energy consumption levels equivalent to the 2022 level through 2040.

Sustainable City Strategy

The Sustainable City Strategy is a statement of the City's commitment to becoming an environmentally and economically sustainable city by ensuring that development is designed and built in a manner consistent with the efficient use of resources and environmental protection. Programs promoted under this strategy include recycling, waste disposal, water conservation, transportation demand management and energy efficiency.

Municipal Code

The City's Municipal Code includes regulations associated with energy efficiency and energy use. City regulations include a Green Building Ordinance (Chapter 17.84) to foster practices to minimize the use and waste of energy, water and other resources in the City of San José, Water Efficient Landscape Standards for New and Rehabilitated Landscaping (Chapter 15.10), requirements for Transportation Demand Programs for employers with more than 100 employees (Chapter 11.105),

and a Construction and Demolition Diversion Deposit Program that fosters recycling of construction and demolition materials (Chapter 9.10).

Envision San José 2040 General Plan

Various policies in the City's General Plan have been adopted for the purpose of reducing or avoiding impacts related to energy, as listed in the following table.

Table 4.11-1:
General Plan Policies: Energy

Green Building Policy Leadership	
Policy MS-1.1	Demonstrate leadership in the development and implementation of green building policies and practices. Ensure that all projects are consistent with or exceed the City's Green Building Ordinance and City Council Policies as well as State and/or regional policies which require that projects incorporate various green building principles into their design and construction.
Energy Conservation and Renewable Energy Use	
Policy MS-2.2	Encourage maximized use of on-site generation of renewable energy for all new and existing buildings.
Policy MS-2.3	Utilize solar orientation, (i.e., building placement), landscaping, design, and construction techniques for new construction to minimize energy consumption.
Action MS-2.8	Develop policies which promote energy reduction for energy-intensive industries. For facilities such as data centers, which have high energy demand and indirect greenhouse gas emissions, require evaluation of operational energy efficiency and inclusion of operational design measures as part of development review consistent with benchmarks such as those in EPA's EnergyStar Program for new data centers.
Action MS-2.11	Require new development to incorporate green building practices, including those required by the Green Building Ordinance. Specifically target reduced energy use through construction techniques (e.g., design of building envelopes and systems to maximize energy performance), through architectural design (e.g. design to maximize cross ventilation and interior daylight) and through site design techniques (e.g. orienting buildings on sites to maximize the effectiveness of passive solar design).
Water Conservation and Quality	
Policy MS-3.1	Require water-efficient landscaping, which conforms to the State's Model Water Efficient Landscape Ordinance, for all new commercial, institutional, industrial, and developer-installed residential development unless for recreation or other area functions.

Waste Diversion	
Policy MS-5.5	Maximize recycling and composting from all residents, businesses, and institutions in the City.
Waste Reduction	
Policy MS-6.5	Reduce the amount of waste disposed in landfills through waste prevention, reuse, and recycling of materials at venues, facilities, and special events.
Policy MS-6.8	Maximize reuse, recycling, and composting citywide.
Reduce Consumption and Increase Efficiency	
Policy MS-14.1	Promote job and housing growth in areas served by public transit and that have community amenities within a 20-minute walking distance.
Policy MS-14.2	Enhance existing neighborhoods by adding a mix of uses that facilitate biking, walking, or transit ridership through improved access to shopping, employment, community services, and gathering places.
Policy MS-14.3	Consistent with the California Public Utilities Commission's California Long Term Energy Efficiency Strategic Plan, as revised and when technological advances make it feasible, require all new residential and commercial construction to be designed for zero net energy use.
Policy MS-14.4	Implement the City's Green Building Policies (see Green Building Section) so that new construction and rehabilitation of existing buildings fully implements industry best practices, including the use of optimized energy systems, selection of materials and resources, water efficiency, sustainable site selection, and passive solar building design and planting of trees and other landscape materials to reduce energy consumption.
Policy MS-14.5	Consistent with State and Federal policies and best practices, require energy efficiency audits and retrofits prior to or at the same time as consideration of solar electric improvements.
Action MS-14.6	Replace 100% of the City's traffic signals and streetlights with smart, zero emission lighting by 2022.
Renewable Energy	
Action MS-15.9	Train City code enforcement and development review staff in state-of-the-art Heating, Ventilation, and Air Conditioning (HVAC) and insulation industry standards, best practices, and resources to ensure buildings are constructed in compliance with those industry standards and best practices.
Responsible Management of Water Supply	
Policy MS-17.2	Ensure that development within San José is planned and built in a manner consistent with fiscally and environmentally sustainable use of current and future water supplies by encouraging sustainable development practices, including low-impact development, water-efficient development and green building techniques. Support the location of new development within the vicinity of the recycled water

	system and promote expansion of the South Bay Water Recycling (SBWR) system to areas planned for new development. Residential development outside of the Urban Service Area can be approved only at minimal levels and only allowed to use non-recycled water at urban intensities. For residential development outside of the Urban Service Area, restrict water usage to well water, rainwater collection, or other similar sustainable practice. Non-residential development may use the same sources and potentially make use of recycled water, provided that its use will not result in conflicts with other General Plan policies, including geologic or habitat impacts. To maximize the efficient and environmentally beneficial use of water, outside of the Urban Service Area, limit water consumption for new development so that it does not diminish the water supply available for projected development in areas planned for urban uses within San José or other surrounding communities.
Water Conservation	
Policy MS-18.2	Require new development outside of the City's Urban Service Area to incorporate measures to minimize water consumption.
Policy MS-18.4	Retrofit existing development to improve water conservation.
Policy MS-18.5	Reduce citywide per capita water consumption by 25% by 2040 from a baseline established using the 2010 Urban Water Management Plans of water retailers in San José.
Policy MS-18.6	Achieve by 2040, 50 million gallons per day of water conservation savings in San José, by reducing water use and increasing water use efficiency.
Policy MS-18.7	Use the 2008 Water Conservation Plan as the data source to determine San José's baseline water conservation savings level.
Water Recycling	
Policy MS-19.1	Require new development to contribute to the cost-effective expansion of the recycled water system in proportion to the extent that it receives benefit from the development of a fiscally and environmentally sustainable local water supply.
Policy MS-19.4	Require the use of recycled water wherever feasible and cost-effective to serve existing and new development.
Action MS-19.10	Develop incentives to encourage the use of recycled water. Enact ordinances that ensure that new buildings in the vicinity of the SBWR pipeline are constructed in a manner suitable for connection to the recycled water system and that they use recycled water wherever appropriate.
Infrastructure Management	
Policy IN-2.1	Utilize the City's Infrastructure Management System Program to identify the most efficient use of available resources to maintain its infrastructure and minimize the need to replace it.
Solid Waste Materials Recovery/Landfill	
Policy IN-5.3	Use solid waste reduction techniques, including source reduction, reuse, recycling, source separation, composting, energy recovery and transformation of solid wastes

	to extend the life span of existing landfills and to reduce the need for future landfill facilities and to achieve the City's Zero Waste goals.
Sustainable Parks and Recreation	
Policy PR-6.4	Consistent with the Green Vision, complete San José's trail network and where feasible develop interconnected trails with bike lanes to facilitate bicycle commuting and recreational uses.
Policy PR-6.5	Design and maintain park and recreation facilities to minimize water, energy and chemical (e.g., pesticides and fertilizer) use. Incorporate native and/or drought-resistant vegetation and ground cover where appropriate.
Action PR-6.9	Obtain applicable Leadership in Energy and Environmental Design (LEED) Certification (or its equivalent) for new and existing parks and recreation facilities, as dictated by applicable City policies.
Vibrant, Attractive, and Complete Neighborhoods	
Policy VN-1.1	Include services and facilities within each neighborhood to meet the daily needs of neighborhood residents with the goal that all San José residents be provided with the opportunity to live within a ½ mile walking distance of schools, parks and retail services.
Neighborhood Serving Commercial	
Policy LU-5.4	Require new commercial development to facilitate pedestrian and bicycle access through techniques such as minimizing building separation from public sidewalks; providing safe, accessible, convenient, and pleasant pedestrian connections, and including secure and convenient bike storage.
Transportation	
Policy TR-1.4	Through the entitlement process for new development fund needed transportation improvements for all modes, giving first consideration to improvement of bicycling, walking and transit facilities. Encourage investments that reduce vehicle travel demand.
Policy TR-2.8	Require new development where feasible to provide on-site facilities such as bicycle storage and showers, provide connections to existing and planned facilities, dedicate land to expand existing facilities or provide new facilities such as sidewalks and/or bicycle lanes/paths, or share in the cost of improvements.
Policy TR-3.3	As part of the development review process, require that new development along existing and planned transit facilities consist of land use and development types and intensities that contribute toward transit ridership. In addition, require that new development is designed to accommodate and to provide direct access to transit facilities.

4.11.3 Energy Impacts

4.11.3.1 *Thresholds of Significance*

For the purposes of this PEIR, an energy impact is significant if implementation of the proposed DSAP would:

- Use fuel or energy in a wasteful manner;
- Result in a substantial increase in demand upon energy resources in relation to projected supplies; or
- Result in longer overall distances between jobs and housing.

Implementation of the proposed DSAP would involve energy use (in the form of electricity, natural gas, and gasoline) during construction and operation of future development and infrastructure projects.

4.11.3.2 *Energy Use Associated with the Built Environment*

As described in the Envision PEIR, planned growth could substantially increase the demand for electricity and natural gas. Under the City's Green Building program, Green Vision, and Greenhouse Gas Reduction Strategy, new development will be required to design for energy efficiency and conservation. Regulations that promote water conservation and recycling would also reduce energy demand associated with the built environment. Increased energy efficiency that lowers overall demand, including peak energy demands in the built environment, is also anticipated as a result of new technologies and energy efficiency requirements and incentives at the national, state, and local level. The City ultimately intends to require all new residential and commercial construction to be designed for zero net energy use, as regulations are revised and technological advances make it feasible (Policy MS-14.3).

General Plan policies and regulations promote the use and expansion of renewable energy resources, including solar voltaic, solar hot water, wind, and biogas or biofuels. Under Policy MS-2.2, for example, the City encourages alternative energy generation at existing and future development sites. The use of cogeneration technology and recovery of waste heat would provide additional sources of energy generation. Therefore, the amount of energy produced within the City is anticipated to increase in the future, reducing demand for imported energy supplies.

For these reasons, the Envision PEIR concluded that development allowed under the 2040 General Plan would not result in an exceedance in energy demand projected regionally by PG&E and adopted by the California Energy Commission through approximately 2020. Implementation of General Plan policies and existing regulations would reduce energy consumption associated with the built environment such that new development would not consume energy in a manner that is wasteful, inefficient, or unnecessary.

Future development under the DSAP would contribute to the citywide increase in demand for electricity and natural gas. All new residential development in the Plan area would be multi-family housing, which has a reduced energy demand per household compared to single-family detached

housing. In conformance with the Green Building Ordinance, new development will be required to incorporate energy conservation and efficiency through site design, architectural design, and construction techniques (Action MS-2.11 and Policy MS-2.3). For example, orienting buildings to maximize the effectiveness of passive solar design would help minimize energy consumption. For these reasons, the DSAP would not result in a substantial increase in demand upon energy resources in relation to projected supplies. This conclusion is consistent with the analysis in the Envision PEIR. **[Less than Significant Impact]**

Secondary Energy Impacts

Development may require expansion of or improvements to the natural gas and electricity networks to provide adequate capacity. Upgrades could range from on-site to off-site installations of pipelines, power lines, and/or electric substations. New distribution lines would typically be installed within existing rights-of-way and should be underground. Siting of natural gas transmission lines would need to be in conformance with federal and state regulations while new development approved by the City would need to be set back from these lines in conformance with City Council policy (refer to Section 4.6 *Hazardous Materials and Hazards*).

To the extent future electrical and natural gas infrastructure can be installed on previously developed sites away from residential uses, substantial environmental impacts resulting from utility system improvements would be reduced, although options for separating infrastructure from the development it serves will be more problematic in the future. Conformance with General Plan policies would further reduce and avoid environmental impacts. The City will continue to coordinate with PG&E on utility needs, including methods for minimizing land use impacts to residential and other sensitive receptors.

4.11.3.3 *Energy Use Associated with Transportation*

According to Envision PEIR, planned growth under the General Plan would result in an increase in energy use associated with transportation. Adding more jobs than employed residents in the City could increase the lengths of regional commute trips, although the construction of housing near future jobs would counter this increase somewhat. Assuming "business-as-usual" travel patterns and an average fuel economy of 35 mpg in 2035, approximately 9.9 million gallons of gasoline would be consumed daily for San José-associated automobile travel. However, implementation of General Plan policies would increase the overall use of transportation alternatives that use no fuel or less fuel per passenger, such as transit, carpooling, bicycling, and walking. A 10 percent reduction in VMT and associated shift in travel modes would result in a savings of almost one million gallons of gasoline. Therefore, the Envision PEIR concluded that implementation of the 2040 General Plan would not result in the wasteful, inefficient or unnecessary use of energy for transportation purposes.

As described in Section 4.2.4.2, the DSAP is a key strategy for reducing vehicle travel over the long-term. Future development would be subject to DSAP Design Guidelines, Transportation Improvement Strategies, and General Plan policies intended to reduce VMT per capita and support transportation alternatives. Therefore, the proposed project would not result in a new or more significant impact related to energy use associated with transportation. This conclusion is consistent with the analysis in the Envision PEIR. **[Less than Significant Impact]**

4.11.3.4 *Energy Use Associated with Redevelopment and Construction*

Future development under the DSAP would involve the use of energy during demolition and construction, including fuels and electrical power for operation of construction equipment, construction worker travel to and from construction sites, and the fabrication and transport of construction materials. Energy will also be used to demolish, transport, and dispose of demolition materials. Implementation of General Plan policies and existing regulations and programs would reduce energy loss resulting from the disposal of construction and demolition materials through diversion and recycling. Therefore, development allowed under the DSAP would not consume energy in a manner that is wasteful, inefficient, or unnecessary.

The proposed DSAP would not result in a significant impact related to energy use associated with redevelopment and construction. This conclusion is consistent with the analysis in the Envision PEIR. **[Less than Significant Impact]**

4.11.4 Cumulative Impacts

As described in the previous discussions, the Envision PEIR concluded that planned growth in the City of San José would not result in a significant impact related to energy, since implementation of the General Plan policies, existing regulations, and future technologies is expected to reduce energy consumption over business-as-usual conditions. Development under the proposed DSAP would contribute to the increase in energy demand, but as a subset of planned growth and a key strategy for reducing VMT, the proposed project would not result in a new or more significant cumulative impact.

The HSR and BART would increase demand on the electric system, but would result in a beneficial effect on energy use by reducing vehicle miles travelled.[306] For example, the statewide HSR system was estimated to result in an annual savings of about 22 million barrels of oil over the "no project" alternative (equating to a five percent decrease). The DSAP accommodates these projects and supports increased transit use, contributing to the net benefit.

The DSAP would not result in a new cumulative impact or make a cumulatively considerable contribution to a previously identified significant impact related to energy use. **[Less than Significant Impact]**

4.11.5 Conclusion

With implementation of General Plan policies and existing regulations, development allowed under the DSAP would not result in a significant impact related to energy consumption. This conclusion is consistent with the analysis in the Envision PEIR. **[Less than Significant Impact]**

The DSAP would not result in a new cumulative impact or make a cumulatively considerable contribution to a previously identified significant impact related to energy use. **[Less than Significant Impact]**

[306] *Bay Area to Central Valley High-Speed Train Program EIR/EIS* (CHSRA/FRA, 2008) and *Silicon Valley Rapid Transit Corridor, BART Extension to Milpitas, San Jose and Santa Clara, Final EIS* (VTA/FTA 2010).

4.12 GREENHOUSE GAS EMISSIONS

This section is based primarily upon the Envision PEIR, except where noted.

4.12.1 Background Information

Global climate change refers to changes in long-term weather patterns including temperatures, precipitation, and wind patterns. Global temperatures are affected by atmospheric gases such as carbon dioxide, water vapor, and methane. These gases are mostly transparent to incoming solar radiation, but are effective in absorbing infrared radiation (energy emitted from the earth). As a result, the heat that otherwise would have escaped back into outer space is now retained, altering the earth's energy balance. This is known as the "greenhouse effect". The world's leading climate scientists have reached consensus that an unnatural warming of the earth's climate is underway and that global climate change is very likely caused by humans.[307]

Gases that trap heat in the atmosphere are called greenhouse gases (GHG). In addition to carbon dioxide (CO_2) and methane, other GHGs include nitrous oxide, chlorofluorocarbons (CFCs) and hydrofluorocarbons (HCFCs). Each GHG has a different ability to trap heat in the atmosphere. CO_2 is the most abundant GHG, but has the lowest Global Warming Potential (GWP) rating. The other GHGs have a higher GWP, expressed in terms of carbon dioxide equivalents (CO_2e). CO_2 emissions account for about 85 percent of the CO_2e emissions in the U.S.

The abundance of GHG in the atmosphere is controlled by cycles that continually transfer the molecules between ocean, land, biomass, and atmosphere reservoirs.[308] For example, the amount of atmospheric carbon is reduced through the accumulation of plant biomass (via photosynthesis) and is increased through deforestation and the burning of fossil fuels (oil, natural gas, and coal) for energy production and transportation.[309] Humans also generate GHG emissions through the decomposition of solid waste, burning of wood, agricultural practices, and industrial activities. Since the beginning of the Industrial Revolution, humans have released carbon into the atmosphere at a much faster rate than is being absorbed into the ocean, land, and biomass reservoirs. It is estimated that natural processes can only absorb about half of CO_2 emitted each year, resulting in an annual net increase of approximately 3.2 billion metric tons.[310]

As a result of global climate change, extreme events such as heat waves, floods, droughts, wildfires, and poor air quality are likely to become more frequent in the future in California.[311] Climate change is expected to increase the demand for electricity and decrease the reliability of water supplies, due to

[307] Intergovernmental Panel on Climate Change (IPCC). "Summary for Policymakers." In: *Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*. Cambridge University Press. 2007.
[308] National Oceanic and Atmospheric Administration (NOAA) and the American Association for the Advancement of Science (AAAS). *Climate Literacy: The Essential Principles of Climate Sciences.* 2009.
[309] Fossil fuels are essentially derived from underground reservoirs of carbon that developed through natural processes over thousands of years.
[310] US Department of Energy, Energy Information Administration. "Greenhouse Gases, Climate Change, and Energy." Last modified April 2, 2004. Accessed June 29, 2011. http://www.eia.doe.gov/oiaf/1605/ggccebro/chapter1.html
[311] California Environmental Protection Agency. *Draft Climate Action Team Report to Governor Schwarzenegger and the Legislature*. 2009.

the warmer-drier climate, changes in precipitation patterns, and earlier melting of the Sierra snow pack. Sea-levels could rise 11 to 18 inches by 2050 and 23 to 55 inches by 2100.

4.12.2 Regulatory Framework

Agencies at the international, national, state, and local levels are considering strategies to control emissions of GHG that contribute to global warming.

4.12.2.1 *California Assembly Bill 32*

With the passage of AB 32 (Global Warming Solutions Act of 2006), the State of California made a commitment to reduce greenhouse gas (GHG) emissions to 1990 levels by 2020, which represents a 30 percent decrease over current levels. CARB's Discrete Early Actions include maximizing energy efficient building and appliance standards, pursuing additional efficiency efforts, including new technologies and new policy and implementation mechanisms, and pursuing comparable investment in energy efficiency by all retail providers of electricity in California (including both investor-owned and publicly-owned utilities). In December 2008, the ARB approved the *Climate Change Scoping Plan*, which proposes a comprehensive set of actions designed to reduce California's dependence on oil, diversify energy sources, save energy, and enhance public health, among other goals.

In addition to AB 32, Executive Order S-3-05 (EO S-3-05) established a reduction target of 80 percent below 1990 levels by 2050.

4.12.2.2 *California Senate Bill 375*

Senate Bill 375 (SB 375), known as the Sustainable Communities Strategy and Climate Protection Act, was signed into law in September 2008. It builds on AB 32 by requiring CARB to develop regional GHG reduction targets to be achieved from the automobile and light truck sectors for 2020 and 2035 when compared to emissions in 2005. The per capita reduction targets for passenger vehicles in the San Francisco Bay Area include a seven percent reduction by 2020 and a 15 percent reduction by 2035.[312] The four major requirements of SB 375 are:

1. MPOs must meet greenhouse gas emission reduction targets for automobiles and light trucks through land use and transportation strategies.
2. MPOs must create a Sustainable Communities Strategy (SCS), to provide an integrated land use/transportation plan for meeting regional targets, consistent with the RTP.
3. Regional housing elements and transportation plans must be synchronized on eight-year schedules, with Regional Housing Needs Assessment (RHNA) allocation numbers conforming to the SCS.
4. MPOs must use transportation and air emissions modeling techniques consistent with guidelines prepared by the CTC.

Consistent with the requirements of SB 375, the MTC is partnering with the Association of Bay Area Governments (ABAG), the Bay Area Air Quality Management District (BAAQMD), and the Bay

[312] The emission reduction targets are for those associated with land use and transportation strategies, only. Emission reductions due to the California Low Carbon Fuel Standards or Pavley emission control standards are not included in the targets.

Conservation and Development Commission (BCDC) to prepare the region's SCS as part of the RTP process.[313] The SCS is referred to as *Plan Bay Area*.

Plan Bay Area is a long-range integrated transportation and land-use/housing strategy through 2040 for the San Francisco Bay Area to meet the requirements of California's landmark 2008 Senate Bill 375, which calls on each of the state's 18 metropolitan areas to develop a Sustainable Communities Strategy to accommodate future population growth and reduce greenhouse gas emissions from cars and light trucks. The strategy is intended to promote compact, mixed-use development close to public transit, jobs, schools, shopping, parks, recreation, and other amenities, particularly within Priority Development Areas (PDAs) identified by local jurisdictions. The Plan area is within a PDA.

On July 18, 2013, the final *Plan Bay Area* was jointly approved by the ABAG Executive Board and by the MTC. The two agencies also adopted the final EIR for the *Plan Bay Area*.[314]

4.12.2.3 *2010 Bay Area Clean Air Plan*

As described in Section 4.4.2.1, the Bay Area 2010 Clean Air Plan (CAP) addresses air emissions in the San Francisco Bay Area Air Basin. One of the key objectives in the CAP is climate protection. The 2010 CAP includes emission control measures and performance objectives, consistent with the state's climate protection goals under AB 32 and SB 375, designed to reduce emissions of GHGs to 1990 levels by 2020 and 40 percent below 1990 levels by 2035.

4.12.2.4 *BAAQMD CEQA Guidelines*

BAAQMD identifies thresholds of significance for operational GHG emissions from land-use development projects in its CEQA Air Quality Guidelines.[315] These guidelines include recommended significance thresholds, assessment methodologies, and mitigation strategies for GHG emissions. Under the BAAQMD CEQA Guidelines, if a project would result in operational-related greenhouse gas emissions of 1,100 metric tons (MT) (also called the "bright line" threshold), or 4.6 metric tons per service population[316] of carbon dioxide equivalents (CO_2e) per year or more, it would make a cumulatively considerable contribution to greenhouse gas emissions and result in a cumulatively significant impact to global climate change. In jurisdictions where a qualified Greenhouse Gas Reduction Strategy has been reviewed under CEQA and adopted by decision-makers, compliance with the Greenhouse Gas Reduction Strategy would reduce a project's contribution to cumulative

[313] ABAG, BAAQMD, BCDC, and MTC. "One Bay Area Frequently Asked Questions." http://www.onebayarea.org/plan_bay_area/faq.htm#31.
[314] ABAG, BAAQMD, BCDC, and MTC. Regional Initiatives; Plan Bay Area. http://onebayarea.org/regional-initiatives/plan-bay-area.html
[315] As described in Section 4.4.2.2, the Superior Court found that adoption of thresholds by the BAAQMD in its CEQA Air Quality Guidelines is a CEQA project and BAAQMD is not to disseminate officially sanctioned air quality thresholds of significance until BAAQMD fully complies with CEQA. However, the ruling in the case does not equate to a finding that the quantitative metrics in the BAAQMD thresholds are incorrect or unreliable for meeting AB 32's climate protection goals. Per the State CEQA Guidelines [Section 15064(b)], the determination of whether a project may have a significant effect on the environment is subject to the discretion of each individual lead agency, based upon substantial evidence. For the assessment of GHG emissions impacts the City of San José analyzes project conformance with its adopted GHG Reduction Strategy as allowed for in the CEQA Guidelines and BAAQMD CEQA Air Quality Guidelines.
[316] Service population is defined as the sum of the number of residents and the number of employees at the development.

greenhouse gas emission impacts to a less than significant level.[317] The BAAQMD CEQA Guidelines also outline a methodology for estimating greenhouse gases.
Other state and federal laws, regulations, and programs aimed at reducing greenhouse gas emissions are described in Sections 4.11 *Energy*.

4.12.2.5 *City of San José Policies*

Municipal Code

The City's Municipal Code includes the following regulations that would reduce GHG emissions from future development:

- Green Building Ordinance (Chapter 17.84)
- Water Efficient Landscape Standards for New and Rehabilitated Landscaping (Chapter 15.10)
- Transportation Demand Programs for employers with more than 100 employees (Chapter 11.105)
- Construction and Demolition Diversion Deposit Program (Chapter 9.10)
- Wood Burning Ordinance (Chapter 9.10)

Greenhouse Gas Reduction Strategy

To meet the requirements of CEQA, AB32, and SB 375, the City of San José prepared a *Greenhouse Gas Reduction Strategy* (GHG Reduction Strategy), in conjunction with the 2040 General Plan.[318] The GHG Reduction Strategy builds on the City's efforts to reduce greenhouse gas emissions, including the Green Vision and Zero Waste Strategy. The GHG Reduction Strategy provides:

- quantification of existing GHG emissions and projections for 2020 and 2035,
- the City's approach to establishing and achieving GHG reduction targets,
- strategies and performance measures for further reducing GHG emissions; and
- an implementation program for monitoring, progress reporting, and updating the GHG Reduction Strategy over time as new technologies or practical measures are identified.

The GHG Reduction Strategy consists of a phased approach to build upon existing GHG emission inventories, improve reduction strategies, and confirm that the City is on track to first meet targets per AB 32 and City policies. It includes performance criteria against which the City's future actions can be evaluated.[319] The strategies and performance measures are based on 2040 General Plan policies and actions that are known to reduce GHG emissions and are separated into four categories:

- Built Environment and Energy (BEE)
- Recycling and Waste Reduction (RWR)
- Land Use and Transportation (LUT)

[317] The required components of a "qualified" Greenhouse Gas Reduction Strategy or Plan are described in both Section 15183.5 of the CEQA Guidelines and the BAAQMD CEQA Air Quality Guidelines (amended 2012).
[318] The GHG Reduction Strategy is included as Appendix 8 of the General Plan and Appendix L of the Envision PEIR.
[319] More specific performance criteria than the policies in the General Plan will be included in a GHG Reduction City Council Policy that will be developed to assist in interpreting and implementing the City's strategy.

- Other GHG Reduction Measures (OM)

Some of the measures set forth in the GHG Reduction Strategy are mandatory for all proposed development projects, while others are voluntary. Voluntary measures could be incorporated as mitigation measures for proposed projects, at the City's discretion.

The GHG Reduction Strategy is intended to meet the mandates as outlined in the CEQA Guidelines and the recent standards for "qualified plans" as set forth by BAAQMD. Therefore, future projects that are consistent with the GHG Reduction Strategy would be found to have a less than significant impact related to GHG emissions through 2020. Consistency with the GHG Reduction Strategy is based on compliance with the mandatory measures and any voluntary measures required by the City, as well as the General Plan Land Use/Transportation Diagram. Future projects that conflict with the GHG Reduction Strategy and 2040 General Plan would have to perform an individual project analysis for GHG emissions through 2020.

Envision San José 2040 General Plan

Various policies in the City's General Plan have been adopted for the purpose of reducing or avoiding impacts related to GHG, as listed in the following table. These measures are incorporated into the GHG Reduction Strategy and identified as "policies to be implemented as part of development review for residential, commercial, industrial, institutional, and municipal projects". Mandatory measures are denoted with an asterisk.

Table 4.12-1:
General Plan Policies Incorporated into GHG Reduction Strategy

BUILT ENVIRONMENT AND ENERGY
*** MS-1.1:** Continue to demonstrate leadership in the development and implementation of green building policies and practices. Ensure that all projects are consistent with and/or exceed the City's Green Building Ordinance and City Council Policies as well as State or regional policies which require that projects incorporate various green building principles into their design and construction.
*** MS-1.2:** Continually increase the number and proportion of buildings within San José that make use of green building practices by incorporating those practices into both new construction and retrofit of existing structures.
*** MS-2.3:** Encourage consideration of solar orientation, including building placement, landscaping, design and construction techniques for new construction to minimize energy consumption.
MS-2.7: Encourage the installation of solar panels or other clean energy power generation sources over parking areas.

**** MS-2.8:** Develop policies which promote energy reduction for energy-intensive industries. For facilities such as data centers, which have high energy demand and indirect greenhouse gas emissions, require evaluation of operational energy efficiency and inclusion of operational design measures as part of development review consistent with benchmarks such as those in EPA's EnergyStar Program for new data centers.

*** MS-2.11:** Require new development to incorporate green building practices, including those required by the Green Building Ordinance. Specifically, target reduced energy use through construction techniques (e.g., design of building envelopes and systems to maximize energy performance), through architectural design (e.g. design to maximize cross ventilation and interior daylight) and through site design techniques (e.g. orienting buildings on sites to maximize the effectiveness of passive solar design).

MS-14.3: Consistent with the California Public Utilities Commission's California Long Term Energy Efficiency Strategic Plan, as revised, and when technological advances make it feasible, require all new residential and commercial construction to be designed for zero net energy use.

*** MS-14.4:** Implement the City's Green Building Policies (see Green Building Section) so that new construction and rehabilitation of existing buildings fully implements industry best practices, including the use of optimized energy systems, selection of materials and resources, water efficiency, sustainable site selection, passive solar building design, and planting of trees and other landscape materials to reduce energy consumption.

MS-14.5: Consistent with State and Federal policies and best practices, require energy efficiency audits and retrofits prior to or at the same time as consideration of solar electric improvements.

MS-15.3: Facilitate the installation of at least 100,000 solar roofs in San José by 2022 and at least 200,000 solar roofs by 2040.

MS-16.2: Promote neighborhood-based distributed clean/renewable energy generation to improve local energy security and to reduce the amount of energy wasted in transmitting electricity over long distances.

MS-17.2: Ensure that development within San José is planned and built in a manner consistent with sustainable use of current and future water supplies by encouraging sustainable development practices, including low-impact development, water-efficient development and green building techniques. Support the location of new development within the vicinity of the recycled water system and promote expansion of the SBWR system to areas planned for new development. Residential development outside of the Urban Service Area will only be approved at minimal levels and only allowed to use non-recycled water at urban intensities. For residential development outside of the Urban Service Area, restrict water usage to well water, rainwater collection or other similar sustainable practice. Non-residential development may use the same sources and potentially make use of recycled water, provided that its use will not result in conflicts with other General Plan policies, including geologic or habitat impacts. To maximize the efficient and environmentally beneficial use of water, outside of the Urban Service Area, limit water consumption for new development so that it does not diminish the water supply available for projected development within San José 's urbanized areas.

MS-18.4: Retrofit existing development to improve water conservation.

MS-19.4: Require the use of recycled water wherever feasible and cost-effective to serve existing and new development.

MS-21.3: Ensure that San José's Community Forest is comprised of species that have low water requirements and are well adapted to its Mediterranean climate. Select and plant diverse species to prevent monocultures that are vulnerable to pest invasions. Furthermore, consider the appropriate placement of tree species and their lifespan to ensure the perpetuation of the Community Forest.

RECYCLING AND WASTE REDUCTION MEASURES

MS-6.5: Reduce the amount of waste disposed in landfills through waste prevention, reuse, and recycling of materials at venues, facilities, and special events.

LU-7.3: Encourage the use of industrially-planned land to provide locations for various forms of recycling services (e.g., collection, handling, transfer, processing, etc.), for the support facilities required by these services (e.g., service yards, truck storage and service) and for companies that manufacture new products out of recycled materials in order to support the City's Solid Waste Program.

LU-16.4: Development approvals that include demolition of a structure eligible for or listed on the Historic Resources Inventory shall require the salvage of the resource's building materials and architectural elements as to allow re-use those elements and materials and avoid the energy costs of producing new and disposing of old building materials.

LAND USE AND TRANSPORTATION MEASURES

*** CD-2.1:** Promote the Circulation Goals and Policies in this Plan. Create streets that promote pedestrian and bicycle transportation by following applicable goals and policies in the Circulation section of this Plan.

a) Design the street network for its safe shared use by pedestrians, bicyclists, and vehicles. Include elements that increase driver awareness.
b) Create a comfortable and safe pedestrian environment by implementing wider sidewalks, shade structures, attractive street furniture, street trees, reduced traffic speeds, pedestrian-oriented lighting, mid-block pedestrian crossings, pedestrian-activated crossing lights, bulb-outs and curb extensions at intersections, and on-street parking that buffers pedestrians from vehicles.
c) Consider support for reduced parking requirements, alternative parking arrangements, and Transportation Demand Management strategies to reduce area dedicated to parking and increase area dedicated to employment, housing, parks, public art, or other amenities. Encourage de-coupled parking to ensure that the value and cost of parking are considered in real estate and business transactions.

CD-2.3: Enhance pedestrian activity by incorporating appropriate design techniques and regulating uses in private developments, particularly in Downtown, Villages, Corridors, Main Streets, and other locations where appropriate. a) Include attractive and interesting pedestrian-oriented streetscape features such as street furniture, pedestrian scale lighting, pedestrian oriented way-finding signage, clocks, fountains, landscaping, and street trees that provide shade, with improvements to sidewalks and other pedestrian ways. b) Strongly discourage drive-up services and other commercial uses oriented to occupants of vehicles in pedestrian-oriented areas. Uses that serve the vehicle, such as car washes and service stations, may be considered appropriate in these areas when they do not disrupt pedestrian flow, are not concentrated in one area, do not break up the building mass of the streetscape, are consistent with other policies in this Plan, and are compatible with the planned uses of the area. c) Provide pedestrian connections as outlined in the Community Design Connections Goal and Policies. d) Locate retail and other active uses at the street level. e) Create easily identifiable and accessible building entrances located on street frontages or paseos. f) Accommodate the physical needs of elderly populations and persons with disabilities. g) Integrate existing or proposed transit stops into project designs.
CD-2.5: Integrate Green Building Goals and Policies of this Plan into site design to create healthful environments. Consider factors such as shaded parking areas, pedestrian connections, minimization of impervious surfaces, incorporation of stormwater treatment measures, appropriate building orientations, etc.
CD-2.10: Recognize that finite land area exists for development and that density supports retail vitality and transit ridership. Use land regulations to require compact, low-impact development that efficiently uses land planned for growth, particularly for residential development which tends to have a long lifespan. Strongly discourage small-lot and single-family detached residential product types in growth areas.
CD-2.11: Within the Downtown and Urban Village Overlay areas, consistent with the minimum density requirements of the pertaining Land Use/Transportation Diagram designation, avoid the construction of surface parking lots except as an interim use, so that long-term development of the site will result in a cohesive urban form. In these areas, whenever possible, use structured parking, rather than surface parking, to fulfill parking requirements. Encourage the incorporation of alternative uses, such as parks, above parking structures.
*** CD-3.2:** Prioritize pedestrian and bicycle connections to transit, community facilities (including schools), commercial areas, and other areas serving daily needs. Ensure that the design of new facilities can accommodate significant anticipated future increases in bicycle and pedestrian activity.
*** CD-3.3:** Within new development, create a pedestrian friendly environment by connecting the internal components with safe, convenient, accessible, and pleasant pedestrian facilities and by requiring pedestrian connections between building entrances and other site features and adjacent public streets.
*** CD-3.4:** Encourage pedestrian cross-access connections between adjacent properties and require pedestrian and bicycle connections to streets and other public spaces, with particular attention and priority given to providing convenient access to transit facilities. Provide pedestrian and vehicular connections with cross-access easements within and between new and existing developments to encourage walking and minimize interruptions by parking areas and curb cuts.
*** CD-3.6:** Encourage a street grid with lengths of 600 feet or less to facilitate walking and biking. Use design techniques such as multiple building entrances and pedestrian paseos to improve pedestrian and bicycle connections.

*** CD-3.8:** Provide direct access from developments to adjacent parks or open spaces, and encourage residential development to provide common open space contiguous to such areas.
*** CD-3.10:** New development should increase neighborhood connectivity by providing access across natural barriers (e.g., rivers) and man-made barriers (e.g., freeways).
*** CD-5.1:** Design areas to promote pedestrian and bicycle movements and to facilitate interaction between community members and to strengthen the sense of community.
CD-5.2: Foster a culture of walking by designing walkable urban spaces; strategically locating jobs, residences and commercial amenities; providing incentives for alternative commute modes; and partnering with community groups and health services organizations to promote healthy life-styles for San José residents.
CD-7.6: Incorporate a full range of uses in each Village Plan to address daily needs of residents, businesses, and visitors in the area. Consider retail, parks, school, libraries, day care, entertainment, plazas, public gathering space, private community gathering facilities, and other neighborhood-serving uses as part of the Village planning process. Encourage multi-use spaces wherever possible to increase flexibility and responsiveness to community needs over time.
PR-8.5 Encourage all developers to install and maintain trails when new development occurs adjacent to a designated trail location. Use the City's Parkland Dedication Ordinance and Park Impact Ordinance to have residential developers build trails when new residential development occurs adjacent to a designated trail location, consistent with other parkland priorities. Encourage developers or property owners to enter into formal agreements with the City to maintain trails adjacent to their properties.
LU-2.1: Provide significant job and housing growth capacity within strategically identified "Growth Areas" in order to maximize use of existing or planned infrastructure (including fixed transit facilities), minimize the environmental impacts of new development, provide for more efficient delivery of City services, and foster the development of more vibrant, walkable urban settings.
LU-2.2: Include within the General Plan Land Use / Transportation Diagram significant job and housing growth capacity within Downtown, Specific Plan Areas, Employment Lands, and Urban Villages. [*summarized*]
LU-2.3: To support the intensification of identified Growth Areas, and to achieve the various goals related to their development throughout the City, restrict new development on properties in non-Growth Areas.
LU-2.4: To accomplish the planned intensification of employment and residential uses at the Berryessa BART station, modify existing entitlements to expand the area planned for employment uses and to increase the density of employment and residential areas within the BART Station Village area.
LU-3.5: Balance the need for parking to support a thriving Downtown with the need to minimize the impacts of parking upon a vibrant pedestrian and transit oriented urban environment. Provide for the needs of bicyclists and pedestrians, including adequate bicycle parking areas and design measures to promote bicyclist and pedestrian safety.

**** LU-3.6:** Prohibit uses that serve occupants of vehicles (such as drive-through windows) and discourage uses that serve the vehicle (such as car washes and service stations), except where they do not disrupt pedestrian flow, are not concentrated, do not break up the building mass of the streetscape, and are compatible with the planned uses of the area.
LU-5.2: To facilitate pedestrian access to a variety of commercial establishments and services that meet the daily needs of residents and employees, locate neighborhood-serving commercial uses throughout the city, including identified growth areas and areas where there is existing or future demand for such uses.
LU-5.3: Encourage new and intensification of existing commercial development in vertical mixed-use projects and, in some instances, integrated horizontal mixed-use projects, consistent with the Land Use / Transportation Diagram.
*** LU-5.4:** Require new commercial development to facilitate pedestrian and bicycle access through techniques such as minimizing building separation from public sidewalks; providing safe, accessible, convenient, and pleasant pedestrian connections; and including secure and convenient bike storage.
*** LU-5.5:** Provide pedestrian and vehicular connections between adjacent commercial properties with reciprocal-access easements to encourage safe, convenient, and direct pedestrian access and "one-stop" shopping. Encourage and facilitate shared parking arrangements through parking easements and cross-access between commercial properties to minimize parking areas and curb-cuts.
LU-6.4: Encourage the development of new industrial areas and the redevelopment of existing older or marginal industrial areas with new industrial uses, particularly in locations which facilitate efficient commute patterns. Use available public financing to provide necessary infrastructure improvements as one means of encouraging this economic development and revitalization.
LU-7.3: Encourage the use of industrially-planned land to provide locations for various forms of recycling services (e.g., collection, handling, transfer, processing, etc.), for the support facilities required by these services (e.g., service yards, truck storage and service) and for companies that manufacture new products out of recycled materials in order to support the City's Solid Waste Program.
*** LU-9.1:** Create a pedestrian-friendly environment by connecting new residential development with safe, convenient, accessible, and pleasant pedestrian facilities. Provide such connections between new development, its adjoining neighborhood, transit access points, schools, parks, and nearby commercial areas. Consistent with Transportation Policy TR-2.11, prohibit the development of new cul-de-sacs or gated communities that do not provide through- and publicly-accessible bicycle and pedestrian connections.
LU-9.2: Facilitate the development of complete neighborhoods by allowing appropriate commercial uses within or adjacent to residential and mixed-use neighborhoods.
LU-10.1: Develop land use plans and implementation tools that result in the construction of mixed-use development in appropriate places throughout the City as a means to establish walkable, complete communities.
LU-10.3: Develop residentially- and mixed-use-designated lands adjacent to major transit facilities at high densities to reduce motor vehicle travel by encouraging the use of public transit.
LU-10.4: Within identified growth areas, develop residential projects at densities sufficient to support neighborhood retail in walkable, main street type development.

LU-10.5: Facilitate the development of housing close to jobs to provide residents with the opportunity to live and work in the same community.
LU-10.6: In identified growth areas, do not approve decreases in residential density through zoning change or development entitlement applications or through General Plan amendments.
LU-10.8: Encourage the location of schools, private community gathering facilities, and other public/quasi public uses within or adjacent to Villages, Corridors and other growth areas and encourage these uses to be developed in an urban form and in a mixed-use configuration.
LU-10.9: Model the federal Interagency Partnership for Sustainable Communities (HUD-DOT-EPA) at the local level between Housing and other City Departments to facilitate the creation of smart growth communities.
LU-16.1: Integrate historic preservation practices into development decisions based upon fiscal, economic, and environmental sustainability.
LU-16.2: Evaluate the materials and energy resource consumption implications of new construction to encourage preservation of historic resources.
**** LU-16.4:** Development approvals that include demolition of a structure eligible for or listed on the Historic Resources Inventory shall require the salvage of the resource's building materials and architectural elements as to allow re-use those elements and materials and avoid the energy costs of producing new and disposing of old building materials.
LU-17.1: Maintain the Greenline/Urban Growth Boundary to delineate the extent of existing and future urban activity and to reinforce fundamental policies concerning the appropriate location of urban development.
TR-1.1: Accommodate and encourage use of non-automobile transportation modes to achieve San José's mobility goals and reduce vehicle trip generation and vehicle miles traveled (VMT).
TR-1.4: Through the entitlement process for new development fund needed transportation improvements for all transportation modes, giving first consideration to improvement of bicycling, walking and transit facilities. Encourage investments that reduce vehicle travel demand.
TR-1.13: Reduce vehicle capacity on streets with projected excess capacity by reducing either the number of travel lanes or the roadway width, and use remaining public right-of-way to provide wider sidewalks, bicycle lanes, transit amenities and/or landscaping. Establish criteria to identify roadways for capacity reduction (i.e., road diets) and conduct engineering studies and environmental review to determine implementation feasibility and develop implementation strategies.
TR-2.2: Provide a continuous pedestrian and bicycle system to enhance connectivity throughout the City by completing missing segments. Eliminate or minimize physical obstacles and barriers on City streets that impede pedestrian and bicycle movement, including consideration of grade-separated crossings at railroad tracks and freeways. Provide safe bicycle and pedestrian connections to all facilities regularly accessed by the public, including the San José International Airport.
TN-2.7: Encourage all developers to install and maintain trails when new development occurs adjacent to a designated trail location, in accordance with Policy PR-8.5.

***TR-2.8:** Require new development to provide on-site facilities such as bicycle storage and showers, provide connections to existing and planned facilities, dedicate land to expand existing facilities or provide new facilities such as sidewalks and/or bicycle lanes/paths, or share in the cost of improvements.
*** TR-2.11:** Prohibit the development of new cul-de-sacs, unless it is the only feasible means of providing access to a property or properties, or gated communities that do not provide through and publicly accessible bicycle and pedestrian connections. Pursue the development of new through bicycle and pedestrian connections in existing cul-de-sac areas where feasible.
*** TR-2.18:** Provide bicycle storage facilities as identified in the Bicycle Master Plan.
*** TR-3.3:** As part of the development review process, require that new development along existing and planned transit facilities consist of land use and development types and intensities that contribute toward transit ridership. In addition, require that new development is designed to accommodate and to provide direct access to transit facilities.
TR-3.9: Ensure that all street improvements allow for easier and more efficient bus operations and improved passenger access and safety, while maintaining overall pedestrian and bicycle safety and convenience.
TR-5.3: The minimum overall roadway performance during peak travel periods should be level of service "D" except for designated areas. *An exception to the level of service "D" standard that reinforces multimodal improvements and transportation alternatives is listed below.* **Protected Intersections.** In recognition that roadway capacity-enhancing improvement measures can impede the City's ability to encourage infill, preserve community livability, and promote transportation alternatives that do not solely rely on automobile travel, specially designated Protected Intersections are exempt from traffic mitigation measures. Protected Intersections are located in Special Planning Areas where proposed developments causing a significant LOS impact at a Protected Intersection are required to construct multimodal (non-automotive) transportation improvements in one of the City's designated Community Improvement Zones. These multimodal improvements are referred to as off-setting improvements and include improvements to transit, bicycle, and/or pedestrian facilities.
TR-6.1: Minimize potential conflicts between trucks and pedestrian, bicycle, transit, and vehicle access and circulation on streets with truck travel.
*** TR-6.7:** As part of the project development review process, ensure that adequate off-street loading areas in new large commercial, industrial, and residential developments are provided, and that they do not conflict with pedestrian, bicycle, or transit access and circulation.
**** TR-7.1:** Require large employers to develop TDM programs to reduce the vehicle trips generated by their employees.
TR-8.1: Promote transit-oriented development with reduced parking requirements and promote amenities around appropriate transit hubs and stations to facilitate the use of available transit services.
TR-8.2: Balance business viability and land resources by maintaining an adequate supply of parking to serve demand while avoiding excessive parking supply that encourages automobile use.
TR-8.3: Support using parking supply limitations and pricing as strategies to encourage use of non-automobile modes.

TR-8.4: Discourage, as part of the entitlement process, the provision of parking spaces significantly above the number of spaces required by code for a given use.
TR-8.5: Promote participation in car share programs to minimize the need for parking spaces in new and existing development.
TR-8.6: Allow reduced parking requirements for mixed-use developments and for developments providing shared parking or a comprehensive TDM program, or developments located near major transit hubs or within Villages and Corridors and other growth areas.
TR-8.8: Promote use of unbundled private off-street parking associated with existing or new development, so that the sale or rent of a parking space is separated from the rent or sale price for a residential unit or for non-residential building square footage.
TR-8.9: Consider adjacent on-street and City-owned off-street parking spaces in assessing need for additional parking required for a given land use or new development.
TR-8.12: As part of the entitlement process, consider opportunities to reduce the number of parking spaces through shared parking, TDM actions, parking pricing or other measures which can reduce parking demand. Consider the use of reserve landscaped open space or recreational areas that can be used on a short-term basis to provide parking or converted to formal parking in the future if necessary.
TR-9.1: Enhance, expand and maintain facilities for walking and bicycling, particularly to connect with and ensure access to transit and to provide a safe and complete alternative transportation network that facilitates non-automobile trips.
TN-2.2: Provide direct, safe and convenient bicycle and pedestrian connections between the trail system and adjacent neighborhoods, schools, employment areas and shopping areas.
TN-2.7: Encourage all developers to install and maintain trails when new development occurs adjacent to a designated trail location, in accordance with Policy PR-8.5.
OTHER GHG REDUCTION MEASURES
LU-12.1: Maintain existing and facilitate the development of new and expanded community gardens and farmers markets throughout San José, prioritizing the provision of these gardens in low income, nutritionally-deficient neighborhoods.
LU-12.2: Support urban agriculture opportunities such as back-yard, roof-top, indoor, and other gardens that produce ecologically sound food for personal consumption. Encourage developers to incorporate gardens that produce ecologically sound food for residents and workers.
Source: Appendix B of the GHG Reduction Strategy: Greenhouse Gas Reduction Policies To Be Implemented As Part of Development Review For Residential, Commercial, Industrial, Institutional, and Municipal Projects. **Notes:** ***** Mandatory measures for all proposed development projects. ****** Mandatory measures applicable to specific project types.

4.12.3 Greenhouse Gas Emissions Impacts

4.12.3.1 *Thresholds of Significance*

For the purposes of this PEIR, a greenhouse gas emissions impact is significant if implementation of the proposed DSAP would:

- Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.
- Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

4.12.3.2 *Greenhouse Gas Emissions*

As with other air pollutants, operation of the project would generate GHG emissions through vehicle trips associated with future development and "area sources" such as natural gas combustion for water and space heating. Construction activities associated with future development projects would generate GHGs through operation of construction equipment and emissions from construction worker vehicles traveling to and from the construction site. Construction-related GHG emissions vary depending on the level of activity, length of the construction period, specific construction operations, types of equipment, and number of personnel.

Given the overwhelming scope of global climate change, it is not anticipated that a single development project would have an individually discernible effect on global climate change. It is more appropriate to conclude that the GHG emissions generated by the proposed project would combine with emissions across the state, nation, and globe to cumulatively contribute to global climate change. Conversely, one of the primary methods for reducing GHG emissions is to decrease VMT and vehicle trips through more efficient land use and transportation planning at the regional and local levels, due to the large contribution of motor vehicle use to national emissions.

The Envision PEIR concluded that the City's projected 2020 GHG emissions per service population will be below the average carbon-efficiency standard necessary to meet statewide 2020 goals as established by AB 32. Implementation of the proposed General Plan through 2020 would not constitute a cumulatively considerable contribution to global climate change. Without further reductions, however, the City's projected 2035 GHG emissions per service population would exceed the average carbon-efficiency standard necessary to maintain a trajectory to meet statewide 2050 goals as established by Executive Order S-3-05. Additional strategies, policies and programs, to supplement those currently identified, will ultimately be required to meet the 2035 reduction target. Therefore, implementation of the 2040 General Plan would result in significant cumulative impact to global climate change based on the 2035 goal.

The GHG analysis took into account energy use associated with operation, transportation, and construction. Modeling found that the largest contributing categories of GHG sources include: 1) mobile sources (i.e., on- and off-road vehicles, trains, construction equipment, and lawn/garden equipment); 2) industrial and commercial facilities; and 3) residential uses.

Although the DSAP proposes amendments to selected properties on the General Plan's Land Use/Transportation Diagram, the proposed project is consistent with the 2040 General Plan in terms of the overall level, type, and location of growth, as described in Section 4.1.3.4.

The DSAP would support the City's vision for new compact, energy-efficient development, which is one of the principal reduction measure contained in the GHG Reduction Strategy for minimizing vehicle miles traveled (VMT). The DSAP is a key strategy for reducing vehicle travel over the long-term (refer to Section 4.2.4.2). Because the Plan area supports the highest level of existing and planned transit service in San José, it is possible that GHG emissions associated with development in the Plan area could decrease beyond 10 percent, compared to existing conditions or a more auto-dependent land use plan for the DSAP.[320]

Measures Included in the Project to Reduce Greenhouse Gas Emissions

All future projects under the DSAP will be subject to General Plan policies, including mandatory and voluntary measures established in the GHG reduction Strategy. Accordingly, all projects will be required to:

- meet or exceed the City's Green Building Ordinance and City Council Policies as well as State and/or regional policies that require the incorporation of green building principles into project design and construction;
- utilize solar orientation (i.e., building placement), landscaping, design, and construction techniques for new construction to minimize energy consumption;
- fully implement industry best practices, including the selection of materials and resources, water efficiency, and sustainable site selection;
- create a comfortable and safe pedestrian environment on new development sites with safe, convenient, accessible, and pleasant pedestrian facilities;
- dedicate land to expand existing sidewalks and/or bicycle lanes/paths, provide new facilities, or share in the cost of improvements;
- provide pedestrian connections from on-site features (building entrances) to public streets, adjacent properties, transit facilities, parks, open space, community facilities (including schools), commercial areas, and other areas serving daily needs;
- use design techniques to facilitate pedestrian and bicycle access (e.g., minimize building separation from public sidewalks, provide multiple building entrances, incorporate pedestrian paseos); and
- provide secure and convenient bicycle storage facilities as identified in the *San José Bicycle Master Plan*.

In addition, new commercial development will be required to provide on-site amenities such as showers. Large employers (with more than 100 employees) will be required to develop and maintain TDM programs to reduce the vehicle trips generated by their employees.

Compliance with the mandatory measures and any voluntary measures required by the City would ensure an individual project's consistency with the GHG Reduction Strategy. Projects that are found

[320] For new compact development that is located near transit and contains a mix of uses that promote walkability and bicycle transport, City staff estimates that GHG emissions from mobile sources could be reduced by approximately 10 percent compared to business as usual due to increased use of alternative travel modes, including bicycle, transit, and pedestrian travel.

to be consistent with the GHG Reduction Strategy and comply with the General Plan Land Use/Transportation Diagram would have a less than significant impact related to GHG emissions. Projects that conflict with the General Plan Land Use/Transportation Diagram will not be covered by the GHG Reduction Strategy and would have to perform an individual project analysis for GHG emissions through 2020.

The proposed DSAP would be consistent with the City's GHG Reduction Strategy, and therefore, would not result in a significant impact related to greenhouse gas emissions through 2020. **[Less than Significant impact]**

4.12.4 Cumulative Impacts

The analysis of greenhouse gas emissions and global climate change is cumulative by nature. As described above, the Envision PEIR concluded that implementation of the 2040 General Plan would result in significant cumulative impact to global climate change because the City's projected GHG emissions per service population in 2035 would exceed the average carbon-efficiency standard necessary to maintain a trajectory to meet statewide 2050 goals. Additional strategies, policies and programs, to supplement those currently identified, will ultimately be required to meet the 2035 reduction target.

Build-out of the DSAP is expected to occur over 25-30 years. Although the DSAP is intended to reduce emissions of regional air pollutants over the long-term, it cannot be determined whether implementation of General Plan policies and proposed measures would reduce greenhouse gas emissions to meet the necessary carbon-efficiency standards. Given the amount of proposed development, the project would make cumulatively considerable contribution to the significant greenhouse gas impact resulting from planned growth in San José as envisioned in the 2040 General Plan.

Impact GHG-1: Build-out of the DSAP would make a considerable contribution to the significant unavoidable cumulative impact to global climate change identified in the Envision PEIR. **[Significant Unavoidable Cumulative Impact]**

4.12.5 Conclusion

The proposed DSAP would be consistent with the City's GHG Reduction Strategy, and therefore, would not result in a significant impact related to greenhouse gas emissions through 2020. **[Less than Significant impact]**

Impact GHG-1: Build-out of the DSAP would make a considerable contribution to the significant unavoidable cumulative impact to global climate change identified in the Envision PEIR. **[Significant Unavoidable Cumulative Impact]**

4.13 AESTHETICS

This section is based primarily upon the Envision PEIR and Strategy 2000 EIR, except where noted.

4.13.1 Existing Setting

The Plan Area is highly urbanized. Buildings and transportation infrastructure (i.e., freeways, roadways, and railroad lines) dominate the aesthetic character. The vast majority of the Plan area is covered with impervious surfaces. As shown on Figure 1-2, there are many surface parking lots that contribute to a vehicle-oriented landscape.

As described in Section 4.1 *Land Use*, the Plan area is developed with a wide range of land uses. In general, mid- and large-scale industrial and commercial uses are located in the Northern Zone of the Plan area, smaller-scale industrial and commercial uses are located in the Central Zone, and a mix of commercial and residential areas are located in the Southern Zone. Vacant properties are scattered throughout the Plan area.

View of a vacant City-owned property at the corner of Gifford and Park Avenue, in the Park/San Carlos subarea.

There is a variety of building types, ages, and architectural styles in the Plan area. As described in Section 4.5 *Cultural Resources*, there are many buildings older than 50 years and several recorded historic buildings. In general, the older buildings have minimal setbacks and relatively low building heights (one to two stories). In many instances, residential uses are located adjacent to industrial uses. Houses from the early to mid 1900's are scattered throughout the Arena North, Julian North, Station East, Royal/Auzerais, and Park/San Carlos subareas. Modern buildings include mid- to late-20th century commercial uses and several recently constructed high-density housing developments. Very few buildings in the Plan area are three stories or taller.

Key visual features within and adjacent to the Plan area include the historic Diridon Station, Del Monte water tower, Arena, and riparian corridor and parkland along the Guadalupe River and Los Gatos Creek. The Arena reaches a maximum height of 130 feet, while the Del Monte water tower is 128 feet tall.[321]

The streetscape throughout the Plan area varies in terms of design features, amenities, and sidewalk width and condition. Street trees and landscaping add to the aesthetic character of the Plan area, while overhead power lines detract from the visual quality. Physical blight conditions (i.e., dilapidation and deterioration) are visible throughout the Plan area. Pedestrian activity is generally low, although Diridon Station is busy during peak commute hours and the Northern Zone has high

[321] City of San José. *KB Home Monte Vista Residential Planned Development Zoning Project Draft EIR*. 2004.

pedestrian traffic when the Arena is hosting an event. There is currently a lack of unifying character in the Plan area, when viewed as a whole.

4.13.1.1 *Surrounding Area*

The traditional center of Downtown San José is located east of the Plan area, opposite SR 87. Downtown has new buildings that are taller and more massive than in the past. Landmarks in include the Bank of America building, De Anza Hotel, Fairmont Hotel, City Hall, and the San José State University Campus. Buildings range in height from 25 feet to 285 feet tall.[322]

The Lakehouse Historic District, which is located north of the Park/San Carlos subarea, is characterized by Queen Anne houses constructed in the 1890's. To the west of the Plan area, there are several distinctive one- and two-story residential neighborhoods including the Shasta Hanchett, Garden Alameda, St. Leo's, and Autumn/Montgomery neighborhoods. Much of the housing in these neighborhoods is over 50 years in age. Tall, mature landscaping, including large planted oaks, palm trees, and redwoods, is found throughout the area. Along The Alameda, the streetscape consists of a mix of modern and historic commercial buildings.

Refer to Section 4.1 *Land Use* for photos of the Plan area and surrounding neighborhoods.

4.13.1.2 *Scenic Views*

The City of San José is located in the Santa Clara Valley, bounded by the foothills of the Santa Cruz Mountains to the west, the Santa Teresa Hills to the south, and the Diablo Mountain Range to the east. Given that the topography of the Plan area is relatively flat, prominent viewpoints of the mountains are limited, as buildings, trees, and infrastructure (e.g., utility lines, elevated roadways, etc.) obscure viewpoints. Views of the mountains, however, are available where roadways provide a break in the built environment or are elevated, such as along SR 87.

View from Park Avenue, east of Sunol Street.

High-rise buildings and landmarks in Downtown east of SR 87 are also considered scenic resources. Views of the Downtown skyline are visible from locations throughout the Plan area, particularly from the Central Zone.

4.13.1.3 *Nighttime Lighting*

Sources of nighttime lighting in San José include indoor lighting visible through windows and outdoor lighting of signs, buildings, walkways, parking lots, and parking structures.

[322] City of San José. *Baseball Stadium in the Diridon/Arena Area Draft EIR.* 2006.

Lick Observatory, located on Mt. Hamilton approximately 14 miles east of San José, is a major research facility for the University of California. Illumination of the night sky by electric lights throughout the Santa Clara Valley can interfere with astronomical observation at the Lick Observatory.

4.13.2 Regulatory Framework

4.13.2.1 *State Designated Scenic Routes*

The California Department of Transportation designates state scenic highways, based upon how much of the natural landscape can be seen by travelers, the scenic quality of the landscape, and the extent that development modifies traveler's enjoyment of the view. There are no highways that are eligible for designation as scenic highways or have been officially designated within the City of San José.[323]

4.13.2.2 *City of San José Policies*

Municipal Code

The City's Municipal Code includes several regulations associated with protection of the City's visual character and control of light and glare. For example, Chapter 13.32 (Tree Removal Controls) regulates the removal of trees on private property within the City, in part to promote scenic beauty of the city.

Several sections of the Municipal Code include controls for lighting of signs and development adjacent to residential properties. These requirements call for floodlighting to have no glare and lighting facilities to be reflected away from residential use so that there will be no glare.

The City's Zoning Ordinance (Title 20 of the Municipal Code) includes design standards, maximum building height, and setback requirements. The *Open Space (OS)* district can be applied to protect areas with scenic values.

City Design Guidelines and Design Review Process

Nearly all new private development is subject to a design review process (architecture and site planning). The design review process is used to evaluate projects for conformance with adopted design guidelines and other relevant policies and ordinances. The City prepared and adopted guidelines to assist those involved with the design, construction, review and approval of development in San José. Adopted design guidelines include those for: Residential, Industrial, Commercial, Downtown/Historic, and Downtown Design Guidelines.

[323] California Department of Transportation. "California Scenic Highway Program". Accessed May 5, 2012. <http://www.dot.ca.gov/hq/LandArch/scenic_highways/scenic_hwy.htm>.

City Council Policy 4-2: Lighting

This policy calls for dimmable, programmable lighting for new streetlights, which would control the amount and color of light shining on streets and sidewalks. Light is to be directed downward and outward. New and replacement streetlights should also offer the ability to change the color of the light from full spectrum (appearing white or near white) in the early evening to a monochromatic light in the later hours of the night and early morning. At a minimum, full-spectrum lights should be able to be dimmed by at least 50 percent in late night hours.

City Council Policy 4-3: Private Outdoor Lighting on Private Developments

This calls for private development to use energy-efficient outdoor lighting that is fully shielded and not directed skyward. Low-pressure sodium lighting is required unless a photometric study is done and the proposed lighting referred to Lick Observatory for review and comment. One of the purposes of this policy is to provide for the continued enjoyment of the night sky and for continuing operation of Lick Observatory, by reducing light pollution and sky glow.

Envision San José 2040 General Plan

The 2040 General Plan identifies "gateways", freeways, and rural scenic corridors where preservation and enhancement of views of the natural and man-made environment are crucial. The segment of Bird Avenue over I-280 adjacent to the Plan area is designated as a gateway for scenic purposes.

Various policies in the City's General Plan have been adopted for the purpose of reducing or avoiding impacts related to aesthetics, as listed in the following table.

Table 4.13-1:
General Plan Policies: Aesthetics

Attractive City	
Policy CD-1.1	Require the highest standards of architectural and site design, and apply strong design controls for all development projects, both public and private, for the enhancement and development of community character and for the proper transition between areas with different types of land uses.
Policy CD-1.2	Install and maintain attractive, durable, and fiscally- and environmentally- sustainable urban infrastructure to promote the enjoyment of space developed for public use. Include attractive landscaping, public art, lighting, civic landmarks, sidewalk cafes, gateways, water features, interpretive/way-finding signage, farmers markets, festivals, outdoor entertainment, pocket parks, street furniture, plazas, squares, or other amenities in spaces for public use. When resources are available, seek to enliven the public right-of-way with attractive street furniture, art, landscaping and other amenities.
Policy CD-1.9	Give the greatest priority to developing high-quality pedestrian facilities in areas that will most promote transit use and bicycle and pedestrian activity. In pedestrian-oriented

	areas such as Downtown, Villages, Corridors, or along Main Streets, commercial and mixed-use building frontages should be placed at or near the street-facing property line with entrances directly to the public sidewalk. In these areas, strongly discourage parking areas located between the front of buildings and the street to promote a safe and attractive street façade and pedestrian access to buildings.
Policy CD-1.19	Encourage the location of new and relocation of existing utility structures into underground vaults or within structures to minimize their visibility and reduce their potential to detract from pedestrian activity. When above-ground or outside placement is necessary, screen utilities with art or landscaping.
Policy CD-1.23	Further the Community Forest Goals and Policies in this Plan by requiring new development to plant and maintain trees at appropriate locations on private property and along public street frontages. Use trees to help soften the appearance of the built environment, help provide transitions between land uses, and shade pedestrian and bicycle areas.
Policy CD-1.24	Within new development projects, include preservation of ordinance-sized and other significant trees, particularly natives. Avoid any adverse affect on the health and longevity of such trees through design measures, construction, and best maintenance practices. When tree preservation is not feasible, include replacements or alternative mitigation measures in the project to maintain and enhance our Community Forest.
Policy CD-1.27	When approving new construction, require the undergrounding of distribution utility lines serving the development. Encourage programs for undergrounding existing overhead distribution lines. Overhead lines providing electrical power to light rail transit vehicles and high tension electrical transmission lines are exempt from this policy.
Policy CD-1.28	To maintain and protect the integrity, character, and aesthetic environment of the streetscape in industrial, commercial, and residential neighborhoods, new billboards should be permitted only through a discretionary review process and only where they do not create visual clutter and blight. The relocation of existing billboards from impacted areas to locations where they would have a less visually blighting effect should be encouraged.
Policy CD-1.29	Provide and implement regulations that encourage high quality signage, ensure that business and organizations can effectively communicate though sign displays, promote way finding, achieve visually vibrant streetscapes, and control excessive visual clutter.
Compatibility	
Policy CD-4.1	Maintain and upgrade design guidelines adopted by the City and abide by them in the development of projects.
Downtown Urban Design	
Policy CD-6.2	Design new development with a scale, quality, and character to strengthen Downtown's status as a major urban center.
Policy CD-6.8	Recognize Downtown as the hub of the County's transportation system and design buildings and public spaces to connect and maximize use of all types of transit. Design Downtown pedestrian and transit facilities to the highest quality standards to enhance the aesthetic environment and to promote walking, bicycling, and transit use. Design

	buildings to enhance the pedestrian environment by creating visual interest and by fostering active uses and avoiding prominence of vehicular parking at the street level.
Policy CD-6.9	Design buildings with site, façade, and rooftop locations and facilities to accommodate effective signage. Encourage Downtown businesses and organizations to invest in high quality signs, especially those that enliven the pedestrian experience or enhance the Downtown skyline.
Policy CD-6.10	Maintain Downtown design guidelines and policies adopted by the City to guide development and ensure a high standard of architectural and site design in its center.
Villages Urban Design	
Policy CD-7.3	Review development proposed within an Urban Village Area prior to approval of an Urban Village Plan for consistency with policies pertaining to the proposed use (e.g., general Urban Design policies). Encourage such new development to be consistent with the Design Policies for Urban Villages.
Attractive Gateways	
Policy CD-10.2	Require that new public and private development adjacent to Gateways and freeways (including 101, 880, 680, 280, 17, 85, 237, and 87), and Grand Boulevards consist of high-quality materials, and contribute to a positive image of San José.
Policy CD-10.3	Require that development visible from freeways (including 101, 880, 680, 280, 17, 85, 237, and 87) is designed to preserve and enhance attractive natural and man-made vistas.
Policy CD-10.4	Prohibit billboards at Gateway locations and along freeways (including 101, 880, 680, 280, 17, 85, 237, and 87) and Grand Boulevards within San José.
Action CD-10.6	Develop Gateway plans for those Gateway locations identified in the General Plan. Plans should include overall streetscape and private design guidelines, needed capital improvements, and long-term solutions for their maintenance.
Action CD-10.7	Work with Caltrans and VTA to ensure that the freeways (including 101, 880, 680, 280, 17, 85, 237, and 87) and Grand Boulevards in San José are maintained and enhanced to include a high standard of design, cleanliness, and landscaping to create a consistent and attractive visual quality.
Landmarks and Districts	
Policy LU-13.7	Design new development, alterations, and rehabilitation/remodels within a designated or candidate Historic District to be compatible with the character of the Historic District and conform to the Secretary of the Interior's Standards for the Treatment of Historic Properties, appropriate State of California requirements regarding historic buildings and/or structures (including the California Historic Building Code) and to applicable historic design guidelines adopted by the City Council.
Community Empowerment	
Policy VN-2.3	Ensure that community members have the opportunity to provide input on the design of public and private development within their community.

4.13.3 Aesthetics Impacts

4.13.3.1 *Thresholds of Significance*

For the purposes of this PEIR, an aesthetics impact is significant if implementation of the proposed DSAP would:

- Have a substantial adverse effect on a scenic vista;
- Substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway;
- Substantially degrade the existing visual character or quality of the site and its surroundings; or;
- Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

To reiterate, the DSAP is a planning document to guide redevelopment and establish a conceptual station expansion plan; it does not propose specific redevelopment projects at this time. Therefore, the following discussions provide program-level review of the potential aesthetic impacts that may result from implementation of the DSAP. Future projects under the DSAP will be subject to subsequent environmental review and assessment of project-specific aesthetic impacts.

It should also be noted that aesthetic values are very subjective. Particular opinions as to what constitutes a degradation of visual character will differ among individuals. The discussion below, therefore, emphasizes change in aesthetic character and views, rather than placing value on the aesthetic quality of a particular condition.

4.13.3.2 ***Impacts to Scenic Vistas***

The Envision PEIR determined that development under the 2040 General Plan would alter views from key roadways that serve as gateways to the City or currently provide substantial views of the natural environment within or adjacent to the City, although implementation of General Plan policies would avoid or substantially reduce impacts to scenic views from key gateways and roadways within the City.

As described in Section 4.13.1 above, panoramic views of hillside areas and the Downtown skyline are key scenic features in the San José area. Roadways, freeways, and public trails tend to provide the best views of these natural and man-made features. Accordingly, the 2040 General Plan designates "gateways" where views should be preserved, including the segment of Bird Avenue over I-280 adjacent to the Plan area. Other key roadways in the vicinity of the Plan area with views of hillside areas include I-280, SR 87, and "Grand Boulevards" (i.e., The Alameda/ Santa Clara Street and San Carlos Street).

Future development of mid-rise buildings allowed under the DSAP could alter views of hillsides and the Downtown skyline from key roadways and gateways. Specifically, where tall structures are constructed immediately adjacent to gateways and freeways, there is the possibility that important views could be partially obscured for motorists, bicyclists, and pedestrians. The General Plan

policies and actions listed in Section 4.13.2.2 above would provide program-level mitigation for impacts to scenic views. For example, in accordance with General Plan Policies CD-10.2 and CD-10.3, new development adjacent to Gateways, Grand Boulevards, and freeways shall be designed to preserve and enhance attractive natural and man-made vistas. In addition, the City will prohibit billboards along Grand Boulevards, Gateways, and freeways in the Plan area (Policy CD-10.4).

The DSAP includes strategies aimed at enhancing views of Diridon Station and the riparian corridors of the Guadalupe River and Los Gatos Creek. For example, new buildings located along Autumn Street would provide additional views of the riparian corridors. With implementation of General Plan policies, future development under the DSAP would not result have a substantial adverse effect on a scenic vista. This conclusion is consistent with the analysis in the Envision PEIR. **[Less than Significant Impact]**

4.13.3.3 *Impacts to Visual Character*

The Envision PEIR concluded that development allowed under the 2040 General Plan would not substantially degrade the existing visual character or quality of San José at the local and citywide level, with implementation of General Plan policies and existing regulations. Similarly, the Strategy 2000 EIR concluded that development of higher intensity land uses in the Downtown Core would not result in any significant impact aesthetic impact, with implementation of the Strategy 2000 design concepts and design criteria.

As described above, the current character of the Plan area is a vehicle-oriented landscape with vast surface parking and low intensity development (one and two story buildings). The vision proposed by the DSAP is to transform the Plan area into an urban environment that is dense, diverse, vibrant, and active most hours of the day. In effect, the DSAP aims to extend the traditional center of Downtown to the west, while establishing the Plan area as its own local and regional cultural destination. The DSAP vision is consistent with goals set forth in the 2040 General Plan and Strategy 2000 for the Downtown area.

The project proposes to achieve this vision through implementation of the Land Use Diagram, Transportation Strategies, and Design Guidelines. The Land Use Diagram would allow a mix of land uses in the Plan area and increased density/intensity of development. The proposed Transportation Strategies are intended to create a more balanced and safe multi-modal circulation system. The Design Guidelines are intended to support high quality development, an interesting and varying street environment, and a unique identity for each zone in the Plan area. The proposed themes for the three identity zones are summarized as follows:

- The Northern Zone ("Innovation District") would be characterized by green technologies with a modern look and feel, reflecting the spirit of innovation.
- The Central Zone would be the most pedestrian-oriented and urban in character, building off the energy from the Arena, Diridon Station, and proposed baseball stadium.
- The Southern Zone would be designed to have an urban neighborhood feel with a greater percentage of vegetation and abundant open spaces to serve as gathering places.

As described in Section 2.4.1, the DSAP Design Guidelines are separated into three categories: 1) Built Form and Site Planning, 2) Open Space Network, and 3) Streetscape Design. The Open Space Network and Streetscape guidelines are primarily directed at improvements to the public realm that would be implemented as part of future development or as capitol projects. The application of the guidelines should be flexible to reflect unique challenges, development opportunities, and market conditions. The following table summarizes the visual changes associated with each of these categories and provides examples.

Table 4.13-2:
Envisioned Character of the Plan Area

DSAP Design Guidelines	Examples
Built Form: Site Planning and Buildings The Design Guidelines encourage a variety of building types and architectural styles that highlight the Downtown's contemporary character and its identity as a place of innovation. The City will ensure high quality architecture and design through competitive selection processes for development teams and architects. New buildings should be orientated to the street and designed to have articulated facades, small blocks, broken-up building masses, and integrated plazas and seating areas. Long stretches of blank walls should be avoided. Mixed use development should have active ground-floor retail uses. Projects should utilize high quality materials, pavement, lighting, fencing, public art, and green infrastructure. New development should be designed to minimize the visual effect of service areas, garage entrances, and utilities by locating them away from public streets and pathways.	
Parking The Design Guidelines generally discourage large surface lots, although small surface lots are allowed in the Northern and Southern Zones. Rather, parking should be accommodated in aboveground or underground structures. Aboveground structures should be integrated into the pedestrian-oriented environment and screened from the street as much as possible through wrapping with habitable spaces, locating them in the center of blocks, and utilizing public art and landscaping for screening and visual enhancement. Any exposed parking structure façade that faces residential development should be screened with vegetation and/or architectural elements. Surface lots, if provided, should be located behind buildings or along the sides (not between the street and building entrance).	

Trees should be planted throughout and along the perimeter of surface lots.	
Open Space Network The public open space network would be enhanced to include: a community park, linear parks referred ("green fingers"), public spaces, and neighborhood squares. The neighborhood squares would be integrated into the design of future development, creating new focal points. Public art would be incorporated to reinforce the character in each of the zones. On private development sites, trees shall be preserved, plant, and maintained to help soften the appearance of the built environment, provide transitions between land uses, and shade pedestrian and bicycle areas.	
Streetscape Streets will be designed to enhance mobility and support pedestrian and bicycle travel, which would contribute to the vibrant character envisioned by the DSAP. Visible differences may include the use of colored bike lanes, installation of medians, traffic calming measures such as speed humps, and high visibility striping or special pavement treatments at crosswalks. Streetscape and site furnishings will play an important role in defining the character of the Plan area and each of the zones. Amenities to be provided along streets and within public spaces on development sites include: benches, lighting, bus shelters, seating, trash/recycling receptacles, bicycle parking, wider sidewalks, landscaping, public art, and way-finding signage. As Grand Boulevards, The Alameda/Santa Clara Street and San Carlos Street will also have a cohesive design through identification banners, lighting, landscaping, and enhanced bus stops. Existing underpasses would be improved through pedestrian-scale lighting, wider sidewalks, public art, and more frequent cleaning. Attractive fencing (no chain-link) and/or plantings should be installed along railroad lines.	 

The DSAP has undergone an extensive public review process, helping to ensure that community values have been incorporated into the Design Guidelines. As described in Section 4.1 *Land Use*, the DSAP is consistent with the *San José Downtown Street and Pedestrian Lighting Master Plan* (2003). The signage program will tie into the City's *Downtown Signage Master Plan* (2002). Where there is overlap, the DSAP Design Guidelines would supersede the urban design concepts established by the Midtown Specific Plan and Strategy 2000. The DSAP Design Guidelines would also take precedence over the adopted Design Guidelines for Commercial, Residential, Industrial, and Downtown development.

The DSAP Design Guidelines are generally consistent with the General Plan policies and actions listed in Section 4.13.2.2 above. In addition, development will be subject to the following General Plan policies and actions:

- Design sites and building façades and rooftops to accommodate effective, high quality signage, especially those that enliven the pedestrian experience or enhance the Downtown skyline (Policy CD-6.9).
- Underground distribution utility lines serving the new development (Policy CD-1.27).

Implementation of the DSAP in accordance with the Design Guidelines and 2040 General Plan would change the visual character of the built environment in the Plan area. The primary visual change would be the increase in the height and mass of development, as new buildings would range in height from 65 to 130 feet. A conceptual diagram of future development under the DSAP is shown on Figure 4-11 to provide an example of building footprints, based on the maximum build-out and Design Guidelines.

Future development would occur on parcels that are currently developed or were developed in the past. Some trees may need to be removed to accommodate new buildings and infrastructure. Trees are considered visual resources in urban environments as they contribute to aesthetic interest and character. The planting of replacement trees in accordance with City policies would offset the aesthetic effects of tree removal.

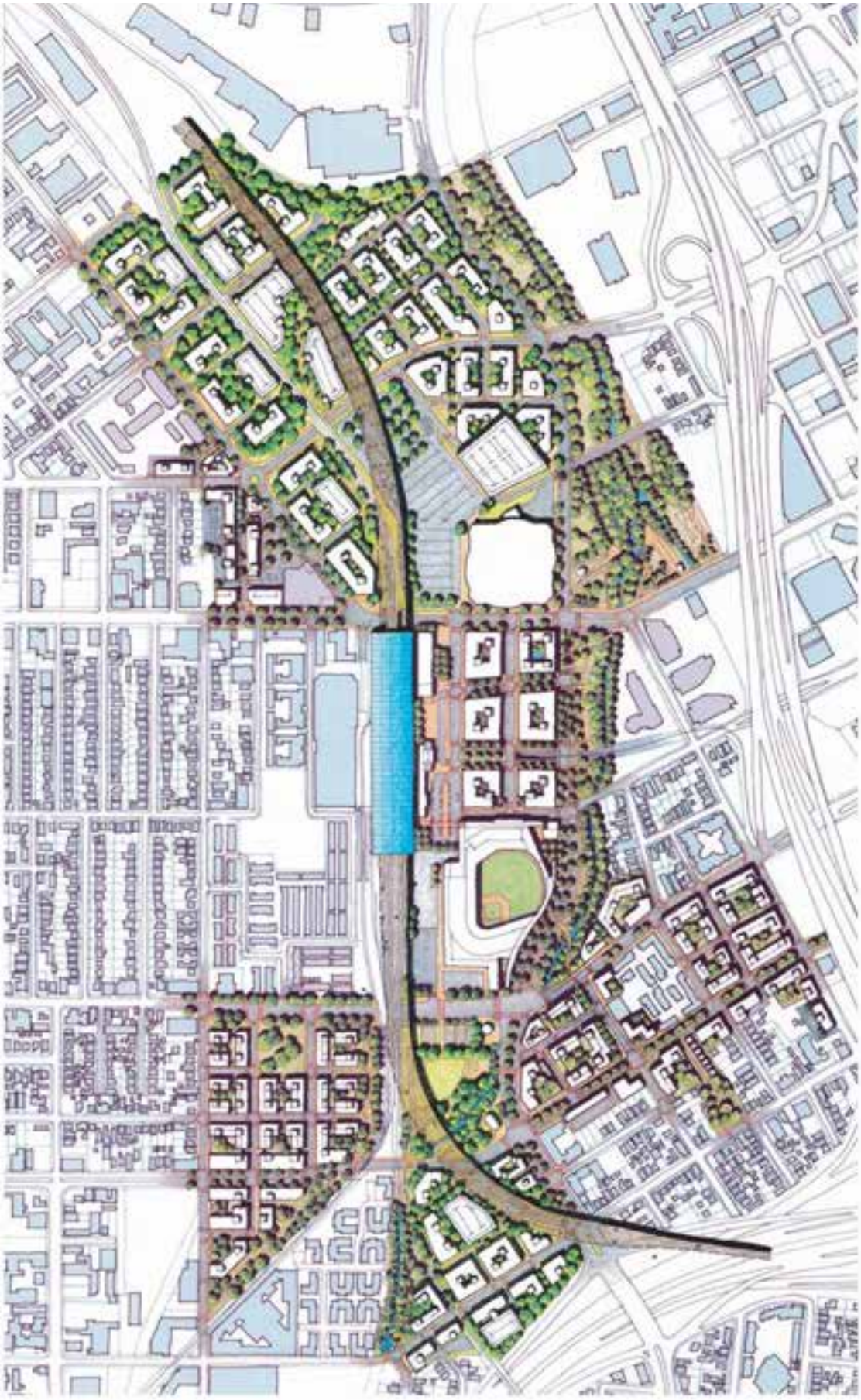
It is anticipated that roadways, vehicles, and parking will no longer be dominating visual elements, particularly in the Central Zone where surface parking lots would be replaced with buildings and public spaces. The area would experience higher levels of pedestrian activity, particularly because the DSAP promotes the use of public spaces for activities and events such as farmers markets, festivals, and outdoor entertainment.

Although the existing visual character of the built environment would be altered, the visual change would not occur all at one time, given that redevelopment under the DSAP would occur incrementally, with an anticipated build-out period of 30 years. Furthermore, the DSAP may enhance the visual character of the Plan area by:

- facilitating the redevelopment of underutilized properties, many of which contain surface parking lots or older buildings in degraded condition;
- replacing degraded transportation infrastructure and adding streetscape amenities;
- expanding the open space network and "greening" the Plan area; and
- creating a more attractive, pedestrian-oriented environment, with less emphasis on vehicle circulation and parking.

Compatibility with Surrounding Development

The increased height and mass of development in the Plan area would be similar to the development pattern of Downtown, although at a relatively reduced scale. New buildings would add to the mix of modern and historic structures that is characteristic of the Central/Downtown Planning Area. Therefore, future development under the DSAP would be compatible with existing development to the east of the Plan area.



CONCEPTUAL DIAGRAM OF
FUTURE DEVELOPMENT UNDER DSAP

FIGURE 4-11

The Plan area is surrounded by distinctive residential neighborhoods, including the Shasta Hanchett, Sunol/Midtown, Garden/Alameda, St. Leo's, Autumn/Montgomery, Lakehouse, and Auzerais/Josefa neighborhoods (refer to Figures 4-1 and 4-2). The introduction of new buildings could change the visual character of the building environment at the interface of the DSAP boundary and surrounding residential areas. Potential visual conflicts could occur if the scale of new development is substantially different.

The DSAP Design Guidelines would reduce and avoid impacts related to building mass by including maximum building heights for each block in the Plan area, as shown on Figure 2-3.[324] Building height limits would ensure that new development is integrated and compatible with existing neighborhoods and key City assets in the surrounding area. For example, the maximum height in the Central Zone is the same height as the Arena (130 feet), in order to maintain the visual prominence of the facility.

The DSAP establishes a 65-foot building height limit for blocks adjacent to single-family residential neighborhoods. These interfaces include: the Stockton Corridor subarea with the Garden/Alameda neighborhood, the Dupont/McEvoy subarea with the Sunol/Midtown neighborhood, and the Park/San Carlos subarea with the Lakehouse District and Auzerais/Josefa neighborhood. The height limits would provide an adequate transition zone between new buildings reaching up to 110 feet in height and the existing predominantly one- and two story buildings outside of the Plan area.

As part of the City's design review process, future development projects will be evaluated for conformance with the proposed DSAP Design Guidelines, Zoning Ordinance, General Plan policies, Municipal Code standards, and other relevant regulations. The projects will be reviewed for compatibility with surrounding development to minimize the potential for land use conflicts to the extent possible.

For the purposes of this EIR, it is assumed that all future projects will reduce aesthetic impacts to a less than significant level through project design. In the event a future project proposes features could substantially degrade the existing visual character, additional environmental review and detailed evaluation of resources and mitigation measures will be required prior to approval or implementation.

Although development allowed under the DSAP would alter the appearance of the Plan area, implementation of the proposed Design Guidelines, General Plan policies, and existing regulations would avoid substantial degradation of the existing visual character or quality of the Plan area and its surroundings. This conclusion is consistent with the analysis in the Envision PEIR. **[Less than Significant Impact]**

[324] Limited intrusions of 10 feet above the limit would be allowed for elevator shafts, rooftop equipment, and architectural treatments.

4.13.3.4 *Impacts from Nighttime Lighting and Daytime Glare*

According to the Envision PEIR, development allowed under the 2040 General Plan could add sources of nighttime light and daytime glare, including external housing lights, street-lights, parking lot lights, security lights, vehicular headlights, internal building lights, and reflective building surfaces and windows. Implementation of General Plan policies and existing regulations would reduce and avoid substantial light and glare impacts.

According to the DSAP, pedestrian-scale lighting should be provided to provide a sense of security and to help define the Plan Area's identity. Lighting would be provided throughout the public right-of-way, including along key streets and paseos, at crosswalks and mid-block crossings, and within plazas. The proposed strategy for lighting is consistent with the San José Downtown Street and Pedestrian Lighting Master Plan (2003), which establishes guidelines for future development in the Downtown Core. The Lighting Master Plan addresses the public right of way through the illumination of pedestrian paths and streets.

Future development under the DSAP will be required to install lighting in accordance with the City Council's adopted Lighting Policy 4-2 and Private Outdoor Lighting Policy 4.3. Development will also be subject to Municipal Code controls for lighting of signs and development adjacent to residential properties, which require lighting to be directed away from residential uses. The DSAP Design Guidelines state that no artificial light shall be emitted onto the street at night from aboveground parking structures in residential areas (page 3-16) and that green roofs or non-reflective materials in neutral colors should be used where roofs will be visible from above (page 3-22). Implementation of the DSAP Design Guidelines, City policies, and regulations as part of the design review process will protect the night sky and control the amount of light shining on streets, sidewalks, and residential properties.

With implementation of General Plan policies and existing regulations, future development under the DSAP would not result in significant light and glare impacts. This conclusion is consistent with the analysis in the Envision PEIR. **[Less than Significant Impact]**

4.13.4 Cumulative Impacts

The proposed project has the potential to contribute to cumulative aesthetic impacts in Downtown San José and neighborhoods to the west.

4.13.4.1 *Impacts to Visual Character*

As described above, future development in accordance with the proposed Land Use Diagram and Design Guidelines would result in a substantial change to the visual character of the Plan area. The proposed baseball stadium and HSR project, including the expansion of Diridon Station, would also affect the aesthetic character of the Plan area.

Diridon Station Expansion and High Speed Rail Infrastructure

Aesthetic impacts related to the station expansion would mainly occur only if the elevated HSR track proposal is implemented. For this reason, the following discussion focuses on the aerial alternative since it has a higher potential to impact the aesthetic character of the project area. It should be noted that the conceptual station expansion plan can accommodate aboveground and underground HSR alignment options.

Based on the conceptual station expansion plan included in the DSAP, improvements at Diridon Station to accommodate HSR would include construction of a new station building at the corner of Cahill Street and Santa Clara Street and three platforms located approximately 60 feet above grade to serve up to six HSR tracks. The platforms would be approximately 1,400 feet long, with additional length at either end for switches and trackwork. A canopy would be constructed over the HSR platforms. The canopy would not extend over Santa Clara Street.

The HSR tracks would extend from Diridon Station on an elevated structure, approximately ~~45~~ 60 feet above grade.[325] Visible elements of the HSR would include trackway (rails and roadbed), catenary system, fencing, and sound barriers. The catenary system, which consists of the poles, cables, and wires that provide the electrical power to the railway, reaches up to ~~25~~ 30 feet above the trackway. The poles would be steel or concrete. The trackway would be lined with fencing and/or sound barriers. Typical sound barriers are built from masonry or pre-cast concrete and are approximately eight to 12 feet tall, although other materials and heights are used, including low walls made of prefabricated metal ~~or wooden panels~~. Photosimulations of the HSR terminal and elevated tracks are shown on Figure 4-12.

The 2008 EIR prepared for the HSR project identified the expansion of Diridon Station as a "medium" visual impact, given that it would be a much longer and taller structure than the existing station building, but in a setting that is proposed to have many larger buildings developed in the area.[326] The visual effect of the elevated HSR tracks was identified as "low" because the trackway is low in profile, the poles of the catenary system resemble power poles, and sound barriers would mask much of the HSR infrastructure, especially from a close vantage point.[327] The aerial structure, however, would cast shadows on residential areas immediately adjacent to the right-of-way.[328] Site-specific designs can minimize the bulk and shading of HSR infrastructure and help blend the structures with surrounding landscape features, although it was unknown at the program-level if design measures can reduce the aesthetic impact of the HSR structure to a less than significant level.

At the time of final station design, subsequent project-level environmental review will be completed for the HSR project to evaluate consistency with City of San José standards and potential effects on the visual character of Diridon Station and the surrounding area. To guide future design and environmental review processes, the CHRSA and City of San José prepared Design Guidance for the

[325] The HSR components are based on the ~~*Bay Area to Central Valley High-Speed Train Program EIR/EIS* (2008)~~ Draft 2014 California High-Speed Rail Business Plan prepared by the CHSRA and FRA. The draft Business Plan was made available to the public on February 7, 2014 and the Final version is expected in May 2014. The CHSRA is currently preparing a Phased Implementation Analysis for construction of HSR infrastructure between San Francisco and San José. During the initial phase of operation, the HSR trains would share the existing Caltrain tracks.
[326] CHSRA and FRA. *Bay Area to Central Valley High-Speed Train Program EIR/EIS*. 2008.
[327] Ibid.
[328] The HSR EIR does not address potential impacts to the planned community park on the SJFD Training Facility property.

San José Corridor. The Design Guidance will be incorporated into a Cooperative Agreement between the City and CHSRA, to be approved by the City Council and CHSRA Board respectively. Under the agreement, City staff and a Community Working Group will be responsible for reviewing and commenting on future plans for the HSR station and infrastructure, to ensure consistency with the guidelines, while an Aesthetic Design Review Panel will serve as an arbitrator for issues resolution. The City and CHRA will also conduct additional community outreach during future design and environmental review. A Joint Powers Authority may be established to manage the design and operations of Diridon Station, given the multiple agencies that share the facility.

The Design Guidance includes the following desired outcomes for the expansion of Diridon Station:

- Diridon Station and station approach infrastructure to the north and south of the station are unified and aesthetically refined, when viewed from streets and public places on both sides of the alignment.
- Aesthetic design of the HSR Station and HSR infrastructure advances implementation of the Diridon Station Area Plan.
- Historic resources are protected and respected through appropriate scale and proximity of the HSR station building and through functional integration of the HSR station, historic depot rail services, and shared transit services.
- Light spillover is minimized from the HSR station building to the neighborhood west of the station.

Table 4.13-3 on the following page summarizes additional "design objectives" included in the HSR Design Guidance that apply to the Plan area. The table also lists the mitigation strategies to be considered during subsequent project-level environmental review and incorporated as feasible, according to the HSR EIR (FRA, 2008).

The expanded station would mainly be visible from the immediate area. Consistent with the DSAP and Design Guidance, the orientation of new public spaces and future development under the DSAP shall provide a view corridor to showcase the new and existing portions of Diridon Station. The HSR station building shall be oriented east towards downtown and Cahill Street, with HSR station architecture addressing the views from the west side of the station and aerial HSR platforms. Based on the expected height of the building, it is not expected to substantially affect views of the eastern foothills from residences located on the opposite side of the tracks such as Plant 51.

When compared to HSR facilities, incorporation of BART into the expanded station would have a minimal effect on the visual character of the site and surroundings, given that the BART tunnel and concourse will be constructed below ground. Based on the conceptual expansion plan for Diridon Station, only BART elevator/escalator entrances and ancillary facilities would be constructed aboveground. These facilities would be designed to be compatible with the proposed public spaces and new buildings, in accordance with DSAP Design Guidelines. Some BART station features would also be integrated into the new portion of the expanded Diridon Station.

Landscape trees of various sizes and species are scattered throughout the surface parking lots that make up the station expansion site. Construction of the HSR and BART facilities would require the removal of existing trees, which would incrementally and temporarily degrade the existing visual quality of the immediate area. However, replacement trees and landscaping would be provided to

enhance the appearance of the station, in accordance with the DSAP Design Guidelines and HSR Design Guidance. With implementation of future design review process established by the CHSRA and City of San José, the expansion of Diridon Station would not substantially degrade the existing visual character or quality of the site and its surroundings.

Baseball Stadium

The Baseball Stadium EIR (2006) concluded that the project would result in a significant aesthetic impact by altering the visual character of the historic Diridon Station. The demolition of buildings adjacent to the station and construction of a baseball stadium would indirectly alter its visual setting and feeling. The completion of HABS-level documentation, as required to mitigate cultural resources impacts, would reduce the magnitude of the aesthetic impact, but not to a less than significant level. It was also determined that the stadium project would have a significant unavoidable aesthetic impact due to the loss of mature trees.[329]

Combined Visual Impact

Although the determination of aesthetic effects is subjective, the combined change in visual character resulting from the proposed DSAP, HSR, and the baseball stadium projects could be considered a significant cumulative impact. As described above, the DSAP has undergone an extensive public review process and includes Design Guidelines intended to facilitate high quality redevelopment and to mitigate aesthetic impacts on the Plan area and its surroundings. The main components of the DSAP (redevelopment with mid-rise buildings, expansion of the open space network, and streetscape improvements) could be considered enhancements to the built environment and would not have the same level of adverse impact as an elevated concrete track structure or 155 foot-tall stadium.

Tree removal would occur incrementally as redevelopment proceeds, although the planting of replacement trees and landscaping would provide mitigation for the aesthetic impact and improve the scenic value of the community forest over time. For these reasons, implementation of the DSAP would not make a considerable contribution to a significant cumulative impact related to aesthetics. **[Less than Significant Cumulative Impact]**

[329] City of San José. *Baseball Stadium in the Diridon/Arena Area Draft EIR.* 2006.

DIRIDON STATION

SANTA CLARA STREET

PHOTOSIMULATIONS OF HIGH SPEED RAIL

FIGURE 4-12

Table 4.13-3:
Design Strategies to be Incorporated in Future Design of HSR Project

Mitigation Strategies in HSR EIR (FRA, 2008)	***Design Guidance for the San José Corridor*** **(CHSRA and City of San José, 2011)**
• Design facilities that are attractive and integrated well into landscapes to reduce potential view blockage, contrast with existing landscape settings, light and shadow effects, and other potential visual impacts. • Design elevated tracks with graceful lines and minimal bulk. • Design structures with sensitivity to the context, using exterior materials, colors, textures, and design details that are compatible with patterns in the surrounding natural and built environment and that minimize the contrast of the structures with their surroundings. • Use neutral colors and dulled finishes that minimize reflectivity for catenary support structures. • Use aesthetically appropriate fencing, such as dark and non-reflective colors, and decorative fencing where appropriate. • Use the minimum amount of night lighting necessary for operations and safety. • Use shielded and hooded outdoor lighting. • Use sensors and timers for lights not required to be on at all times. • Design stations to minimize potential shadow impacts on adjacent pedestrian areas, parks, and residential areas, and site all structures in a way that minimizes shadow effects on sensitive portions of the surrounding area. • Use strategic plantings of fast-growing trees to provide partial or full screening of elevated tracks, where they are close to residential areas, parks, and public open spaces.	<u>General Infrastructure Design</u> • Create a unified, coherent project that integrates aesthetic design for Diridon Station and station approach infrastructure north and south of the station. • Create a strong sense of place for the Diridon area, with the station at the center of a vibrant, walkable, urban mixed-use district. The Diridon area is to be a recognizable destination that identifies San José as the center of Silicon Valley, the technological capital of the world. • Provide daylight between two-track viaduct structures. • Provide opportunity for active public use of space under the viaduct. <u>Diridon Station</u> • Integrate aesthetic design of station approach infrastructure and Diridon Station to create a unified, coherent HSR project. • Reflect the Silicon Valley spirit of innovation and San José's rich history of progress through world-class architecture. • Design the HSR station to be compatible in terms of scale and massing to the historic depot. The Cahill elevation of the new HSR station shall not overwhelm the historic depot in terms of height and proportion. The southern elevation of the HSR station shall be located a minimum of 150 feet from the north wall of the existing station. • Acknowledge San José's agricultural history and verdant character by incorporating landscaping features prominently. • Allow for the installation of significant public art. <u>South of the Station</u> • Minimize the number of columns with the use of long-span balanced cantilever construction for approach to Diridon Station and I-280 long-span bridge. • Develop column orientation and spacing to support future park site uses at the existing SJFD Training Facility, reduce number of straddle bents, and enable development at the Royal/Auzerais area per the DSAP. • Implement gateway improvements at the Bird

	• Avenue and Auzerais Avenue intersection, with landscaping, street trees, mini-park and pedestrian improvements under the aerial viaduct.

4.13.5 Conclusion

With implementation of General Plan policies, proposed Design Guidelines, and existing regulations, future development under the DSAP would not result have a substantial adverse effect on a scenic vista or the existing visual character or quality of the Plan area and its surroundings. The proposed project would not result in significant light and glare impacts. These conclusions are consistent with the analysis in the Envision PEIR. **[Less than Significant Impact]**

With implementation of General Plan policies, Design Guidelines, and existing regulations, future development under the DSAP would not make a considerable contribution to a cumulative aesthetic impact. This conclusion is consistent with the analysis in the Envision PEIR. **[Less than Significant Cumulative Impact]**

4.14 AGRICULTURAL AND FOREST RESOURCES

This section is based primarily upon the Envision PEIR, except where noted.

3.14.1 Existing Setting

According to the City's Zoning Ordinance, the *Agricultural* (A) and *Open Space* (OS) zoning districts are intended to provide for areas where agricultural uses are desirable and conserve land for the preservation and managed production of natural resources, including forestlands. There are no properties within the Plan area zoned as *Agricultural* or *Open Space*.[330]

3.14.1.1 *Agricultural Resources*

According to the *2010 Santa Clara County Farmland Map*, the Plan area is designated as Urban and Built-up Land.[331] There are no properties within the Plan area that are designated as Prime Farmland by the California State Department of Agriculture or the subject of a Williamson Act contract.[332]

3.14.1.2 *Forest Resources*

According to Section 12220 (g) of the Public Resources Code, forest land is defined as "land that can support 10-percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits." Based on this definition, only the riparian corridor of Los Gatos Creek through the Plan area could be considered forest land because it supports native species and provides public benefits such as biodiversity. Although the Los Gatos Creek corridor is not zoned *Open Space*, it is designated as *Open Space, Parkland, and Habitat* on the 2040 General Plan.

3.14.2 Agricultural and Forest Resources Impacts

3.14.2.1 *Thresholds of Significance*

For the purposes of this PEIR, an agricultural, forest, or mineral resources impact is significant if implementation of the proposed DSAP would:

- Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use;
- Conflict with existing zoning for agricultural use, or a Williamson Act contract;
- Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g); or
- Result in the loss of forest land or conversion of forest land to non-forest use.

[330] City of San José. *Zoning Map 83*. Updated June 24, 2011.
[331] California Department of Conservation. *2010 Important Farmland Map for Santa Clara County*. Map. 2011.
[332] Envision PEIR.

3.14.2.2 *Impacts to Agricultural Resources*

The Plan area is developed with urban uses and no properties are used for agricultural purposes, under a Williamson Act contract, or designated as important farmland. Future development under the DSAP would not impact agricultural resources. **[No Impact]**

3.14.2.3 *Impacts to Forest Resources*

As described in Section 4.7 *Biological Resources*, future development under the DSAP would not result in a significant impact to riparian habitats with implementation of General Plan policies and existing regulations such as the Riparian Corridor Policy. It is assumed that all riparian trees would be preserved, and the corridor would be enhanced with the redevelopment of the existing SJFD Training Facility with a community park. The proposed project would not result in the loss of forest land or conversion of forest land to non-forest use. **[Less than Significant Impact]**

3.14.3 Conclusion

Future development under the DSAP would not impact agricultural or forest resources. **[No Impact]**

Future development under the DSAP would not result in a significant impact to forest resources. **[Less than Significant Impact]**

4.15 POPULATION AND HOUSING

This section is based primarily upon the Envision PEIR, except where noted.

4.15.1 Background and Existing Setting

Changes in population, housing, and employment in and of themselves are generally characterized as social and economic effects. While increased population does not necessarily cause direct effects on the physical environment, it could cause indirect environmental effects such as increased vehicle trips and air pollutant emissions. Therefore, this discussion focuses on the relationship between the locations of jobs and housing, based upon the analysis in the Envision PEIR.

Table 4.15-1 below summarizes the most recent existing and projected population and employment data for San José (2010). Since 2000, the total population of San José has increased by an average of 12,795 residents per year, reaching 1,023,083 at the beginning of 2010. Over half of the city's housing stock consists of single-family detached units, although multi-family development (i.e., apartments, condominiums, and townhouses) has been the fastest growing housing type in recent years, accounting for 75 percent of all residential construction since 2000. The average household size is expected to decrease from the current rate of 3.2 people to about 3.06 people by 2035.

Table 4.15-1:
Population and Employment in San José

	Existing (2010)	ABAG Projections for 2035	2040 General Plan
Population	945,942	1,380,900	1,313,811
Households/ Dwelling Units	314,038	435,110	429,350
Employed Residents	489,305	774,320	665,493
Jobs	369,450	708,980	839,450

Source: April 2010 Census Data, U.S. Census Bureau. Association of Bay Area Governments (ABAG) data is based on the *2009 Projections* report.

The City estimates that there are approximately 1,430 residents and 1,680 employees within the DSAP boundaries, as of 2009.[333]

4.15.1.1 *Jobs/Housing Balance*

The term "jobs/housing balance" refers to the ratio of employed residents to jobs in a given community or area. It is used to indicate the general distance between residences and employment locations. A well-balanced ratio (close to 1:1) can minimize commute distances and the number of

[333] DSAP. Page 4-26.

vehicle miles traveled (VMT).[334] As described throughout this EIR, VMT is linked to a variety of environmental impacts (i.e., traffic flows, air quality, energy consumption, etc.).

Important to the analysis of the jobs/housing balance is whether housing is affordable to local employees and whether employment opportunities match the skills and educational characteristics of the local labor force. When considering these factors, sizeable levels of in-commuting and out-commuting may occur, even if a jurisdiction has a statistical balance between jobs and housing. Improving the availability of housing that is suitable for those holding jobs in the community can allow employees to live in proximity to their place of work.

The City of San José has historically provided a higher than average proportion of housing in Santa Clara County. The current ratio of jobs to employed residents in San José is estimated to be 0.8 to 1, making the city "housing rich".[335] The concentration of housing in San José and employment in other jurisdictions has created a well-established commute pattern (southeast to northwest). It has become apparent that the physical relationship between jobs and housing significantly contributes to several of the primary environmental impacts of concern in the Bay Area, particularly air pollution and the excessive consumption of energy resulting from an inefficient sprawling land-use pattern.

4.15.2 Regulatory Framework

The Association of Bay Area Governments (ABAG) allocates regional housing needs to each city and county within the nine-county Bay Area, based on statewide goals. California's Housing Element Law requires all cities to: 1) zone adequate lands to accommodate its Regional Housing Needs Allocation (RHNA); 2) produce an inventory of sites that can accommodate its share of the regional housing need; 3) identify governmental and non-governmental constraints to residential development; 4) develop strategies and work plan to mitigate or eliminate those constraints; and 5) adopt a housing element that is to be updated on a regular recurring basis.

4.15.2.1 *City of San José Policies and Programs*

The City of San José implements and develops a wide range of housing policies and programs to address local, regional, and state housing needs and goals; to facilitate housing opportunities for all income levels; to work towards ending homelessness; to create strong and resilient communities; and to build great places, especially near transit, jobs, services, and other amenities. The City's Department of Housing administers affordable housing programs and develops and updates its local Housing Investment Plan, the state-required Housing Element, and the federal Consolidated Plan, which are required for local jurisdictions to implement its local land use authority and to receive regional, state, and federal funing for housing, community development, and transporation programs.

[334] Paradoxically, a balanced ratio of jobs and housing could result in increased VMT by dispersing vehicle travel in such a way as to facilitate a greater overall utilization of existing roadways, while concentrating jobs in a single location may force more commuters to divert from congested roadways to alternative modes of transportation, such as the regional transit system.
[335] San José is unique in that all other large cities in the U.S. function as regional job centers, with a great than 1 to 1 ratio of jobs to employed residents.

Envision San José 2040 General Plan

Various policies in the City's General Plan have been adopted for the purpose of reducing or avoiding impacts related to population and housing, as listed in the following table.

Table 4-15-2:
General Plan Policies: Population and Housing

General Plan Phasing / Planning Horizons/ Major Review Policies	
Policy IP-2.1	Gradually implement the development of new Urban Village areas by dividing them into three Plan Horizons and allowing a specific portion of the Urban Village areas to be developed within each Horizon. Identify the locations of current Plan Horizon Urban Villages presently available for residential development on the Land Use/Transportation Diagram.
Policy IP-2.4	Conduct a Major Review of this General Plan by the City Council every four years to evaluate the City's achievement of key economic development, fiscal and infrastructure/service goals, greenhouse gas emission reduction goals and targets, water conservation and recycling goals, availability and affordability of housing supply, Healthful Community goals, and review changes and trends in land use and development. Based on this review, determine the City's readiness to begin the next General Plan Horizon or to modify the number of "pool" residential units available for non-specific Urban Village areas within the current Plan Horizon. Amend the Land Use/Transportation Diagram and/or General Plan goals, policies, and actions accordingly.
Policy IP-2.9	Open Horizons for development in planned phases to give priority for new residential growth to occur in areas proximate to Downtown, with access to existing and planned transit facilities, and adequate infrastructure to support intensification, and proximate to other Growth Areas to contribute to the City's urban form.
General Plan Annual Review and Measurable Sustainability	
Policy IP-3.2	As part of the General Plan Annual Review, carefully monitor the jobs-to-employed resident ratio and, as a minimum, consider the following current development trends: • Vacant land absorption; • Amount of residential and economic development; • Amount and value of non-residential construction; • Number and types of housing units authorized by building permit, including number of affordable units, and development activity level in zonings, development permits, annexations and building permits; • Status and current capacity of major infrastructure systems which are addressed in General Plan Level of Service policies (transportation, sanitary sewers and sewage treatment); • Transit-ridership statistics and other measures of peak-hour diversion from single occupant vehicles;

	• Status and implementation of Green Vision, General Plan policies, and other greenhouse gas reduction strategy measures, including greenhouse gas emission reductions compared to baseline and/or business-as-usual; and • Levels of police, fire, parks and library services being provided by the City.
Housing Development	
Policy IP-19.1	Through a Major General Plan Review or, as needed, through the Annual General Plan review process, evaluate the Plan's consistency with housing development goals as determined by the State and regional agencies and take actions as necessary to address their requirements.

4.15.3 Population and Housing Impacts

4.15.3.1 *Thresholds of Significance*

For the purposes of this PEIR, a population and housing impact is considered significant if implementation of the proposed DSAP would:

- Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure); or
- Displace substantial numbers of existing housing or people, necessitating the construction of replacement housing elsewhere.

4.15.3.2 *Induce Substantial Population Growth*

Examples of ways in which a project can induce substantial population growth include:

- proposing new housing beyond projected or planned development levels;
- generating demand for housing as a result of new businesses;
- extending roads or other infrastructure to previously undeveloped areas; or
- removing obstacles to population growth (i.e., expanding capacity of a wastewater treatment plant beyond that necessary to serve planned growth).

The Envision PEIR concluded that the potential for direct growth inducing impacts from the 2040 General Plan is minimal because growth planned and proposed as part of the General Plan will consist entirely of development within the City's existing Urban Growth Boundary and Urban Service Area. The 2040 General Plan includes policies and actions that address orderly growth within the City and are aimed at balancing housing supply with job growth. (Refer to Section 4.15.3.4 below for a discussion of the potential for indirect growth inducement to occur outside of San José under cumulative conditions.)

The DSAP allows for the development of 2,588 dwelling units in the Plan area. The DSAP ~~assumes that 15 percent of the new units would be affordable housing~~ includes a policy goal that a minimum of 15% of residential units in the Plan area be affordable to households of low- and moderate-income. Based on the standard rate of 3.06 people per household in San José, new residential

development would result in a population of approximately 7,919 people. Applying more typical rates for higher density multi-family housing rates (two people per market-rate units and 2.7 people per affordable unit) would generate a residential population of 5,450. The DSAP also provides capacity for approximately 23,010 new jobs.

As described in Section 4.1 *Land Use*, the development levels proposed by the DSAP are consistent with the combined jobs and housing capacities established in the 2040 General Plan for the Downtown, Midtown, and VT-4 Growth Areas. Therefore, the proposed project would not *indirectly* induce population growth in San José by proposing new housing or economic development beyond levels in the 2040 General Plan.

The DSAP is consistent with the General Plan goals for focused and sustainable growth, because it supports the intensification of development in an urbanized area that is currently served by existing roads, transit, utilities, and public services. As described in Section 4.10 *Utilities and Service Systems*, the construction and/or expansion of existing infrastructure will likely be needed to serve the amount of growth envisioned in the Plan area under both the DSAP and 2040 General Plan. The proposed transportation strategy includes modifications to the roadway network to accommodate existing and projected traffic levels, consistent with the transportation goals and policies in the 2040 General Plan. Therefore, the DSAP would not directly induce population growth by extending or expanding infrastructure beyond what is required to serve the planned growth capacity. **[Less than Significant Impact]**

4.15.3.3 *Displace Housing Units or People*

The Envision PEIR determined that nearly all existing housing units could be retained under the 2040 General Plan, because growth would be focused in existing commercial, industrial, and vacant areas within the City's Urban Growth Boundary. The intensification of employment lands and the construction of infrastructure and public facilities necessary to serve future growth would not displace substantial amounts of existing housing or people. Therefore, the 2040 General Plan would not result in significant impact in terms of housing or population displacement.

The Plan area currently contains a mix of uses, with existing residential uses concentrated in the Arena North and Park/San Carlos subareas. Under maximum build-out, existing residential uses would be replaced with higher intensity development, with the exception of a few existing developments that were constructed during the last 10-15 years and are assumed to remain (e.g., Museum Park). Implementation of the DSAP could displace a portion of the approximately 1,430 existing residents in the Plan area. However, some of these residents may relocate to new housing in the Plan area. It should be noted that while new housing may be more expensive due to higher construction costs in the future, ~~it is anticipated that approximately 15 percent of the total residential units proposed would be affordable housing units~~ the City has a policy goal that a minimum of 15% of residential units in the Plan area be affordable to households of low- and moderate-income. Given that the project would not result in a large net increase in dwelling units, the displacement of existing residential uses would not necessitate the construction of replacement housing elsewhere.

Future development under the proposed DSAP would not displace substantial amounts of existing housing or people. This conclusion is consistent with the analysis in the Envision PEIR. **[Less than Significant Impact]**

4.15.3.4 *Cumulative Impacts*

The 2040 General Plan provides capacity for 120,000 net new dwelling units and an additional 470,000 jobs in San José by 2035. According to the Envision PEIR, development under the 2040 General Plan would meet the City's currently identified fair-share housing obligation and would not induce growth beyond that anticipated in ABAG projections in the near term. The 2040 General Plan would, however, allow for a substantial increase in jobs above ABAG's projection for 2035, in order to support the City's goals of economic sustainability.

By 2035, San José could have 1.3 jobs per employed resident, which is a substantial change beyond the existing 0.8 to 1 ratio. The new jobs/housing imbalance would have the secondary effect of inducing population growth outside of San José by creating demand for new housing to serve the new workers in San José.[336] For traffic modeling purposes, the Envision PEIR assumed more housing growth and less job growth in other jurisdictions than projected by ABAG, in order to maintain the overall total for the region. Since the City cannot predict exactly where the housing growth will occur outside of San José, the Envision PEIR evaluated a worst-case scenario in which all of the new workers in excess of the number projected by ABAG were assumed to live outside of Santa Clara County, even though some new workers will probably live in the county. As a result of increased commuting from other jurisdictions, the Envision PEIR concluded that implementation of the 2040 General Plan would substantially increase VMT per service population in the Bay area region.[337]

As described throughout the Envision PEIR and this EIR, the projected increase in VMT due to jobs and housing growth would result in significant environmental impacts, including traffic congestion, air pollution, noise, greenhouse gas emissions, and biological resources (nitrogen deposition). While the General Plan includes policies for reducing VMT, there is no assurance that these measures would reduce environmental impacts to a less than significant level. Therefore, the impact related to the jobs/housing balance and induced population growth outside of San José was identified in Envision 2040 as significant and unavoidable.

Based on the estimates of jobs and residents above, the DSAP could generate approximately three times more jobs than residents within the Plan area, although future development under the DSAP represents a small proportion of overall growth in the city (a projected increase of 21,610 jobs would equate to 4.6 percent of the City's total job capacity). Given that San José is currently housing rich, the proposed excess of new jobs in relation to new residents would help the City achieve a jobs/housing balance in the near term. Housing development would be allowed in the first horizon (phase), but development may occur over 30-year build-out, thus contributing to the jobs rich condition and generating demand for housing outside San José. This is particularly true if there is

[336] It is estimated that approximately 109,000 additional housing units would be needed elsewhere in the region to provide adequate housing opportunities for future workers. In the Bay Area, commute distance includes all of the nine counties in the Bay Area and the central San Joaquin Valley.
[337] Using a less conservative assumption would have generated a lower VMT per capita.

insufficient housing (that matches the needs of new workers) available in San José at the time the new employment uses are constructed.

The DSAP is intended to reduce VMT through regional transit use and increase the use of alternative transportation at the community level, a major goal of the City and the region. By intensifying development in proximity to Diridon Station (San José's largest transit hub) and other transit services included in the cumulative condition, the DSAP supports use of the regional transit system for commuting. In addition, the intensification of residential development near Downtown (San José's primary employment center) can reduce the distances between jobs and housing, supporting alternative transportation modes over vehicle use for commuting.

The main environmental issue associated with a jobs/housing imbalance is increased VMT and the DSAP is a key strategy for reducing VMT; however, because the project will increase jobs over residential units within the City, the DSAP would contribute to the significant unavoidable impact identified in the Envision PEIR.

Impact PH-1: Future development under the proposed DSAP would make a substantial contribution to the significant unavoidable impact related to the jobs/housing imbalance, as identified in the Envision PEIR. **[Significant Unavoidable Cumulative Impact]**

4.15.4 Conclusion

Future development under the proposed DSAP would not induce substantial population growth in San José displace substantial amounts of existing housing or people. This conclusion is consistent with the analysis in the Envision PEIR. **[Less than Significant Impact]**

Impact PH-1: Future development under the proposed DSAP would make a substantial contribution to the significant unavoidable impact related to the jobs/housing imbalance, as identified in the Envision PEIR. **[Significant Unavoidable Cumulative Impact]**

4.16 PUBLIC FACILITIES AND SERVICES

This section is based primarily upon the Envision PEIR, except where noted.

4.16.1 Existing Setting

4.16.1.1 *Fire Protection*

Fire protection services in San José are provided by the San José Fire Department (SJFD). The SJFD responds to all fires, hazardous materials spills, and medical emergencies (including injury accidents). There are currently 33 active fire stations in the city. The closest fire stations and their distance to Diridon Station (representing the center point of the Plan area) are shown in Table 4.16-1 below.

Table 4.16-1:
Fire Stations Nearest to the Plan Area

Station Number	Address	Distance to Diridon Station	Travel Time by Vehicle*
#30	454 Auzerais Avenue	0.7 miles	3 minutes
#1	225 North Market Street	1 mile	5 minutes
#7	800 Emory Street	1.7 miles	5 minutes
#3	98 Martha Street	2.3 miles	8 minutes
#8	802 E. Santa Clara Street	1.9 miles	11 minutes

* According to Google Maps. The travel times represent conservative estimates given that traffic signal preemption reduces travel times for emergency vehicles.

The SJFD employs two standards to measure service performance: travel time and total reflex time. Travel time is the period of time from when a responding unit leaves the fire station to its arrival at the emergency scene. Total reflex time refers to the total amount of time that passes from receipt of the emergency call to the arrival of the responding unit at the scene.

4.16.1.2 *Police Protection*

Police protection services in San José are provided by the City of San José Police Department (SJPD). The SJPD employs approximately 1,050 sworn officers. Patrolling officers are dispatched via police headquarters, located at 201 West Mission Street. The SJPD also has three community policing centers, which are located in Alviso, at Westfield Mall, and on Williams Road. All three centers have been closed due to staffing constraints.

In addition, security for VTA bus and light rail facilities is provided by the Santa Clara County Sheriff's Office who also subcontracts some security services through VTA's Protective Services, a private security contractor.

4.16.1.3 *Schools*

The Plan area is served by the San José Unified School District (SJUSD), which consists of 27 elementary, six middle, and nine high schools. The SJUSD has a total capacity of 30,520 students.[338] Enrollment has increased from 31,524 during the 2008-09 school year to 33,018 during the 2010-11 school year, indicating that SJUSD is currently over capacity.[339] Table 4.16-2 below shows the schools most likely to serve residents in the Plan area.

Table 4.16-2:
SJUSD Schools Nearest to the Plan Area

School	2010-11 Enrollment [a]	Maximum Capacity [b]	Available Capacity	Approximate Distance to Plan area [c]
Gardner	584	600	16	1.0 mile
Horace Mann	632	750	118	1.3 miles
Lowell	403	576	173	1.7 miles
Trace	985	840	(145)	2 miles
Elementary Total	*2,604*	*2,766*	*162*	
Herbert Hoover Middle	1,008	1,176	168	1.5 miles
Lincoln High	1,685	1,653	(32)	1.6 miles
TOTAL	**5,297**	**5,595**	**298**	

[a] California Department of Education, Educational Demographics Unit.
[b] Strategy 2000 EIR. Trace capacity: Morrison Park Residential Project IS
[c] Google Maps. Distance to Diridon Station, representing center point of Plan area.

The only school located in the Plan area is Sunol Community School, which is operated by the County of Santa Clara Alternative Education Department.[340] The school is located at 258 Sunol Street in the DuPont/McEvoy subarea.

[338] Envision PEIR.
[339] California Department of Education, Educational Demographics Unit. "DataQuest: District Enrollment by Grade." Accessed March 29, 2012. http://dq.cde.ca.gov/dataquest
[340] County of Santa Clara, Office of Education. "Alternative Schools." 2012. http://www.sccoe.org/schooldirectory/coe/aed/

4.16.1.4 *Parks and Recreation*

The City's Department of Parks, Recreation, and Neighborhood Services is responsible for the development, operation, and maintenance of parks, trails, community centers, and other recreational facilities in San José.

Parkland

The City owns 184 neighborhood/community-serving parks and nine regional parks, making up approximately 3,435 acres of land. There are currently no public parks within the Plan area, although there is a 0.2-acre green space in front of Diridon Station referred to as Station Green. Sunol Community School also has a multi-use lawn. Parkland and recreational facilities in the surrounding area are summarized in Table 4.16-3 below.

Table 4.16-3:
Parks and Recreational Facilities Within a Half Mile of the Plan Area

Name	Size (acres)	Approximate Distance to Plan Area (miles)
Theodore Lenzen Park	0.5	Adjacent
Discovery Dog Park	0.4	Adjacent
Guadalupe River Park		
Arena Green	10.6	Adjacent
Discovery Meadow at Children's Museum	11.5	0.1
Guadalupe Gardens	120	0.2
McEnery Park	1.8	0.25
Columbus Park	9.9	0.5
San Fernando Station	0.6	0.1
Cahill Park	3.7	0.1
O'Connor Park	1.9	0.35
Plaza de Cesar Chavez	2.4	0.4
St. James Park	7.0	0.4
TOTAL	**170**	

Sources: DSAP Existing Conditions Report and Google Earth (used to estimate distances to Plan edge).

Theodore Lenzen Park, Cahill Park, O'Connor Park, and St. James Parks are designated as neighborhood parks, while Plaza de Cesar Chavez and Guadalupe River Park are classified as citywide/regional parks.[341] Guadalupe River Park is an approximately three-mile linear park that runs along the river from I-880 in the north to I-280 in the south. The park includes neighborhood-serving spaces such as Arena Green, Discovery Meadow, and McEnery Park, as well as 33 plazas and educational exhibits.[342] North of Coleman Avenue, the park includes a Visitor and Education Center, multiple gardens (such as the Heritage Rose Garden and the Guadalupe Community Garden), and Columbus Park. The Guadalupe River Trail runs the entire length of the park on one or both sides of the river. The nearest facilities to the Plan area that have sports fields/courts are Arena Green, which contains tennis courts, and Columbus Park, which contains softball fields, basketball courts, and beach volleyball courts.

Under existing conditions, the Stockton Corridor subarea is within walking distance (considered as 1/3 mile) to Theodore Lenzen Park, Arena Green, and Cahill Park. The majority of the Park/San Carlos subarea is within walking distances to the Discovery Dog Park, San Fernando Station green space, Discovery Meadow, McEnery Park, and Arena Green. The Dupont/McEvoy subarea and the remaining portion of the Park/San Carlos subarea (west of Josefa Street) are only within walking distance to Cahill Park. Existing facilities in and near the Plan area are currently considered to be underutilized.[343]

Trails

There are currently over 54 miles of trails in San José. The City has determined that all residents may access a trail within three miles of home.[344] The closest to the Plan area are the Guadalupe River Trail and Los Gatos Creek Trail. The Guadalupe River Trail extends 9.4 miles from Virginia Street north to Gold Street in Alviso. There is a small gap in the trail on the western side of the river between Julian Street and St. John Street ~~the UPRR line~~. It is anticipated that this gap will be filled upon completion of the at-grade crossing of Autumn Parkway, as planned under the Coleman Avenue/Autumn Street Improvement Project.

As described in Section 1.2.1.4, there is an existing segment of Los Gatos Creek Trail extending from Lonus Street to San Carlos Street, along the DSAP boundary. That reach is linked via an on-street connection to the remaining 10.7 miles of the Los Gatos Creek Trail, which runs south through Campbell and Los Gatos. The City plans to complete Reach 5 (San Carlos Street to Santa Clara Street), which will link to the Guadalupe River Trail.[345]

[341] Neighborhood/community parks typically include amenities that serve the immediate or nearby neighborhood such as playgrounds, dog parks, ball fields, sport courts, and exercise courses. Regional parks attract visitors from throughout the Bay Area and may include larger or unique amenities such as landscaped gardens or festival sites for large events.
[342] Guadalupe River Park Conservancy. Guadalupe River Park and Gardens Walking Map. http://www.grpg.org/Files/WalkingMap.pdf
[343] DSAP. Page 2-32.
344 City of San José, Department of Parks, Recreation, and Neighborhood Services. *Residents' Proximity to Off-Street Trails.* Map. May 2010. <http://www.sjparks.org/Trails/Reports/3-mile%20buffer%2011x17.jpg>
[345] An on-street connection currently links Reach 4 (Lonus Street to Auzerais Avenue) to the remaining 10.7 miles of the Los Gatos Creek Trail, which extends south through the cities of Campbell and Los Gatos.

The 2040 General Plan identifies the Los Gatos Creek and Guadalupe River Trails as *Core Trail Systems*, which carry relatively high volumes of traffic, extend significant distances, or link to regional systems outside the City's boundaries. These trails also connect housing to employment and thus, support commuting.

Community Centers and Other Recreational Facilities

The City currently has a total of 25 community centers, 12 senior centers, 14 youth centers, six public skate parks, three municipal golf courses, 19 community gardens, six swimming pools, and one lake swimming program.[346,347,348] Nearby facilities include the Roosevelt Community Center (including a senior center, youth center, and a skate park), Guadalupe Community Garden, and Ryland Pool (approximately one mile to the northeast). There are additional community center reuse facilities within two miles of the Plan area, including Gardener, Hoover, and Northside centers.[349] All three golf courses (San José Municipal, Los Lagos, and Rancho Del Pueblo) are located about four to five miles from the Plan area.

Planned Parks and Recreation Improvements

In 2002, the City adopted the Guadalupe River Park Master Plan that establishes a vision for the park and outlines the various flood control, recreational, and habitat elements. The master plan calls for the future development of park amenities between St. John Street and the railroad tracks, adjacent to the Plan area. In 2008, the City approved the Del Monte Park Master Plan for the development of a 1.7-acre neighborhood park on the south side of Auzerais Avenue, immediately west of Los Gatos Creek and the existing trail.[350] The City has also designated the SJFD Training Facility as a future park site in the Midtown Specific Plan (1992), Diridon/Arena Strategic Development Plan (2002), Greenprint (2009), and 2040 General Plan. The DSAP maintains the open space designation and proposes a community park as part of open space network strategy.

The Coleman Avenue/Autumn Street Improvement Project, approved in 2008, includes removal of existing buildings along the west side of Los Gatos Creek and north side of Coleman Avenue. This improvement project will allow for the addition of 4.7 acres of open space and the construction of an off-street trail alignment adjacent to Los Gatos Creek between Park Avenue and Santa Clara Street (an option in the Reach 5 Master Plan).[351] In addition, any extra land acquired for the Coleman Avenue widening may be added to the Guadalupe Gardens.[352]

[346] City of San José, Department of Parks, Recreation, and Neighborhood Services. "San José Community Gardens." Accessed March 29, 2012. http://www.sjcommunitygardens.org/
[347] City of San José, Department of Parks, Recreation, and Neighborhood Services. "Golf Course Information." Accessed March 29, 2012. http://www.sjparks.org/golf.asp
[348] City of San José. *Greenprint 2009 Update for Parks, Recreation Facilities and Trails.* 2009.
[349] The City's Community Center Reuse Policy allows Santa Clara County-based nonprofit, neighborhood associations, school districts, and other government agencies or community service providers to use City-owned recreation facilities designated as "Community Center Reuse sites" at no cost in exchange for services that primarily benefit San Jose residents. **Source:** http://www.sanjoseca.gov/prns/facility_reuse/.
[350] The future "Del Monte Park" site was dedicated to the City by KB Home to satisfy their Park Impact Obligation (Chapter 14.25 of the San Jose Municipal Code) for the residential development located across Auzerais Avenue.
[351] City of San José. *Coleman Avenue/Autumn Street Improvement Project Final Integrated Focused EIR.* 2008.
[352] Ibid.

4.16.1.5 *Libraries*

The San José Public Library System consists of one main library and 18 open branch libraries. The Dr. Martin Luther King Jr. Main Library is located in Downtown San José, approximately one mile from the Plan area. The nearest branch libraries are the Rose Garden Library (1580 Naglee Avenue) and Biblioteca Latinoamericana (921 South First Street), both of which are approximately two miles from Diridon Station.

4.16.2 Regulatory Framework

4.16.2.1 *California Government Code Section 65996*

California Government Code Section 65996 specifies that an acceptable method of offsetting a project's effect on the adequacy of school facilities is the payment of a school impact fee prior to issuance of a building permit. The legislation states that the payment of school impact fees "are hereby deemed to provide full and complete school facilities mitigation" under CEQA [§65996(b)]. The school district is responsible for implementing the specific methods for mitigating school impacts under the Government Code. The CEQA documents must identify that school impact fees and the school districts' methods of implementing measures specified by Government Code 65996 would adequately mitigate project-related increases in student enrollment.

4.16.2.2 *School Siting Criteria*

The siting and construction of schools in California is regulated by Title 5 of the California Code of Regulations (School Site Selection Criteria), Sections 17210.1 and 17213 of the California Education Code (Schools Property Evaluation and Cleanup), and Section 21151.8 of CEQA (Requirements for School Site Acquisition or Construction). To assist school districts in complying with regulations and gaining state approval for the selected school sites, the California Department of Education (CDE) developed the *School Site Selection and Approval Guide* (2000). According to the guide, the following safety factors shall be considered when evaluating a potential school site: 1) proximity to airports; 2) proximity to high-voltage power transmission lines; 3) presence of toxic and hazardous substances; 4) hazardous air emissions and facilities within a quarter mile; 5) other health hazards; 6) proximity to railroads; 7) proximity to high-pressure natural gas lines, gasoline lines, pressurized sewer lines, or high-pressure water pipelines; 8) proximity to propane tanks; 9) proximity to major roadways; 10) noise; 11) results of geological studies and soils analyses; 12) condition of traffic and school bus safety; 13) safe routes to school; and 14) safety issues for joint-use projects.

4.16.2.3 *Quimby Act-California Code Sections 66475-66478*

The Quimby Act (California Government Code Sections 66475-66478) was approved by the California legislature to preserve open space and parkland in the State. The Quimby Act authorizes local governments to establish ordinances requiring developers of new subdivisions to dedicate parks, pay an in-lieu fee, or perform a combination of the two. As described below, the City has adopted a Parkland Dedication Ordinance and a Park Impact Ordinance, consistent with the Quimby Act.

4.16.2.4 *Countywide Trails Master Plan*

As described in Section 4.2 *Transportation*, the *Santa Clara County Trails Master Plan Update* (1995) establishes a vision for a contiguous trail network that connects regional open spaces and urbanized areas of the County. The Master Plan Update identifies potential trail routes that support the recreation, transportation, health and welfare, and science education goals of the County. The Master Plan Update also includes design, use, and management guidelines for the implementation of "new" trails. The guidelines address trails and land use compatibility, environmental protection, emergency access, easements, trail design, visual screening, fire protection, signage, and maintenance.

The guidelines in the Master Plan Update generally apply to rural areas in the County. To provide a common framework for the various jurisdictions and private developers who design and manage trails in the urban areas of the County, the *Uniform Interjurisdictional Trail Design, Use, and Management Guidelines* were prepared by the Santa Clara County Interjurisdictional Trails Committee in 1999. The Master Plan Update identifies the Guadalupe River Trail as a major regional trail route.

4.16.2.5 *City of San José Policies*

City of San José Greenprint 2009 Update

In December 2009, the City Council adopted the *City of San José Greenprint 2009 Update*, which is the City's 20-year strategic plan for parks, recreational facilities, and programs. As part of the Greenprint and Green Vision, the City has identified two goals related to the trail network: 1) complete 100 miles of interconnected trails by 2022, and 2) complete 130 miles of the network by 2035.

The Greenprint identifies the Central/Downtown Planning Area as having the greatest parkland deficit, with a projected need for roughly 300 additional acres of neighborhood/community-serving parkland to meet the City's service objective by 2020.[353] Given its population density, the most practical strategy for increasing recreation amenities will be the development of privately owned pocket parks, plazas, and other small scale recreation facilities; however, completion of planned park facilities such as Del Monte Park and build-out of the Guadalupe River Park Master Plan will help offset the acreage needed.[354]

According to the Greenprint, there are no areas in the Central/Downtown Planning area that are underserved by community centers, based on a three-mile radius from residential uses. Assuming a 2020 population of approximately 150,000 people, approximately 75,000 community center space would be needed in this Planning area to meet the City's objective of 500 square feet of space per 1,000 residents.

[353] Given that the 2040 General Plan allows for additional growth in Downtown compared to the 2020 General Plan, the current need exceeds the previous estimates for parkland acreage identified in the Greenprint.
[354] City of San José. *Greenprint 2009 Update for Parks, Recreation Facilities and Trails.* 2009.

Parkland Dedication Ordinance and the Park Impact Ordinance

The City of San José has adopted the Parkland Dedication Ordinance (PDO, Municipal Code Chapter 19.38) and Park Impact Ordinance (PIO, Municipal Code Chapter 14.25) requiring new residential development to either dedicate sufficient land to serve new residents, or pay fees to offset the increased costs of providing new park facilities for new development. Under the PDO and PIO, a project can satisfy half of its total parkland obligation by providing private recreational facilities on-site. For projects over 50 units, it is the City's decision as to whether the project will dedicate land for a new public park site or accept a fee in-lieu of land dedication. Affordable housing including low, very-low, and extremely-low income units are subject to the PDO and PIO at a rate of 50 percent of applicable parkland obligation. The acreage of parkland required is based on the minimum acreage dedication formula outlined in the PDO.

Envision San José 2040 General Plan

Various policies in the City's General Plan have been adopted for the purpose of reducing or avoiding impacts associated with public facilities and services, as listed in the following table.

Table 4.16-4:
General Plan Policies: Public Facilities and Services

Education	
Policy ES-1.9	Provide all pertinent information on General Plan amendments, rezonings and other development proposals to all affected school districts in a timely manner.
Policy ES-1.15	Integrate school construction and/or renovation plans into the Village planning process.
Policy ES-1.16	Continue to work with public and private schools through programs such as the Street Smarts School Safety Education Program to improve pedestrian and bicycle safety and encourage walking and biking to and from school.
Libraries	
Policy ES-2.2	Construct and maintain architecturally attractive, durable, resource-efficient, and environmentally healthful library facilities to minimize operating costs, foster learning, and express in built form the significant civic functions and spaces that libraries provide for the San José community. Library design should anticipate and build in flexibility to accommodate evolving community needs and evolving methods for providing the community with access to information sources. Provide at least 0.59 square feet of space per capita in library facilities.
Policy ES-2.12	Maintain City programs that encourage civic leadership in green building standards for library facilities.
Action ES-2.13	Identify preferred locations and acquire sites for library facilities in Neighborhood Business Districts, Urban Village Centers, and other commercial areas in San José.

Law Enforcement and Fire Protection	
Policy ES-3.1	Provide rapid and timely Level of Service response time to all emergencies: a. For police protection, achieve a response time of six minutes or less for 60 percent of all Priority 1 calls, and of eleven minutes or less for 60 percent of all Priority 2 calls. b. For fire protection, achieve a total response time (reflex) of eight minutes and a total travel time of four minutes for 80 percent of emergency incidents. c. Enhance service delivery through the adoption and effective use of innovative, emerging techniques, technologies and operating models. d. Measure service delivery to identify the degree to which services are meeting the needs of San José's community. e. Ensure that development of police and fire service facilities and delivery of services keeps pace with development and growth in the city.
Policy ES-3.3	Locate police and fire service facilities so that essential services can most efficiently be provided and level of service goals met. Ensure that the development of police and fire facilities and delivery of services keeps pace with development and growth of the city.
Policy ES-3.4	Construct and maintain architecturally attractive, durable, resource-efficient, environmentally sustainable and healthful police and fire facilities to minimize operating costs, foster community engagement, and express the significant civic functions that these facilities provide for the San José community in their built form. Maintain City programs that encourage civic leadership in green building standards for all municipal facilities.
Policy ES-3.5	Co-locate public safety facilities with other public or private uses to promote efficient use of space and provision of police and fire protection services within dense, urban portions of the city.
Policy ES-3.6	Work with local, State, and Federal public safety agencies to promote regional cooperation in the delivery of services. Maintain mutual aid agreements with surrounding jurisdictions for emergency response.
Policy ES-3.8	Use the Land Use/Transportation Diagram to promote a mix of land uses that increase visibility, activity and access throughout the day and to separate land uses that foster unsafe conditions.
Policy ES-3.9	Implement urban design techniques that promote public and property safety in new development through safe, durable construction and publicly-visible and accessible spaces.
Policy ES-3.10	Incorporate universal design measures in new construction, and retrofit existing development to include design measures and equipment that support public safety for people with diverse abilities and needs. Work in partnership with appropriate agencies to incorporate technology in public and private development to increase public and personal safety.

Policy ES-3.11	Ensure that adequate water supplies are available for fire-suppression throughout the City. Require development to construct and include all fire suppression infrastructure and equipment needed for their projects.
Policy ES-3.13	Maintain emergency traffic preemption controls for traffic signals.
Policy ES-3.14	Encourage property maintenance and pursue appropriate code enforcement to reduce blight, crime, fire hazards or other unsafe conditions associated with under-maintained and under-utilized properties.
Policy ES-3.15	Apply demand management principles to control hazards through enforcement of fire and life safety codes, ordinances, permits and field inspections.
Policy ES-3.18	Maintain a program consistent with requirements of State law to inspect buildings not under authority of the Office of the State Fire Marshall.
Policy ES-3.19	Remove excessive/overgrown vegetation (e.g., trees, shrubs, weeds) and rubbish from City-owned property to prevent and minimize fire risks to surrounding properties.
Policy ES-3.20	Require private property owners to remove excessive/overgrown vegetation (e.g., trees, shrubs, weeds) and rubbish to the satisfaction of the Fire Chief to prevent and minimize fire risks to surrounding properties.
Action ES-3.21	Create long-range funding and deployment strategies for expanding and maintaining police and fire facilities and operations to address service delivery demands from new population growth.
Action ES-3.22	Maintain the City's Fire Department Strategic Plan as a tool to achieve General Plan Level of Service and other related goals and policies. Base fire station location planning on a four-minute travel radius.
Action ES-3.23	Engage public safety personnel in the land use entitlement process for new development projects.
Action ES-3.26	Evaluate potential strategies for the use of police substation type facilities, including opportunities to locate police facilities within new mixed-use development projects, to support law enforcement activities from a distributed network of facilities located within Villages or other new growth areas.
Parks, Trails, Open Space, and Recreation	
Policy PR-1.1	Provide 3.5 acres per 1,000 population of neighborhood/community serving parkland through a combination of 1.5 acres of public park and 2.0 acres of recreational school grounds open to the public per 1,000 San José residents.
Policy PR-1.2	Provide 7.5 acres per 1,000 population of citywide/regional park and open space lands through a combination of facilities provided by the City of San José and other public land agencies.
Policy PR-1.3	Provide 500 square feet per 1,000 population of community center space.

Policy PR-1.9	As Village and Corridor areas redevelop, incorporate urban open space and parkland recreation areas through a combination of high-quality, publicly accessible outdoor spaces provided as part of new development projects; privately, or in limited instances publicly, owned and maintained pocket parks; neighborhood parks where possible; as well as through access to trails and other park and recreation amenities.
Action PR-1.12	Regularly update and utilize San José's Parkland Dedication Ordinance/Parkland Impact Ordinance (PDO/PIO) to implement quality facilities.
Action PR-1.13	Maintain and periodically update a strategic plan (the *Greenprint*) establishing criteria and standards for the provision of parks and recreation services.
Action PR-1.15	Develop community sports parks to serve existing and future residents, workers, and visitors in San José.
Policy PR-2.4	To ensure that residents of a new project and existing residents in the area benefit from new amenities, spend Park Dedication Ordinance (PDO) and Park Impact Ordinance (PIO) fees for neighborhood serving elements (such as playgrounds/ tot-lots, basketball courts, etc.) within a 3/4 mile radius of the project site that generates the funds.
Policy PR-2.5	Spend, as appropriate, PDO/PIO fees for community serving elements (such as soccer fields, dog parks, sport fields, community gardens, community centers, etc.) within a 3-mile radius of the residential development that generates the PDO/PIO funds.
Policy PR-2.6	Locate all new residential developments over 200 units in size within 1/3 of a mile walking distance of an existing or new park, trail, open space or recreational school grounds open to the public after normal school hours or include one or more of these elements in its project design.
Policy PR-3.2	Provide access to an existing or future neighborhood park, a community park, recreational school grounds, a regional park, open space lands, and/or a major City trail within a 1/3 mile radius of all San José residents by either acquiring lands within 1/3 mile or providing safe connections to existing recreation facilities outside of the 1/3 mile radius. This is consistent with the United Nation's Urban Environmental Accords, as adopted by the City for recreation open space.
Policy PR-6.2	Develop trails, parks and recreation facilities in an environmentally sensitive and fiscally sustainable manner.
Policy PR-6.5	Design and maintain park and recreation facilities to minimize water, energy and chemical (e.g., pesticides and fertilizer) use. Incorporate native and/or drought-resistant vegetation and ground cover where appropriate.
Action PR-6.9	Obtain applicable Leadership in Energy and Environmental Design (LEED) Certification (or its equivalent) for new and existing parks and recreation facilities, as dictated by applicable City policies.

Policy PR-7.2	Condition land development and/or purchase property along designated Trails and Pathways Corridors in order to provide sufficient trail right-of-way and to ensure that new development adjacent to the trail and pathways corridors does not compromise safe trail access nor detract from the scenic and aesthetic qualities of the corridor. Locate trail right-of-ways consistent with the provisions of the City's Riparian Corridor Policy Study and any adopted Santa Clara Valley Habitat Conservation Plan/Natural Communities Conservation Plan (HCP/NCCP).
Policy PR-8.5	Encourage all developers to install and maintain trails when new development occurs adjacent to a designated trail location. Use the City's Parkland Dedication Ordinance and Park Impact Ordinance to have residential developers build trails when new residential development occurs adjacent to a designated trail location, consistent with other parkland priorities. Encourage developers or property owners to enter into formal agreements with the City to maintain trails adjacent to their properties.
Policy PR-8.7	Actively collaborate with school districts, utilities, and other public agencies to provide for appropriate recreation uses of their respective properties and rights-of-ways. Consideration should be given to cooperative efforts between these entities and the City to develop parks, pedestrian and bicycle trails, sports fields and recreation facilities.
Action PR-8.19	Pursue joint use projects with schools and colleges, Santa Clara Valley Water District, other public agencies, and private foundations. Whenever feasible, obtain permanent joint-use agreements when partnering with other organizations or agencies in providing parks or recreation facilities in order to ensure the amenities' availability in perpetuity.

4.16.3 Public Facilities and Services Impacts

4.16.3.1 *Thresholds of Significance*

Unlike utility services, public services are provided to the community as a whole, usually from a central location or from a defined set of nodes. The resources base for delivery of the services, including the physical service delivery mechanisms, is financed on a community-wide basis, usually from a unified or integrated financial system. The service delivery can be provided by a city, county, service, or other special district. Usually, new development will create an incremental increase in the demand for these services. The amount of the demand will vary widely, depending on both the nature of the development (residential vs. industrial, for instance) and the type of services, as well as on the specific characteristics of the development (such as senior housing vs. family housing).

The impact of a particular project on public services and facilities is generally a fiscal impact. By increasing the demand for a type of service, a project could cause an eventual increase in the cost of providing the service (more personnel hours to patrol an area, additional fire equipment needed to service a tall building, etc.). CEQA requires analysis of fiscal impacts to the extent that increased demand triggers the need for a new facility (such as a school or fire station), since the new facility would have physical effects on the environment.

For the purposes of this PEIR, a public facilities and services impact is significant if implementation of the proposed DSAP would:

- Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated; or
- Result in substantial adverse physical impacts from the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

  – Fire protection;
  – Police protection;
  – Schools;
  – Parks; or
  – Other public facilities.

The applicable service level objectives, as described in the General Plan policies listed above, include:

- **Fire Protection:** a maximum travel time performance standard of four minutes and a total reflex time of eight minutes for first engine response for 80 percent of emergency incidents

- **Police Protection:** response time goal of six minutes or less for 60 percent of all Priority 1 calls and 11 minutes or less for 60 percent of all Priority 2 calls[355]

- **Parks and Recreation:**
  – 3.5 acres of neighborhood/community serving parkland per 1,000 residents, of which a minimum is 1.5 acres of City-owned parkland and up to two acres of recreational school grounds
  – 7.5 acres of citywide/regional parkland per 1,000 residents

- **Community Centers:** 500 square feet of community center space per 1,000 residents

- **Libraries:** 0.59 square feet of library space per capita

It should be noted that the Envision PEIR determined that planned growth in the city would not result in a significant impact to any public services.

4.16.3.2 *Fire Protection*

According to the Envision PEIR, development allowed under the General Plan is not anticipated to require the construction of new fire stations, other than those currently planned. The expansion of existing facilities may be required to accommodate additional equipment and employees. In the event expanded or additional facilities are determined to be necessary, it is assumed that adherence to General Plan policies such as ES-3.4 would reduce the physical impacts from development of fire

[355] Priority 1 calls involve immediate danger to life or property, while Priority 2 calls involve non-emergency situations.

department facilities to a less than significant level, although supplemental environmental review would be required. Implementation of General Plan policies and actions would ensure adequate long-term provision of services throughout the city. Therefore, planned growth would not result in a significant impact related to fire protection.

Future development under the DSAP would contribute to increased demand for fire protection services. New buildings, which would range in height from three to 12 stories, would be constructed to current fire and building code standards, including adequate emergency vehicle access and features that would reduce potential fire hazards. According to current SJFD protocols, fires in structures that are four stories or taller in height will require responses from more than one fire station. Therefore, additional staffing and equipment may be needed to serve the proposed high density development in the Plan area. This will be determined at the project level.

The increases in roadway congestion resulting from the DSAP and other development in Downtown could increase response times for emergency vehicles (refer to Section 4.2 *Transportation*). Although the SJFD is not currently meeting response time objectives, it is anticipated that the planned construction and/or relocation of stations as described in the General Plan, will improve response times. Furthermore, traffic signal preemption will continue to be implemented as necessary to provide adequate response times within and surrounding the Plan area (GP Policy ES-3.13).

The existing SJFD Training Facility, located at Park Avenue and Montgomery Street, is the only site that provides training for the SJFD. The approximately five-acre facility includes classrooms, a driving course, and a seven-story live fire training tower. The DSAP includes redevelopment of this property with a new community park, consistent with its designation on the 2040 General Plan and 1992 Midtown Specific Plan. The City has not identified a site to relocate the SJFD training facility at this time, although it will be required to determine a suitable location and replace all current functions. Once a suitable site is identified, additional environmental review will be required for the construction of a new training facility, concurrent with or prior to the project-level review of the community park.

The proposed DSAP would contribute to increased demand for fire protection services in San José, but planned growth is not anticipated to result in the need for construction of fire stations in excess of those currently planned. Implementation of General Plan policies would help ensure that the SJFD meets and maintains the City's response time objectives over the long-term. This conclusion is consistent with the analysis in the Envision PEIR. **[Less than Significant Impact]**

4.16.3.3 *Police Protection*

The Envision PEIR concluded that population growth under the General Plan would increase demand for police protection services, including additional officers and equipment. Police services would continue to be dispatched from police headquarters and no additional stand-alone police facilities are anticipated; however, expansion of existing facilities on developed sites may be required. The police substation in Edenvale may also be re-opened if necessary. The SJPD may also increase the number of community policing centers located in existing commercial buildings or incorporated into new private development within Growth Areas. In the event additional or expanded facilities are determined to be necessary, it is assumed that implementation of General Plan policies would reduce

the physical impacts from development of police facilities to a less than significant level, although supplemental environmental review would be required. Implementation of General Plan policies and actions would also help the SJPD to meet and maintain the City's response time objectives over the long-term. Therefore, planned growth would not result in a significant impact to police protection.

Development under the DSAP would contribute to increased demand for police protection services in the city. At the time development is proposed, the City will engage public safety personnel and evaluate potential strategies for incorporating police substation facilities to support law enforcement in the Plan area, in accordance with GP Actions ES-3.23 and ES-3.26. Additional staffing and equipment needs to serve the project area will be evaluated at that time. Construction of new police facilities would require supplemental environmental review. General Plan policies would provide program-level mitigation for new development in the Plan area. This conclusion is consistent with the analysis in the Envision PEIR. **[Less than Significant Impact]**

4.16.3.4 *Schools*

As described in the Envision PEIR, new development allowed under the General Plan would increase the number of students attending local schools. Implementation of the proposed General Plan policies and programs would ensure that additional school facilities are sited to serve new residential development. For example, the City will provide all pertinent information on development proposals to affected school districts and integrate plans for school construction and/or renovation into the planning process for Growth Areas such as the DSAP (Policies ES-1.9 and ES-1.15).

Planned growth under the General Plan is estimated to generate an additional 11,079 students in the SJUSD, which would require 11 new schools (seven elementary, two middle, and two high schools).[356] As shown in Table 4.16-5, future residential development under the DSAP would generate 688 of the additional students (roughly six percent of the total increase).[357] Based on 2010-11 school year capacity of the six schools closest to the Plan area (Table 4.16-2 above), existing schools may not have capacity to accommodate the projected increase in students. Other schools in the SJUSD may be able to absorb some of the new student population, although this would increase travel distances from residential uses to schools and could require increased busing.

Table 4.16-5:
Projected School Capacities

School Type	Existing Capacity	DSAP Demand	Surplus/ Deficit
Elementary	162	344	-182
Middle	168	184	-16
High	-32	160	-192
Total	**298**	**688**	**-390**

[356] Although the addition of this many students would exceed available capacity at operating schools, the SJUSD has school facilities that are currently leased or closed that may be reopened to serve a portion of the projected increase in enrollment.
[357] This estimate is based on the SJUSD's student generation rates for multi-family (condominium) uses: 0.133 students in grades K-5 per dwelling unit, 0.071 (grades 6-8), and 0.062 (grades 9-12). **Source:** Envision PEIR.

Although the DSAP would contribute to increased demand for school facilities in the SJUSD, the project would not result in a new or more significant impact than identified in the Envision PEIR. Pursuant to Sections 65995 to 65998 of the California Government Code and City of requirements, developers of new residential uses would be required to pay a school impact fee to the school district to offset the increased demands on school facilities caused by the development.[358] The SJUSD would be responsible for implementing specific mitigation methods, which may include the expansion of existing facilities, construction of new schools, alterations to attendance boundaries, and/or modifications of class schedules.

The Land Use Diagram proposed by DSAP does not specifically identify potential sites for schools or other public facilities, although schools would be generally compatible in the areas planned for mixed-use residential uses. The maximum development levels proposed by the DSAP assumes redevelopment of the Santa Clara County Sunol Community School property; however, the land uses proposed by the DSAP for the Dupont/McEvoy subarea would be compatible with the existing school, if it were to remain.

Potential constraints to school development in the Plan area include noise, transportation safety, and proximity to the San José Airport, freeways, railroads, high transmission power lines, and hazardous materials users. The siting of new public schools at any location within the SJUSD boundaries would be subject to various state regulations, as described in Section 4.16.2.2 above. It is assumed that full consistency with these regulations would reduce and avoid environmental impacts of new schools that would be required to serve residential development under the DSAP; however, the school district would be the lead agency responsible for completing environmental review. This conclusion is consistent with the analysis in the Envision PEIR. **[Less than Significant Impact]**

4.16.3.5 *Parks and Recreation*

Based on the City's service level objectives for parkland and the goal to provide public parkland or recreational open space within 1/3 mile of all residents, the need for new or expanded facilities to serve new residential development in order to maintain performance standards and avoid deterioration of existing facilities would depend on the size of existing facilities, their proximity to the residential development, and their current usage.

According to the Envision PEIR, planned growth allowed under the General Plan would result in the need for an additional 1,327 acres of neighborhood/community-serving parkland and additional 72,000 square feet of community center space to meet service level objectives.[359, 360] When including non-City owned regional parklands and open space areas, there will continue to be sufficient citywide/regional parkland to meet service level objectives. Build-out of the planned trail network in San José in accordance with General Plan policies would meet the City's goals for trails. Implementation of the PDO/PIO and General Plan policies would ensure that adequate parkland and

[358] This is consistent with the standard measure in the *Morrison Park Residential Project Recirculated Initial Study* (City of San José, March 2008).
[359] The additional parkland could include up to 1,293 acres of recreational school grounds.
[360] Based on the size of the Roosevelt Community Center (30,000 square feet), this would equate to two or three new community centers in the city.

recreational facilities are provided to meet increased demand and avoid exacerbation of existing deficiencies.

Based on a residential projected population in the Plan area of 5,450 people and the City's service level objectives, new residential development under the DSAP would generate a demand for 19 acres of neighborhood-serving parkland and 2,725 square feet of community center space. New residents would have sufficient access to the Roosevelt Community Center and other City-owned community spaces, based on the City's three-mile radius objective. However, additional space may be needed in the long-term to serve projected growth and maintain the level of service standard in the Planning area.

As listed in Table 4.16-3 above, there are roughly 170 acres of parkland within a half mile of the Plan area under existing conditions. The Plan area would be well-served by regional park amenities due to the proximity to the Guadalupe River Park and Gardens. Given that the Central/Downtown Planning area is currently underserved in terms of neighborhood/community-serving parkland, population growth has the potential to exacerbate deficiencies, without the construction of additional facilities. Within the DSAP boundaries, the Dupont/McEvoy subarea and portions of the Park/San Carlos subarea are particularly underserved in terms of walking distance to parkland, as described in Section 4.16.1.4 above. There is also a lack of sports fields and courts in the vicinity. Other than the tennis courts at Arena Greens, the closest public facility with these facilities is Columbus Park, located over 1.5 miles from the Southern Zone where most new residential development would occur.[361]

Construction of the planned parks and trails would help offset the current and future demand for recreational facilities in the Plan area and surrounding neighborhoods. As described above, planned facilities in the vicinity include Del Monte Park, Reach 5 of the Los Gatos Creek Trail, build-out of the Guadalupe River Park and Gardens Master Plan, and a community park on the SJFD Training Facility site in the Plan area.

A community park is proposed by the DSAP as part of the open space network strategy. According to the DSAP, the new community park at the current site of the San José Fire Department Training Facility would include a range of active and passive recreation activities such as playgrounds, picnic areas, multi-use lawns, and/or sports fields/courts.[362] The new community park will also incorporate a portion of the planned Los Gatos Creek Trail (Reach 5). The extension of Reach 5 from San Carlos Street to the existing Guadalupe River Trail will complete a key link in the City's trail network and enhance access to parks, recreation, and open space, including the regional- and community-serving elements in the Guadalupe River Park north of Coleman Avenue.

With completion of the planned recreational facilities, all residentially-designated areas would be within 1/3 mile from a public park, trail, or open space, including the Dupont/McEvoy and Park/San Carlos subareas that are currently underserved (GP Policy PR-2.6). The new community park could improve access to sports fields/courts, if ultimately proposed. It should be noted, however, that the

[361] Columbus Park is located approximately 1.5 miles (by trail) from the Southern Zone where most new residential development would occur.

The new community park may be expanded to eight acres in the future if the City is able to acquire the properties at the northwest corner of Montgomery Street and San Carlos Street, across Los Gatos Creek from the Training Facility.

HSR alignment is currently planned to pass over the southwestern portion of the park site and the presence of elevated tracks 60 feet above the ground surface could constrain the uses and design of the new community park (precluding baseball/softball fields, for example).[363]

In addition to the planned facilities, the DSAP's Design Guidelines for the public open space network propose the construction of neighborhoods squares and linear parks ("green fingers"). The squares would serve as outdoor spaces at new or existing intersections. The green fingers are envisioned as a 30- to 40-foot wide landscaped zone with a pathway for pedestrians and bicyclists. The green fingers would be constructed along several corridors in both residential and commercial zones of the Plan area. Both types of open spaces could include passive and active recreational elements such as playgrounds, picnic areas, multi-use lawns, and fitness circuits. It is anticipated that public open space improvements would be constructed as part of either private development or future transportation/infrastructure projects.

Furthermore, new residential development will be required to incorporate outdoor spaces and recreational amenities, in accordance with GP Policy PR-1.9, the City's Residential Design Guidelines, and the DSAP Design Guidelines. Outdoor spaces incorporated into new housing development would supplement the public open space network and add to neighborhood-serving amenities in the Plan area.

To further offset demand for parkland, community centers, and other recreational facilities, future residential developers will be subject to the City's PDO/PIO. Consistent with the Strategy 2000 EIR, development under the DSAP could satisfy their parkland obligation through a combination of several means, including: 1) dedication of land; 2) payment of PDO/PIO fees, to be based on the number of dwelling units; 3) credit for qualifying private recreational amenities; and 4) improvement of parkland or recreational facilities. The PDO/PIO fees generated by new residential development would be used to provide neighborhood-serving facilities within a 0.75 mile radius of the development site and/or community-serving facilities within a three-mile radius (GP Policies PR-2.4 and PR-2.5). The PDO/PIO fees could be used to fund the design and construction of the future park at the Fire Training Facility site.

The combination of existing, planned, and proposed recreational facilities within and adjacent to the Plan area would meet community needs. Planned development under the DSAP would not increase the use of existing parks or other recreational facilities such that substantial physical deterioration would occur or be accelerated due to overuse.

Construction-related Effects of New Facilities

The new community park will be subject to supplemental project-level review at the time a final design or master plan is developed. In accordance with GP Policies PR-6.2, PR-6.5, and PR-6.9, the park would be designed, constructed, and maintained in an environmentally sensitive and fiscally sustainable manner, through minimizing use of water, energy, and chemicals, incorporating native and/or drought-resistant vegetation where appropriate, and obtaining LEED certification (or an equivalent).

[363] A baseball field for adult use is about three acres in size.

Other than the future community park, proposed Del Monte Park, and Los Gatos Creek Trail extension, the specific locations of new parkland, community centers, and other recreational facilities that will be required to serve residential development are not yet known. The siting, design, and construction of new facilities would require supplemental environmental review on a case-by-case basis, either independently or as part of a larger development or transportation project. Construction of new facilities and/or expansion of existing facilities in a manner that is fully consistent with General Plan policies and existing regulations would be expected to reduce any environmental impacts to a less than significant level.

Although development allowed under the DSAP would contribute to demand for parkland and recreational facilities in the Central/Downtown Planning area, the proposed project would not result in a new or more significant impact than previously identified in the Envision PEIR or Strategy 2000 EIR. It is anticipated that construction or expansion of parkland and recreational facilities to accommodate increased demand would not result in significant environmental effects with implementation of General Plan policies and existing regulations. This conclusion is consistent with the analysis in the Envision PEIR. **[Less than Significant Impact]**

4.16.3.6 *Libraries*

Based on the City's 2010 population of 1,023,083, the City currently has approximately 0.8 square feet of library space per capita. For the anticipated population under the 2040 General Plan, existing and planned facilities would provide approximately 0.68 square feet of library space, which would meet the service level objective of providing at least 0.59 square feet of library space per capita. Therefore, the Envision PEIR concluded that planned growth would not result in the need for new or expanded library facilities in order to maintain acceptable service level objectives. In the event additional facilities are determined to be necessary, it is assumed that implementation of General Plan policies would reduce the physical impacts from development of library facilities to a less than significant level, although supplemental environmental review would be required.

Future residential development under the DSAP would contribute to citywide demand for library services. Given that the existing and planned library facilities would adequately serve planned growth in the city, the proposed project would not result in a new or more significant impact. This conclusion is consistent with the analysis in the Envision PEIR. **[Less than Significant Impact]**

4.16.4 Cumulative Impacts

As indicated in the discussions above, impacts to public services resulting from an individual project such as the DSAP are cumulative by nature in that they depend on the capacity of the service provider to provide adequate service to the existing *and* future population. Public services in the project area are provided by the City of San José, with the exception of schools, which are operated by the SJUSD.

Performance objectives for police protection are generally citywide, given the flexibility of the SJPD to redistribute patrolling officers to maintain response times instead of constructing building new facilities. However, performance objectives for fire protection and library services are generally defined for subareas. The service area for neighborhood/community-serving recreational facilities

(including parkland, community centers, and trails) generally includes a radius of 1/3 to three miles surrounding new residential uses, while regional facilities serve the entire city. The cumulative condition for school impacts includes residential uses within the SJUSD boundaries, particularly the attendance areas of the nearest schools. Therefore, the proposed project has the most potential to contribute to public services impacts within and west of Downtown and to a lesser extent the city as a whole.

The Growth Areas with the most potential to combine with the DSAP to result in cumulative effects include the remaining portions of the Downtown Core, Midtown Specific Plan, and The Alameda Village (VT4), as well as CR31, VR9, CR20, and Martha Gardens Specific Plan. With a combined growth capacity of 19,609 new dwelling units, the 2,588 dwelling units proposed by the DSAP would comprise roughly 13 percent of the planned residential capacity in these Growth Areas. Based on the SJUSD's current student generation rates, the combined growth could result in approximately 5,200 new students at the SJUSD schools closest to the Plan area.

Planned residential and employment development in these Growth Areas was previously evaluated in the Envision PEIR. As described above, the Envision PEIR determined that planned growth in the city would not result in a significant impact to any public service, including schools. Although new development would increase the need for public services, implementation of General Plan policies would ensure services and facilities are provided at adequate levels. Construction of new facilities or expansion of existing facilities, if required, would be subject to supplemental environmental review, although this work is not expected to result in significant environmental effects with implementation of existing regulations described in Section 4.16.2 above and construction best management practices (BMPs).

The Strategy 2000 EIR also concluded that planned growth in the Downtown Core would not result in a significant impact to any public service, with implementation of General Plan policies. Although future development under the DSAP, particularly new housing, would contribute to demand for public services, the project would not increase the need for new facilities beyond that anticipated in the Envision PEIR or Strategy 2000. Therefore, when combined with planned growth in Downtown and the city as a whole, the DSAP would not result in a new cumulative impact.

The remainder of this discussion focuses on the potential for cumulative impacts resulting from planned transportation projects and the proposed Major League Baseball Stadium. Given that these projects do not include housing, they would not contribute to demand for schools, libraries, or recreation, although they could affect the availability or use of parkland. As previously described, the HSR project could limit the types of uses and design of the future community park in the Plan area, based on the currently planned alignment of the elevated tracks. Conversely, the Coleman Avenue/Autumn Street Improvement Project includes the expansion of open space and parkland that would serve future development in the Plan area. The planned Del Monte Park and Los Gatos Creek Trail extension would further add to the supply of recreational facilities.

Emergency Services

The HSR, BART, and LRT projects could incrementally increase demand for police and fire protection services in the Plan area due to potential for security and safety incidents on-board trains,

along the alignments, and at the new stations.[364] To ensure the provision of emergency services at the new BART facilities, the BART Police Department will expand its force, coordinate with the City of San José police and fire departments through a mutual aid agreement, and continue to implement its current System Safety Plan and Emergency Response Plan.[365] The future LRT station at San Carlos Street would be patrolled by the VTA police and security force.[366] The BART, LRT, and HSR stations will be designed to current building and fire codes and will include appropriate safety, security, and surveillance features to minimize potential for criminal activity and ensure adequate emergency access.

The baseball stadium would also increase demand for emergency services in the Plan area. The Ballpark EIR concluded that operation of the stadium would not result in a significant impact to police or fire protection for the following reasons:

- Based on current practices at the San José Arena, the stadium operator will prepare a Ballpark Event Operations Plan to establish procedures for event day security and will coordinate with the SJPD on appropriate staffing needs.
- The stadium will be designed to include facilities for police/fire department operations and to provide emergency vehicle access. The building plans will be submitted to the SJFD for review and approval.
- The City will prepare an emergency preparedness plan to address the evacuation of attendees from the stadium and Downtown area in the event of a natural or human-made disaster.

The stadium could substantially increase traffic congestion in the Plan area on event days, as described in Section 4.2 *Transportation*. Operation of the HSR could also increase vehicle traffic in the area, depending on the availability of parking for train users and the provision of other transit modes. Traffic conditions that limit travel speeds could adversely affect SJPD and SJFD response time performance.

Conversely, the BART project, future LRT station, BRT and bus improvements, and the Los Gatos Creek Trail extension are intended to reduce vehicle trips. The extension of Autumn Street and conversion of streets from one-way to two-way would improve connectivity in the area and decrease peak period traffic congestion.[367] By supporting more efficient circulation of the roadway network, these improvements would likely benefit emergency vehicle response times. The continued use of traffic signal preemption and reallocation of officers and resources as needed in accordance with General Plan policies would ensure adequate response times within and surrounding the Plan area.

For these reasons, the combined effects of the baseball stadium, transportation projects, planned land use development, and the DSAP would not result in a significant cumulative impact on emergency services such that additional facilities beyond those currently planned would be required to maintain service level objectives. **[Less than Significant Cumulative Impact]**

[364] The environmental review documents prepared for the BART and LRT projects did not identify any significant impacts to public services and facilities.
[365] BART police officers have the same powers of arrest as city police officers and county sheriff's deputies. The BART police have an average response time to emergencies of four minutes, and an average response time of eight minutes to non-emergency calls. **Source:** CHSRA and FRA. *Silicon Valley Rapid Transit Corridor, BART Extension to Milpitas, San Jose and Santa Clara, Final EIS.* 2010.
[366] VTA and FTA. *Vasona Corridor Light Rail Transit Project EIR/EIS.* 1999.
[367] City of San José. *Coleman Avenue/Autumn Street Improvement Project Final Integrated Focused EIR.* 2008.

4.16.5 Conclusion

The proposed DSAP would contribute to increased demand for fire and police protection services, libraries, school, parkland, and recreational facilties in San José, but planned growth is not anticipated to result in the need for construction of facilities in excess of those currently planned. Implementation of General Plan policies would help ensure that the project meets City response time goals and acceptable service level objectives. General Plan policies and existing regulations would provide program-level mitigation for new development in the Plan area. This conclusion is consistent with the analysis in the Envision PEIR. **[Less than Significant Impact]**

The proposed project would not contribute to any previously-identified significant unavoidable impact or result in a new cumulative impact to public services and facilities. **[Less than Significant Cumulative Impact]**

SECTION 5.0 GROWTH INDUCING IMPACTS

The CEQA Guidelines require that an EIR discuss the ways in which a proposed project could directly or indirectly foster economic or population growth in a surrounding area. Per CEQA Guidelines Section 15126.2(d), it must not be assumed that growth in an area is necessarily beneficial, detrimental, or of little significance to the environment. Negative impacts resulting from induced growth occur only where the projected growth would cause significant adverse environmental effects. To evaluate growth inducement under CEQA, it is necessary to distinguish between the growth (and the impacts from that growth) that is part of the project itself and "induced" growth which may be caused by the project but is not part of the project. This EIR explicitly identifies all of the impacts that result from the project itself and identifies mitigation for significant impacts from the proposed project.

As described in Section 4.15 *Population and Housing*, the Envision PEIR concluded that the potential for ***direct*** growth inducing impacts from the 2040 General Plan is minimal because growth planned and proposed as part of the will consist entirely of development within the City's existing Urban Growth Boundary and Urban Service Area. Like the General Plan, the DSAP does not encourage or serve development beyond what is required to serve the planned growth capacity. For these reasons, the potential for the proposed project to results in direct growth inducing impacts is minimal.

In terms of ***indirect*** effects, the Envision PEIR determined that development of employment uses under the 2040 General Plan would outpace housing development within the City, making the San José "jobs-rich". An indirect effect of the new jobs/housing imbalance would be inducing population growth elsewhere in the region, since new workers will need to commute from other jurisdictions where housing is available. Traffic and the environmental effects of traffic, such as air pollution, noise, and greenhouse gases resulting from induced population growth in other jurisdictions will result in significant environmental impacts. While the City proposes to implement measures to reduce VMT within San José, there is no assurance that these measures would reduce environmental impacts to a less than significant level, particularly at a regional level. Therefore, the impact related to the jobs/housing balance and induced growth was identified as significant and unavoidable.

If other jurisdictions within the County do not provide a greater share of the region's housing need, the new concentration of jobs within San José would exacerbate the existing regional imbalance of jobs to employed workers. The City cannot predict exactly where the housing growth will occur. New housing growth could result in a range of environmental effects depending on its location (e.g., impacts to biological resources, air quality, cultural resources or construction of new facilities that cause significant environmental effects). Conversely, the 2040 General Plan could reduce potential impacts from employment growth in other jurisdictions, because it includes more employment growth capacity than the demand projected by ABAG for San José.

SECTION 6.0 SIGNIFICANT UNAVOIDABLE IMPACTS

This EIR has identified the following significant unavoidable environmental impacts that would occur as a result of the DSAP. If the project is approved, a Statement of Overriding Considerations would be required for the following significant unavoidable impacts:

Impact TRAN-1: When compared to existing conditions, build-out of the DSAP would result in a significant impact on 15 directional mixed flow freeway segments and four directional HOV lane freeway segments during at least one peak hour when compared to the existing condition. **[Significant Unavoidable Impact]**

Impact TRAN-2: Build-out of the DSAP would result in a significant impact to the intersections of The Alameda/Naglee Avenue and Park Avenue/Naglee Avenue under Strategy 2000 plus Project Build-out conditions. The project proposes to add these two intersections to the List of Protected Intersections. **[Significant Unavoidable Impact]**

Impact TRAN-3: The proposed project would result in a significant impact on mixed flow lanes of one additional freeway segment under Strategy 2000 plus Project Build-out conditions. Although the DSAP is intended to reduce vehicle travel over the long-term, particularly at a citywide and regional level, it is not possible to know if the contribution to freeway impacts would be reduced to a less than significant level. **[Significant Unavoidable Impact]**

Impact TRAN-4: Build-out of the DSAP would make a substantial contribution to significant cumulative impacts at the intersections of Park Avenue/Naglee Avenue, The Alameda/Naglee Avenue, and Lincoln Avenue/San Carlos Street under Cumulative plus Project conditions. Because there are no feasible mitigation measures that would reduce the identified impacts to a less than significant level, these intersections would be added to the City's List of Protected Intersections and offsetting improvements will be required. **[Significant Unavoidable Cumulative Impact]**

Impact TRAN-5: The proposed project would make a substantial contribution to significant impacts on transit priority corridors. Although General Plan policies, DSAP strategies, and planned BRT improvements are intended to reduce traffic congestion and improve transit efficiency, these measures may not reduce the cumulative impact or the DSAP's contribution to a less than significant level. This conclusion is consistent with the analysis in the Envision PEIR. **[Significant Unavoidable Cumulative Impact]**

Impact NV-1: Build-out of the DSAP would result in a significant unavoidable impact at existing noise-sensitive land uses adjacent to segments of Julian Street, Park Avenue, and San Carlos Street due to substantial increases in traffic noise. Although the Envision PEIR did not identify noise increases at these specific locations, this conclusion is consistent with the analysis in the Envision PEIR,

which acknowledged that future development would result in a significant traffic noise impact at noise-sensitive uses throughout the City. **[Significant Unavoidable Impact]**

Impact AQ-1: Build-out of the DSAP would result in a net increase in ROG and NOx in the Bay area, contributing to existing violations of ozone standards. This conclusion is consistent with the analysis in the Envision PEIR and Strategy 2000 EIR. **[Significant Unavoidable Impact]**

Impact AQ-2: Although the DSAP is intended to reduce emissions of regional air pollutants over the long-term, it cannot be determined whether implementation of General Plan policies and proposed measures would reduce the project's contribution to the significant cumulative impact to a less than significant level. Therefore, build-out of the DSAP would result in a cumulatively considerable contribution to the significant impact to regional air quality identified in the Envision PEIR. **[Significant Unavoidable Cumulative Impact]**

Impact CUL-1: The DSAP would make a cumulatively considerable contribution to previously identified significant impacts to historic resources. **[Significant Unavoidable Cumulative Impact]**

Impact CUL-2: Implementation of the conceptual station expansion plan would not directly affect Diridon Station as an individual resource, but would result in a significant impact to the historic district directly through the potential removal of contributing elements and indirectly through new construction and circulation improvements that affect its setting and character. Because the station expansion design has not been finalized and the City is not the lead agency for the HSR project, it cannot be determined if the proposed measures in Section 4.5.4 will reduce the impact to a less than significant level. Therefore, the impact to the district would be considered significant and unavoidable. **[Significant Unavoidable Cumulative Impact]**

Impact BIO-1: The DSAP would make a cumulatively considerable contribution to a significant increase in nighttime light levels of the Los Gatos Creek corridor. **[Significant Unavoidable Cumulative Impact]**

Impact GHG-1: Build-out of the DSAP would make a considerable contribution to the significant unavoidable cumulative impact to global climate change identified in the Envision PEIR. **[Significant Unavoidable Cumulative Impact]**

Impact PH-1: Future development under the proposed DSAP would make a substantial contribution to the significant unavoidable impact related to the jobs/housing imbalance, as identified in the Envision PEIR. **[Significant Unavoidable Cumulative Impact]**

SECTION 7.0 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES

Section 15126.2(c) of the CEQA Guidelines requires a discussion of the extent to which a proposed project will commit nonrenewable resources to uses that future generations will be unable or unlikely to reverse. An example of such an irreversible commitment is the construction of highway improvements that would provide public access to previously inaccessible areas. A project would generally result in a significant irreversible impact if:

- Primary and secondary impacts would commit future generations to similar uses.
- The project would involve a large commitment of nonrenewable resources.
- The project would involve uses in which irreversible damage could result from any potential environmental accidents associated with the project.

The following discussions are based upon the analysis in the Envision PEIR.

7.1 CHANGES IN LAND USE THAT COMMIT FUTURE GENERATIONS

Development under the proposed DSAP would result in the intensification of underutilized properties and vacant sites within the Plan area. This development would constitute a long-term commitment to residential, commercial, industrial, parking, and other urban uses. This development is likely to exist for the next 50 to 100 years.

7.2 COMMITMENT OF RESOURCES

Development allowed under the proposed DSAP would commit nonrenewable resources to the construction and maintenance of buildings, infrastructure, and roadways. These non-renewable resources include mining resources such as sand, gravel, iron, lead, copper, and other metals, in addition to the fabrication of building materials such as steel. Implementation of the DSAP would also result in an irreversible commitment of limited, renewable resources such as lumber and water. General Plan policies associated with Waste Diversion, Waste Reduction, Infrastructure Management, and Solid Waste Materials Recovery would support the conservation of building materials.

Build-out of the DSAP also represents a long-term commitment to the consumption of fossil fuels, natural gas, and gasoline, as energy would be used for the construction, lighting, heating, and cooling of buildings, as well as for transportation associated with the new development. General Plan policies associated with Measurable Sustainability, Recycling, Energy Conservation and Renewable Energy Use, Water Conservation, and Energy Security would incrementally reduce the consumption of energy and non-renewable resources.

Implementation of the proposed DSAP would also result in an irreversible commitment of limited, renewable resources such as lumber and water. General Plan policies associated with Recycling/Zero Waste, Water Conservation, and Water Recycling would result in some savings of renewable resources.

In addition to General Plan policies, existing regulations and programs described in Sections 4.10 *Utilities and Service Systems* and 4.11 *Energy* would further reduce the commitment of resources for new development allowed under the DSAP.

7.3 IRREVERSIBLE DAMAGE FROM ENVIRONMENTAL ACCIDENTS

Irreversible changes to the physical environment could occur from accidental release of hazardous materials associated with development activities. However, compliance with federal, state and local hazardous materials and life safety regulations, as discussed in Section 4.6 *Hazards and Hazardous Materials*, are designed to minimize this risk. No other irreversible changes are expected to result from the adoption and implementation of the DSAP.

SECTION 8.0 ALTERNATIVES TO THE PROPOSED PROJECT

8.1 INTRODUCTION

CEQA requires that an EIR identify alternatives to a project as it is proposed. The CEQA Guidelines specify that the EIR should identify alternatives that "will feasibly attain most of the basic objectives of the project but will avoid or substantially lessen any of the significant effects of the project." The purpose of this section is to determine whether there are alternatives of design, scope, or location that will substantially lessen the significant impacts, even if those alternatives "impede to some degree the attainment of project objectives," or are more costly. [CEQA Guidelines Section 15126.6(b)]

In order to comply with CEQA, it is important to identify alternatives that reduce the significant impacts that are anticipated to occur if the project is implemented and to try to meet as many of the project's objectives as possible. The Guidelines emphasize a common sense approach. The alternatives should be reasonable, "foster informed decision-making and public participation," and must focus on alternatives that avoid or substantially lessen the significant impacts.

The discussion of alternatives shall include enough information to allow a meaningful evaluation and comparison with the proposed project. The CEQA Guidelines state that if an alternative would cause one or more additional impacts, compared to the proposed project, the discussion should identify the additional impact, but in less detail than the significant effects of the proposed project. The three critical factors to consider in selecting and evaluating alternatives are: (1) the significant impacts from the proposed project that could be reduced or avoided by an alternative; (2) consistency with the project's objectives; and (3) the feasibility of the alternatives available. Each of these factors is discussed further below.

8.2 SIGNIFICANT IMPACTS OF THE PROPOSED PROJECT

As mentioned above, the CEQA Guidelines advise that an alternatives discussion in an EIR should be limited to alternatives that would avoid or substantially lessen any of the significant effects of the project and would achieve most of the project objectives. As discussed in Section 6.0, *Significant Unavoidable Impacts* of this EIR, the proposed project would result in significant unavoidable impacts related to traffic (freeways, three intersections, and transit priority corridors), noise, air quality, historic resources, biological resources, climate change, and jobs/housing balance. The majority of these impacts are cumulative in nature. As discussed in the respective sections of this EIR, with implementation of General Plan policies, DSAP Design Guidelines, and other applicable regulations and standard measures, the proposed project would not result in any other significant impacts.

8.3 PROJECT OBJECTIVES

Pursuant to CEQA Guidelines Section 15124, the EIR must include a statement of objectives, including the underlying purpose of the project. The underlying purpose of the proposed project is to provide a land use plan that will guide future development in the Diridon Station Area. The specific objectives for the proposed project are listed in Section 1.4 of this DEIR and are provided below for reference:

1. Establish a land use plan and policy framework that will guide future development and redevelopment in the Diridon Station Area toward land uses that support transit ridership and economic development and create a world-class cultural destination. Ambitious job and housing growth capacity is planned for the two growth areas covering Downtown. This growth capacity is important to achieve multiple City goals, including support for regional transit systems and for the development of Downtown as a regional job center, consistent with the Envision San José 2040 General Plan and Strategy 2000.

2. Improve pedestrian, bicycle, motorized, and transit connectivity between the station site and existing adjacent commercial and residential areas.

3. Develop and implement urban design standards that promote walkable, livable, and business supportive environments within the Diridon Station Area.

4. Provide a variety of commercial and mixed use development opportunities, ranging from large-scale corporate or institutional sites to smaller infill development sites.

5. Create a highly active and lively pedestrian and bicycle friendly environment with excellent connectivity to downtown destinations and regional transit.

6. Support partner agencies in the expansion of Diridon Station to create a well-integrated center of architectural and functional significance.

7. Enhance the existing neighborhoods and add high-density residential, commercial, and mixed use development within the Diridon area to act as a catalyst for similar developments in the surrounding areas.

8. Educate and inform the public about the area planning process and Transit-Oriented Development (TOD) concepts.

8.4 FEASIBILITY OF ALTERNATIVES

CEQA, the CEQA Guidelines, and case law on the subject have found that feasibility can be based on a wide range of factors and influences. CEQA's general definition of feasibility is "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors." Among the factors that may be taken into account in considering the feasibility of an alternative are "…site suitability, economic viability, availability of infrastructure, General Plan consistency, other plans or regulatory limitations, jurisdictional boundaries…and whether the proponent can reasonably acquire, control, or otherwise have access to the alternative site…" [Section 15126.6 (f)(1)].

The alternatives analyzed in this PEIR have been developed with the goal of being at least potentially feasible, given project objectives and site constraints, while avoiding or reducing the project's identified environmental effects. The ultimate feasibility of the alternatives discussed in this EIR will be determined by the City of San José Planning Commission and/or City Council as it makes a decision concerning the proposed project, taking into account all information in the administrative record.

8.5 SELECTION OF CEQA ALTERNATIVES

Consideration of a "No Project" alternative is mandatory under CEQA. When a project is the implementation of a land use plan, the No Project Alternative is the continuation of the existing land use designations into the future [CEQA Guidelines Section 15126.6(a)(3)(A)]. The discussion of the No Project Alternative below is based on continued use of the existing General Plan land use designations for the DSAP area, as shown on the current (2040) Land Use/Transportation Diagram, assumed with available infrastructure and community services.

Various assumptions were made for the future condition to evaluate potential alternatives to the project. BART and High Speed Rail (either above- or below-ground) are anticipated to be constructed within the DSAP area. Other assumptions include the realignment of Autumn Parkway and improvements to other streets, completion of the Los Gatos Creek Master Plan, and construction of a new park at the existing fire department training yard south of Park Avenue. These projects have been identified in many plans and strategies for the area and have been taken into account during the development of project alternatives.

Prior to the preparation of the DSAP, an Alternatives Analysis Report (July 2010) was prepared to evaluate three project alternatives (A, B, and C) based on existing conditions in the area and the desired density given the proximity to rail and transit. The three alternatives were the result of numerous community workshops and meetings, given the various future development and constraints in the DSAP and surrounding area. Alternative B is the alternative with the most potential to reduce environmental impacts because it includes significantly less office/R&D square footage when compared to the proposed project. Although residential uses under this alternative are significantly greater than the proposed project, residential uses result in 30% less traffic than jobs-related land uses. For this reason, Design Alternative B was carried forward into this alternatives discussion, as described in greater detail below.

The proposed DSAP has designated most of the area north of West Santa Clara Street and east of Stockton Avenue (exclusive of the Arena and its associated parking) as Transit Employment Center. In addition to the three project alternatives, the City studied Land Use Policy Alternatives that would allow the potential for residential development on the east side of Stockton Avenue between West Santa Clara Street and Julian Street, as shown on Figure 8-2. These additional residential units were accounted for in the traffic analysis prepared for the project.

As described above, the significant unavoidable impacts resulting from the project are related to traffic, noise, air quality, cultural and biological resources, greenhouse gas emissions, and population and housing. Therefore, this analysis focuses on alternatives that would reduce or eliminate impacts related to these impacts. All of the impacts of the project were also identified in the Envision San José 2040 General Plan EIR.

8.5.1 Alternatives Considered but Rejected from Further Consideration

Given that the main objective of the project is to establish a land use plan and policy framework to guide future development in a specific area of the City, it would not be feasible to evaluate an

alternative location (i.e, in another city or location in San José). The DSAP area is located in Downtown San José and the proposed project has been designed taking into account the surrounding land uses, and its location within the flight path of the airport and proximity to an existing and future rail line. To evaluate another location for such specific development, especially given the recent approval of the General Plan update, which anticipates growth similar to what is proposed by the DSAP, would not be meaningful for the purposes of informing a decision about the proposed project.

8.6 NO PROJECT ALTERNATIVE

The purpose of this alternative is to identify what development and associated environmental impacts would occur if the City does not adopt the proposed DSAP; in other words, how the area would continue to grow and evolve under the current 2040 General Plan's goals, policies, and Land Use Transportation Diagram. Under the No Project Alternative, the project area would be developed consistent with the 2040 General Plan and Downtown Strategy Plan, as shown on Figure 2-4.

While there are some locations where General Plan land use designations would be changed, including areas along West San Carlos Street, the amount of development proposed under the DSAP is not significantly different than that approved as part of the General Plan, as shown on Figure 2-4. As shown in Table 4.1-5, the job capacity and planned housing yields with the approved General Plan and the proposed DSAP are the same; therefore, development intensity and the particular properties to be affected would be similar.

8.6.1 Comparison of Environmental Impacts

Cultural Resources: The No Project Alternative would potentially require the removal of historic structures, similar to the proposed project. Because high speed rail is assumed whether DSAP is approved or not, impacts to the Diridon Station historic district would most likely still occur. Mitigation for such impacts may be included in the project once the final design is approved, however, it is assumed that the impact to the historic district could still occur.

Biological Resources: This alternative would result in similar impacts to biological resources given the project location and amount of development proposed are very similar. Impacts to the riparian corridor would be similar including lighting. Mitigation measures, including consistency with the Riparian Corridor Policy, would be implemented for the No Project Alternative.

Traffic: The implementation of the DSAP would result in traffic impacts similar to what would be expected under the existing General Plan because the amount of development would be comparable. Significant unavoidable traffic impacts associated with freeway operations, intersections, and transit priority corridors would still occur under the No Project Alternative given the amount of development anticipated in the General Plan.

Noise: Build-out of the DSAP would result in traffic generated noise impacts to segments of Julian Street, Park Avenue, and San Carlos Street. Because development under the DSAP would result in similar amounts of traffic, the No Project Alternative would not reduce this impact.

Air Quality: Implementation of the No Project Alternative would not result in a decrease in ROG, NOx, or regional air quality when compared to the proposed project because development levels would be almost identical. This conclusion is consistent with the analysis in the Envision San José 2040 EIR.

Greenhouse Gas Emissions: Build-out of the 2040 General Plan land uses within the DSAP area would generate greenhouse gas emissions similar to the proposed project, as development intensities would be comparable. This conclusion is consistent with the analysis in the Envision San José 2040 General Plan.

Population and Housing: The land uses proposed for the DSAP area as part of this project are very similar to what would be allowed under the 2040 General Plan. The project and the No Project Alternative would both increase jobs over residential units and increase the Vehicle Miles Travelled (VMT) in San José and the region. For this reason, the No Project Alternative would not reduce the project's contribution towards the significant unavoidable cumulative population and housing impact identified in this EIR and the Envision San José 2040 EIR.

8.6.2 Feasibility of the No Project Alternative

The No Project Alternative is feasible from the standpoint that no changes to the General Plan would be required to implement the DSAP and a similar amount of development would occur within the DSAP area. That development, however, would not reflect the DSAP design guidelines prepared to take into account the intensification of development to accommodate future transit opportunities in the DSAP area, while emphasizing pedestrian and bicycle access and connectivity. While the 2040 General Plan includes goals and policies related to these objectives, the DSAP provides conceptual designs that provide more specificity in terms of feasibility and the integration of high intensity land uses with public amenities.

8.6.3 Relationship to Project Objectives

While the No Project Alternative would result in a similar amount of residential uses and jobs in the DSAP, the 2040 General Plan does not provide the amount of detail required to provide a regional destination with a mix of land uses and sufficient density to support existing and planned transit infrastructure. Urban design standards were not developed as part of the General Plan to promote walkable, liveable, and business supportive environments in the DSAP area. Because of the lack of detail in the General Plan, the underlying purpose of transforming the Diridon Station area into a regional, high active, lively pedestrian and bicycle friendly place to live and work may not be realized. For these reasons, this Alternative would not fully meet the basic project objectives of the City of San José for the DSAP area.

8.6.4 Conclusion

Because very similar environmental impacts would occur under both the No Project/Retain Existing General Plan Alternative and the proposed project, this alternative is not considered to be environmentally superior. The project objectives would not be fully met under this alternative.

8.7 DESIGN ALTERNATIVE

Prior to development of the preferred plan for the DSAP area, an analysis was completed that compared the relative merits of three project alternatives.[368] The analysis built upon an Existing Conditions Report prepared for the area and was completed with input from members of the business and development community, as well as residents within the immediate area and surrounding long-established neighborhoods. The overall themes for the development of the alternatives are similar to the project objectives and include components such as high intensity urban form and structure, connectivity and transportation for pedestrians, bicyclists, and motorists, compatibility with surrounding land uses, open space, art, and parking.

As previously described, Alternative B is the design alternative that has the greatest potential to reduce the impacts of the DSAP as described in this EIR. This Design Alternative is compared to the proposed project in Table 8-1, below and shown on Figure 8-1.

Table 8-1:
Conceptual Land Use Alternatives

Features & Land Uses	**Proposed DSAP**	**Design Alternative**
Description	**Mix of Residential, Commerical, Employment, and Entertainment** with neighborhood squares, community parks, and green fingers	**Sports & Entertainment** with green squares
North, Central, and South Districts	**N**: Innovation Zone **C**: Commerce and Entertainment Zone **S**: Neighborhoods Zone	**N**: R&D/Comm. & residential NW **C**: Sport/Rest/Retail **S**: Neighborhoods & Commercial
Ballpark	Ballpark	Ballpark
Office/R&D	4.96 million sf in the North, Central, & Southern Zones	1.15 million sf in the North & Central Zone
Residential	2,588 dwellings	4,000 dwellings
Hotels	900 rooms	600 rooms
Retail/Restaurant	424,000 sf Primarily within Central Zone	400,000 sf Neighborhood, sports/entertainment in Central District

Notes: All areas and counts for the conceptual land use alternatives are approximate quantities for each land use. All alternatives and the proposed project have a parking structure north of the San José Arena area.

[368] The *Diridon Station Area Plan Alternatives Analysis Report*, July 2010, is on file at the City of San José Department of Planning, Building & Code Enforcement.

LOCATION OF HUDSON PROPERTY IN THE NORTHERN ZONE OF THE DSAP

FIGURE 8-1

The Design Alternative establishes a mix of vibrant uses and districts with a high-intensity, entertainment oriented core providing a link between the Ballpark and the Arena. Residential uses are primarily located east and west of the core along West San Carlos Street, with freeway-oriented retail located in the south. This alternative includes a freestanding high speed rail building (assuming a below-grade alignment) between Cahill and Montgomery Streets. The historic depot would continue to be used for commuter rail services.

8.7.1 Comparison of Environmental Impacts

Cultural Resources: The Design Alternative include development throughout the DSAP area and therefore, would potentially require the removal of historic structures, similar to the proposed project. Because high speed rail is assumed whether DSAP is approved or not, impacts to the Diridon Station historic district would most likely still occur, although as with the proposed project, the historic depot would not be affected. Mitigation for impacts to the historic district would be included in the Design Alternative, as it would for the proposed project once the final design is approved; however, it is assumed that the impact to the historic district could still occur.

Biological Resources: The Design Alternative would result in similar impacts to biological resources given the project location and amount of development proposed are very similar. Impacts to the riparian corridor would be similar, including lighting. Mitigation measures, including consistency with the Riparian Corridor Policy, would be implemented for the Design Alternative.

Traffic: The implementation of the DSAP would result in traffic impacts greater than what would be expected with the Design Alternative. This is primarily due to the fact that DSAP includes more office and R&D development, which generates approximately 30% more vehicle trips than residential uses. While significant unavoidable traffic impacts associated with freeway operations, intersections, and transit priority corridors could be reduced with implementation of the Design Alternative, deficiencies at Downtown Core intersections which are exempt from LOS policies, would still occur. One intersection, which is already a Protected Intersection would most likely continue to be affected and others could still require protection; however, the other intersections located outside of downtown would most likely continue to operate at unacceptable levels of service. Freeway segments and transit priority corridors would be impacted given the number of new residential uses and jobs included in the Design Alternative. In summary, some traffic impacts would be reduced, however, it would be unlikely that they would be reduced to a less than significant level.

Noise: Build-out of the DSAP would result in traffic generated noise impacts to segments of Julian Street, Park Avenue, and San Carlos Street. Because development under the Design Alternative is expected to result in similar amounts of traffic, although traffic distributions may be somewhat different, there is a potential that the Design Alternative would not reduce this impact. More residential units would be affected by future noise with this alternative.

Air Quality: Implementation of the Design Alternative, which would result in a similar amount of overall project development, would not result in a significant decrease in ROG, NOx, or regional air quality when compared to the proposed project. This conclusion is consistent with the analysis in the Envision San José 2040 EIR.

Greenhouse Gas Emissions: Build-out of the 2040 General Plan land uses within the DSAP area would generate greenhouse gas emissions similar to the Design Alternative and the proposed project, as development intensities would be comparable. This conclusion is consistent with the analysis in the Envision San José 2040 General Plan.

Population and Housing: The Design Alternative would result in fewer jobs than the proposed project, thereby resulting in a reduction in VMT when compared to the proposed project. Although the contribution of the traffic generated by the Design Alternative towards the significant unavoidable impact identified in the Envision San José 2040 EIR would be less than the proposed project, future development in the DSAP represents a small proportion of overall growth in the City. For this reason, it is estimated that the Design Alternative could still result in a significant contribution towards this cumulative impact.

8.7.2 Feasibility of the Design Alternative

The Design Alternative is feasible from the standpoint that the land uses could be implemented within the DSAP area. This alternative would result in additional residential and less office/R&D when compared to the DSAP, which could affect the City's jobs to housing ratio, inconsistent with the 2040 General Plan.

8.7.3 Relationship to Project Objectives

The provision of jobs within the DSAP and San José in general is important to improve the jobs to housing balance in the City as described in the Envision San José 2040 General Plan. It also would provide for the internalization of trips due to the proximity of new residential development both within the DSAP and in Downtown. Finally, providing jobs and housing in proximity to major transit hubs supports transit ridership and economic development while reducing overall vehicular traffic and air quality emissions.

The Development Alternative would provide a variety of commercial and mixed use development and create highly active and lively pedestrian and bicycle friendly environments within the Downtown area. However, the additional development levels of office/R&D included in the proposed project would increase the extent to which the objectives of the project are met when compared to the Design Alternative. Additional residential units could affect the City's jobs to housing balance as described in the Envision San José 2040 EIR.

8.7.4 Conclusion

The Design Alternative is considered to be environmentally superior to the proposed project because it would incrementally reduce the magnitude of traffic and cumulative population and housing impacts, although potentially not to a less than significant level. This alternative, however, would still result in significant unavoidable impacts associated with project-generated noise, air quality, cultural and biological resources, and greenhouse gas emissions. While the majority of the project objectives would be met under the Design Alternative, the proposed project would increase the extent to which the objectives are met.

8.8 REDUCED SCALE ALTERNATIVE

The proposed project would result in impacts at three intersections located outside the Downtown Core (Park Avenue/Naglee Avenue, The Alameda/Naglee Avenue, and Lincoln Avenue/San Carlos Street), freeway segments, and transit priority corridors. An analysis was conducted to determine what level of development could be built in the DSAP area that would not result in these impacts. The analysis determined that impacts to these facilities would occur with the addition of very little traffic, as existing conditions are already deficient, especially on freeway segments as described in Chapter 2 of the Traffic Impact Analysis. It was determined that a Reduced Scale Alternative that proposes half of the development in the DSAP (approximately 2.5 million square feet of office/R&D uses, 210,000 square feet of retail/restaurant, 1,300 residential units, and 450 hotel rooms) would not reduce impacts to the intersections outside of the Downtown Core to a less than significant level.

This alternative could be developed in such a way as to spread the uses over the DSAP area, thus resulting in less intensive development or could be as intense, but not utilize as much as land as the DSAP. This could reduce additional impacts as described below. The Reduced Scale Alternative would include a freestanding high speed rail building (assuming a below-grade alignment) between Cahill and Montgomery Streets. The historic depot would continue to be used for commuter rail services, including high speed rail.

8.8.1 Comparison of Environmental Impacts

Cultural Resources: The Reduced Scale Alternative would include development throughout the DSAP area and therefore, would potentially require the removal of historic structures, similar to the proposed project. Some properties could therefore be avoided, thus reducing impacts. Because high speed rail is assumed whether DSAP is approved or not, impacts to the Diridon Station historic district would most likely still occur, although as with the proposed project, the historic depot would not be affected. Mitigation for impacts to the historic district would be included in the Reduced Scale Alternative, as it would for the proposed project once the final design is approved; however, it is assumed that the impact to the historic station district could still occur.

Biological Resources: The Reduced Scale Alternative could result in similar impacts to biological resources given the project location; however, some properties along Los Gatos Creek could be avoided to reduce lighting impacts. This would avoid the cumulatively considerable contribution towards this cumulative impact. Mitigation measures, including consistency with the Riparian Corridor Policy, would be implemented for the Reduced Scale Alternative.

Traffic: The implementation of the DSAP would result in traffic impacts greater than what would be expected with the Reduced Scale Alternative. While significant unavoidable traffic impacts associated with freeway operations, intersections, and transit priority corridors could be reduced with implementation of the Reduced Scale Alternative, they would not be reduced to a less than significant level. The three intersections located outside of downtown would continue to operate at unacceptable levels of service because impacts would occur even with a very small increase in traffic at these gateway intersections. Freeway segments and transit priority corridors would still be impacted given the number of new residential uses and jobs included in the Reduced Scale Alternative, given that freeways segments in the downtown area are currently operating under poor

traffic conditions attributable to traffic bound for destinations to the north and south. In summary, some traffic impacts would be reduced, however, it is unlikely that they would be reduced to a less than significant level.

Noise: Build-out of the DSAP would result in traffic generated noise impacts to segments of Julian Street, Park Avenue, and San Carlos Street. Development under the Reduced Scale Alternative is expected to result in less traffic and could therefore, reduce traffic generated noise although perhaps not to a less than significant level.

Air Quality: Implementation of the Reduced Scale Alternative would reduce the amount of ROG and NOx generated and could reduce impacts to regional air quality when compared to the proposed project. It is not anticipated that impacts would be reduced to a less than significant level because the BAAQMD thresholds are fairly low for the type of development anticipated.

Greenhouse Gas Emissions: The Reduced Scale Alternative would result in the generation of fewer greenhouse gas emissions when compared to the DSAP project, as development intensities would be substantially less. Because this is a cumulative condition, the Reduced Scale Alternative would contribute towards the significant greenhouse gas impacts identified in the Envision San José 2040 General Plan EIR, although not to the same extent.

Population and Housing: The Reduced Scale Alternative would result in fewer jobs and residences than the proposed project, thereby reducing overall VMT when compared to the proposed project. Although the contribution of the traffic generated by the Reduced Scale Alternative towards the significant unavoidable impact identified in the Envision San José 2040 EIR would be less than the proposed project, future development in the DSAP represents a small proportion of overall growth in the City. For this reason, it is estimated that the Reduced Scale Alternative could still result in a significant contribution towards this cumulative impact.

8.8.2 Feasibility of the Reduced Scale Alternative

The Reduced Scale Alternative is feasible from the standpoint that the land uses could be implemented within the DSAP area. This alternative would result in less residential and office/R&D uses when compared to the DSAP, which could affect the City's jobs to housing ratio, inconsistent with the 2040 General Plan.

8.8.3 Relationship to Project Objectives

The provision of jobs within the DSAP and San José in general is important to improve the jobs to housing balance in the City as described in the Envision San José 2040 General Plan. The Reduced Scale Alternative would not contribute to balancing the jobs to housing ratio to the same extent as the DSAP. It also would not provide the same internalization of trips anticipated by the proposed project, which supports transit ridership and economic development while reducing overall vehicular traffic and air quality emissions.

The Reduced Scale Alternative would provide a variety of commercial and mixed use development and create highly active and lively pedestrian and bicycle friendly environments within the

Downtown area. However, the Reduced Alternative would reduce the extent to which the objectives of the project are met. Urban design standards could still be implemented to promote walkable, livable, and business supportive environments within the Diridon Station Area. The Reduced Scale Alternative would not act as a catalyst for similar developments in the surrounding area to the extent that the proposed project would. Fewer jobs and residential units could affect the City's jobs to housing balance as described in the Envision San José 2040 EIR.

8.8.4 Conclusion

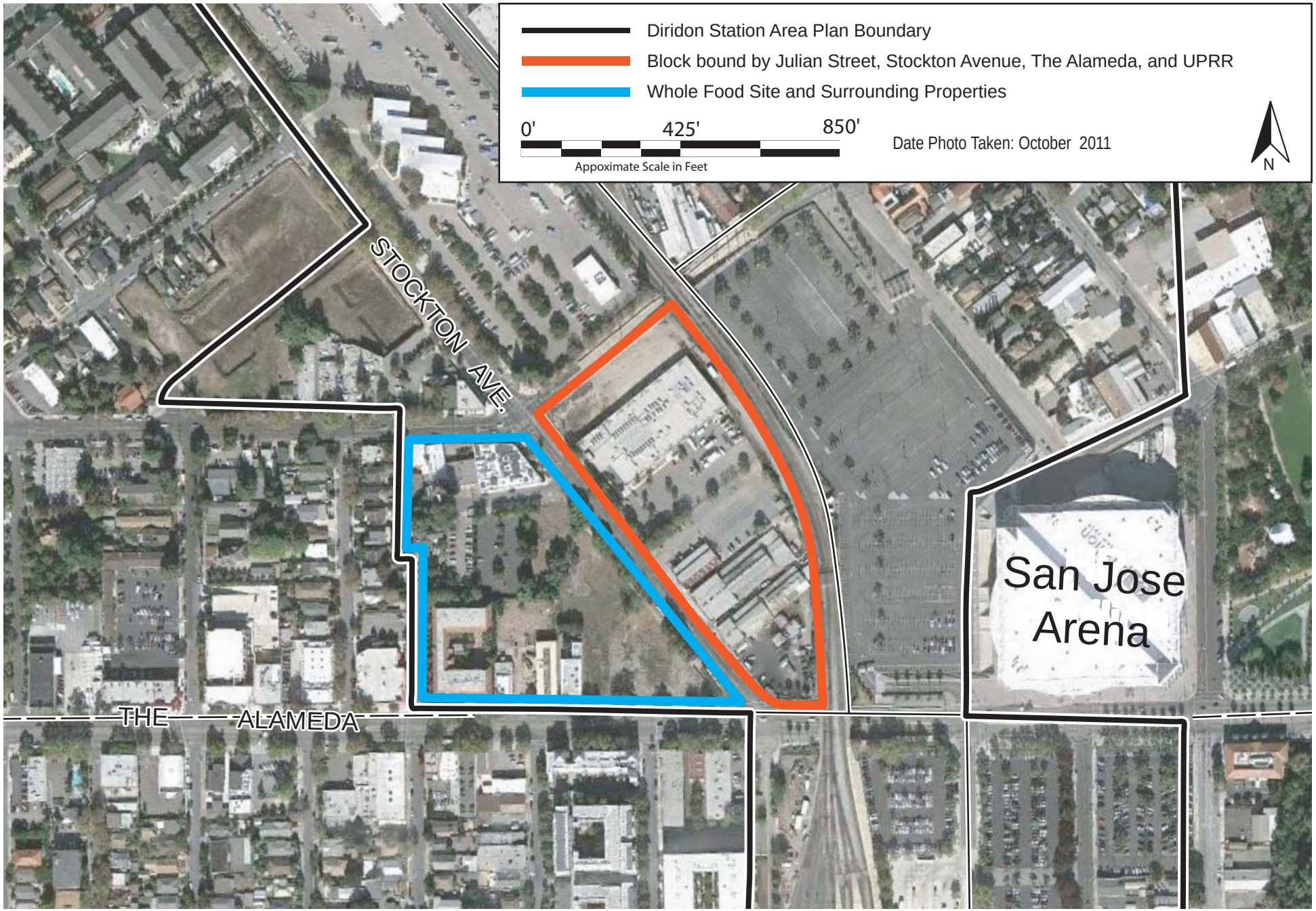
The Reduced Scale Alternative is considered to be environmentally superior to the proposed project because it would incrementally reduce the magnitude of traffic, noise, air quality, and cumulative population and housing impacts, although potentially not to a less than significant level. This alternative could also reduce impacts to cultural and biological resources and greenhouse gas emissions. Reducing the land use intensities of the project would not support transit ridership and economic development at levels that would be beneficial to the Downtown and the region. While some of the project objectives could be met under the Reduced Scale Alternative, it would not be to the same extent as the proposed project.

8.9 LAND USE POLICY ALTERNATIVES

There are two land use designation alternatives that are slight variations to the proposed project. The traffic report for the project included an additional 155 residential units that were ultimately not distributed within the DSAP Preferred Plan. These units could be placed on one or both of the alternatives below, if either or both are pursued. These alternatives would not significantly reduce environmental impacts because these properties were already included in the DSAP and their ultimate development is anticipated as part of the project. However, if additional units are ultimately proposed, subsequent environmental review, primarily in regards to traffic, may be required.

8.9.1 Alternative for block bound by Julian Street, Stockton Avenue, The Alameda, and the Union Pacific Railroad

This alternative would designate the properties between Julian Street, Stockton Avenue, The Alameda, and the Union Pacific Railroad tracks with an *Urban Village* Land Use Designation. The properties included in this alternative are shown on Figure 8-2. The *Urban Village* General Plan land use designation is a designation that can be applied to properties within an Urban Village area. Because the Diridon Station Area is proposed to be an Urban Village, this designation could be applied to properties within the DSAP.



LAND USE POLICY ALTERNATIVES

FIGURE 8-2

The *Urban Village* land use designation supports a wide variety of commercial, residential, and institutional land uses with an emphasis on establishing an attractive and pedestrian-oriented urban form. This land use designation supports a floor area ratio (FAR) of up to 10.0 and a residential density of up to 250 dwelling units to the acre. Given the building height limits in the Urban Design Chapter of the DSAP Draft Plan (Figure 3-1-1) and the FAA height limits resulting from the San Jose International Airport that would be in effect for this site, the intensities and densities of new development under this land use designation would, however, be significantly lower than these upward maximums. New development along Stockton Avenue, adjacent to the intersection of The Alameda, would be required to include active and functional retail space fronting the street, consistent with the location shown on Figure 2-1-1: Diridon Station Area Plan.

To further the City's Envision San Jose 2040 goal of transforming San Jose from the bedroom community for Silicon Valley to a regional employment center for the Bay Area, the Urban Village Land Use designation, as applied to the properties in this alternative, would have a minimum commercial FAR of 0.5 for projects containing residential uses. This designation would therefore only support residential development in a vertical or horizontal mixed-use format that includes commercial uses or square footage that is equal to or greater than a 0.5 FAR for a given project. The commercial component of a project would need to be built simultaneously or prior to the construction of the residential component.

In addition to furthering the employment goals of the Envision San Jose 2040 General Plan, locating employment or commercial uses in proximity to the Diridon Station would be more supportive of the major transit investments that have, and are planned to be made at Diridon; employment uses adjacent to transit generates more ridership on the adjacent transit system than does locating housing, of a comparable intensity, adjacent to that system.

8.9.2 Alternative for the Whole Foods Site and Surrounding Properties

This alternative would designate the properties on the west side of Stockton Avenue from Julian Street to The Alameda with an *Urban Village* land use designation. Included in this alternative is the property that contains the Whole Foods project currently under construction and the adjacent properties that contain the recently approved mixed-use project at 785 The Alameda. The properties included in this alternative are shown on Figure 8-2.

As with the alternative above, the *Urban Village* General Plan land use designation applied to the properties in this alternative would include a minimum commercial FAR of 0.5 for all projects including residential uses. The commercial component of a project would need to be built simultaneously or prior to the construction of the residential component. This designation would allow higher residential densities than the Urban Residential designation in the proposed DSAP. New development adjacent to The Alameda and the intersection of The Alameda and Stockton Avenue would be required to include active and functional retail space fronting the street, consistent with the locations shown on Figure 2-1-1: Diridon Station Area Plan. Both the Whole Foods project and the approved mixed-use project at 785 The Alameda are consistent with this land use designation.

8.9.3 Comparison of Environmental Impacts

Cultural Resources: The Land Use Policy Alternatives would potentially require the removal of historic structures, similar to the proposed project. Impacts would not be reduced with implementation of this alternative.

Biological Resources: These alternatives would result in similar impacts to biological resources given they would ultimately be developed as part of the DSAP, regardless of the ultimate uses.

Traffic: As previously noted, the traffic report included an additional 155 units that were not included in the DSAP Preferred Plan. Therefore, development of residential uses on the Land Use Policy Alternatives properties would not significantly change the amount of traffic generated by the DSAP project. Residential with commercial uses could generate less traffic than transit-oriented employment uses. Traffic distribution could change, but it not anticipated that it would be to an extent that would significantly change the results of the traffic analysis completed for the DSAP project. For this reason, it is estimated that impacts to intersections, freeway segments, and transit priority corridors would still occur under the Land Use Policy Alternatives.

Noise: Traffic-generated noise is expected to be similar to what is expected with the build-out of the DSAP because neither traffic volumes nor distribution would change substantially. The main difference in noise impacts when comparing DSAP build-out to the Land Use Policy Alternatives is the impacts that would occur to future residents on the property located in the block bound by Julian Street, Stockton Avenue, The Alameda, and UPRR. The Whole Foods block would not be significantly affected by additional noise when compared to the DSAP.

The property on the east side of Stockton Avenue is located within the area of the DSAP most affected by air traffic to and from Mineta San José International Airport. In addition, the existing Caltrain tracks and future high speed rail (aerial alternative) would run near the eastern boundary of the property. Future *Transit Employment Center* land uses to the north of the site would be expected to utilize equipment during assembly, manufacturing, and testing activities that would generate operational noise that could affect adjacent residential uses. While the implementation of General Plan policies and other applicable regulations would reduce the noise generated, it may not be to a less than significant level. A project-level noise analysis would be required prior to development of residential uses on these properties. Therefore, additional noise impacts would occur that would affect future residents on the east side of Stockton Avenue when compared with the DSAP. This noise would be generated by adjacent rail and Transit Employment Center uses.

Air Quality: Implementation of the Land Use Policy Alternatives would not result in a decrease in ROG, NOx, or regional air quality when compared to the proposed project because the alternatives and proposed project would result in a similar amount of development. The use of hazardous materials that may affect air quality as part of assembly, manufacturing, and testing processes could also impact residential uses on the east side of Stockton Avenue. Residents on the Whole Foods block would not be affected beyond what is anticipated for the DSAP development. It is anticipated that the implementation of General Plan policies and other local, state, and federal regulations would reduce this impact to a less than significant level.

Greenhouse Gas Emissions: Implementation of the Land Use Policy Alternatives would generate construction-related greenhouse gas emissions similar to the proposed project, as development intensities would be comparable. Traffic-generated GHG emissions would be similar. This conclusion is consistent with the analysis in the Envision San José 2040 General Plan.

Population and Housing: The Land Use Policy Alternative on the property on the east side of Stockton Avenue would reduce the number of new jobs proposed as part of the DSAP, and thus, Vehicle Miles Travelled (VMT) in San José and the region would be decreased. The addition of 155 residential units, which were included in the evaluation of the proposed project would not amount to a significant increase. Changing the land use designation on the Whole Foods site would not significantly change the amount of residential units expected on those properties. For this reason, the Land Use Policy Alternatives would not reduce the project's contribution towards the significant unavoidable cumulative population and housing impact identified in this EIR and the Envision San José 2040 EIR.

8.8.2 Feasibility of the Land Use Policy Alternatives

The Land Use Policy Alternatives are feasible alternatives in that the development allowed by the *Urban Village* designation is consistent with and similar to the uses proposed for other properties in the DSAP. Additional studies and mitigation measures may be required due to the presence of existing rail adjacent to the site on the east side of Stockton Avenue and the planning of additional rail lines near that site. Although implementation of the mitigation measures included in this EIR as well as General Plan policies and other regulations would reduce some impacts to the new residential uses on the property bounded by Julian Street, Stockton Avenue, The Alameda, and the Union Pacific Railroad to a less than significant level, additional environmental review may be required.

8.8.3 Relationship to Project Objectives

The Land Use Policy Alternatives would result in the development of additional residential units within the DSAP while at the same time reducing the amount of *Transit Employment Center* lands in the northern Innovation Zone. The placement of this residential development could result in restrictions being placed on the adjacent employment lands to reduce impacts associated with noise, land use compatibility, and hazardous materials use. Additional residential units on the The Whole Foods and surrounding properties site would not result in new, different, or an increase in significant impacts when compared to those identified in this PEIR for the proposed project.

These alternatives could be considered to meet most if not all of the project objectives because the development of additional residential uses would be consistent with the project goals of creating a walkable, liveable, and business supportive environment in the DSAP area. For this reason, this alternative would meet the basic project objectives of the City of San José for the DSAP area.

8.8.4 Conclusion

While project objectives could be met with this alternative, most environmental impacts would be similar to the proposed project with the exception of noise and air quality. Although some land use compatibility impacts could occur, the same property would be developed with high intensity uses.

For this reason, the Land Use Policy Alternatives are not considered to be environmentally superior. The basic project objectives would be met under this alternative.

8.10 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

The CEQA Guidelines specify that an EIR must identify the environmentally superior alternative among those discussed. If the environmentally superior alternative is the "No Project" alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives. The No Project Alternative would result in implementation of General Plan land use designations which are not significantly different than the land uses proposed in the DSAP. In other words, if the DSAP is not approved, the project area will eventually develop according to the General Plan which will also result in high density development in the DSAP area.

Two alternatives would reduce the environmental impacts of the DSAP: the Design Alternative and the Reduced Scale Alternative. Traffic and traffic-generated noise and air quality impacts could be reduced with the implementation of either of these alternatives because fewer residential units and less office/R&D and commercial uses would be developed. While impacts of the Reduced Scale Alternative to cultural and biological resources could be reduced if fewer properties are developed, the Design Alternative would not reduce these impacts because the same DSAP properties would be developed. Greenhouse gas emissions and impacts to population would also still occur with the Design and Reduced Scale Alternatives although not to the extent expected by the DSAP. For these reasons, the Reduced Scale Alternative, which would result in less development overall than the Design Alternative, is considered to be the environmentally superior alternative.

8.10.1 Relationship to Project Objectives

The Reduced Scale Alternative would reduce impacts overall when compared to the DSAP project, although most likely not to a less than significant level. This is primarily due to the existing deficiences of intersections outside the Downtown Core and poor operation of freeway segments in the Downtown area.

While the Reduced Scale Alternative could meet the basic project objectives of developing a land use plan and policy framework to guide future development toward land uses that support transit ridership and economic development and creat a world-class destination. It could also improve pedestrian, bicycle, motorized, and transit connectivity between the station site and existing adjacent commercial and residential areas. However, none of these objectives would be met to the same extent as the proposed project. The DSAP would be more highly active mainly because more residential uses and job opportunities would be developed in proximity to one of the largest transit hubs planned in the region. Residents and workers would have immediate access to light rail, commuter rail, high speed rail, bus rapid transit, and BART. The more development in the DSAP, the more trips can be internalized and the City's jobs to housing imbalance corrected. For these reasons, this alternative does not fully meet the objectives of the proposed project.

SECTION 9.0 REFERENCES

Association of Bay Area Governments (ABAG). *ABAG Geographic Information Systems, Hazard Maps, Tsunami Evacuation Planning Map for San Francisco Bay Area*. Accessed January 6, 2010. http://www.abag.ca.gov/bayarea/eqmaps/tsunami.

Association of Bay Area Governments (ABAG), Bay Area Air Quality Management District (BAAQMD), Bay Conservation and Development Commission (BCDC), and Metropolitan Transportation Commission (MTC). "One Bay Area Frequently Asked Questions." http://www.onebayarea.org/plan_bay_area/faq.htm#31.

---. "Spotlight: Bay Area Agencies Approve Preferred Land Use Scenario and Transportation Investment Strategy." http://www.onebayarea.org/plan_bay_area/may_2012.htm.

Bay Area Air Quality Management District (BAAQMD). *California Environmental Quality Act Air Quality Guidelines*. 1999 (updated in 2010 and 2012).

---. *Screening Tables for Air Toxics Evaluation During Construction.* May 2010.

---. *Toxic Contaminant Inventory for 2009*. December 31, 2009. Available at: http://www.baaqmd.gov/pmt/air_toxics/annual_reports/index.htm.

California Air Resources Board (CARB). "iADAM Air Quality Statistics." 2012. Accessed: August 26, 2012.

California Department of Conservation. *2010 Important Farmland Map for Santa Clara County*. Map. 2011.

California Department of Education, Educational Demographics Unit. "DataQuest : District Enrollment by Grade." Accessed March 29, 2012. http://dq.cde.ca.gov/dataquest.

California Department of Toxic Substances Control. "EnviroStor". Accessed October 17, 2011. http://www.envirostor.dtsc.ca.gov/public/.

California Department of Transportation. "California Scenic Highway Program". Accessed May 5, 2012. http://www.dot.ca.gov/hq/LandArch/scenic_highways/scenic_hwy.htm.

California Environmental Protection Agency. *Draft Climate Action Team Report to Governor Schwarzenegger and the Legislature*. 2009.

California Geological Survey. *Seismic Hazard Zones, San Jose East Quadrangle*. 2002.

California High-Speed Rail Authority (CHSRA). *California High-Speed Train Project, Station Parking Guidance, Technical Memorandum*. September 2008.

---. *High-Speed Train Sound Fact Sheet*. 2010.

---. "San Francisco to San Jose Phased Implementation Fact Sheet." April 11, 2011. Available at: ~~http://www.cahighspeedrail.ca.gov/San_Francisco_-_San_Jose.aspx~~ http://www.hsr.ca.gov/docs/programs/statewide_rail/proj_sections/SanFran_SanJose/San_Francisco_to_San_Jose_Phased_Implementation_Fact_Sheet_4_11_11.pdf.

California High-Speed Rail Authority and Federal Railroad Administration (FRA). *Bay Area to Central Valley High-Speed Train Program Environmental Impact Report/ Environmental Impact Statement*. Accessed October 15, 2013. Available at: ~~http://www.cahighspeedrail.ca.gov/library.aspx.~~ http://www.hsr.ca.gov/Programs/Environmental_Planning/index.html.

---. *Final Program Environmental Impact Report/Environmental Impact Statement (EIR/EIS) for the Proposed California High-Speed Train System*. August 2005.

California State Office of Historic Preservation. "California Historical Landmarks." 2012. http://ohp.parks.ca.gov/?page_id=21478.

California State Water Resources Control Board. "GeoTracker." Accessed October 18, 2011. http://geotracker.waterboards.ca.gov/.

CalRecycle. "Solid Waste Information System (SWIS), Facility/Site Listing." Accessed October 18, 2011. http://www.calrecycle.ca.gov/SWFacilities/Directory/search.aspx.

CalRecycle. "Compliance and Enforcement." Last updated: May 3, 2011. Accessed March 23, 2012. http://www.calrecycle.ca.gov/Enforcement/.

Caltrain. "Peninsula Corridor Electrification Project." February 27, 2014. Available at: http://www.caltrain.com/projectsplans/CaltrainModernization/Modernization/PeninsulaCorridorElectrificationProject.html.

---. ""Caltrain/California HSR Blended Operations Analysis." March 2012. Available at: http://www.caltrain.com/Assets/Caltrain+Modernization+Program/Documents/Final-Caltrain-California+HSR+Blended+Operations+Analysis.pdf.

City of Los Angeles. *City of Los Angeles CEQA Thresholds Guide*. 2006.

City of San José. *Assessment of Infrastructure for the Integrated Waste Management Zero Waste Strategic Plan Development*. November 2008.

---. *Baseball Stadium in the Diridon/Arena Area Draft Environmental Impact Report*. February 2006.

---. *Baseball Stadium in the Diridon/Arena Area (Modified Project) Supplemental Environmental Impact Report*. February 2010.

---. *Coleman Avenue/Autumn Street Improvement Project Final Integrated Focused Environmental Impact Report*. January 2008.

---. *Diridon Amendment Preliminary Report*. April 13, 2009.

---. *Diridon Station Area Plan, Existing Conditions Report*. 2010.

---. *Envision San José 2040 General Plan Integrated Final Program Environmental Impact Report*. September 2011.

---. *Greenprint 2009 Update for Parks, Recreation Facilities and Trails*. December 2009.

---. "Heritage Trees in the City of San José." Accessed March 1, 2011. http://www.sanjoseca.gov/tree/trees_heritage_map.asp.

---. *KB Home Monte Vista Residential Planned Development Zoning Project Draft Environmental Impact Report*. November 2004.

---. *Los Gatos Creek Trail Master Plan (Reach 5) Initial Study/Mitigated Negative Declaration*. 2008.

---. *Morrison Park Residential Project Recirculated Initial Study*. March 2008.

---. *Riparian Corridor Policy Study*. 1999.

---. *San José Downtown Strategy 2000 Environmental Impact Report*. March 2005.

---. *Whole Foods Market Initial Study*. May 2007.

---. Municipal Code and Zoning Ordinance. 2012.

City of San Jose, Department of Aviation. "About SJC". Accessed April 29, 2010. http://www.flysanjose.com/fl/about.php?page=index.

City of San José, Department of Environmental Services. "San José/Santa Clara Water Pollution Control Plant." May 4, 2010. Accessed October 12, 2010. http://www.sanjoseca.gov/esd/wastewater/water-pollution-control-plant.asp.

---. "Public Area Recycling." Updated July 17, 2009. Accessed March 23, 2012. http://www.sjrecycles.org/civic.asp.

---. *Recycled Water Pipeline System*. Map. January 30, 2008.

City of San José, Department of Parks, Recreation, and Neighborhood Services. "Golf Course Information." Accessed March 29, 2012. http://www.sjparks.org/golf.asp.

---. *Residents' Proximity to Off-Street Trails*. Map. May 2010. http://www.sjparks.org/Trails/Reports/3-mile%20buffer%2011x17.jpg

---. "San José Community Gardens." Accessed March 29, 2012. http://www.sjcommunitygardens.org/.

Cornerstone Earth Group. *Current Conditions Report Hazards and Hazardous Materials, Envision San José 2040 General Plan Update*. February 12, 2010.

County of Santa Clara. *Five-Year CIWMP/RAIWMP Review Report*. August 2007.

County of Santa Clara, Office of Education. "Alternative Schools." 2012. http://www.sccoe.org/schooldirectory/coe/aed/.

County of Santa Clara, City of San José, City of Morgan Hill, City of Gilroy, Santa Clara Valley Water District, and Santa Clara Valley Transportation Authority. *Draft Santa Clara Valley Habitat Plan*. December 2010. Available at: http://www.scv-habitatplan.org/www/site/alias__default/341/public_draft_habitat_plan.aspx.

G.B. Arrington and Robert Cervero. *TCRP Report 128 - Effects of TOD on Housing, Parking, and Travel, page 13*. Washington, D.C.: Transportation Research Board, 2008.

Guadalupe River Park Conservancy. Guadalupe River Park and Gardens Walking Map. http://www.grpg.org/Files/WalkingMap.pdf

H. T. Harvey & Associates. *Envision San José 2040 General Plan Update Biological Resources Report*. 2010.

Intergovernmental Panel on Climate Change (IPCC). "Summary for Policymakers." In: *Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*. Cambridge University Press. 2007.

Jed Kolko, *Making the Most of Transit: Density, Employment Growth, and Ridership Around Stations, page 22*. Sacramento: Public Policy Institute of California. 2011.

Jarrett Walker. *Human Transit: How Clearer Thinking About Public Transit Can Enrich Our Communities and Our Lives, page 124*. Washington, D.C.: Island Press. 2011.

National Oceanic and Atmospheric Administration (NOAA) and the American Association for the Advancement of Science (AAAS). *Climate Literacy: The Essential Principles of Climate Sciences*. May 2009.

Regional Water Quality Control Board (RWQCB). Letter from Bruce H. Wolfe, Executive Officer to Stacey Ingersoll of the Peninsula Corridor Joint Powers Board. "Approval of Remedial Action Workplan Implementation Summary Report and Groundwater Investigation Workplan, and

Requirement for Completion Report, Diridon Station, 65 Cahill Street, San Jose, Santa Clara County." April 5, 2010.

Robert Cervero and John Landis. "*Twenty Years of the Bay Area Rapid Transit System: Land Use and Development Impacts, page 320."* Transportation Research Part A 31, no. 4. 1997.

San Jose Water Company. *City of San Jose 2040 General Plan Water Supply Assessment*. June 2010.

Santa Clara County Airport Land Use Commission. *Comprehensive Land Use Plan, Santa Clara County, Norman Y. Mineta San Jose International Airport*. Adopted October 2010.

Santa Clara Valley Transportation Authority (VTA). "BART Silicon Valley Frequently Asked Questions (FAQ)." March 29, 2012. Available at: http://www.vta.org/bart/faq.html.

---. "Deficiency Plan Requirements." September 2010.

---. *Silicon Valley Rapid Transit Corridor, BART Extension to Milpitas, San Jose and Santa Clara, Draft Environmental Impact Report*. 2007.

Santa Clara Valley Transportation Authority (VTA) and Federal Transit Administration (FTA). *Vasona Corridor Light Rail Transit Project Environmental Impact Statement/Report (EIR/EIS)*. October 1999.

---. *Silicon Valley Rapid Transit Corridor, BART Extension to Milpitas, San Jose and Santa Clara, Final Environmental Impact Statement*. March 2010.

Santa Clara Valley Urban Runoff Pollution Prevention Program. *Mercury Pollution Prevention Plan*. March 2002. Available at: http://www.scvurppp-w2k.com/pdfs/0102/SC34.03_c9c_Merc_Pol_Prevention_plan.pdf.

---. "Trash." http://www.scvurppp-w2k.com/trash.shtml.

Santa Clara Valley Water District. "Anderson Dam and Reservoir". Accessed July 21, 2011. http://www.valleywater.org/Services/AndersonDamAndReservoir.aspx.

State Water Resources Control Board. "Impaired Water Bodies." 2011. Accessed January 20, 2012. http://www.waterboards.ca.gov/water_issues/programs/tmdl/integrated2010.shtml.

---. "Guadalupe River Watershed Mercury TMDL." 2011. Accessed January 20, 2012. http://www.swrcb.ca.gov/rwqcb2/water_issues/programs/TMDLs/guadaluperivermercurytmdl.shtml.

U.S. Environmental Protection Agency (EPA). "Diazinon: Phase Out of all Residential Uses of the Insecticide." Last updated September 6, 2011. Accessed January 20, 2012. http://www.epa.gov/opp00001/factsheets/chemicals/diazinon-factsheet.htm.

U.S. Department of Agriculture Soil Conservation Service. *Soil Survey of Santa Clara County, California*. 1958.

U.S. Department of Energy, Energy Information Administration. "Greenhouse Gases, Climate Change, and Energy." Last modified April 2, 2004. Accessed June 29, 2011. http://www.eia.doe.gov/oiaf/1605/ggccebro/chapter1.html.

U.S. Department of Transportation, Federal Transit Administration, and Peninsula Corridor Joint Powers Board. *Caltrain Electrification Program San Francisco to San Jose, Final Environmental Impact Report*. July 2009.

Persons Contacted List

Ben Tripousis, Transportation Policy Manager. City of San José, Department of Transportation. August 2012.

Cary Green, Airport Planner. City of San José, Department of Aviation (Mineta San José International Airport). March 2012.

SECTION 10.0 LIST OF PREPARERS

Lead Agency:

City of San José

Department of Planning, Building, and Code Enforcement
Michael Brilliot, Senior Planner
John Davidson, Senior Planner
David Keyon, Planner II

Department of Transportation
Amy Olay, Acting Division Manager
Paul Ma, Senior Transportation Specialist
Stacey Lu, Engineer II

Consultants:

David J. Powers & Associates
Environmental Consultants and Planners
Jodi Starbird, Principal Project Manager
Lori Parks, Project Manager
Zach Dill, Graphic Artist

Field Paoli
Frank Fuller, Principal

Hexagon
Transportation Consultants
Robert Del Rio, Vice President & Principal Associate

Illingworth & Rodkin
Acoustics and Air Quality Consultants
Michael Thill, Senior Consultant
James Reyff, Senior Consultant