

VI. CUMULATIVE IMPACTS

A. CUMULATIVE PROJECTS

CEQA defines cumulative impacts as “two or more individual effects which, when considered together, are considerable, or which can compound or increase other environmental impacts.” Section 15130 of the *CEQA Guidelines* requires that an EIR evaluate potential environmental impacts when the project’s incremental effect is cumulatively considerable. “Cumulatively considerable” means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects. These impacts can result from a combination of the proposed project together with other projects causing related impacts. “The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects.”

When evaluating cumulative impacts, CEQA allows the use of either a list of past, present, and probable future projects, including projects outside the control of the lead agency, or a summary of projections in an adopted planning document. Generally, this EIR bases its cumulative analysis on the buildout of the projects listed in Table VI-1 and shown in Figure VI-1.

Table VI-1: List of Cumulative Projects

Project # (See Figures)	Project Name/Location	Project Size (acres)	Description
1	Downtown San Jose/Strategy 2000	1,920	Allow for 45,000 jobs, 10,000 du’s, 2,500 hotel rooms.
2	Marburg Way at U.S. 101 (GP03-03-16)	3	Δ industrial to residential
3	Berryessa Rd., west of UPRR (GP03-04-08)	13	Δ industrial to residential
4	Murphy Ave., east of Oakland (GP04-04-08)	4	Δ industrial to indust./comm.
5	Tully Rd. at S. 10th St. (GP02-07-03)	14	Δ public to mixed use
6	Lewis Rd., east of Garden (GP03-07-06)	6	Δ industrial to residential
7	Story Rd. at McLaughlin Ave. (GP04-07-02)	1	Δ industrial to commercial
8	Del Monte Residential Projects (PDC03-071)	11.1	Development of a high density residential project.
9	San Jose Water Project (PDC02-046)	7.7	Development of a mixed use retail and residential center
10	Cahill South, north of Park Ave. /west of UPRR (PDC00-116)	4	Development of a high density residential project
11	Park Avenue Townhomes, immediately west of UPRR tracks (PDC05-037)	1.9	Development of a mixed use retail and residential project.

Source: City of San Jose, 2005.

Figure VI-1: Cumulative Project Locations

8 1/2 x 11 BW

B. CUMULATIVE IMPACT ANALYSIS BY TOPIC

Potentially significant cumulative impacts to which the proposed project may contribute are discussed below for each topic evaluated in Chapter V.

1. Land Use

a. Cumulative Impacts. In cumulative impact terms, land use compatibility can be divided into short-term and long-term impacts. Short-term impacts occur during construction and primarily affect existing sensitive land uses, such as hospitals, schools, and residential development near the construction site. These impacts include the noise and dust generated by grading and excavation activities and the use of heavy machinery, and the use of hazardous materials such as solvents. These specific impacts are discussed in greater detail in Chapter V, Sections V.D, Noise; V.E, Air Quality; and V.I, Hazards and Hazardous Materials, of this EIR.

Locating incompatible land uses within close proximity of one another also creates the potential for long-term conflicts between the two land uses. Although the proposed project itself would appear to be inconsistent with at least some General Plan policies, as discussed in Chapter V.A, Land Use, the proposed project would be generally consistent with existing entertainment-related land uses in the Diridon Area. As such, operation of the proposed project would not result in long-term land use impacts per se. Projects included in the cumulative analysis would all be required to conform with General Plan policies and to conform to residential and industrial design guidelines that are intended to minimize land use conflicts. While the proposed project, and those listed in Table VI-1, would result in land use changes, such changes are generally consistent with the City's goals and policies that are found in the General Plan and *Strategy 2000*. The proposed project, along with the cumulative projects discussed in this analysis would have a less-than-significant cumulative land use impact.

b. Cumulative Mitigation Measures. No mitigation measures would be necessary for cumulative land use impacts.

2. Population, Employment and Housing

a. Cumulative Impacts. As discussed in Chapter V.B, Population, Employment, and Housing, the proposed project would generate a large number of jobs and no housing units. However, the proposed project would not impact the jobs-to-housing balance within the city. Projects on the cumulative projects list would provide both jobs and housing within the project vicinity. While the proposed project and cumulative projects would contribute to the number of jobs and households in San Jose, the increase would not be substantial enough to adversely impact the projected balance between jobs and housing within the City.

b. Cumulative Mitigation Measures. No mitigation measures would be necessary for cumulative population, employment, and housing impacts.

3. Transportation, Circulation, and Parking

a. Cumulative Impacts. Cumulative traffic conditions were calculated using a different methodology than the project list analyzed in this Chapter. To represent other potential development, build-out of downtown San Jose under the *Strategy 2000* plan was assumed. These trips were added to the simultaneous-events project scenario to represent cumulative conditions. It should be noted that under

the *Strategy 2000* buildout, intensified development was assumed for the stadium site: mostly residential development. This intensified development was not subtracted from the overall level of development modeled here (i.e., this cumulative scenario includes a small component of double-counted trips). Whereas the cumulative scenario here analyzes the 6:00-7:00 p.m. time period for intersection impacts (because this is when project impacts will be greatest), the *Strategy 2000* traffic study focused on the PM peak hour of commute traffic, which is 4:30-5:30 PM. To represent the 6:00-7:00 PM time period, the downtown trips were factored by 70 percent, which is the relationship between the time periods found in existing traffic counts. The analysis of cumulative freeway impacts focuses on the 5:00-6:00 p.m. time period.

(1) Intersection Levels of Service. Table VI-2 shows that the following four intersections would operate below the City of San Jose standard of LOS D under cumulative conditions: Julian and SR 87 NB Ramps (LOS F); Santa Clara and SR 87 NB Off-ramp (LOS E); Delmas and Park (LOS F); and Bird and San Carlos (LOS E).

(2) Freeway Analysis. The *Strategy 2000* traffic study showed that of the seven freeway segments studied in this stadium traffic study, three would operate at LOS F under downtown buildout conditions: SR 87 southbound between Coleman and Julian; SR 87 southbound between Julian and I-280; and SR 87 southbound between I-280 and Alma. The ballpark would add traffic of greater than one percent of capacity to the first two of these segments. Therefore, the ballpark would have a significant impact on two freeway segments under cumulative conditions. To improve these freeway segments to LOS E would require widening the freeway, which is infeasible given right-of-way constraints and costs. Therefore, these impacts would be significant and unavoidable.

b. Cumulative Mitigation Measures. All intersections experiencing significant cumulative impacts are within the San Jose Downtown area and, thus, are exempt from the City’s Level of Service policy. Three of these intersections also were shown to operate at LOS E or F in the *Strategy 2000* traffic study. Mitigation measures to address these intersection LOS shortcomings were described in that study and are as follows:

Table VI-2: Cumulative Intersection Levels of Service – Simultaneous-Events Scenario

Intersection	LOS	Average Delay	Average Criterion Delay
SR 87 and Julian Street (E)*	F	98.1	110.3
SR 87 and Julian Street (W)*	C	32.9	51.3
SR 87 and W. Santa Clara Street*	E	70.0	97.6
I-280 and Bird Avenue (N)*	D	35.0	56.7
I-280 and Bird Avenue (S)*	D	48.8	80.3
S. Autumn Street and W. Santa Clara Street*	D	54.6	71.3
Bird Avenue and W. San Carlos Street*	E	74.3	102.6
SR 87 and Woz Way	A	9.1	8.3
S. Autumn Street and San Fernando	D	42.2	38.8
Bird Avenue and Auzerais Avenue	C	30.3	36.7
Delmas Avenue and Auzerais Avenue	B	15.8	16.7
Woz Way and Auzerais Avenue	B	11.8	5.8
Delmas Avenue and Park Avenue ^a	F	124.8	138.4
Delmas Avenue and W. San Carlos Street	C	30.3	34.5
S. Autumn Street and Park Avenue	C	30.5	34.7
Woz Way and Park Avenue	C	26.7	29.7
Woz Way and W. San Carlos Street	C	28.7	32.5
Delmas Avenue and San Fernando Street	D	52.9	65.0

* Denotes CMP intersection.

Note: **Bold** indicates a significant cumulative impact.

Source: Hexagon Transportation Consultants, 2006.

Julian and SR 87 NB Ramps. The language from the *Strategy 2000* traffic study states, “At this intersection numerous improvements have been identified. These improvements include the Autumn Street extension from Julian Street to Coleman Avenue as identified in the City’s General Plan, addition of exclusive through and right-turn lanes from Notre Dame Street, addition of an exclusive westbound right-turn lane from Julian Street, and changes to the signal phasing. The implementation of these improvements would improve intersection level of service to LOS D and E under the AM and PM peak hours, respectively. In accordance to CMP standards, this is an acceptable level of service.” These same improvements would mitigate the stadium impact at this intersection under cumulative conditions.

Delmas and Park. The mitigation in the *Strategy 2000* traffic study is the addition of a second southbound through lane. This already has been assumed in this ballpark cumulative analysis, and the Level of Service still is LOS F. The reason for the LOS F operation is the amount of greentime needed for pedestrian crossings to get to the ballpark. Further physical improvements would not be feasible or prudent. Therefore, this impact should be considered significant and unavoidable. It is possible that under long-range conditions more stadium and HP Pavilion attendees would use transit to access those two facilities, and pedestrian flows would be more manageable. Transit usage could be encouraged through advertising campaigns.

Bird and San Carlos. The *Strategy 2000* traffic study showed this intersection to operate at LOS F with downtown buildout, improving to LOS E with the addition of a second northbound to westbound left turn lane. The present stadium study includes the additional left turn lane as part of the Bird Avenue improvements that will be completed by the project. The present stadium study shows the same LOS E as the *Strategy 2000* traffic study for this intersection with the improvement. Since LOS E still does not meet the City’s typical LOS D standard, the *Strategy 2000* traffic study includes the following language: “this intersection would continue to operate at an unacceptable level of service during the PM peak hour. The impact at this intersection is significant and unavoidable.”

The intersection of Santa Clara and the SR 87 NB Off-ramp was not shown to operate poorly in the *Strategy 2000* EIR. The reason for the poor level of service shown in this downtown stadium analysis is the large number of cars that would be exiting the freeway to access parking under the simultaneous-events scenario. There are no feasible physical improvements that could ameliorate the LOS impact at this intersection. The downtown traffic study describes a planned improvement that would increase the capacity of the I-280 off-ramp to 7th Street. This would provide an alternative route to access downtown and would reduce traffic exiting the freeway at Santa Clara Street. However, the 7th Street ramp improvements are unfunded, but would be required mitigation associated with development of Phase III of the *Strategy 2000*. Even with the completion of the 7th Street ramp improvements associated with Phase III of *Strategy 2000*, the impact to the Santa Clara and SR 87 NB Off-ramp intersection would be significant and unavoidable.

4. Air Quality

a. Construction Impacts. Projects in the San Jose area that would be under construction simultaneously with the proposed project are listed in Table VI-1. Depending on construction schedules and actual implementation of projects in the area, generation of fugitive dust and pollutant emissions during construction may result in substantial short-term increases in air pollutants. The cumulative construction of projects could contribute to short-term air quality impacts. However, each individual project would be subject to the rules and regulations, and other mitigation requirements during con-

struction that are recommended by the Bay Area Air Quality Management District (BAAQMD) to reduce all construction related emissions to a less-than-significant level.

b. Attainment of PM₁₀ and Ozone Standards. Currently, the San Francisco Air Basin is in non-attainment for PM₁₀ and Ozone.

Impact CUMULATIVE AIR-1: Construction and operation of the proposed project, in conjunction with other planned developments within the cumulative study area and the subregion, would contribute to the existing non-attainment status. Thus, the proposed project would exacerbate non-attainment of air quality standards within the subregion and air basin and contribute to adverse cumulative air quality impacts. (S)

Mitigation Measure CUMULATIVE AIR-1: Mitigation Measure AIR-1 and AIR-2, would help to address the project's contribution to this cumulative impact. Mitigation Measure AIR-1 would reduce the project's cumulative contribution to construction period impacts to a less-than-significant impact. However, the project's contribution to cumulative ozone precursor emissions would remain significant and unavoidable. (SU)

5. Noise

a. Construction Impacts. The construction of the proposed project and other cumulative projects in the area would result in short-term noise and disturbance at various locations throughout the City. Projects in the San Jose area that would be under construction simultaneously with the proposed project are listed in Table VI-1. Impacts from cumulative construction noise would be less than significant because the cumulative project sites are scattered throughout the City and will likely have different construction schedules. Construction noise mitigation measures are also included as part of each project, especially major development and public projects. Implementation of construction Mitigation Measure NOISE-5 would reduce construction noise impacts to a less-than-significant level. Construction noise would not contribute to off-site cumulative noise impacts from other planned and future projects.

b. Project-Related Traffic. Project-related traffic would contribute to cumulative traffic noise impacts in the vicinity of the project site.

Impact CUMULATIVE NOISE-1: The increase in noise levels from project-related traffic of more than 3 dBA is substantial and the project would contribute to the cumulative increase in traffic noise. (S)

Mitigation Measure CUMULATIVE NOISE-1: No additional mitigation measures, besides those identified in Chapter V.E, Noise, would reduce the project's contribution to a less-than-significant level. Therefore, this cumulative impact would remain significant and unavoidable. (SU)

c. Project Operational Noise. Noise associated with stadium events such as baseball games, concerts and fireworks displays would contribute to the cumulative ambient noise in the vicinity of the project site. As listed in Table VI-1, additional development is planned for the area which will result in additional noise sources typical of urban areas such as night club music, public address sys-

tems at restaurants, or noise from people on active streets. Such cumulative noise sources are to be expected in a downtown area as envisioned by the City's *Strategy 2000* plan.

Impact CUMULATIVE NOISE-2: The increase in ambient noise from project operations would contribute to the cumulative noise increase. (S)

Mitigation Measure CUMULATIVE NOISE-2: Mitigation measures identified in Chapter V.E, Noise, would reduce the impacts of baseball game event noise. However, no additional mitigation measures would reduce the project's contribution to cumulative noise levels in the downtown area to a less-than-significant level. Therefore, this cumulative impact would remain significant and unavoidable. (SU)

6. Biological Resources

a. Cumulative Impacts. Implementation of the proposed project would require the removal of 45 ordinance-size trees from the project site. The proposed project as well as cumulative projects listed in this analysis are required to develop landscape plans in conformance with City of San Jose Landscape and Irrigation Guidelines and City of San Jose Planning Department specifications. The City requires tree replacement for trees greater than 18 inches in diameter with 24-inch box trees at a ratio of 4:1 (trees planted to trees removed). In addition, ordinance-size trees on the project site are located in an urban downtown area designated for substantial redevelopment. Their removal, with implementation of mitigation measures discussed in Chapter V.F, Biological Resources, would represent a less-than-significant cumulative impact.

b. Cumulative Mitigation Measures. No mitigation measures besides those identified in Chapter V.F, Biological Resources would be necessary.

7. Geology, Soils and Seismicity

a. Cumulative Impacts. The proposed project would not contribute considerably to any cumulative impacts related to geology. Implementation of the project in conjunction with other cumulative development would increase the number of people and employees that could be exposed to regional seismic risks in the seismically active San Francisco Bay Area, but this impact is not expected to be significant with incorporation of standard geotechnical mitigation measures, and no other impact related to geology, soils or seismicity would result.

b. Cumulative Mitigation Measures. No additional mitigation measures besides those identified in Chapter V.G, Geology, Soils and Seismicity would be necessary.

8. Hydrology and Water Quality

a. Surface Water Quality Impacts. The project site discharges directly into Los Gatos Creek, a tributary to the Guadalupe River. Both of these water bodies are listed as water quality impaired by the RWQCB. The RWQCB has designated Los Gatos Creek as water quality impaired for diazinon (a pesticide); the Guadalupe has been designated water quality impaired for diazinon and mercury.¹ If there is a chance that the project could increase the load of any of these pollutants discharged to these

¹ Regional Water Quality Control Board (RWQCB), San Francisco Bay Region, 2003. 2002 CWA Section 303(d) List of Water Quality Limited Segment, Approved by USEPA. July.

surface water bodies, then a significant impact would be expected to occur (the RWQCB has determined that the assimilative capacity of the Bay for these pollutants has already been exceeded).

Diazinon has been one of the most widely used insecticides in the U.S. for household as well as agricultural pest control. A December 2000 agreement with the technical registrants is phasing out and canceling all indoor and outdoor residential uses in order to reduce risks to children and others.² The only remaining approved use is for some agricultural crops, and is therefore not available for legal use at the project site. Mercury would not be used at the site and discharges of this contaminant would not be expected to be affected by the project. Therefore, the project would not be expected to result in cumulative impacts to surface water quality.

b. Stormwater Quality Impacts. Construction of the proposed project, in addition to other projects, could create an increase in volume of storm water runoff and contaminants carried in the runoff, adversely affecting the waters of Los Gatos Creek, the Guadalupe River and the San Francisco Bay. Project-specific mitigation measures required for each of the projects would be incorporated into their design and operation to reduce the impacts to a less-than-significant level.

c. Cumulative Mitigation Measures. No additional mitigation measures, besides those identified in Chapter V.H, Hydrology and Water Quality, would be necessary.

9. Hazards

a. Cumulative Impacts. As discussed in Chapter V.I, Hazards and Hazardous Materials, development of the project site could expose construction workers and/or the public to hazardous materials releases during and following construction activities. Operation of the proposed baseball stadium as well as the operation of the relocated substation could also result in the release of hazardous materials. Construction activities at the site as well as operation of the electrical substation, stadium complex, and any other businesses at the project site that use, store, or dispose of hazardous materials would be required to comply with federal, State, and local requirements for managing hazardous materials. No significant unavoidable impacts related to hazards would result from construction or operation of the proposed project and the project would not contribute to any cumulative hazards impacts.

b. Cumulative Mitigation Measures. No additional mitigation measures, besides those identified in Chapter V.I, Hazards and Hazardous Materials would be necessary.

10. Cultural and Paleontological Resources

a. Historic Resources Impacts. As discussed in Chapter V.J, Cultural and Paleontological Resources, the proposed project would result in the removal of a structure listed on the *City of San Jose Historic Resources Inventory* as a Structure of Merit, which also appears to be both a candidate City Landmark and eligible for the California Register. In addition, the proposed project would alter the character of the San Jose Diridon Station, a City Landmark listed on the National Register. The alteration of the setting and character of a structure listed on the National Register is a significant

² US Environmental Protection Agency, 2005. Pesticides: Topical and Chemical Fact Sheets, Diazinon, available on EPA's website: http://www.epa.gov/REDS/factsheets/diazinon_ired_fs.htm.

unavoidable impact that would result from the proposed project. These impacts to historic resources would have a cumulatively considerable impact on historic resources within the Diridon Area.

Projects on the cumulative project list may also result in the alteration of historic structures. While it is unlikely that the individual impacts associated with these projects and the proposed project would combine to create a cumulative impact of greater severity upon any one historic period or type of resource, the cumulative alteration or loss of historic structures within the City, especially the Downtown Area, would be significant. The combined impacts to historic resources that would result from implementation of the proposed projects listed would result in a cumulatively significant loss of historic resources. The proposed project would contribute to that cumulatively significant impact.

b. Archaeological and Paleontological Resources Impacts. No significant unavoidable impacts related to archeological or paleontological resources would result.

c. Cumulative Mitigation Measures. No additional mitigation measures, beyond those identified in Chapter V.J, Cultural and Paleontological Resources, would reduce impacts to historic resources to a less-than-significant level. The alteration of a historic resource within the project site vicinity would result in a significant unavoidable cumulative impact.

No additional mitigation measures, besides those identified in Chapter V.J, Cultural and Paleontological Resources, would be necessary for archeological and paleontological resources impacts.

11. Visual and Aesthetic Resources

a. Cumulative Impacts. The alteration of the visual setting and feeling of historic buildings within the project vicinity would substantially damage scenic resources in the area resulting in a significant unavoidable visual resources impact. This, in combination with the alteration of other existing visually significant historic structures would be a significant unavoidable cumulative impact.

In addition, the proposed project would remove 45 ordinance-size trees from the project site. Ordinance-size trees are considered significant visual resources; however, as discussed above in the Biology sub-section of this Chapter, the removal of ordinance-size trees would not be a cumulatively considerable impact.

b. Cumulative Mitigation Measures. No additional mitigation measures, beyond those identified in Chapter V.K, Visual and Aesthetic Resources, would reduce impacts to historic visual resources to a less-than-significant level. The removal of five historic visual resources from the project site would be a significant unavoidable cumulative impact.

No additional mitigation measures, besides those identified in Chapter V.K, Visual and Aesthetic Resources, would be necessary for the removal of ordinance-size trees.

12. Shade/Shadow and Light/Glare

a. Cumulative Shade/Shadow Impacts. The proposed project, along with cumulative projects, would increase the amount of shade and shadow cast in and around the project site. However, given the amount of development and the location of the project in Downtown San Jose, this would be considered a less-than-significant impact.

b. Cumulative Shade/Shadow Mitigation Measures. No additional mitigation measures, besides those identified in Chapter V.L, Shade/Shadow, would be necessary.

c. Cumulative Light/Glare Impacts. The proposed project, along with cumulative projects, would increase the amount of light and glare in and around the project site.

Impact CUMULATIVE SHADE-1: Obtrusive light and glare resulting from nighttime operation of the proposed stadium, in conjunction with other planned developments within the cumulative study area, could present a nuisance to surrounding land uses, specifically nearby residences and the Lick Observatory. (S)

Mitigation Measure CUMULATIVE SHADE-1: Mitigation Measures SHADE-2a and 2b would help to address the project's contribution to this cumulative impact. However, this cumulative impacts would remain significant and unavoidable (SU)

13. Utilities

a. Cumulative Impacts. The proposed project, and those projects listed in Table VI-1, would increase the demand for water service, wastewater service, and other utilities. However, given the size of the service area and overall demand, the cumulative impact on utilities would be less-than-significant. In addition, utility service providers maintain long term projections for demand for their services within the City based on the City's General Plan, and have developed strategies to meet anticipated future demand levels.

b. Cumulative Mitigation Measures. No mitigation measures would be necessary for cumulative utilities impacts.

14. Public Services and Facilities

a. Cumulative Impacts. The proposed project, in addition to the projects listed in Table VI-1, would increase the demand for police and fire services. These services go through an annual budgeting process during which citywide priorities are established and service levels monitored, allowing for adjustment where needed. The cumulative impact to public services and facilities would be considered less than significant.

b. Cumulative Mitigation Measures. No mitigation measures would be necessary for cumulative public services and facilities impacts.

15. Energy

a. Cumulative Impacts. The development of the proposed project, in addition to the cumulative projects identified in Table VI-1, would require connection to electrical and natural gas transmission and distribution systems maintained and served by Pacific Gas & Electric (PG&E). All expansion of electrical or natural gas facilities and services would be undertaken in accordance with Title 24 and the City's General Plan policies related to energy savings. The application of these policies would ensure that the cumulative effect of this development on energy would be less than significant.

b. Cumulative Mitigation Measures. No mitigation measures would be necessary for cumulative energy impacts.

C. CONCLUSION

The proposed project would have the following cumulatively considerable impacts:

- The increase in project traffic on SR-87 and I-280 would contribute to an increase in freeway traffic in the City;
- Project construction activities and operation would exacerbate non-attainment of air quality standards within the subregion and air basin.
- The increase in noise levels from project-related traffic would contribute to increases in traffic noise in the Downtown Area.
- The loss of a structure which appears to be both a candidate City Landmark and eligible for the California Register and alteration of the setting and feeling of a structure listed on the National Register would substantially damage cultural resources; and
- The alteration of the setting and feeling of a structure listed on the National Register would substantially damage cultural resources.
- The increase in light and glare from nighttime operation of the stadium would contribute to the amount of light and glare in the area.

These effects constitute significant cumulative impacts. In all other environmental topical areas, the project's contribution would be reduced or eliminated by project mitigation measures to the point that the project would not contribute considerably to any other significant cumulative impacts.

