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June 28, 2007

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CITY OF SAN JOSE
DEVELOPMENT SERVICES

Via Federal Express

Darryl Boyd
City of San Jose
Department of Planning, Building, and Code Enforcement
200 East Santa Clara Street, 3rd Floor
San Jose, CA 95113

**Re: Draft Environmental Impact Report for the Coyote Valley
Specific Plan (SCN# 2005062017)**

Dear Mr. Boyd:

On behalf of the Greenbelt Alliance, we have reviewed the Draft Environmental Impact Report ("DEIR") for the proposed Coyote Valley Specific Plan ("CVSP" or "Project"). We submit this letter to state our position that the DEIR does not comply with the California Environmental Quality Act ("CEQA"), for the reasons set forth below. Unless the DEIR is extensively revised and recirculated, any approvals made on the basis of its environmental analysis will be unlawful.

The DEIR suffers from two essential defects—its thoroughgoing failure to accurately describe the Project and the equivocation in its approach to environmental review. Although it is never explicitly stated, the DEIR attempts to describe the proposed CVSP and evaluate its environmental impacts on both a programmatic and project-specific level. It falls far short of both of these goals. Huge parts of the CVSP—the public transit system, for example—are not described at all. Those aspects that the DEIR

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does attempt to describe are depicted with so little detail that a reader is left with no idea of what Coyote Valley will look like at build-out or how it will work. As fully discussed below, the Project is so thinly described that it appears to be essentially unplanned, and certainly is not ready to receive approvals from the City.

The total failure of the project description makes the rest of the DEIR inadequate as well. Because the concrete details of the construction and operation of the CVSP appear to be unplanned and therefore unknown, its environmental impacts cannot be accurately analyzed, nor can effective mitigation be identified. The fog of uncertainty surrounding the Project and its impacts leads inevitably to vague or deferred analysis and mitigation. The reader is given the impression that impacts will be determined as they happen and mitigation will be worked out some time in the future.

This strategy, while made inevitable by the inadequate project description, is wholly unlawful under CEQA. An EIR is "an environmental 'alarm bell' whose purpose it is to alert the public and its responsible officials to environmental changes *before* they have reached ecological points of no return." *Village Laguna of Laguna Beach, Inc. v. Board of Supervisors* (1982) 134 Cal. App. 3d 1022, 1027 (emphasis added). The DEIR's approach strips the document of its ability to provide such forewarning. As explained in detail below, this EIR will not be adequate unless and until the Project is fully described and the discussion of its various impacts completely revised. This blinkered approach to environmental review must be abandoned and replaced with a thorough analysis of the full scope of project impacts.

Revisions of the required magnitude will in turn require recirculation of the DEIR. See CEQA Guidelines § 15088.5(a)(4). At the same time, if the project description in the DEIR truly reflects the current state of the City's planning for the CVSP, then this specific plan is not ready for approval. The first step in revising the DEIR must be serious planning by the City of San Jose ("City") to a level at which the Project can be effectively evaluated.

BACKGROUND AND PROJECT CONTEXT

The proposed Project, the Coyote Valley Specific Plan, sets the stage for buildout of more than 7,000 acres of primarily undeveloped land in the southern part of San Jose. The CVSP would ultimately support a community of up to 80,000 residents, create a massive new job center (up to 50,000 new jobs), and add over 26,000 housing

units. Collectively, this development would convert thousands of acres of open space and agricultural lands to intensive urban development over the next 25 to 50 years. The Coyote Valley is considered by many to be the last remaining pristine open space within San Jose.

The City touts the CVSP as a project that is based on smart growth principles; a project that will build community without encouraging urban sprawl. DEIR at 1xviii. In this respect, the CVSP asserts that the “Environmental Footprint” was the starting point for the CVSP’s planning and remains the yardstick for promoting “Environmental Stewardship” as a Guiding Principle. Draft CVSP at 33. To this end, the DEIR states: “[B]ecause of the potential sensitivity of several environmental resources in Coyote Valley, and the City’s desire to create a model community based on innovative planning and design, the CVSP is based on a new approach, which involves a shift from a land planning driven process to one that evolves from the existing natural environmental or Environmental Footprint.” DEIR at 14. The DEIR goes on to state that “the urban design approach for Coyote Valley focuses on the guiding principles of a sustainable, pedestrian, and transit-oriented community, containing a mix of uses that utilize land efficiently.” *Id.* This and similar language is repeated throughout the DEIR as a justification for the Project. *See, e.g., id.* at 8, 96, 162, 419. However, a more careful look at the DEIR demonstrates that this characterization is entirely disingenuous, as evidenced by the following:

- The DEIR deems the CVSP similar to the Greenbelt Alliance’s “Getting It Right” plan, claiming that it is based on smart growth principles, resulting in the creation of a very urban, mixed-use community without encouraging urban sprawl. DEIR at 1xviii, 96. Such is not the case. As currently designed, jobs and housing are decentralized in a sprawling pattern; residential densities are more indicative of suburban-type subdivisions; and high-speed arterials and ample parking are designed to facilitate auto-based transportation. Contrary to the “Getting It Right” plan, the CVSP would facilitate car-oriented sprawl.
- Every day, the CVSP would add between 210,000 and 266,000 cars to the area, resulting in an additional 1,687,000 daily vehicle miles traveled. DEIR at 147, 417. The Project’s roadways and 41,000 parking spaces, intended to accommodate the automobile, would sabotage the potential for transit to succeed in Coyote Valley. Indeed, as the DEIR confirms, transit would play only a modest role in the CVSP. Upon buildout, the CVSP would generate 302,780 new person trips yet

only *four* percent of these trips are expected to be on transit. DEIR at 147, 163 (emphasis added).

- The CVSP asserts that a core principle guiding building the new Coyote Valley community is to respect and protect all existing precious resources that may be impacted by urban development. Draft CVSP at 31. Whereas the CVSP indeed would afford a tremendous opportunity to preserve much of the Coyote Valley's precious agricultural and open space lands, the DEIR fails to identify and study any serious program or mechanism for doing so. Amazingly, the DEIR concedes that the City currently has no intention of requiring conservation easements over the lands in the Greenbelt; instead, a statement of overriding considerations will be required. DEIR at 118.
- Although the City intended to ensure that development would not take place in the absence of services or infrastructure (DEIR at 2), the DEIR provides no evidence that critical public services such as wastewater, solid waste, and even water supply would be available to serve the CVSP. Indeed, the DEIR lacks any specific evaluation of the phasing, timing, or financing of these and other critical infrastructure and public services.
- Although the DEIR asserts that 20% of the housing units included in the CVSP would be deed-restricted below market rate units (DEIR at 9, 69), it includes no information as to how this affordable housing goal would be met, where the affordable housing would be located, or which income levels would be targeted.

In sum, the Specific Plan established for the Coyote Valley appears to be a superbly inappropriate planning tool to accomplish sustainable development in the Valley. It is most perplexing that despite a planning process spanning decades, the end result is a project that accomplishes so little. Indeed, the Greenbelt Alliance's initial concern about the planning for the Coyote Valley is now confirmed: the analysis in the DEIR clarifies that the CVSP will not be sustainable, will not result in increased transit use, will not ensure the protection of agricultural and open space lands, and will not guarantee the provision of affordable housing.

ANALYSIS

I. THE DEIR IS INADEQUATE UNDER CEQA.

The DEIR for the CVSP is woefully inadequate under CEQA. An EIR must provide a degree of analysis and detail about environmental impacts that will enable decision-makers to make intelligent judgments in light of the environmental consequences of their decisions. CEQA Guidelines § 15151; *Kings County Farm Bureau v. City of Hanford*, 221 Cal.App.3d 692 (1990). To this end, the lead agency must make a good faith effort at full disclosure of environmental impacts. In order to accomplish this requirement, it is essential that the project is adequately described and that existing setting information is complete. *See County of Inyo v. City of Los Angeles*, 71 Cal.App.3d 185, 199 (1977). Both the public and decision-makers need to fully understand the implications of the choices that are presented related to the project, mitigation measures, and alternatives. *Laurel Heights Improvement Ass'n v. Regents of University of California*, 6 Cal.4th 1112, 1123 (1988). In this case, the CVSP DEIR fails to provide sufficient information to enable informed decision-making by the City.

A. A Program EIR Is Inappropriate and Unlawful in this Case.

The text of the CVSP DEIR implies that the environmental document is both a programmatic EIR, describing in broad terms the plans for and impacts of development of the entire Coyote Valley, and a project-level EIR, analyzing in detail impacts resulting from tentative maps and project construction. *See e.g.*, DEIR at 68, 169 (asserting that a “project-level” analysis was undertaken). Importantly, the DEIR states:

This EIR provides environmental review for the adoption of the CVSP and its initial implementation through the pre/rezoning and annexation processes as described in Section 1.5.1, above. A determination will be made on a case-by-case basis if further environmental review for the CVSP components listed below will be required before they can be approved or constructed, and it is unknown at this time when these components may be required to accommodate the proposed urban development. Subsequent project-specific environmental review will be required *as appropriate and necessary* prior to approval or construction of these components. Any project not included on the list will be considered on a case-by case basis.

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DEIR at 11 (emphasis added). The DEIR then goes on to list numerous approvals ranging from general plan amendments, and subdivision/tentative maps to the issuance of development permits and actual construction activity. *Id.*

Despite the vague assurance that project-specific environmental review *may* be undertaken for specific projects, the City has apparently designed the CVSP in such a way as could potentially allow residential development of the Coyote Valley without any further environmental review. Specifically, as the City is undoubtedly aware, Government Code Section 65457 exempts from CEQA review “[a]ny residential development project, including any subdivision, or any zoning change that is undertaken to implement and is consistent with a specific plan” for which an EIR has been certified. Based on this provision, if the City certifies the EIR and approves the CVSP, future residential development in Coyote Valley may escape *any further environmental review* so long as the proposed development is consistent with the Specific Plan. Public Resources Code Section 21080.7(a) contains a similar, although somewhat more limited, exemption.¹

In light of these exemptions, the DEIR’s assurance that future components of the CVSP may require project-specific environmental review is misleading and disingenuous. If CVSP components such as tentative maps and project construction may proceed with no further environmental review, the DEIR must so state. In that event, to be legally adequate, the DEIR must provide far more detailed environmental analysis appropriate to a project-level EIR. And here, the DEIR utterly fails to provide this necessary detail.

Indeed, use of a program EIR is plainly unlawful and inappropriate in this case precisely because the residential components of the Project are unlikely to receive meaningful future environmental review based on the statutory exemptions cited above. CEQA sanctions the use of program EIRs only where additional environmental analysis under CEQA will occur as additional projects are proposed under the program. In *Friends of Mammoth v. Town of Mammoth Lakes Redevelopment Agency* (2000) 82 Cal.App.4th 511, for example, the court’s decision to invalidate a program EIR turned largely on the fact that the document was “not a true first-tier EIR,” and so there was “no

¹ Among other things, Section 21080.7(a) requires a finding that the previously approved EIR “is sufficiently detailed so that the significant effects on the environment of the project and measures necessary to mitigate or avoid those effects can be determined.”

guarantee” of subsequent environmental review at a future stage. *Id.* at 536. So too, here, inasmuch as there is no guarantee of environmental review of future residential development plans, the CVSP DEIR must be revised to contain the same level of detail as a project-level EIR.

Moreover, even if the CVSP DEIR were intended as a program EIR, this would not justify the lack of detailed analysis. Numerous CEQA provisions clarify that “tiering [e.g., preparing a program EIR followed by a project-level EIR] does not excuse the lead agency from adequately analyzing reasonably foreseeable significant environmental effects of the project and does not justify deferring such analysis to a later tier EIR or negative declaration.” Guidelines §15152(b); *see also id.* §15152(c). Rather, “[t]he degree of specificity required in an EIR must correspond with the degree of specificity of the proposed project. An EIR on a construction project will necessarily be more detailed in the specific effects of the project” *Id.* §15146. This rule persists regardless of “any semantic label accorded to the EIR.” *Friends of Mammoth*, 82 Cal.App.4th at 534.

Given that the City intends to allow project level approvals—not simply *study* the planning for Coyote Valley—in reliance on this document, the DEIR is obligated to analyze all foreseeable impacts of development projects anticipated under the CVSP. Accordingly, the EIR must be revised to contain the same level of detail as a project-level EIR to allow analysis of impacts from the development of the Coyote Valley.

B. The DEIR’s Description of the Project Is Inadequate.

In order for an EIR to adequately evaluate the environmental ramifications of a project, it must first provide a comprehensive description of the project itself. “An accurate, stable and finite project description is the *sine qua non* of an informative and legally sufficient EIR.” *San Joaquin Raptor/Wildlife Rescue Center v. County of Stanislaus* (1994) 27 Cal. App. 4th 713, 730 (quoting *County of Inyo v. City of Los Angeles* (1977) 71 Cal. App. 3d 185, 193). As a result, courts have found that even if an EIR is adequate in all other respects, the use of a “truncated project concept” violates CEQA and mandates the conclusion that the lead agency did not proceed in the manner required by law. *San Joaquin Raptor*, 27 Cal. App. 4th at 729-30. Furthermore, “[a]n accurate project description is necessary for an intelligent evaluation of the potential environmental effects of a proposed activity.” *Id.* at 730 (citation omitted). Thus, an

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inaccurate or incomplete project description renders the analysis of significant environmental impacts inherently unreliable. Here, the DEIR for the CVSP does not come close to meeting these clearly established legal standards because it fails to provide a stable and finite project description with respect to key components of the proposed Project that have the potential to result in significant environmental impacts not analyzed in the DEIR.

In practical terms, the CVSP is a plan to erect a city within a city, with as many as 80,000 residents, over 26,000 housing units, and about 50,000 jobs. DEIR at 14, 15. Any reasonably complete description of the Project would give the public and decision-makers a sense of what this new community would look like, how it would work, and how it would fit into life in the greater San Jose area and the rest of Santa Clara County. The purported project description does none of this. It is effectively no description at all; it is merely a suggestion of the City's general conceptual scheme for the Coyote Valley. There is certainly no comprehensive plan for how this community would be developed. This failure echoes throughout the entire document: because the Project is incompletely described, none of its impacts can be fully analyzed. Over and over again, as discussed at length throughout this letter, the DEIR defers analysis until after project approval and offers vague and unenforceable mitigation measures. It simply is not possible to analyze and therefore mitigate the impacts of a project whose parameters are as vague as the CVSP's.

1. The Project's Land Use Planning Lacks Critical Details.

The CVSP DEIR provides only the most preliminary of plans for development of Coyote Valley and therefore lacks sufficient information to allow informed decisions about how the CVSP will affect the region. There may be further discretionary approvals down the road, but this EIR and the approvals it informs are the only opportunity for decision-makers and the public to understand and weigh in on the big-picture questions that will determine what kind of a community is about to be created in their midst, or whether this community should be created at all. Yet the DEIR is so vague and general as to render informed participation meaningless. Astonishingly, we can find no evidence in the DEIR, or elsewhere, that any type of meaningful land use planning has been undertaken for this massive development project.

The closest that the DEIR comes to providing a sense of the CVSP is Figure 2.01 (Draft Land Use Plan), Figure 2.02 (Illustrative Plan), and Figure 2.03

(Planning Areas Diagram).² These maps offer no more than a general level of detail, depicting generally where the residential, commercial, and industrial/workplace development would be located. Merely showing the location of these uses is not sufficient. At a minimum, the document must provide information about what these uses will “look like” and how they will work. Where, for example, are the CVSP’s development standards and guidelines? What plan can the public and decision-makers consult in order to verify that the neighborhoods are well-planned and that land uses are compatible? How will the commercial uses be integrated with the single-family and multi-family dwelling units at the neighborhood level? How accessible (i.e., how long would it take to walk) are the CVSP residential neighborhoods to shopping and employment opportunities? How would the design of the street system accommodate the pedestrian and connectivity? How would the residential, employment, and commercial uses be integrated with the transit system?

Nor does the DEIR identify imminent development activity. Are specific projects in the pipeline? If so, how many and what type? Is there more demand for residential projects or non-residential? Which projects are likely to be built within the first five years? Which of the public projects would be constructed first?

2. The Project’s Transit Components Are Unplanned and Unfunded.

The flaws in the DEIR’s project description extend far beyond its failure to contain detailed land use planning information. The DEIR also fails to describe major elements of the CVSP. For instance, the DEIR states that the CVSP includes a transportation system comprised of a public transit system, bike/trails system, and roadway network. DEIR at 25. As for the public transit system, the DEIR further states that the CVSP’s transit system consists of three components: CalTrain, the Santa Clara Valley Transportation Authority (“VTA”) bus system, and an an internal fixed guideway Bus Rapid Transit (“BRT”) system. *Id.* While the DEIR describes the CVSP roadway system in intricate detail (i.e., diagrammatic cross sections complete with roadway widths), the document lacks *any* description of the Project’s purported public transit system. This lack of detail is particularly ominous given that the City has chosen to

² A footnote to Figure 2.0-1 states that a planning area detail appendix was reissued in June 2006 and that this document contains additional detail for land use refinements. This appendix does not appear to be included with the DEIR.

present this Project as “very urban” and “transit-oriented.” *Id.* at 8, 96. In this regard, the CSVP does not even meet its own objectives.

3. The Project’s Public Services and Infrastructure Are Undefined.

The DEIR totally lacks plans for how the development will function. According to CEQA, an EIR’s project description must contain “[a] general description of the project’s technical, economic, and environmental characteristics, considering the principal engineering proposals if any and supporting public service facilities.” CEQA Guidelines § 15124(c). Here, the DEIR does nothing more than state the obvious when it asserts that implementation of the CVSP would require extension of electrical, sewer, potable and advanced treated recycled water, and natural gas. DEIR at 43. In fact, with the exception of the roadways and flood control/storm drainage facilities, the necessary public services and utilities are discussed in such a superficial manner that the description of the solid waste facility, for example, amounts to no more than a self-evident rumination that this facility would be developed. *Id.* at 44. The DEIR never explains how the massive amount of solid waste generated by the Project would be accommodated, other than the assertion that “the CVSP may require the creation of a separate collection district.” *Id.* at 44. Remarkably, the DEIR never begins to resolve where this waste would actually be disposed.

Further, while the DEIR acknowledges that the CVSP would contribute to the need for and expansion of the area’s wastewater treatment plant, the document admits that the plan to study such an expansion has not yet been prepared. *Id.* at 505, 507. Nor does the DEIR ever explain how energy would be supplied to the CVSP. This information is of critical concern inasmuch as the California Energy Commission has determined that California will have an adequate supply of electricity only through 2009 and that Northern California will have an adequate supply of natural gas only through 2007. *Id.* at 392. These public services are not trivial, speculative, or optional—they are *part of the Project*, and therefore must be included in the project description. *See San Joaquin Raptor*, 27 Cal. App 4th at 714-16 (holding EIR inadequate where project description failed to include sewer expansion which was “required element of the development project”).

Nor does the DEIR contain necessary information relating to the phasing, timing, or financing of these infrastructure and services. In a project of this size and duration, public and private improvements must be developed in a logical and viable

sequence; infrastructure needs to be in place prior to demand for new development. Unfortunately, the DEIR contains no documentation, let alone evidence, that the residential, commercial, and industrial development would be efficiently linked to necessary infrastructure. The failure to provide detailed plans for this key infrastructure is particularly disturbing inasmuch as one of the City's "key considerations for development in Coyote Valley was consistency with the City's growth management policies and the potential city-wide effects of premature development in an area without services or infrastructure." DEIR at 2.

Until these aspects of the CVSP are fully described, this document cannot legally support even the first specific project. Disturbingly, development nevertheless appears imminent in the Coyote Valley. If this is not the time for such basic level of planning, when is?

Likewise, the failure to "specify . . . in detail" the infrastructure and other required components renders the Specific Plan itself legally inadequate. Gov't Code § 65451(a).

4. The DEIR Improperly Segments Environmental Review of the CVSP.

In addition to the deficiencies described above pertaining to CVSP's solid waste facilities and service, the DEIR suffers from another serious flaw—it inappropriately segments components of the Project for purposes of environmental review. An accurate description of the project is one that considers the whole project, instead of narrowly focusing on a particular segment. CEQA "mandates 'that environmental considerations do not become submerged by chopping a large project into many little ones—each with a . . . potential impact on the environment—which cumulatively may have disastrous consequences.'" *City of Santee v. County of San Diego*, 214 Cal.App.3d 1438, 1452 (1989); *see also McQueen v. Board of Directors*, 202 Cal.App.3d 1136, 1146 (1988) (open space district "impermissibly divided the project into segments which evade CEQA review"); *Plan for Arcadia, Inc. v. Arcadia City Council*, 42 Cal.App.3d 712, 726 (1974) (shopping center and parking lot projects are related and should be regarded as a single project for CEQA purposes).

Like the related projects in *City of Santee*, *McQueen*, and *Plan for Arcadia*, the DEIR acknowledges that the CVSP would require a joint use maintenance and vehicle storage facility as part of its collection district to provide integrated solid waste services.

DEIR at 44. The document goes on to state that this facility would include a corporation yard, a materials recovery facility and a composting facility, and possibly a solid waste transfer/processing station. *Id.* at 386. Rather than define these CVSP project components and analyze their environmental impacts, the DEIR simply asserts that these facilities would require further review. *Id.* The DEIR's approach of limiting its evaluation of impacts to the land use aspects of the CVSP alone, which is clearly analogous to the improper segmentation found by the court in *City of Santee* and related cases, is therefore impermissible under CEQA. The revised DEIR must include an analysis of the *entire* CVSP project and, by the DEIR's admission, the CVSP includes the solid waste facilities.

5. The Design of the CVSP Remains Unplanned.

The visual quality of a community is a basic building block for healthy, vibrant, and beautiful neighborhoods. Design standards and design guidelines must be in place to lend character and aesthetic quality to the community. Among other things, design guidelines can encourage architectural continuity, provide guidance for site layout to maintain the attractiveness of roadways and industrial and commercial areas, and offer suggestions for landscaping to create a pleasant streetscape.

Here, almost 4,000 acres of the Coyote Valley are on the verge of being developed; beautiful open space lands with broad vistas would be replaced with buildings. Yet, the DEIR provides absolutely no sense of what this development would look like. The document is silent as to residential, commercial and industrial architectural themes, and contains no information as to the types of building materials to be used, roof styles, building massing, projections, or color schemes. Nor does the DEIR identify, or in any way describe, the intended streetscape or landscape themes and designs. Because the DEIR does not discuss any of these architectural, streetscape, and landscaping details, the public and decision-makers are left in the dark as to what Coyote Valley would actually look like in 10, 30, or 50 years.

6. The CVSP Lacks a Coherent Mechanism for Ensuring the Protection of Agricultural and Open Space Lands.

The CVSP purports to include a "greenbelt strategy," which would establish a framework to create and sustain a rural environment that supports, among other things, land conservation and agriculture. DEIR at 9, 44, 432. The DEIR also identifies, as a

project objective, that the Specific Plan should seek mechanisms to facilitate the permanent acquisition of fee title or conservation easements in South Coyote. *Id.* Indeed, the CVSP presents a tremendous opportunity to preserve open space and agricultural land in Santa Clara County that could offset the loss of such lands that would be caused by the development of CVSP. But the DEIR never even identifies, let alone commits to adopting, a specific mechanism that the City would rely on to ensure preservation of the Coyote Valley Greenbelt.

7. The CVSP and the DEIR Should Go Back to the Drawing Board.

The foregoing are just a few of the myriad issues that define sound land use planning, especially *environmentally sensitive* land use planning. Given the massive scale of the CVSP, we understand the difficulty in undertaking detailed planning. Yet, it is precisely because of the size of this Project and its far reaching environmental consequences that the City is obligated to address these fundamental issues now. The DEIR's failure to address these issues is particularly disconcerting because San Jose prides itself as having developed an overall *vision* for Coyote Valley—a model community assertedly based on innovative planning and design. DEIR at 14.

The City is clearly capable of providing details about the CVSP, as indicated by the DEIR's detailed descriptions and schematics of the CVSP's roads and flood control system. DEIR at 106. The level of planning and design undertaken for roadways and flood control must be extended to the remaining CVSP components. Unless and until the City prepares a more detailed land use plan for the CVSP, and one which grapples with these basic planning and design considerations, the DEIR will remain incapable of addressing and analyzing the Project's important quality of life and environmental implications for the region.

We appreciate that, under certain circumstances, an EIR for a planning level document may include less detail than required for a project-specific EIR. Nevertheless, program level EIR's are not excused from CEQA's mandate to provide an accurate, stable, and finite project description. *County of Inyo*, 71 Cal.App.3d at 192. Moreover, as noted above, the DEIR for this project is not a true program EIR and thus must include sufficient detail to allow accurate analysis of the impacts of full development under the CVSP.

In short, it is simply inconceivable that accountable decision-makers could make a decision to approve this Project with essentially no information about these fundamental project components. Yet that is effectively what this DEIR asks the City to do. Equally important, the DEIR's abject failure to describe these critical components for the CVSP sends an ominous message about planning for the rest of this massive Project. Under state law, the DEIR must be revised to include a detailed description of the CVSP. These descriptions must then provide the basis for new, extensive analyses of the Project's environmental impacts.

In sum, this Project needs to go back to the drawing board. Once the necessary planning is complete for the large-scale and controversial project, the City will be in a position to actually evaluate the Project's environmental effects. Only then can it make the intelligent, informed decisions that CEQA requires.

C. The DEIR's Analysis of and Mitigation for the Impacts of the Proposed Project Are Inadequate.

The discussion of a proposed project's environmental impacts is at the core of an EIR. See CEQA Guidelines § 15126.2(a) (“[a]n EIR *shall* identify and focus on the significant environmental effects of the proposed project”) (emphasis added). As explained below, the DEIR's environmental impacts analysis is deficient under CEQA because it fails to provide the necessary facts and analysis to allow the City and the public to make informed decisions about the Project. An EIR must effectuate the fundamental purpose of CEQA: to “inform the public and responsible officials of the environmental consequences of their decisions before they are made.” *Laurel Heights Improvement Assn.*, 6 Cal.4th at 1123. To do so, an EIR must contain facts *and* analysis, not just an agency's bare conclusions. *Citizens of Goleta Valley v. Board of Supervisors*, 52 Cal.3d 553, 568 (1990). Thus, a conclusion regarding the significance of an environmental impact that is not based on an analysis of the relevant facts fails to fulfill CEQA's informational goal.

Additionally, an EIR must identify feasible mitigation measures to mitigate significant environmental impacts. CEQA Guidelines § 15126.4. Under CEQA, “public agencies should not approve projects as proposed if there are feasible alternatives or feasible mitigation measures available which would substantially lessen the significant environmental effects of such projects. . . .” Pub. Res. Code § 21002.

In every section of the CVSP's impact analysis, it is apparent that the authors are faced with an impossible task: they must evaluate the environmental consequences of implementing a "plan" so vague and incomplete that it barely constitutes a plan at all. As described above, the DEIR includes virtually no concrete description of key elements of the CVSP. This void becomes even more clear in the impacts chapters, where time and again the DEIR defers analysis and mitigation because there is presently no way to determine how this vague "Project" will affect the environment.

As discussed above, the CVSP's nebulous approach to environmental review fails to adequately accomplish the purpose of either a programmatic or a project-level EIR. The problems with this approach become immediately apparent when reviewing the DEIR's environmental impact analysis. Thus, although it is clear that the CVSP has the potential to be one of the most environmentally degrading actions ever suggested by San Jose, neither the public nor decision-makers have any way of knowing the magnitude of this harm. The DEIR simply fails to provide decision-makers and the public with detailed, accurate information about the Project's significant environmental impacts and to analyze mitigation measures that would reduce or avoid such impacts.

- 1. The DEIR Fails to Adequately Analyze the Project's Impact on Agricultural Lands and Open Space.**
 - a. The DEIR Fails to Analyze the Severity and Extent of the Project's Impacts to Coyote Valley's Rich Agricultural Lands.**

The DEIR's utter failure to adequately analyze the Project's impact on agricultural lands is one of the document's most notable and alarming deficiencies. Indeed, the purported analysis of impacts to agricultural lands is no more than one paragraph; and this paragraph simply asserts that the Project would result in the loss of 2,400 acres of prime farmland, farmland of local and state importance, and unique farmland. DEIR at 111. Although the DEIR does acknowledge this impact to be significant, it provides no analysis of what it actually means to take some of the richest farmland in California, and possibly the country, out of production. Merely stating that an impact is "significant" does not satisfy CEQA; the EIR must contain facts *and* analysis in support of its conclusions, and must describe how significant the impact will be.

Equally disconcerting, the DEIR understates the acreage of impacted agricultural lands because it relies exclusively on CEQA's definition of prime agricultural

lands. DEIR at 102. Relying on this definition, however, omits up to 1,400 acres of agricultural land from the analysis. As discussed below, in the context of the open space impact analysis, the DEIR states that the CVSP would result in the development of approximately 3,800 acres of primarily undeveloped flat agricultural land. *Id.* at 110. Likewise, the Santa Clara County Local Agency Formation Commission's ("LAFCO") Draft Agricultural Mitigation Policies rely on the Cortese Knox Herzberg Act's definition of prime agricultural lands in evaluating a project's impacts on agricultural lands. Had the DEIR adequately analyzed the CVSP's consistency with LAFCO's policies—and at least considered the Cortese Knox Herzberg Act's definition of prime agricultural lands—it likely would have determined that the Project would impact far more than 2,400 acres of prime agricultural land. Finally, as discussed below, the DEIR acknowledges that existing agricultural operations within the Coyote Valley may have to be discontinued once future residents move into the CVSP Development Area. DEIR at 107, 108. The DEIR never attempts, however, to calculate the amount of agricultural land that would be taken out of production as a result of these land use conflicts.

Similarly, the DEIR's bland and truncated "analysis" of impacts to agricultural lands provides no good faith attempt to capture the extraordinary importance of these lands or what their loss would mean to California agriculture and indeed the entire United States. According to "Setting The Standard in Coyote Valley," Coyote Valley was once part of the Valley of Heart's Delight, combining fertile soil, a moderate climate and sufficient water flows to earn the reputation as an "agricultural eden." *See* "Setting The Standard in Coyote Valley," attached hereto as Exhibit A. This Report explains what the CVSP DIR does not—that the loss of agricultural land due to the Project is a severe impact with far-reaching consequences:

The loss of productive farmland to urban and suburban encroachment is a pressing environmental and food security concern in California and through out the United States. According to the American Farmland Trust, every day we lose more than 3,000 acres of productive farmland to urban sprawl. More than 75 percent of our fruits and vegetables are produced near urban areas, directly in the path of development. Each year, we lose an area of productive farmland the size of Delaware. Loss of this essential form of natural capital deprives future generatons of the ability to grow food and fiber and reap the multiple benefits of open space. In California, agricultural land loss on a county by

county basis is tracked by the Division of Land Resource Protection. Between 1984 and 2004, Santa Clara County lost 33,288 acres of agricultural land to development, or 1,664 acres per year. (CDC 2005a).

See Exhibit A at ____.

b. The DEIR Fails to Adequately Analyze the Project's Impact on Coyote Valley's Open Space Land.

The document fares no better in its "analysis" of open space impacts. In a stunning display of understatement, the DEIR simply asserts that the Project would replace 3,800 acres of undeveloped agricultural land with buildings, streets, parking areas, and other infrastructure. DEIR at 110. This bland and utterly characterless description of open space impacts does not remotely capture the extraordinary importance of these lands. Permanent protection of important open space areas has become an urgent need in the Bay Area, and indeed throughout the state. California statutory and case law have long recognized open space as a valuable environmental resource. Accordingly, the California Legislature has declared that "open-space land is a limited and valuable resource which must be conserved wherever possible." Gov't Code § 65562(a). Nearly thirty years ago, the California Supreme Court recognized that "[t]he elimination of open space in California is a melancholy aspect of the unprecedented population increase which has characterized our state" *Associated Home Builders of the Greater East Bay, Inc. v. City of Walnut Creek*, 4 Cal.3d 633, 638 (1971), *cert. denied*, 404 U.S. 878 (1971).

Growing evidence suggests that open space conservation is not an expense, but a worthwhile investment that produces enormous economic benefits. Open space is a major attraction for employees, residents and visitors because it increases the attractiveness of an area as a place to live, work, and recreate. As the Trust for Public Land explains:

Too often we hear that communities cannot afford to "grow smart" by conserving open space. But accumulating evidence indicates that open space conservation is not an expense but an investment that produces important economic benefits. Some of this evidence comes from academic studies and

economic analysis. Other evidence is from firsthand experience of community leaders and government officials who have found that open space protection does not “cost” but “pays.”

“The Economic Benefits of Parks and Open Space: How Land Conservation Helps Communities Grow Smart and Protect the Bottom Line” (1999), attached hereto as Exhibit B. The EIR for the CVSP needs to provide meaningful analysis of this important issue.

c. The DEIR Fails to Identify Feasible Mitigation Measures to Reduce the Project's Significant Impacts on Agricultural and Open Space Lands.

As serious as the DEIR’s deficiencies are relating to the loss of agricultural and open space lands, they pale in comparison to the document’s failure to identify adequate mitigation for this loss. One of the fundamental objectives of CEQA is to facilitate the identification of “feasible alternatives or feasible mitigation measures which will avoid or substantially lessen” significant environmental effects. Pub. Res. Code § 21002. To effectuate this purpose, CEQA mandates that “public agencies should not approve projects as proposed if there are . . . feasible mitigation measures available which would substantially lessen the significant environmental effects of such projects . . .” *Id.* Consequently, an EIR must identify feasible mitigation measures to mitigate significant environmental impacts. CEQA Guidelines § 15126.4. As the Supreme Court has held, “The core of an EIR is the mitigation and alternatives sections.” *Citizens of Goleta Valley*, 52 Cal.3d at 564.

Given the extraordinary importance of Coyote Valley’s agricultural and open space lands, the DEIR should have provided extensive mitigation for the loss of these lands. Indeed, one would expect extensive mitigation in light of the fact that the City presents the CVSP as having a clear “greenbelt strategy.” DEIR at 44. In terms of the Project’s impacts on open space, however, the DEIR fails to consider *any* mitigation measures. The DEIR’s failure to identify even one mitigation measure epitomizes the document’s failure to meet CEQA’s core requirements.

The DEIR’s approach to mitigation for the Project’s loss of agricultural lands is even more disingenuous. Amazingly, after providing a vague discussion of programs that could create new or protect existing farmlands, the DEIR explicitly states

that the *City is not requiring such mitigation for the project*. DEIR at 114-118. So rather than seriously study the feasibility of mitigation opportunities—as clearly required by CEQA—the DEIR appears to throw its hands up in defeat. The DEIR’s failure to consider mitigation for the loss of agricultural lands, both on a project-specific and cumulative level, is particularly egregious given the wide variety and number of successful programs that exist to address this issue. Mitigation is defined by the CEQA Guidelines to include:

- Avoiding the impact altogether by not taking a certain action or parts of an action;
- Minimizing impacts by limiting the degree or magnitude of the action and its implementation;
- Rectifying the impact by repairing, rehabilitating, or restoring the impacted environment;
- Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action; and
- Compensating for the impact by replacing or providing substitute resources or environments.

CEQA Guidelines § 15370.

Here, the CVSP’s impact on agricultural and open space lands can be compensated for by the implementation of programs that provide for such lands in other locations or that reduce the impact over time by preservation of such lands. As the Bay Area Conservancy Program notes specifically with respect to Santa Clara County, “restoration and protection can be accomplished through the proper design of new developments and through mitigation requirements.” *See* “Regional Needs Briefing Book” at 27, attached hereto as Exhibit C. The American Farmland Trust has identified a number of such mitigation measures for farmland conversion, including:

- Requiring that remaining farmland, or an equal or greater amount of farmland, be placed under Williamson Act contract;
- Requiring a conservation easement to be placed on remaining or alternate farmland;
- Requiring that new agricultural land be brought into production; and

- Requiring a per-acre mitigation fee on development projects to be used for the acquisition of development rights on farmland in another location.

See American Farmland Trust, "Saving the Farm: A Handbook for Conserving Agricultural Land" (Jan. 1990) at 5-4, attached hereto as Exhibit D. In addition to protecting farmland, conservation easements are also effective mechanisms for preserving habitat, water quality, viewsheds, and community open space buffers.

In addition to these general forms of mitigation, there are numerous examples of communities that have required land dedications and/or fees for purchase of land to compensate for the loss of open space and agricultural lands as mitigation for significant impacts. Many communities with similar open space provisions in their general plans also require new projects that contribute to the loss of open space and agricultural lands, as well as to the growing need for open space, to mitigate for those impacts.

Among the feasible mitigation measures the CVSP DEIR fails to include that are capable of reducing or eliminating project-related and cumulative impacts are the following:

- Clustering of the development to protect on-site agricultural lands and provide permanent protection of those lands through an appropriate instrument (*e.g.*, dedication of lands to a Land Trust and/or multiple party holders of easements or other acceptable means of ensuring permanence).
- Payment of a mitigation fee to an appropriate conservation organization for purchase of mitigation lands.
- Purchase in fee title or conservation easement of comparable open space and agricultural land in the area (*e.g.*, South Coyote Valley agricultural area, Coyote Ridge, and the cascading ranges to the west of Coyote Valley) and permanent protection of that land through a dedication to an appropriate open space conservation entity.

As the programs described above clearly show, feasible measures exist to reduce impacts relating to the loss of open space and agricultural lands. Indeed, even San

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Jose planning staff recognizes the feasibility of such measures, as indicated by the attached e-mail. *See* e-mail correspondence from Darryl Boyd to Brian Schmidt, May 14, 2007 (confirming that City staff's position is that farmland preservation is feasible mitigation for the loss of farmland), attached hereto as Exhibit E. In light of this fundamental CEQA violation, the DEIR must be revised to adequately analyze and mitigate the CVSP's impacts on agricultural and open space lands.

2. The DEIR Fails to Adequately Analyze and Mitigate the Project's Land Use Impacts.

The DEIR's analysis of land use impacts is hamstrung in part by the DEIR's consistent failure to define critical components of the Project. Nowhere is this more evident than in the document's failure to adequately analyze impacts relating to the compatibility of future land uses with existing and on-going agricultural operations. The DEIR acknowledges that existing agricultural operations within the Coyote Valley may have to be discontinued once future residents move into the CVSP Development Area. DEIR at 107, 108. This startling contention—that the development of the CVSP could adversely impact the economic viability of the valley's *remaining* agricultural lands, and indeed the County's agricultural industry as a whole—is given only passing discussion.

The document never bothers to describe the specific agricultural operations that might be threatened, let alone the nature of these operations. Nor does the document identify which or how many of the CVSP's projects would be incompatible with these agricultural lands. In addition, it makes no attempt to specifically identify or describe what is grown on these agricultural lands. For example, are there specific agricultural uses that would be less threatened by potential land use conflicts than others (i.e., organic farming may result in fewer land use conflicts in comparison to farming practices that use pesticides)? Are the threatened agricultural lands under Williamson Act contracts? Specifically, how much additional acreage of agricultural lands stands to be lost as a result of incompatible land uses? What size buffer zones would have to be in place to minimize or eliminate these potential conflicts? Now is the time to answer these questions so that the CVSP land use lines can be redrawn to protect existing agricultural operations. Yet, the DEIR is simply silent on all these critical issues.

The DEIR's persistent error of deferring planning and mitigation also infects the mitigation measures purporting to minimize impacts relating to land use compatibility with agricultural operations. Rather than set forth specific mitigation, the DEIR relies in part on the yet-to-be prepared Design Guidelines to "reduce the likelihood

that significant impacts would occur.” DEIR at 107. Yet the development of these Design Guidelines is deferred until after project approval. To the extent these Guidelines would help to minimize this impact, they should be a key component of the Project, not left up to developers to implement ad hoc after the fact. Moreover, even if the Design Guidelines had real content, they might only begin to lessen the land use compatibility impact of the CVSP.

The DEIR does mention that Santa Clara County has an Agricultural Rights, Disclosure, and Dispute Resolution Ordinance. DEIR at 108. However, rather than explain how this ordinance might minimize impacts relating to incompatibilities with agricultural operations, the DEIR states that the City is not subject to this ordinance. *Id.* Thus, rather than committing to adopt a similar ordinance, the DEIR simply asserts that San Jose would *consider the adoption* of a similar complementary ordinance. *Id.* CEQA requires more than an agency’s illusory promise to mitigate significant impacts.

The ultimate fact remains that the urban development associated with the CVSP would permanently threaten agricultural practices in Coyote Valley in ways that remain unknown because the DEIR does not provide anything close to a complete analysis of these impacts. Similarly, the DEIR’s findings that the CVSP would not result in significant land use incompatibility impacts is conclusory and unsupported by substantial evidence. Unless and until the CVSP is appropriately planned and designed, as discussed above, the County cannot effectively analyze the land use implications of development within the Coyote Valley. Thorough planning is a prerequisite for a comprehensive analysis of land use impacts and for the proposal of mitigation and/or alternatives that will minimize those impacts. The appropriate forum for such analysis is a revised and recirculated DEIR.

3. The DEIR Fails to Adequately Analyze and Mitigate the Project’s Transportation Impacts.

a. The DEIR Lacks an Accurate Description of the Project’s Qualitative Effects on Traffic.

The traffic impacts of the proposed CVSP demonstrate once again the profound changes that a project on the vast scale envisioned here will bring to this area. On a typical day, buildout of the Coyote Valley would generate approximately 302,780 daily new person trips, the vast majority of which will be made by automobile. DEIR at

147. The CVSP's intense influx of traffic is just one of the ways in which this proposed Project would forever alter the character of the Coyote Valley.

Rather than present a forthright picture of the full range and severity of the consequences of the CVSP, the DEIR's traffic analysis hides behind an opaque wall of numbers and charts. The concrete, quantitative analysis of traffic impacts is essential, but it is a means to an end. The purpose of the analysis is to allow an understanding of what will happen to the area if the Project is built. In some cases, like this one, numbers will not tell the whole story. Here, the significance of the CVSP's traffic impacts cannot be accurately conveyed without a textual description of how the Coyote Valley transportation system will work and what residents or visitors to the valley will actually experience once the CVSP is built out. As a result, neither the public nor decisionmakers have a realistic understanding of the actual traffic impacts of the CVSP.

The DEIR would have us believe that the CVSP is based on innovative planning—relying on the principles of smart growth and the concept of planning based on the environment. DEIR at 14. To this end, the DEIR asserts that the CVSP is based on “a new approach, which involves a shift from a land planning driven process to one that evolves planning from the existing natural environment or ‘Environmental Footprint.’” *Id.* The DEIR goes on to state that “the urban design approach for Coyote Valley focuses on the guiding principles of a sustainable, pedestrian and transit-oriented community” and that “the CVSP has been designed to encourage alternative means of transportation including walking, biking, and transit use.” *Id.* at 14, 162.

One need not delve far into the DEIR's traffic analysis to discover that the end product would not be sustainable, transit-oriented, or environmentally friendly development. Indeed, the CVSP would result in an additional 1,687,000 daily vehicle miles traveled in the region and between 210,000 and 266,000 extra cars on the roads every day. DEIR at 147, 417. This number of vehicles is roughly equivalent to that which travel on the Oakland-San Francisco Bay Bridge each day. *See* “Facts at a Glance,” Caltrans, (identifying the Oakland-San Francisco Bay Bridge daily traffic as 270,000 vehicles), attached hereto as Exhibit F. And as discussed further below, rather than extensive travel on transit, as the DEIR would have us believe, the DEIR itself estimates that only *four percent* of the CVSP-related trips would be made on transit. DEIR at 147.

In short, the DEIR must explain to the public and decision-makers what it means to have a quarter-million extra cars on the roads every day. Such a shift in the

region's character is the true significant traffic impact of the proposed Project; the numbers are only an indication of that change. By trying to spin the CVSP as a transit-based plan, the DEIR fails to accurately depict the severity and extent of traffic impacts. In addition, as explained below, as excessive as these traffic numbers are, the DEIR actually paints an unrealistically optimistic picture of the CVSP's effect on the region's traffic congestion.

b. The DEIR Understates the CVSP's Traffic Impacts Because it Assumes the Implementation of Unfunded Transportation Infrastructure.

The CVSP purports to include, and the DEIR relies on, a series of major transportation infrastructure projects to be implemented during the next 25 to 50 years (i.e., the timeline for buildout of the CVSP). The DEIR therefore concludes that any impacts resulting from the phasing of traffic improvements to development phases would be "temporary and ultimately mitigated." DEIR at 166. However, the traffic analysis suffers from a fatal flaw: it assumes the implementation of major transportation projects in its baseline for determining project impacts when there is *no evidence* that these projects would actually be implemented. Thus if any of these roadway improvements are not constructed or implemented, traffic impacts would be more severe than described.

The DEIR nevertheless assumes these transportation infrastructure improvements in its analysis of CVSP traffic impacts, claiming that such projects are required to accommodate proposed CVSP land use development. DEIR at 146. Yet, these are not minor undertakings; they include massive projects such as new interchanges with U.S. 101 and the construction of major regional arterials. DEIR at 148-150. The DEIR never, however, specifically identifies how these projects would be funded or how the City would ensure that infrastructure improvements necessary to support land use development would occur concurrently, or in advance of, the demand anticipated from new development.

Such details are essential for a project-level EIR such as this. Unfortunately, the environmental document raises more questions than it answers, as illustrated by the following statements:

This major infrastructure would be financed through a variety of mechanisms over the life of the project implementation

process. For example, Development Impact Fees *could* be assessed at the time of project approval. Additionally, the City of San Jose *could* seek funding from regional sources to help finance major improvements to the regional transportation system, including upgrading and/or expanding transit systems. Build-out of the project would be dependent on concurrent implementation of the major transportation infrastructure elements.

DEIR at 148 (emphasis added). The DEIR never actually identifies, let alone describes, the City's Development Impact Fee program. Would this fee program be the only funding mechanism (other than the vague hope for "regional funding sources") for the necessary infrastructure improvements? Put simply, will the financing for these massive projects be sufficient or not?

Nor does the DEIR identify the schedule, or even a tentative schedule, for design and construction of this infrastructure. For example, the DEIR asserts that the City would begin to approve the residential component of the Project only after 5,000 new jobs have been added. DEIR at 7. At the same time, the DEIR admits that the CVSP cannot proceed without the roadway projects. *Id.* at 146. The DEIR never identifies exactly which transportation projects have to be in place prior to the industrial development (i.e., the 5,000 jobs). Once the 5,000 jobs have been created, which transportation projects would have to be in place before the City moves forward with the residential component? More importantly, at what point, if ever, will the City decide it cannot approve further development because significant infrastructure projects have not yet been constructed? The DEIR simply ignores these fundamental issues. These are critical components of the CVSP, not trivial details that can be defined after project approval. Until the DEIR resolves this critical flaw, it cannot legally support project-level approvals.

The problems with the DEIR's failure to ensure the implementation of necessary infrastructure represent more than just poor planning. In a few instances, the DEIR admits that some of the transportation projects would be implemented as mitigation measures for the CVSP's significant traffic impacts. To this end, the document explains that "the proposed project" shall make a fair share contribution toward the necessary transportation improvement. *See e.g.*, Impact Trans-4, Trans-5, and Trans-15; DEIR at

176-178. Given that the “project” here is the specific plan itself, how exactly will the specific plan pay its fair share contribution?

According to state law, fee-based mitigation programs for public service impacts based on fair share infrastructure contributions by individual projects may potentially be adequate mitigation measures under CEQA. *Save Our Peninsula Committee v. Monterey County Bd. of Supervisors*, (2001) 87 Cal. App. 4th 99, 140. To be adequate, however, these mitigation fees must be part of a reasonable plan of actual mitigation that the relevant agency commits itself to implementing. *Id.* at 140-41; *see also Anderson First Coalition v. City of Anderson*, (2005) 130 Cal. App. 4th 1173, 1188-89 (explaining that fee-based traffic mitigation measures have to be specific and part of a reasonable, enforceable plan or program that is sufficiently tied to the actual mitigation of the traffic impacts at issue). Here, in direct contrast to CEQA’s clear requirements, the DEIR’s proposed mitigation simply assumes that the payment will occur, that it will cause the transportation projects to actually be constructed, and that it will adequately mitigate the impacts, without providing a reasonably enforceable plan to achieve those results. Again, since these assumptions are not based on actual agency commitments, neither the public nor decision-makers have any way of knowing the actual traffic consequences of approving the CVSP.

If, as the DEIR contends, the CVSP will include identification of financing measures for the needed capital improvements to support planned levels of development (DEIR at 8), this Project does not come close to achieving its intended objective. The DEIR should be revised to provide analysis sufficient to explain how the public and private infrastructure would be provided in a logical and viable sequence, so that each increment of development is supported by adequate public infrastructure and improvements.

c. The DEIR Understates the CVSP’s Traffic Impacts Because it Assumes Unrealistically High Transit Use.

As discussed above, while the DEIR’s traffic analysis assumes that four percent of the CVSP’s person trips would be made on transit (DEIR at 147), the document provides no evidentiary support for this optimistic assumption. Once again, the DEIR assumes the implementation of three major public transit improvements—the CalTrain station in the Coyote Valley, a shuttle to the Santa Clara Valley Transportation

Authority (“VTA”) Light Rail Transit (“LRT”) station at Santa Teresa, and an internal fixed guideway bus rapid transit (“BRT”) system. DEIR at 25, 28, 183. Here too, the DEIR never discloses exactly how these major transit infrastructure projects would be funded. The cost to actually construct this infrastructure, while undisclosed in the DEIR, would clearly be substantial. Moreover, infrastructure is only one of the costs associated with transit service. With the exception of a passing reference to the need for an increase in frequency and expansion of the VTA bus service (DEIR at 164), the DEIR ignores the specific increases in transit service necessary to serve CVSP transit needs. In addition, as discussed below, the DEIR is also silent as to how the CVSP would impact the transit service providers. Thus, in essence, contrary to the CVSP’s purported objective, the Project includes no real plan to provide transit service.

Even if the transit service were in place, the DEIR fails to provide any basis for its four percent ridership assumptions. It is especially difficult for transit to compete with the automobile if auto-based travel is faster and more convenient. Here, the CVSP would be developed with low-density, decentralized land uses, high-speed arterials, and over 41,000 parking spaces, all of which have a tremendously deadening effect on public transit. Thus, far from providing sustainable, transit-oriented development, the CVSP would do nothing more than facilitate San Jose’s trajectory of car-oriented sprawl.

Unless and until the DEIR can substantiate its assumption that four percent of CVSP trips would be made by transit, the document should assume these 13,000 trips would be made by automobile. This is a serious flaw in the analysis, which the DEIR must be revised to address.

d. The DEIR Understates the CVSP’s Traffic Impacts Because It Fails to Analyze Impacts to Regional Intersections.

The DEIR further understates the CVSP’s effect on traffic because it artificially limits the geographical size of the study area used to analyze intersection impacts. Specifically, the DEIR asserts that “project traffic will dissipate and disperse significantly once outside of the Coyote Valley, therefore intersections operating at LOS C or better outside of the CVSP Area were not analyzed.” DEIR at 125. The DEIR thus ignores hundreds, perhaps thousands, of intersections simply because the intersections are located outside of the Coyote Valley. By unreasonably restricting the size of the study

area, the DEIR gives the impression that the quarter-million daily cars traveling to and from the Project site would not impact intersections outside the Coyote Valley. Such an assumption is absurd. Traffic congestion in urban areas is a regional phenomenon. Cars would not suddenly stop once they are outside of the CVSP's boundaries but would continue—to Santa Clara County, San Francisco, Alameda County, and beyond.

The California Supreme Court has emphasized that “an EIR may not ignore the regional impacts of a project approval, including those impacts that occur outside of its borders; on the contrary, a regional perspective is required.” *Citizens of Goleta Valley*, 52 Cal.3d at 575. An EIR must analyze environmental impacts over the entire area where one might reasonably expect these impacts to occur. *See Kings County Farm Bureau*, 221 Cal.App.3d at 721-23. This principle stems directly from the requirement that an EIR analyze all significant or potentially significant environmental impacts. Pub. Res. Code §§ 21061, 21068. An EIR cannot analyze all such environmental impacts if its study area does not include the geographical area over which these impacts will occur.

If the CVSP is approved, extensive new traffic would inundate the South Bay. Yet this DEIR leaves the public and decision-makers in the dark as to the Project's actual traffic impacts because it arbitrarily ignores myriad intersections. The revised DEIR must identify each intersection that would be significantly impacted by the CVSP's influx of traffic, analyze the impacts, and identify feasible mitigation.

e. The DEIR Fails to Address Impacts to Transit Providers.

Regardless of the accuracy of this DEIR's projected transit mode share, the document provides no analysis, let alone evidence, that transit service providers would be able to accommodate the increase in transit ridership. The DEIR indicates that the demand for transit service will increase by up to 500 to 600 riders (apparently peak hour riders), upon buildout of the CVSP. DEIR at 164. If accurate, this increase in ridership would have potentially significant impacts on CalTrans and on VTA. Despite this fact, the DEIR fails to include any description of current loading capacities of the transit currently serving the site or the ability of Caltrans and VTA to serve its existing customers.

Moreover, the DEIR does not contain a specific threshold of significance for impacts to transit service. The DEIR, therefore, has no basis to conclude that impacts

to transit service providers would be less than significant. To conclude, as the DEIR does, that an impact is less than significant, substantial evidence must demonstrate that mitigation measures will reduce an impact to a less-than-significant level. Substantial evidence consists of “facts, a reasonable presumption predicated on fact, or expert opinion supported by fact,” not “argument, speculation, unsubstantiated opinion or narrative.” Pub. Res. Code § 21080(e)(1)-(2). Because the DEIR’s conclusion of insignificance is premised on unsupported assumptions, it falls far short of this threshold.

The revised DEIR must provide the following: (1) supporting evidence for transit ridership assumptions based on the types of uses proposed, taking into consideration the existing ridership loads and future transit services; (2) an indication of the number of transit riders that will be added to each line during the peak periods; (3) a description of the loadings on the various bus and other transit mode routes that will be affected by the project; (4) information about how much demand the CVSP will generate for routes that are already at capacity or projected to be at capacity in 25-50 years; and (5) a description of how transit agencies would be able to accommodate this demand.

f. The DEIR Fails to Consider and Adopt Feasible Mitigation Measures For the Project’s Significant Impact on Freeways.

Although the DEIR finds that traffic from the CVSP would cause 10 freeway segments to operate at an unacceptable LOS F (DEIR at 162), the document fails to provide any substantive mitigation for these gridlock conditions. Rather than identify any specific mitigation, the DEIR simply suggests that undisclosed transit improvements would reduce auto usage and that this reduction in auto usage would be most noticeable on freeways. *Id.* at 178, 179. The DEIR never actually identifies the specific transit improvements or explains how they would reduce auto usage. Moreover, instead of providing mitigation for the CVSP’s severe impacts on area freeways, the DEIR simply labels these impacts significant and unavoidable. DEIR at 183. The DEIR’s approach to “mitigating” the Project’s impacts thus epitomizes its failure to meet CEQA’s core requirements. California courts have made clear that an EIR is inadequate if it fails to suggest feasible mitigation measures, or if its suggested mitigation measures are so undefined that it is impossible to evaluate their effectiveness. *San Franciscans for Reasonable Growth v. City and County of San Francisco* (1984) 151 Cal.App.3d 61, 79.

The EIR's conclusion that mitigation to freeway impacts is somehow unavailable—that the City's hands are tied with respect to causing gridlock on area freeways—is particularly disturbing in light of the fact that the CVSP is intended to promote sustainable and transit-oriented development. Certainly, the DEIR could, and must, consider the following feasible mitigation measures intended to reduce auto-dependency:

- Study the feasibility of implementing a transportation demand management ordinance that would include such measures as a parking supply cap, parking pricing, jobs-based ridesharing programs; shuttle services, and telecommuting;
- Limit the amount of development proposed by the CVSP;
- Eliminate the artificial boundary between north and central Coyote Valley, thereby allowing for the integration of jobs, commercial and housing development;
- Increase development intensities and densities, thereby facilitating the potential for alternative modes of transportation;
- Reduce planned roadway capacity, specifically reducing the number of high-speed arterials constructed within the CVSP area; and
- Study and fund specific transit projects that would serve local as well as regional transportation needs.

In conclusion, the DEIR's failure to adequately identify and analyze feasible mitigation for the Project's impacts on freeways renders the DEIR legally inadequate. The revised DEIR must seriously address opportunities such as those identified above to reduce dependence on automobiles and to increase transit service.

4. The DEIR Fails to Adequately Analyze and Mitigate the Project's Water Supply Impacts.

Under CEQA, an EIR must inform decisionmakers and the public of the intended sources of water for a proposed project, as well as of the environmental impact if water is supplied from a particular source or sources. *Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova*, 40 Cal. 4th 412, 429 (2007) ("*Vineyard*"). It also must inform decisionmakers of the means by which any adverse impact resulting from the use of the identified water sources will be addressed. *Id.* Decisionmakers must be "presented with sufficient facts 'to evaluate the pros and cons of

supplying the amount of water that the [project] will need.” *Id.* at 431 (quoting *Santiago County Water Dist. v. County of Orange*, 118 Cal. App. 3d 818, 829 (1981)). The “future water sources for a large land use project and the impacts of exploiting those sources are not the type of information that can be deferred for future analysis.” *Id.* The DEIR’s analysis of water supply for the Project fails to meet this standard.

a. The DEIR Does Not Adequately Describe Baseline Water Conditions in Coyote Valley.

“Before the impacts of a project can be assessed and mitigation measures considered, an EIR must describe the existing environment. It is only against this baseline that any significant environmental effects can be determined.” *Save Our Peninsula Committee v. County of Monterey*, 87 Cal. App.4th 99, 119-20 (2001) (quoting *County of Amador v. El Dorado County Water Agency*, 76 Cal. App. 4th 931, 952 (1999)). Here, the DEIR’s Water Supply Impacts section (Section 4.16) misstates the baseline water supply in the Coyote Valley Groundwater Sub-basin. Section 4.16.2.1 of the DEIR states that “approximately 8,000 acre-feet per year (afy) *is currently being* extracted from Coyote Valley Groundwater Sub-basin for agricultural and urban uses . . . with no adverse effects in a multi-year drought.” DEIR at 421 (emphasis added). However, the full Water Supply Evaluation (“WSE”) in Appendix M of the DEIR states that “the [Santa Clara Valley Water] District [(“SCVWD”)] has concluded that *up to* 8,000 [afy] *may be* withdrawn from the [Coyote Valley Groundwater Sub-basin] on a sustainable basis during multiple year drought conditions.” WSE at 2 (emphasis added).

These figures are misleading. The SCVWD’s Water Supply Analysis (“SCVWD WSA,” located in Appendix E to the full WSE) outlines historical groundwater pumping in the Sub-basin. SCVWD WSA at 10, Figure 7. According to the SCVWD WSA, between 1987 and 2002, an average of only 6,799 afy were pumped from the Sub-basin. Only in one year, 1997, were 8,000 or more afy pumped. Moreover, Table D-1 in the City’s Groundwater Basin Information (“Groundwater Basin Info.,” located in Appendix D to the WSE) contains slightly different figures for historical groundwater pumping in Coyote Valley, in spite of the fact that both the City and the SCVWD claim that the source of the data is the SCVWD. *See* Groundwater Basin Info. at D-7, Table D-1. This conflicting information further confuses the issue of baseline water supply.

Even more troubling, Figure 8 in the SCVWD WSA, which outlines historical water supply for the Coyote Valley Sub-basin, indicates that in the driest year on record, *only 2,239* acre feet were available. Though the SCVWD recognizes that “[w]hat demand could be met under this supply scenario depends on the groundwater storage at the beginning of the drought and how much of that groundwater storage can be withdrawn without adverse impacts,” neither the SCVWD WSA nor the body of the DEIR provides an adequate analysis of such a dry year scenario. Moreover, neither the DEIR nor any appendix sufficiently discusses the available supply (as measured in Figure 8 of the SCVWD WSA) as compared with the amount of water pumped (as measured in Figure 7 of the SCVWD WSA and Table D-1 of the Groundwater Basin Info.) or the relationship between those two figures relate to one another, leading to further confusion about baseline supply.

b. The DEIR Does Not Provide Adequate Information About the Environmental Impact of the Construction of Recharge Basins and the Increased Groundwater Extraction in Coyote Valley.

The DEIR states that 50-100 acres of groundwater recharge basins are needed in Coyote Valley to supply the 6,000 afy of recharge to the Sub-basin needed for the Project at full build out. However, there is insufficient detail about the environmental impact of constructing such basins. Though the DEIR briefly outlines the biological, cultural resources, land use, traffic, and hazardous materials impacts of the construction and use of recharge basins, these analyses are cursory and inconclusive at best.

Moreover, the DEIR does not identify any possible sites for the basins and therefore does not include analyses of their impact on animal species, existing trees, or cultural resources; nor does it include analyses of land use compatibility or hazardous materials conditions. At the same time, the DEIR claims that construction of groundwater recharge basins will increase the supply of potable groundwater in the Coyote Valley Sub-basin to 13,000 afy, meaning that the basins will be responsible for supplying over 80% of the predicted potable water supply deficit for the Project (5,000 afy of 6,200 afy, *see* DEIR at 383, Figure 4-11.1). DEIR at 385. The construction of recharge basins is therefore critically important to the water supply analysis for the Project. Though proper tiering may be appropriate for “long-term, multipart projects” such as this one, it is “not a device for deferring the identification of significant impacts that the adopting of a specific plan can be expected to cause.” *Vineyard*, 40 Cal. 4th at 429 (quoting *Stanislaus Natural*

Heritage Project v. County of Stanislaus, 48 Cal. App. 4th 182, 199 (1996)). Without the construction of the recharge basins, the Project's potable water supply needs simply will not be met. The City must therefore conduct a thorough analysis of the environmental impacts of the proposed recharge basins before it certifies *this* EIR or adopts the specific plan.

Additionally, the SCVWD WSA states that “[m]aintaining groundwater supplies [in the Coyote Valley Sub-basin] while avoiding nuisance high groundwater conditions is a challenge made even more difficult by the important fishery and habitat needs supported by Coyote Creek.” SCVWD WSA at 6. The DEIR ignores this challenge, conclusively stating that “Coyote and Fisher Creeks would not be adversely affected by the extraction of groundwater from the Coyote Valley Sub-basin because water withdrawal amounts would not change above the 8,000 afy.” DEIR at 421. The DEIR contains no substantiation for this statement. In fact, a central claim of the DEIR's identification of water supply sources in Section 4.11.2.3 is that 13,000 afy will be withdrawn from the Sub-basin to meet the potable water needs of the Project. DEIR at 385. The claim about the lack of significant environmental impact (which is based on extraction of 8,000 afy) and the claim about the adequacy of the water supply (which is based on increased extraction to 13,000 afy) are therefore directly contradictory.

c. The DEIR Does Not Adequately Discuss Groundwater Quality in the Coyote Valley Sub-basin.

A thorough discussion of the quality of the groundwater, both current and anticipated (with additional recharge and pumping), is critical to enable the public and decision-makers to make an informed decision about the feasibility of continued and increased use of potable groundwater extracted from the Coyote Valley Sub-basin. Because the water currently being extracted is used for both agricultural and urban purposes, it is not clear from the DEIR how much of that water is potable, nor how much of the additional water available with supplemental recharge would be potable.

The DEIR briefly discusses the nitrate and perchlorate content of the groundwater in Section 4.8.2.6, but it does not provide adequate detail about the quality of groundwater to be pumped in the future, claiming only that “[a]ll public water supply wells meet drinking water standards.” DEIR at 333. The DEIR provides no support for this statement, which appears to be directly contradicted by the Groundwater Basin

Information appendix, which states that over half of the 600 private wells tested in the Llagas and Coyote Valley Sub-basins in 1997 exceeded the federal safe drinking water standard for nitrate.³ Groundwater Basin Info. at D-14. Moreover, even after land is converted from agricultural to residential use, “nitrate concentrations in groundwater may continue to increase and or remain steady due to residual nitrate in the soil from prior use and the slow movement of water from the surface the water table.” *Id.*

Though there are somewhat more detailed groundwater quality data in the appendices to the DEIR, “a report ‘buried in an appendix’ is not a good substitute for ‘a good faith reasoned analysis.’” *California Oak Foundation v. City of Santa Clarita*, 133 Cal. App. 4th 1219, 1239 (2005) (quoting *Santa Clarita Organization for Planning the Environment v. County of Los Angeles*, 106 Cal. App. 4th 715, 722-23 (2003)).

d. The DEIR Does Not Adequately Address the Feasibility or Environmental Impact of the Construction of an Advanced Recycled Water Treatment Facility.

The DEIR’s discussion of the use of recycled water relies on the construction of an advanced recycled water treatment facility (“ARWTF”), the feasibility of which is still unknown. According to the DEIR, the ARWTF would supply a total of 10,300 afy of advanced treated water for groundwater recharge (6,000 afy) and non-potable uses (4,300 afy). This amount constitutes 100% of the non-potable water requirement of the Project, as well as 100% of the supplemental recharge requirements for the Coyote Valley Sub-basin. Disturbingly, the DEIR includes few details about the construction of an ARWTF. Moreover, the DEIR states that “existing ARWTF facilities are fairly rare and the anticipated environmental impacts described [] are preliminary.”

The DEIR’s analysis of the long-term environmental impacts of the ARWTF is unacceptably hypothetical, and the DEIR does not provide any meaningful detail about the possible environmental impacts. Instead, the DEIR simply suggests that the ARWTF may be sited so as to avoid the removal of trees “to the extent possible,” as well as to “avoid land use compatibility impacts,” and states that further analyses must be done in the future with respect to a number of possible impacts. DEIR at 425-27. No hazardous materials or cultural resources analyses were conducted. Likewise, the

³ Given that the public wells and the private wells draw from the same Sub-basin, the more likely scenario is that they have similar levels of contamination.

analysis of the impact of the waste stream discharge from the ARWTF is cursory, suggesting simply that discharging the waste to the San Francisco Bay would be beneficial because it would help to remedy the long-term desalinization of the Bay, without discussing specific biological impacts. DEIR at 426. Moreover, though the DEIR acknowledges that an ARWTF would require a significant amount of electricity as well as the construction of underground diesel storage tanks, there is no discussion of the environmental impacts of these requirements, except to state that green building policies “could reduce these impacts to a less than significant level.”

This cursory analysis is inadequate, regardless of whether the DEIR is viewed as a programmatic or project-level CEQA review. “While proper tiering of environmental review allows an agency to defer analysis of certain details to later phases of long-term linked or complex projects until those phases are up for approval, CEQA’s demand for meaningful information ‘is not satisfied by simply stating information will be provided in the future.’” *Vineyard*, 40 Cal. 4th at 431 (quoting *Santa Clarita*, 106 Cal. App. 4th at 723). “[F]uture water sources for a large land use project and the impacts of exploiting those sources are not the type of information that can be deferred for future analysis.” *Id.*

e. The DEIR Does Not Adequately Address Alternative Water Supply Sources.

In *Vineyard*, the Supreme Court stated that if there is still “uncertainty regarding actual availability of the anticipated future water sources, CEQA requires some discussion of possible replacement sources or alternatives to the use of the anticipated water, and of the environmental consequences of those contingencies.” 40 Cal. 4th at 432. Though the court in *Vineyard* recognized that certainty of water supply is not required by CEQA, it ruled that an EIR must discuss uncertainty if it exists.

The only mention of uncertainty in the present DEIR is the introductory sentence to Section 4.16.3, which states simply: “In the event that the preferred water supply sources do not fulfill the projected demands, the SCVWD and the City have identified alternative sources that could be utilized countywide and for the Project.” DEIR at 428. There is no explicit discussion of uncertainty elsewhere, in spite of the fact that the feasibility of constructing an ARWTF is unknown and the fact that the full WSE classifies the availability of an additional 5,000 afy of groundwater from the Coyote Valley Sub-basin as “less certain.” WSE at 42.

The full WSE also states that additional technical studies, storage and delivery infrastructure, treatment, energy supplies, treatment waste disposal, DHS approval, SCVWD approval, and the construction of recharge basins are required in order to make the additional 5,000 afy of groundwater supply a reality. *Id.* Given that the 5,000 afy that are “less certain” make up over a third of the Project’s estimated potable water supply needs, the degree of uncertainty is a critical factor that the DEIR overlooks. The *only* alternative water supply even mentioned in the DEIR is the possible construction of a new reservoir. Specifically, DEIR section 4.16.3 (“Alternative Water Supply Sources”) mentions a reservoir as a possible alternative water supply source, but does not go into any detail about the construction of such a reservoir or its environmental impact. DEIR at 428-29. Under *Vineyard*, the DEIR’s cursory discussion of this single alternative source is woefully inadequate, as is the DEIR’s failure to fully disclose the uncertainty of future water supplies to serve the Project.

f. DEIR Section 4.16.2.4 Is Misleading and Misstates the Project’s Water Needs.

Section 4.16.2.4 of the DEIR states that “approximately 1,200 acre-feet per year (afy) of potable water (in addition to the 8,000 afy already being withdrawn from the Coyote Valley Sub-basin) is required to meet the water supply needs of the proposed Project.” DEIR at 428. This statement is misleading in two ways. First, as discussed above, 8,000 afy is not currently being withdrawn from the Coyote Valley Sub-basin. Second, the Project’s total demand for potable water, as outlined in Section 4.11.2.3, is 14,200 afy. This total far exceeds the 9,200 afy (8,000 plus 1,200) implied by Section 4.16.2.4. Moreover, stating that only 1,200 afy is required to meet water supply needs ignores the *assumption* that an additional 5,000 afy will be available from the Coyote Valley Sub-basin if the recharge basins are constructed. The DEIR must use consistent figures throughout in order to avoid confusing the public and decisionmaking bodies about the Project’s water demands.

g. The DEIR Does Not Provide Adequate Detail About the Source or Accuracy of the Projected Water Demands at Build Out.

The DEIR uses 18,500 afy as the estimated total water demand at Project build out; this figure excludes the 4,000 afy of recycled water currently supplied to Metcalf Energy Center (“MEC”). DEIR at 383. Presumably, based on the information contained in the WSE, this figure is taken from the SCVWD 2005 Urban Water

Management Plan (“UWMP”), which included forecasted Project demand. *See* WSE at 1. However, the WSE also indicates that current estimated Coyote Valley build-out demand is 18,700 afy, and that demand estimated by the retailers that submitted water supply assessments ranges from 13,700 to 20,400 afy. *Id.* Moreover, some of those estimates include the 4,000 afy currently being supplied to MEC while others don’t, further confusing the issue. The body of the DEIR itself must provide a more detailed outline of the projected water demands as well as the basis for its use of 18,500 afy as the projected demand at build out. *California Oak Foundation*, 133 Cal. App. 4th at 1239 (“Information ‘scattered here and there in EIR appendices’ or a report ‘buried in an appendix’ is not a good substitute for ‘a good faith reasoned analysis.’”)

h. The DEIR Confuses the SCVWD’s Analysis of the Adequacy of Water Supplies Through 2020 and 2030.

In Section 4.11.2.3, the DEIR states that the “Santa Clara Valley Water District’s [UWMP] includes the build-out demand of the Project and concludes that with water conservation savings and additional infrastructure, projected County-wide demand (including Coyote Valley) can be satisfied through 2030.” DEIR at 383. However, the WSE frames the UWMP’s conclusions differently, stating that “with water conservation savings, current district supplies are adequate to meet current and near future demand (to 2020) in normal and dry year scenarios, while new investment in water supplies is needed to meet additional future demand past the year 2020.” WSE at 28. The details of the infrastructure needed to meet demand beyond 2020, while very broadly outlined, are not analyzed in the DEIR or its appendices. *See* WSE at 29-30 (“The next [Integrated Water Resource Plan Study] is scheduled to be completed in 2008, and will define the strategy to secure supplies to 2020 and beyond.”). The DEIR states that “[f]urther investigation of the associated costs and economic feasibility for . . . each of the proposed alternatives is underway . . .” DEIR at 386. The text of the DEIR is therefore misleading in assuring the public and decision-makers that the SCVWD has found that water supplies are adequate through 2030. Though the DEIR recognizes that the adequacy of long-term supplies depends on conservation and additional infrastructure, there is little detail about the infrastructure that must be put into place or about the environmental impact of such infrastructure.

i. The Organization of the Water Supply Analysis in the DEIR is Confusing and Disjointed.

“The data in an EIR must . . . be presented in a manner calculated to adequately inform the public and decision-makers, who may not be previously familiar with the details of the project.” *Vineyard*, 40 Cal. 4th at 442. Here, the information about the adequacy of the water supply for the Project as well as about the environmental impacts of utilizing the proposed water sources are scattered in several places throughout the DEIR. For instance, the information about water quality is in Section 4.8, while the information about water supply appears fifty pages later in Section 4.11. While it may be appropriate to separate the impact analysis from the setting, this organization is unnecessarily disjointed. As a result, it is difficult for the public and decision-makers to understand all aspects of the proposed water supply and its impacts without reading and re-reading scattered sections of the DEIR in order to find the necessary information.

j. The DEIR Does Not Address Water Rights in the Coyote Valley Sub-Basin.

Section 4.11.2.3 states that “[w]ater is currently obtained for use in the valley from privately owned wells,” though the DEIR implies that the public has rights and access to this water. DEIR at 383. However, there is not an adequate discussion of where new wells will be located (or if new wells will be drilled at all) or of water rights more generally in the Sub-basin. In order for the public and decision-makers to have an adequate foundation on which to evaluate the reliability of groundwater supplies, the DEIR must describe water rights in the Sub-basin. For instance, if the wells will deliver groundwater for use on parcels other than those from which the water is drawn, those uses must be characterized as appropriative rather than overlying. *See City of San Bernardino v. City of Riverside*, 186 Cal. 7 (1921); *see also City of Pasadena v. City of Alhambra*, 33 Cal. 2d 908, 927 (1949). Under California’s common law system of groundwater rights, appropriative rights must give way when necessary to serve overlying users, e.g., agricultural users who pump groundwater for irrigation on the same parcel from which the water is pumped. *See City of Pasadena*, 33 Cal. 2d at 926. Accordingly, the DEIR must provide adequate information about overlying versus appropriative rights and use of the groundwater in the Coyote Valley Sub-basin, as well as about the location of any new wells and any environmental impacts of their drilling.

k. The DEIR Does Not Provide Adequate Information About the Variability of Water Supply in Wet and Dry Years or in a Multi-Year Drought.

In *Vineyard*, the court noted that an analytically thorough EIR should address the issue of water supply in wet and dry years, and the specific combination of proposed water sources to be used during wet and dry years, respectively. *Vineyard*, 40 Cal. 4th at 440. The DEIR does not adequately address this issue. It does not distinguish between wet and dry years, stating without explanation that up to 13,000 afy will be available (with additional recharge) from the Coyote Valley Sub-basin “with no adverse effects in a multi-year drought” and that the supply of recycled water will be “largely uninterrupted.” DEIR at 385. Though the appendices contain some additional detail about water supply and demand variability in dry versus wet years as well as during multi-year droughts, “a report ‘buried in an appendix’ is not a good substitute for ‘a good faith reasoned analysis.’” *California Oak Foundation*, 133 Cal. App. 4th at 1239.

5. The DEIR Fails to Adequately Analyze and Mitigate the Project’s Impacts on Utilities and Public Services.

The DEIR’s analysis of the CVSP’s impacts on utilities and service systems is woefully inadequate. In direct conflict with the CVSP’s project objective to ensure adequate services and infrastructure (DEIR at 2), the document fails to provide this necessary assurance. As discussed below—using solid waste and wastewater services as examples—the document fails to provide any evidence that critical public utilities and services would be in place to serve the CVSP.

a. The DEIR Fails to Identify the Necessary Solid Waste Facilities or Analyze and Mitigate Impacts Relating to the Provision of Solid Waste Services.

As discussed in the project description section of this letter, the DEIR errs in its failure to identify and describe specific components of the CVSP’s solid waste system, including the joint-use maintenance, vehicle storage facility, corporation yard, materials recovery facility, and the composting facility. The DEIR is equally deficient in its failure to specifically identify how the City intends to serve the solid waste needs of the CVSP. Indeed, rather than seriously study the City’s ability to accommodate the 2.7 million pounds per week of solid waste that would be generated by the CVSP, the DEIR leaves the entire issue unresolved. See DEIR at 387, Table 4.11-2 (emphasis added).

Absent any evidence or substantive analysis, the DEIR simply concludes that impacts relating to solid waste collection and disposal would be less than significant. DEIR at 387.

What information is provided in the DEIR regarding disposal capacity offers absolutely no assurance that area landfills would be able to accommodate the massive amount of waste generated by the CVSP. Yet, the DEIR implies that solid waste disposal would be a non-issue because the “CVSP would represent a small fraction of the city’s total generated waste.” *Id.* at 387. The CVSP’s percentage of San Jose’s total waste is irrelevant and does nothing to explain whether adequate landfill capacity would exist to accommodate the waste generated by the CVSP. Moreover, the information that is provided regarding the ability of landfill capacity to meet future waste demand is incomplete and contradictory. For example, as regards the Newby Island Landfill, the DEIR states that the City’s existing contract with Newby Island lasts until 2020 and that any expansion is speculative. DEIR at 379. Later, the document states that any garbage collected within Coyote Valley will be disposed of at Newby Island. *Id.* at 387. The DEIR never actually identifies the capacity of Newby Island or explains whether Newby Island would be able to adequately accommodate the CVSP’s solid waste needs.

Nor does the DEIR provide useful information regarding the ability of the Kirby Canyon Landfill to meet the Project’s solid waste needs, as the following statement confirms: “It is unknown how long there will be capacity at Kirby Canyon Landfill or other adjacent landfills, but all capacity within the City is expected to be exhausted by 2030 regardless of the development of CVSP.” *Id.* Following this decidedly vague and ambiguous statement, the DEIR boldly asserts that “the proposed CVSP project would not result in a significant impact as a result of exceeding the capacity of a landfill.” *Id.* It is impossible to reconcile the statements listed above with the DEIR’s conclusion that impacts relating to solid waste would be less than significant.

The DEIR’s analysis of cumulative solid waste impacts correctly concludes that these impacts would be significant. DEIR at 510. But here too, the DEIR fails to adequately analyze this impact. It makes no attempt, for example, to identify total solid waste demand in the region, or to analyze that demand against the capacity of area landfills. The cumulative analysis simply repeats the fact that all capacity within the City is expected to be exhausted by 2030 (DEIR at 509), but again lacks any of the detail as to the severity or extent of the impact.

The DEIR's approach to mitigating these cumulative impacts is also woefully inadequate. The document mentions potential mitigation options, including research and analysis to increase waste diversion and to monitor the continued availability of recycling, resource recovery, and composting capacity, or to open a new landfill. DEIR at 510. Yet, we can find no evidence that these "mitigation measures" would actually be required and incorporated into the Project.

In conclusion, the region's ability to accommodate the CVSP's massive amount of solid waste is not a trivial detail that can be determined after project approval. The DEIR must identify the total amount of the City's solid waste, including that generated by the CVSP, identify landfill or compost capacity, and determine whether the Project's waste can be accommodated upon buildout of the CVSP. Of course, this analysis must take into account the other jurisdictions that rely on the region's landfills and compost facilities.

b. The DEIR Fails to Adequately Disclose, Analyze and Mitigate Cumulative or Project-Level Impacts Relating to Sanitary Sewer/Wastewater Treatment.

Although the DEIR correctly concludes that cumulative impacts relating to sanitary sewer/wastewater treatment would constitute a significant impact, it substantially understates the severity and extent of this impact. The analysis suffers from two fundamental flaws: (1) it does not identify or analyze the wastewater that would be generated by other jurisdictions; and (2) it does not actually analyze the environmental impacts that would result from the exceeding the capacity of the wastewater treatment system. Moreover, as explained below, because the CVSP is not expected to be built out for 25 to 50 years, the deficiencies in the DEIR's cumulative analysis of wastewater impacts implicates the document's project-specific analysis.

The San Jose/Santa Clara Water Pollution Control Plant ("WPCP") provides wastewater treatment for the cities of San Jose, Santa Clara, Milpitas, Campbell, Cupertino, Los Gatos, Saratoga, and Monte Sereno. DEIR at 504. The DEIR states that while the WPCP has an existing capacity to treat 167 million gallons of wastewater per day ("mgd"), the National Pollution Discharge Elimination System ("NPDES") permitting program limits the amount of treated wastewater that can be discharged to the San Francisco Bay to 120 mgd. DEIR at 376. The DEIR further notes that the capacity allocated to San Jose of the 167 mgd figure is 107 mgd. *Id.* In 2006, San Jose pumped 84 mgd. *Id.* at 505. Cumulative development *within the City* would result in an increase

in wastewater discharge for a total of 117 mgd which would exceed the City's allotted capacity by about 10 mgd. *Id.* (emphasis added).

Of course, what the DEIR's analysis omits entirely is that, upon buildout of the CVSP—expected to occur sometime between 2032 and 2057—the wastewater volume of the cities of Santa Clara, Milpitas, Campbell, Cupertino, Los Gatos, Saratoga, and Monte Sereno will have substantially increased. Yet the CVSP DEIR makes no attempt to estimate the increased wastewater discharge from these other jurisdictions and thus fails to disclose the severity of this capacity deficit. Moreover, it follows that if there is insufficient capacity to serve cumulative development, there would not be sufficient capacity to serve the CVSP itself, given the CVSP's buildout timeframe. The DEIR incorrectly concludes this project-specific impact is less than significant. DEIR at 383.

Although the DEIR acknowledges that the 33 mgd increase in wastewater attributable to San Jose's cumulative development would cause the discharge from the WPCP to the San Francisco Bay to exceed the 120 mgd trigger, it fails to analyze the environmental consequences from this discharge, claiming instead that the City's Municipal Code would not allow this to occur. DEIR at 505, 506. Merely requiring compliance with agency regulations does not conclusively indicate that a proposed project would not have a significant and adverse impact. In *Kings County Farm Bureau*, 221 Cal.App.3d at 716, for example, the court found the fact that the EPA and the local air pollution control district had issued the necessary air emission permits for the construction of a coal fired cogeneration plant did not nullify the CEQA requirement that the lead agency analyze the significant air quality impacts of the entire project. Here, the DEIR concedes that exceeding San Jose's wastewater flow allotment could possibly impact endangered species in the San Francisco Bay, but the document stops short of actually analyzing the environmental effects of this discharge. The revised DEIR must provide an analysis of this and any other environmental impacts that could result from such an exceedance. This revised analysis must also evaluate the cumulative and project-specific impacts resulting from the CVSP, San Jose's other development, and the projected wastewater demand from the cities of Santa Clara, Milpitas, Campbell, Cupertino, Los Gatos, Saratoga, and Monte Sereno.

The DEIR also fails in its approach to mitigate for cumulative and project-specific wastewater impacts. Rather than specifically identify feasible mitigation measures, the document simply promises the eventual preparation of a Plant Master Plan which will "include a rigorous analysis of conditions beyond the scope of this EIR as to whether expanding treatment capacity is necessary." *Id.* at 506, 507. It is wholly

inappropriate, however, to deem this measure "mitigation" and allow it to be delayed until after project approval. *See Gentry v. City of Murrieta* (1995) 36 Cal. App. 4th 1359, 1396 (rejecting mitigation measures allowing project applicant to comply with report and measures regarding the Stephens' kangaroo rat developed *after* project approval). Moreover, the fact that the DEIR acknowledges the need to evaluate the necessity of expanding the wastewater treatment plant demonstrates the inadequacy of the County's environmental review.

Finally, while the DEIR vaguely alludes to potential environmental impacts that could result from increasing the treatment capacity of the Plant (DEIR at 507), it again stops short of actually providing this analysis. CEQA requires an EIR to evaluate any potentially significant environmental impacts that would be caused by mitigation measures. CEQA Guidelines § 5126.4 (a)(1)(D). Here, the expansion of the existing wastewater treatment plant, or the construction of satellite facilities, would have potential impacts including but not limited to the loss of agricultural and open space lands, loss of wildlife habitat, water supply and water quality impacts, air quality, odor, and noise impacts. The revised DEIR must identify, and analyze and identify feasible mitigation for these impacts. A thorough investigation on the cumulative and project-specific wastewater impacts must be prepared now in order to evaluate and mitigate these impacts before the Project is approved.

8. The DEIR Fails to Adequately Analyze and Mitigate the Significant Energy Footprint of the CVSP.

The DEIR acknowledges that the CVSP would result in the use of a substantial amount of electricity, natural gas, and gasoline and correctly concludes that these impacts would be considered significant. DEIR at 394, 395. Indeed, the DEIR has no choice but to conclude energy impacts would be significant inasmuch as the California Energy Commission ("CEC") has determined that California will have an adequate supply of electricity only through 2009 and that Northern California will have an adequate supply of natural gas only through 2007. *Id.* at 392. Particularly given these looming shortages, the DEIR should have comprehensively and specifically evaluated the effect that the CVSP would have on the ability of energy providers to supply electricity and natural gas. Yet, in a flagrant disregard for CEQA, the sum total of the DEIR's purported impact analysis is a simple recitation of how the CVSP would likely *reduce* energy consumption. *Id.* at 394, 395 (explaining that a mix of land uses and the provision of housing may lead to reductions in energy consumption). At a minimum, the DEIR is obligated to provide a detailed investigation of the severity and extent of impacts to

energy providers. Without this analysis, it is simply not possible to determine whether sufficient resources would be available to serve the CVSP.

Nor does the DEIR provide any evidentiary support for its conclusion that the energy mitigation measures would reduce the CVSP's energy impacts to a less than significant level. In addition to the fact that the measures are vague and relatively undefined, the DEIR makes no attempt to identify the expected energy savings from these measures. Once again, the DEIR provides no basis to judge the effectiveness of its mitigation. Rather it is a mere expression of hope that the City will be able to devise a way around California's energy crisis. The DEIR preparers' ambivalence toward implementing energy measures is further confirmed by the following statement in the document's cumulative energy analysis: "[t]he degree to which such measures will be incorporated into the CVSP or other cumulative projects is not presently known." *Id.* at 512.

Clearly, the DEIR must be revised to comprehensively analyze and mitigate the CVSP's effect on California's short and long-range energy needs. We direct the DEIR preparers to begin their investigation by carefully reviewing CEQA Appendix F (Energy Conservation) which is intended to ensure that a project's energy implications are fully considered in project decisions. This investigation must include the Project's compliance with California's Energy Efficiency Standards for Residential and Nonresidential Buildings.

9. The DEIR Fails to Adequately Analyze the Project's Effect on Global Climate Change.

While the DEIR provides a cursory analysis of the CVSP's contribution toward global climate change, the document once again fails to acknowledge the severity and extent of this impact. Indeed, the DEIR fails to identify a threshold of significance and therefore fails to identify the Project's impact upon climate change as significant. Absent such a determination, the DEIR inappropriately and irresponsibly fails to identify mitigation measures (i.e., specific emission reduction strategies) capable of offsetting the Project's greenhouse gas footprint. The DEIR does apparently acknowledge some obligation to implement such strategies when it suggests that Green Building policies could be implemented and reminds us that the CVSP "has been specifically designed to promote non-auto modes of transportation." DEIR at 395, 419. Yet, these passing glances to emission strategies do nothing more than demonstrate that the DEIR preparers

view these strategies as nothing more than a bureaucratic hurdle that must be jumped over prior to project approval.

The CVSP would be a significant source of greenhouse gas emissions. Indeed, by itself, the Project's approximately 1,687,000 vehicle miles traveled *per day* would result in 314,500 metric tons per year of carbon dioxide vehicle emissions. DEIR at 417. The CVSP's annual electricity usage would generate 183,000 metric tons per year of carbon dioxide emissions. *Id.* Given these extraordinary increases in greenhouse gas emissions, the DEIR is obligated to seriously investigate emission reduction strategies.

We recommend that this investigation begin with a review of the "White Paper on Global Climate Change," a report prepared by the Association of Environmental Professionals ("AEP"). In its White Paper, AEP provides a recommended framework and methodology for evaluating climate change impacts under CEQA. To this end, AEP states that the preferred approach to reducing a project's impact on global climate change is to incorporate design features into the project that comply with California's strategies to reduce greenhouse gas emissions. The White Paper identifies a list of features that could apply to residential, commercial and industrial projects. According to AEP, it is only with the incorporation of these mitigation measures that a project's cumulative incremental contribution to green house gases could even arguably be anticipated to be less than significant. The CVSP DEIR's purported strategies to reduce greenhouse gas emissions do not come close to the design features set forth in AEP's report. The DEIR, and indeed the Coyote Valley Specific Plan itself, should be redesigned to include these important measures. We also suggest that the City investigate and consider the adoption of a greenhouse gas reduction plan modeled after such a plan prepared by Marin County.

10. The DEIR Fails to Adequately Analyze the Project's Population, Jobs and Housing Impacts.

The DEIR's analysis of population, jobs, and housing provides so little information that it is not possible to determine the adequacy of the impact analysis. Notably, the DEIR ignores several factors that will increase the CVSP's labor demand that the Project would necessitate. One of the most obvious failures in the DEIR's analysis is the absence of construction workers in the employment estimates. Over the next 25 – 50 years, the CVSP would essentially be a continuous construction site, yet the DEIR completely ignores the significant labor demand this construction will surely generate. Furthermore, the DEIR's employment estimates appear to ignore additional employment generated by the ancillary activities within the CVSP—most notably the

increased demand for road maintenance on new and significantly upgraded highways, emergency services, and other public services. Moreover, many of these new employees are likely to come from outside the area, bringing with them families and new demand for City services. All of these phenomena will increase labor demand, and therefore housing demand, but none of them are accounted for in the DEIR. This omission violates basic CEQA requirements. *See Napa Citizens for Honest Government v. Napa County Board of Supervisors* (2001) 91 Cal. App. 4th 342, 367-71.

Although the DEIR asserts that 20% of the housing units included in the CVSP would be deed-restricted below market rate units (DEIR at 9, 69), it includes no discussion of the current or future need for affordable housing in the CVSP or in San Jose. Specifically, the document fails to quantify employee household distribution by geographic location and, by extension, determine the local affordable housing need through project buildout. Amazingly, the DEIR does not provide any information as to how this affordable housing goal would be met, where the affordable housing would be located, or which income levels would be targeted. The revised DEIR must disclose the current and expected affordable housing needs, disclose the ability of San Jose to meet those needs, and identify a specific mitigation plan for achieving the 20% affordable housing goal.

11. The DEIR Fails to Analyze the Project's Growth-Inducing Effects.

CEQA requires an EIR to include a "detailed statement" setting forth the growth-inducing impacts of a proposed project. Pub. Res. Code § 21100(b)(5); *City of Antioch v. City Council of Pittsburg* (1986) 187 Cal. App. 3d 1325, 1337. The statement must "[d]iscuss the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment." CEQA Guidelines § 15126.2(d). It must also discuss how projects "may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively." *Id.* The DEIR at issue here does not begin to meet these requirements.

One key route to induced growth is the removal of constraints that formerly limited growth. *Id.* Development of much of the CVSP is currently limited by the lack of infrastructure and public services. The Project would remove that constraint by extending services and infrastructure to the site (i.e., the Project would require an extension of the Urban Service Area to cover the Urban Reserve Area, to allow the extension of urban

services, including sewer and water). DEIR at 96, 525. The DEIR concludes, without any evidence or discussion, that “the project does not include expansion of infrastructure, including flood control and roadways, beyond that needed to serve the proposed development.” *Id.* at 524. There is no reason to believe that adjacent private landowners will not see in the new infrastructure the means to pursue their own development plans. In fact, such plans would be facilitated by the extension of the Urban Service Area. Indeed, inasmuch as there is no guarantee that lands within the Coyote Valley Greenbelt would be ultimately protected via conservation easements or any other mechanism, the property owners of the 381 parcels located in the Greenbelt will be tempted to develop their land and lobby to have services extended further south. *Id.* at 94. Unless mitigation measures commit the City to ensure that all the infrastructure and services are scaled to serve only the CVSP, it will provide a strong incentive for offsite growth. The DEIR must carefully consider this resultant potential growth and its environmental impacts, and it must propose mitigation measures to minimize those impacts. *See City of Antioch*, 187 Cal. App. 3d 1325.

Another way that projects may induce growth is by “tax[ing] existing community service facilities, requiring construction of new facilities that could cause significant environmental effects.” CEQA Guidelines § 15126.2(d). The DEIR completely ignores the possibility that the Project will have exactly this effect on local and regional solid waste and wastewater facilities. As discussed above, the DEIR admits that there will be the need to develop new facilities and expand services to serve the CVSP. This new construction is exactly the sort of project-induced facilities growth, the environmental effects of which the DEIR must carefully consider.

Similarly, the DEIR acknowledges that the CVSP would require the construction of an extension of Bailey Avenue (commonly referred to as “Bailey-over-the-Hill roadway”) to the Almaden Valley. DEIR at 105. The DEIR further acknowledges that the area that the Bailey-over-the-Hill roadway alignment “may someday pass through is primarily designated for Agricultural and Non-urban uses.” *Id.* at 106. Inasmuch as the extension of this roadway appears, according to the DEIR, as a foregone conclusion, the DEIR is obligated to analyze its environmental effects—including its growth-inducing impacts. Indeed, this major roadway extension would open the Almaden Valley and points between the CVSP and Almaden Valley to intense development pressure. The DEIR is silent on this issue and therefore must be revised to correct this unlawful omission.

When considering the Project's potential for inducing population and economic growth, the DEIR erroneously focuses only on the increase in population and employment brought on by the CVSP itself. Like the DEIR's discussion of housing and population, it ignores the construction workforce. More importantly, it assumes that the CVSP will be the only development in the area. If it is successful, however, it is likely to stimulate further land development. Speculators may decide to buy vacant land and develop subdivisions, and retail proprietors may decide to develop shops and restaurants to cater to the new community. The DEIR fails entirely to acknowledge that the development of this new community will foster population and retail growth beyond the boundaries of the project site. "The fact that the exact extent and location of such growth cannot now be determined does not excuse the [City] from" the requirement of analyzing the effects of this growth on the environment, *Stanislaus Audubon Society, Inc. v. County of Stanislaus* (1995) 33 Cal. App. 4th 144, 158, especially in light of the potential for radical change to the region's rural/agricultural environment.

12. The DEIR Fails to Analyze the Cumulative Impacts of the Project.

An EIR must discuss significant "cumulative impacts." CEQA Guidelines § 15130(a). "Cumulative impacts" are defined as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts." CEQA Guidelines § 15355(a). "[I]ndividual effects may be changes resulting from a single project or a number of separate projects." CEQA Guidelines § 15355(a). A legally adequate "cumulative impacts analysis" views a particular project over time and in conjunction with other related past, present, and reasonably foreseeable future projects whose impacts might compound or interrelate with those of the project at hand. "Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time." CEQA Guidelines § 15355(b). The cumulative impacts concept recognizes that "[t]he full environmental impact of a proposed . . . action cannot be gauged in a vacuum." *Whitman v. Board of Supervisors* (1979) 88 Cal.App.3d 397, 408. Incredibly, the DEIR contains only the most cursory treatment of cumulative impacts. In addition to the document's deficient analyses of cumulative impacts on utilities and public services discussed above, the following are examples of some of the most egregious deficiencies.

The DEIR's analysis of cumulative loss of agricultural lands is, at best, half-hearted because it inappropriately limits its analysis to projects only with San Jose's boundaries. Given California's rapidly diminishing agricultural resources, impacts

relating to its loss cannot be limited to San Jose. Urban and suburban encroachment is a pressing concern statewide; therefore, the DEIR should have evaluated the cumulative loss of agricultural lands on a regional and statewide basis and identified feasible mechanisms for mitigating this loss.

The DEIR's conclusion regarding cumulative loss of open space lands betrays a fundamental misunderstanding of CEQA. After acknowledging that the CVSP itself would significantly impact open space resources, it concludes that cumulative open space impacts would be less than significant. DEIR at 470. The DEIR comes to this illogical conclusion in part because it, again, only looks as far as San Jose's lands. Yet, the analysis is equally deficient in that it absurdly concludes that the loss of other open space lands in San Jose would not be significant because the open space sites targeted for development are not designated as permanent open space in the City's General Plan. *Id.* The General Plan's designation of these lands is irrelevant; CEQA requires an EIR to evaluate a project's effects against what is on the ground. If the cumulative projects' lands are open space and that open space would be lost as a result of their development, the impact caused by the CVSP together with these other impacts would undoubtedly be cumulatively considerable. The revised DEIR must identify this cumulative loss of open space as a significant impact and identify feasible mitigation.

The DEIR's cumulative traffic analysis suffers from many of the same flaws as the project-specific traffic analysis. In particular, it is simply impossible to determine the severity and extent of traffic impacts because the document never identifies which specific transportation projects are assumed to be in place in the future. Moreover, like the DEIR's analysis of cumulative impacts to agricultural and open space lands, the document limits its analysis to those projects that would be developed within the City of San Jose, ignoring altogether projects in other jurisdictions. *See* DEIR at 468 ("For purposes of this EIR, the cumulative analysis is based on build-out of the approved San Jose General Plan . . . in combination with all pending applications to change the City's General Plan"); Table 6.0-1. As discussed above in the context of project-specific impacts, traffic is a regional phenomenon. The DEIR's cumulative traffic analysis must be revised to address regional traffic impacts from the CVSP together with other projects that have the potential to cause traffic congestion. Such an analysis cannot stop at San Jose's boundary. In addition, the revised DEIR must identify the specific transportation projects that are assumed to be in place over the next 50 years and identify whether these assumed projects are funded or have a reasonable basis for funding.

The failure to conduct a proper cumulative impacts analysis is especially disconcerting since this is an EIR on such a massive project. The City should use this EIR as an opportunity to consider broad policy alternatives and mitigation measures at this early stage when agency has greater flexibility to deal with cumulative impacts. See CEQA Guidelines § 15168(b)(4).

III. THE DEIR DOES NOT ADEQUATELY DISCUSS ALTERNATIVES TO THE PROPOSED PROJECT.

An EIR must describe a range of alternatives to the proposed project, and to its location, that would feasibly attain the project's basic objectives while avoiding or substantially lessening the project's significant impacts. Pub. Res. Code § 21100(b)(4); CEQA Guidelines § 15126.6(a). A proper analysis of alternatives is essential for the County to comply with CEQA's mandate that significant environmental damage be avoided or substantially lessened where feasible. Pub. Res. Code. § 21002; CEQA Guidelines §§ 15002(a)(3), 15021(a)(2), 15126.6(a); *Citizens for Quality Growth v. City of Mount Shasta*, 198 Cal.App.3d 433, 443-45 (1988). As stated in *Laurel Heights*, "[w]ithout meaningful analysis of alternatives in the EIR, neither the courts nor the public can fulfill their proper roles in the CEQA process. . . . [Courts will not] countenance a result that would require blind trust by the public, especially in light of CEQA's fundamental goal that the public be fully informed as to the consequences of action by their public officials." 47 Cal.3d 376, 404 (1988). Here, the DEIR's discussion of alternatives fails to live up to these standards.

The primary flaw in the DEIR's alternatives analysis is its failure to identify and consider a reasonable range of alternatives that reduce project impacts, as CEQA requires. See CEQA Guidelines § 15126.6(c); *Citizens of Goleta Valley*, 52 Cal.3d at 566. The discussion of alternatives must focus on alternatives capable of avoiding or substantially lessening the adverse environmental effects of a project, "even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly." CEQA Guidelines § 15126.6(b). The alternatives to be discussed need not be identical to, or even substantially similar to the project as originally described by the applicant, so long as they can be accomplished within a reasonable period of time, taking into account economic, environmental, social and technological factors. *Citizens of Goleta Valley*, 52 Cal.3d at 574.

A. The Reduced Scale Alternatives Are Not the Most Reasonable Alternatives Available.

The essential problem with the on-site alternatives considered in the DEIR is their arbitrariness. Three on-site alternatives, aside from the no project alternative, are offered. Two of the alternatives reduce the scale of the CVSP, while the third purportedly redesigns the Project based on Greenbelt Alliance's "Getting It Right" plan. DEIR at 430- 458. The two reduced scale alternatives offer brief explanations of the reasoning behind their designs, but there is no indication that the DEIR preparers gave meaningful consideration to the site and its possibilities and limitations. Indeed, these alternatives result in unacceptable environmental impacts and therefore do not satisfy CEQA's mandate that an EIR discuss a reasonable range of alternatives that "offer substantial environmental advantages over the project proposal." *Citizens of Goleta Valley*, 52 Cal.3d at 566.

Thus, rather than select project alternatives with a mind toward avoiding or substantially lessening environmental impacts, the DEIR preparers selected the two reduced scale alternatives to mimic the CVSP, albeit on a reduced scale. Although these reduced scale alternatives have subtle differences, each would allow an equivalent number of jobs and housing units (i.e., each would allow 20,000 jobs and 10,000 housing units) with the intent of echoing the proportion of jobs and housing provided by the CVSP. DEIR at 438. While both alternatives would allow 20,000 jobs, apparently because of the CVRP entitlements, there are no such entitlements for 10,000 housing units. The reduced scale alternatives are, therefore, essentially one and the same in that they both would allow identical levels of development distinguished only by minor variations in the location of that development. Had the DEIR preparers taken a step back and assessed the environment constraints associated with the Coyote Valley, they would have studied variations on the housing component of these alternatives.

Furthermore, we find it particularly disingenuous that the DEIR preparers made such a rigorous attempt to achieve the project objective of echoing the jobs/housing ratio identified as a CVSP project objective inasmuch as the CVSP itself does not come close to meeting so many of its objectives (e.g., transit-based development, preservation of agricultural lands, adequate public services and utilities, and affordable housing). Therefore, since the DEIR actually only studies one reduced scale alternative, it fails to provide a reasonable range of alternatives as required by CEQA. In addition, as discussed below, the DEIR fails to adequately describe or analyze the environmental effects of these alternatives.

B. The DEIR Fails to Provide Sufficient Information About the Alternatives and Their Environmental Impacts.

The DEIR's description of the CVSP lacks important substantive detail and, as a result, neither the public nor decision-makers have an accurate sense of the Project. As discussed above, information about land use planning, public transportation, public services and infrastructure, and mechanisms necessary for the preservation of agricultural and open space lands simply has not been provided. Not surprisingly, the DEIR's description of CVSP alternatives is equally lacking in detail. Thus, it is not possible to compare each alternative's development scenarios with those of the CVSP.

Using the reduced scale Alternative II (smaller CVSP scenario) as an example, the DEIR states that a planned community similar in design to the CVSP could be implemented, in a designated location where uses are integrated to create an urban, pedestrian, and transit-oriented mixed use community. DEIR at 443. The DEIR never identifies or explains this "similar design;" it does not identify the "designated location;" and it fails to provide any explanation as to how the uses could be integrated.

The absence of these development components renders an accurate evaluation of this alternative's environmental impacts impossible. Indeed, as regards this alternative, the DEIR imply states: "[l]ess traffic would be generated both within and outside of the CVSP Development Area, resulting in fewer traffic impacts at affected intersections" and "[a]ll other environmental impacts that result from the implementation of the CVSP would be reduced or avoided by [the alternative] scenarios due to the fact that less development would occur on fewer acres." *Id.* at 446. The public deserves more than self-evident statements such as these. How would the trip generation of this alternative, for example, compare to that of the CVSP? What would be the difference in vehicle miles traveled? How many fewer intersections and freeway segments would be impacted? How would this alternative specifically compare to the CVSP in terms of wastewater, solid waste and energy demand and the ability to supply this demand? Because the DEIR is lacking in substantive detail—both in terms of the description of the alternative itself and its purported comparative evaluation of impacts—it is not possible to compare environmental benefits of any of the alternatives to the CVSP.

C. The DEIR Fails to Provide an Accurate Comparison of the “Getting It Right” Alternative to the CVSP.

The DEIR provides a distorted, and therefore inaccurate, analysis of the Greenbelt Alliance’s Getting It Right Plan alternative (“Getting It Right”). Because the document does not evaluate the CVSP against an accurate representation of Getting It Right, it fails to acknowledge the ability of Getting It Right to effectively mitigate many of the CVSP’s environmental impacts. For example, the DEIR erroneously assumes that the intensification of land use densities associated with Getting It Right would result in increased traffic congestion. DEIR at 450. In fact, just the opposite is true; as land use density declines, automobile travel tends to increase. Moreover, Getting It Right calls for dissolving the artificial division between North and Mid-Coyote Valley, implementing a robust transit system, constructing a street network entirely on a grid pattern and implementing a transportation demand management program, all of which would very much discourage auto-based travel and facilitate public transportation. Thus the DEIR’s conclusion that Getting It Right’s traffic impacts would be similar to the CVSP’s is simply wrong. Moreover, to the extent that the DEIR’s traffic assumptions inform the air quality analysis, the DEIR fails to acknowledge that the CVSP’s air quality impacts would likely be far more severe than those associated with Getting It Right.

Nor does the DEIR correctly compare Getting It Right and the CVSP’s respective effects on agricultural and open space lands. While, the DEIR does acknowledge that Getting It Right would result in less loss of Prime and Important Farmlands in comparison to the CVSP, its analysis understates the true benefit of Getting It Right because it focuses only on the actual footprint of development. Specifically, the DEIR identifies the loss of agricultural land lost under the CVSP as 2,400 acres, while the amount lost under Getting It Right would be 1,875. DEIR at 450. Yet, the DEIR ignores the fact that Getting It Right calls for the *permanent protection* of the 2,380 acres of agricultural lands throughout Coyote Valley. Inasmuch as the CVSP contains no specific mechanism for protecting these lands and indeed because the DEIR makes clear that the City has no intention of requiring such mitigation, the CVSP’s impact on agricultural lands would be far more severe. As for open space impacts, the DEIR’s analysis of Getting It Right is silent altogether. Here too, Getting it Right calls for the permanent protection of 3,300 acres of South Coyote Valley as a greenbelt, while the CVSP provides for no such protection.

In addition, Getting It Right calls for the establishment of a Community Facilities and Services District to help fund and manage infrastructure projects. As

discussed above, the DEIR provides no mechanism to ensure that necessary infrastructure and public services would be funded and implemented prior to demand for residential, commercial, and industrial development. As a result, the CVSP's impacts would be more severe than those associated with Getting It Right.

Finally, Getting It Right calls for at least 20 percent of all housing units as affordable housing for low, very-low, and extremely low-income residents. Furthermore, the Plan calls for the establishment of inclusionary zoning, a subsidy and an incentive program to facilitate and create affordable housing. As discussed above, the CVSP provides no specific program for providing affordable housing and therefore its impacts in this regard would be substantially more significant.

Because the CVSP's true consequences are so outside the stated objectives of this Project, it is all the more imperative that the DEIR be revised to provide an accurate analysis of an alternative that comes far closer to meeting the CVSP's objectives. This alternative is the Greenbelt Alliance's Getting It Right Plan.

D. The DEIR Fails to Adequately Identify and Analyze the No Project Alternative.

CEQA requires that a "no project" alternative be evaluated as part of the document's alternatives analysis. CEQA Guidelines 15126.6 (e)(1). The purpose of describing and analyzing a no project alternative is to allow decision-makers to compare the impacts of approving the project with the impacts of not approving the project. *Id.* Contrary to CEQA's requirements, the CVSP DEIR fails to identify an adequate no project alternative because its no project alternative anticipates 50,000 jobs within the North Coyote Campus Industrial Area. DEIR at 434.

While CEQA does encourage an EIR to include in its no project analysis a discussion of what is reasonably expected to occur in the foreseeable future if the project were not approved (CEQA Guidelines 15126.6 (e)(2)), such a discussion should supplement, not replace, the no project analysis that reflects existing conditions. Thus, rather than present a true no project alternative, the DEIR's no project alternative includes a substantial portion of the development contemplated in the CVSP itself and thus does not reflect existing conditions in the Coyote Valley. Because this no project alternative includes extensive development with corresponding environmental impacts, it does not serve CEQA's purpose of providing decision makers with accurate information needed to compare the impacts of approving the project with the impacts of not approving the

project. Indeed, contrary to common sense, the no project alternative would allow 30,000 more jobs than either one of the reduced scale alternatives. DEIR at 434, 437, 443 (emphasis added).

E. The DEIR's Alternatives Analysis Must Be Revised to Comprehensively Evaluate Less Damaging Options.

In sum, rather than imparting serious information about potentially viable alternatives, the DEIR's alternatives serve as "straw men" to provide justification for the Project. Such an approach violates the letter and spirit of CEQA. Therefore, the EIR's failure to consider feasible alternatives that sufficiently reduce the Project's environmental impacts renders the document inadequate under CEQA. *See, e.g., San Joaquin Raptor/Wildlife Rescue Ctr. v. County of Stanislaus* (1994) 27 Cal.App.4th 713, 735-38.

Given the truly enormous environmental consequences of the CVSP, the consideration of alternatives will not be complete until decision-makers and the public are presented with a rigorous, good-faith assessment of how much development the Coyote Valley can sustain. Without this opportunity, the public is merely asked to take on "blind trust" that the proposed Project is the best alternative. Asking for this sort of faith is not only unfair to the people of the region, it is unlawful "in light of CEQA's fundamental goal that the public be fully informed as to the consequences of action by their public officials." *Laurel Heights Improvement Association*, 47 Cal. 3d at 494. Again, we urge the DEIR preparers to take a step back and reconsider the Getting It Right alternative proffered by Greenbelt Alliance.

II. THE DEIR MUST BE REVISED AND RECIRCULATED.

Given the foregoing deficiencies, the DEIR must be revised and recirculated. The present DEIR cannot properly form the basis of a final EIR. CEQA and the CEQA Guidelines describe the circumstances which require recirculation of a draft EIR or circulation of a supplemental draft EIR. Such circumstances include adding significant new information to the EIR after public notice is given of the availability of the DEIR but before circulation, and where the DEIR is so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded. CEQA Guidelines § 15088.5. "Significant new information" includes the identification of new significant impacts, a substantial increase in the severity of

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identified significant impacts, and the mitigation measures that could reduce impacts below a level of significance. *Id.*

Here, in order to cure the numerous defects described above, the revised DEIR must necessarily include substantial new information that triggers CEQA's recirculation request. Failure to recirculate the revised DEIR would thus violate CEQA.

Very truly yours,

SHUTE, MIHALY & WEINBERGER LLP



ROBERT PERLMUTTER
LAUREL L. IMPETT, AICP
Urban Planner

Exhibits:

- Exhibit A: "Setting The Standard in Coyote Valley."
- Exhibit B: "The Economic Benefits of Parks and Open Space: How Land Conservation Helps Communities Grow Smart and Protect the Bottom Line" (1999).
- Exhibit C: "Regional Needs Briefing Book" at 27, Bay Area Conservancy Program.
- Exhibit D: "Saving the Farm: A Handbook for Conserving Agricultural Land," American Farmland Trust (Jan. 1990) at 5-4).
- Exhibit E: E-mail correspondence from Darryl Boyd to Brian Schmidt, May 14, 2007.
- Exhibit F: "Facts at a Glance," Caltrans.

cc: Michele Beasley, Greenbelt Alliance
Melissa Hippard, Sierra Club

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Exhibit
A.

Setting the Standard in Coyote Valley



A Scenarios for Sustainability (S2) Analysis of Preliminary Development Options

Prepared by

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December 2005



Setting the Standard in Coyote Valley

A Scenarios for Sustainability (S2) Analysis of Preliminary Development Options

Prepared by

Dr. John Talberth^{*}, Frank Gallivan[†],
Connie Galambos[‡], and Karen Wolowicz[§]

I. Synopsis

Scenarios for Sustainability (S2) is an urban planning tool that provides decision makers with quantitative information about the degree to which alternative development options achieve environmental, economic, and social sustainability objectives. S2 combines elements of two well-known sustainability indicators created by Redefining Progress: the Ecological Footprint (EF) and the Genuine Progress Indicator (GPI). This report applies S2 to the debate over the future of San José's Coyote Valley by providing a preliminary comparison of the City's Specific Plan with the *Getting it Right* (GIR) vision advanced by Greenbelt Alliance.

Coyote Valley is a largely undeveloped tract of agricultural land just south of San José, some of which lies within the city's urban growth boundary, some within its sphere of influence. As it is the largest development project now contemplated in the Bay Area and as issues of sprawl, pollution, farmland loss, traffic congestion and affordability make daily headlines, all eyes are focused on how San José develops this sensitive area and if it can achieve a delicate balance between accommodation of growth and preservation of the Bay Area's unique quality of life.

The debate over how much and where to develop and what form that development should take is a debate that is often highly politicized but one that cries out for impartial analysis. S2 meets this need by addressing multifaceted concerns over environmental, economic, and social sustainability in a quantitative fashion. Here, our quantitative measures include the ecological footprint, the costs of lost farmland, non-market costs of carbon dioxide emissions, capital exports needed to pay for oil from afar, and equity in the distribution of housing types and access to open space. By providing quantitative measures of sustainability that vary as planning parameters are modified, S2 is a tool the City can use to design a final development plan in Coyote Valley that minimizes its ecological footprint and maximizes its contribution to genuine human progress.

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While a complete S2 analysis cannot be completed until the City releases a final Environmental Impact Report (EIR) and supporting documentation, our preliminary analysis suggests the following:

- By promoting a more compact urban form, a better mix of jobs and residences, and fewer vehicle miles traveled and by converting fewer acres of biologically productive land to impervious surface, GIR's ecological footprint will be at least 17% less than that of the Specific Plan.
- By preserving more agricultural land, reducing carbon dioxide emissions damage, and exporting fewer dollars out of the local economy to pay for imported oil relative to the Specific Plan, GIR will cost at least \$6.4 million less each year in terms of externalized economic costs to future generations.
- GIR represents a 30% improvement in the equitable distribution of housing types as compared with the distribution envisioned by the Specific Plan.
- GIR would allow 7% more families to have immediate access to open space, thereby mitigating the tendency for open space to be clustered near high income areas alone.

Thus, in terms of S2 indicators of environmental, economic, and social sustainability, GIR appears to be a consistently superior approach. The remainder of this report is organized as follows. In Section II, we provide background information about Coyote Valley, the two development options we address, and the basic structure of our S2 analysis. In Sections III, IV, and V, we describe and report on the results of the environmental, economic, and social sustainability components of our S2 analysis. We offer conclusions and suggestions for future refinements in Section VI.

II. Background on Coyote Valley Development Options and S2

Coyote Valley is situated at the southernmost edge of the urbanized portion of the San Francisco Bay region, as shown in Figure 1. The region includes 6,800 acres of primarily rural land, situated between South San José and north Morgan Hill in Santa Clara County. Large-scale Coyote Valley development plans have been a source of controversy in the region for years, as the Valley comprises one of few remaining large developable areas in the urbanized San Francisco Bay Area.

Coyote Valley was once part of the Valley of Heart's Delight, combining fertile soil, a moderate climate and sufficient water flows to earn the reputation as an "agricultural Eden." Farmland in the 6,800-acre valley, especially in its northern two-thirds, have been dwindling steadily in recent years as the city has changed zoning designations to allow for urban and industrial development (Najeeb 2003). Now, the dominant agricultural uses for the land are row crops and forage. Other current uses within the remainder of the valley include orchards, plant nurseries and greenhouses, a mushroom producing facility, a driving range, a golf course, a county park, quarry ponds, and single-family residential uses. The Hamlet of Coyote includes some residential, industrial, and commercial uses in northeastern Coyote Valley. An IBM

research/development facility is located in northwestern Coyote Valley, while the Metcalf Energy Center and the Metcalf substation are located along Monterey Road in the northeastern portion of mid-Coyote Valley (San José 2005).

Coyote Valley encompasses unique natural features, and therefore significant site constraints. Any development, no matter how well-designed, will result in irrevocable changes to the local ecosystem. Sections of the valley already have an especially high water table, which could lead to potential water-quality problems. The valley lies in a flood plain that threatens any potential development. Development threatens critical habitat for species such as the burrowing owl and silverspot butterfly as well as farms, ranches, and orchards.

When built out according to current proposals, Coyote Valley would have between 70,000-80,000 people, more than the combined populations of neighboring Morgan Hill and Gilroy. It would also support at least 50,000 jobs and 25,000-26,302 homes, exponentially increasing the need for public services such as schools, police, fire, and healthcare, in addition to the strain upon natural resources. Silicon Valley's built environment to date incorporates a traditional mix of low-density office buildings surrounded by large swaths of impervious parking lots and streets, all accessed via expressways. With Coyote Valley, the City must choose whether to continue this type of resource-intensive sprawl in the South Bay or provide a long overdue model of sustainable large-scale development.

As the largest site currently proposed for development in the San Francisco Bay Area, Coyote Valley represents a distinct opportunity to shape urban growth in the region. Given the amount of land affected and the intensity of proposed development, impacts of planning and land use decisions made in Coyote Valley will reverberate across the San Francisco Bay Area for decades to come.

The City of San José's Specific Plan

Coyote Valley has been slated for urban development since 1983 when the San José City Council amended its General Plan. North Coyote Valley is within the city's urban boundaries, as is mid-Coyote Valley. The latter, however, will need to be annexed into San José once the specific plan is approved by City Council. South Coyote's greenbelt is outside of the Urban Growth Boundary, but within the city's sphere of influence; as such the entire area must comply with the city's General Plan. At the time of the General Plan Amendment, the Council also established "triggers" to ensure that industrial development preceded housing development, and that adequate financial resources were available to support quality public services. More recently, the City's General Plan was amended to relax these trigger requirements and allow the preparation of a specific plan. Previously, neither development nor preparation of a specific plan could begin until these triggers were satisfied. Consistent with this amendment, the City Council, on August 20, 2002, initiated the Coyote Valley Specific Plan process by approving a 20-member Task Force.

The City Council also adopted a Vision Statement, including 16 expected outcomes as the guiding principles for the planning of an entirely new community within Coyote Valley. The principles call for the minimum development of 50,000 industry-driving jobs and 25,000

dwelling units within the North and Mid-Coyote Valley areas, while stating that the line (Greenline/Urban Growth Boundary) between central and southern Coyote Valley remain intact, in order to preserve the Greenbelt as a nonurban buffer. The plan must develop mechanisms to ensure that increments of housing may not move forward until the appropriate number of jobs is in place, in a parallel timeline to maintain a valley-wide jobs/housing balance. In addition, twenty percent of developed housing is to remain below market rate.

The City's Specific Plan as drafted calls for "highly livable" community that is "very urban, pedestrian and transit-oriented" and that "maximizes land use efficiency" (City of San José 2005). In the Plan, an artificial lake, over fifty acres in size, serves as the focal gathering place and commercial center for the valley while parks and open spaces are located throughout. At the edge of the town center is a transit hub, designed to link the valley's public transit system with Caltrain. Outside of this town center, the plan separates homes and jobs across the valley, with access provided through expansion of existing roads into a network of multi-lane thoroughfares (City of San José 2004). It is important to note that at this stage the Specific Plan is undergoing evaluation, and has not been finalized. Therefore, there is significant room for modifications should they be deemed appropriate.

The Greenbelt Alliance Getting it Right (GIR) Vision

A vision developed by Greenbelt Alliance in 2003 called *Getting it Right* (GIR) provides a distinct alternative to the City's Specific Plan. Based on the principles of smart growth and drawing on a range of expertise and stakeholder participation, GIR was developed through a yearlong process which mirrored the City's process for developing its Specific Plan. Greenbelt Alliance's GIR includes detailed proposals on land use and transportation, as well as policy recommendations to ensure that Coyote Valley builds community, protects the environment and agriculture, ensures social equity, and promotes economic vitality.

GIR illustrates a strategy for achieving San José's objective to develop Coyote Valley into a major employment center that attracts new jobs and revenue to the City. Rather than creating a land use monoculture that caters to a single industry sector, the community will be designed to accommodate a broad range of businesses and the services needed to support them—generating employment for a diverse workforce with the full range of education and skill levels. Higher density will also facilitate the provision of affordable workforce housing by lowering per unit construction costs and spreading those costs over more market-rate units. Compact, mixed-use development will locate parks, schools, child care, health care and other community services near transit to increase access to these resources by all in the community.

GIR addresses hydrology issues by establishing a comprehensive area-wide flood management system that protects existing and future development from flooding while also preserving natural habitat, creating recreational amenities, and accommodating agricultural needs. The design of the new community will preserve the pervious land needed to recharge the groundwater, maintain sustainable levels in the aquifer underlying the valley, and implement Best Management Practices. Additionally, the new community will maintain a compact form in order to preserve as much agricultural land as possible while establishing mechanisms for preventing future erosion of agricultural potential in the Valley.

A Comparison of Development Goals and Basic Design

Before we discuss how GIR and the Specific Plan as drafted differ in terms of RP's quantitative sustainability criteria, it is useful to compare the two with respect to development goals and selected elements of their basic design. Development goals for both alternatives are summarized in Table 1.¹ Both GIR and the Specific Plan address conservation of natural areas, economic viability, and equity, but in differing ways. In terms of conservation, GIR places a greater emphasis on biological diversity and natural ecosystems, while the Specific Plan has a greater emphasis on recreational space. In terms of economics, GIR is more concerned with economic stability as well as profitability while the Specific Plan is concerned with financial feasibility for developers. In terms of equity, GIR puts a greater emphasis on access to a range of community amenities including affordable housing, work, and community services, while the Specific Plan specifies only standards for housing affordability.

In terms of basic design, the GIR vision and the Specific Plan differ in terms of their developed areas, circulation systems, hydrological systems, and land use organizations. Figures 2 and 3 provide a visual comparison of these elements. Table 2 summarizes key differences. At the simplest level, GIR envisions a denser development than its counterpart. With residential densities averaging 28.5 units/acre (versus the City's 18 units/acre), GIR makes more efficient use of urban land and therefore preserves more undeveloped land. Most notably, that means the preservation of land east of Monterey Highway, which the City plans to develop. Higher densities affect sustainability in a number of ways, including reducing vehicle usage, protecting habitat and open space, and reducing the amount of impervious surfaces.²

The circulation systems of the two plans differ substantially in their emphasis on auto-based travel. GIR proposes an entirely grid-based road system, with all streets accessible to both pedestrians and bicyclists. In contrast, the City proposes a central parkway feature that loops around the main areas of the town, and cannot be crossed on foot except at designated overpasses and underpasses. Although both plans include a rapid transit system in Coyote Valley, only GIR directly connects that system to San José's existing light rail system, thus creating a direct transit link to regional jobs. The City's only regional transit provision would be Caltrain. As for the internal transit system, it has not been determined at the time of this publication who will operate the system and what the nature of it will be.

The City's most dramatic effort at altering the landscape of Coyote Valley would be the creation of a central lake as a natural amenity and flood management system. GIR does not include a lake, but instead relies on the existing creeks within the area to provide the same functions. This alternative has the significant advantage of lower cost, and it may provide ecological benefits as well.

Finally, the land use patterns of the two plans are substantially different. The City proposes that Coyote Valley's mixed use center be focused around the lake and along Santa Teresa Boulevard,

¹ Tables and figures appear sequentially in Appendix 1.

² Impervious surfaces are mainly constructed surfaces - rooftops, sidewalks, roads, and parking lots - covered by impenetrable materials such as asphalt, concrete, brick, and stone. These materials seal surfaces, repel water and prevent precipitation and meltwater from infiltrating soils.

the central north-south artery, concentrating employment in the North Coyote Valley area. In contrast, GIR takes the neighborhood as its basic building block. It establishes a distinct town center comprised of mixed use and retail, along with six smaller such neighborhood centers. Employment is concentrated in the east of Coyote Valley. The distinctly multi-centered approach suggests that residents of Coyote Valley would have to travel less, and that amenities and essential services would be more widely accessible.

Scenarios for Sustainability Framework

Given that both GIR and the Specific Plan include implicit or explicit references to sustainability in their objectives, the GIR vision and the Specific Plan can be compared using sustainability measures developed by Redefining Progress as part of our Scenarios for Sustainability (S2) toolkit. The concept of sustainability is commonly understood as balanced attention to the three core domains: environmental, economic, and social.³ These three domains are interdependent aspects of human society's ability to maintain its quality of life into the future. S2 provides a way to address environmental, economic, and social sustainability in a quantitative fashion. In performing S2 analysis, RP draws indicators of relevance from each of these domains on a case by case basis.

In the context of Coyote Valley, we selected one key indicator from the environment domain, three from the economic domain, and two from the social domain. To address environmental sustainability, we calculate the ecological footprint. As applied in an urban planning framework, the ecological footprint quantifies the ecological demands of particular development projects in a single measure. The footprint identifies direct impacts of a proposed development in terms of average "global" acres of bioproductive space as well as the additional amount of space needed to absorb pollutants and wastes.

To address economic sustainability, we draw from elements of RP's Genuine Progress Indicator (GPI). The GPI provides a more realistic measure of progress than the nationally accepted gross domestic product because it makes adjustments for income inequality, environmental degradation, depletion of non-renewable resources, and expenditures that are purely "defensive" in nature, such as those needed to clean up toxic waste. In this application, we quantify the economic costs associated with lost farmland, carbon dioxide emissions, and export of income needed to pay for oil from afar. To address social sustainability, we draw on two measures of equity. These include measures of equity in the distribution of housing types and equitable access to open space.

Using these S2 indicators we compare GIR with the Specific Plan. Before we present the analysis, however, it is important to understand that our scope of analysis is severely limited by two factors. First, the two proposed developments bear little resemblance to anything that currently exists in the Coyote Valley area. Thus any analysis must rely on forecasting of behavioral and consumptive patterns such as patterns in transportation modes and frequencies. Second, little information is currently available to assist in forecasting. Although GIR has been

³ For example, the Key National Indicators Initiative – the nation's most prominent effort to develop a consistent set of indicators for the nation – is subdivided into the three domains of environment, economy, and people. See <http://keyindicators.org/>.

completed for two years, a more detailed version of the City's plan is not expected in draft form for several more months. Preliminary documents provide some guidelines, but information remains limited. Nonetheless, an analysis at this stage can indicate at least some of the ways that GIR and Specific Plan differ in their potential for environmental, economic, and social sustainability. Our analysis follows.

III. Environmental Sustainability

In terms of environmental sustainability, the more sustainable plan is that which pollutes less, uses fewer resources, and preserves more undeveloped, natural areas. The ecological footprint captures these objectives in a single, quantitative measure. This section estimates the direct and indirect ecological footprint generated by the GIR vision and the Specific Plan, as they are currently configured. Additional details of the calculations are provided in Appendix 2: Methods and Sources of Information, and referenced as "MSI" with the numerical references referring to specific sections in that appendix.

A. Direct footprint acres.

As discussed earlier, the ecological footprint is a way to quantify both the direct and indirect ecological impacts of a proposed development project in terms of acres of bioproductive space on the planet. In terms of direct impacts, the calculations are relatively straightforward. Each of the development proposals will convert different acreages of one or more biomes used in the footprint analysis into built space.⁴ These direct impact acreages are converted into acreage of global bioproductive space by applying equivalence factors that represent the relative productivity of each particular biome to the global average (MSI 1). So, for example, agricultural land has been shown to have 2.17 times the biological productivity of the global average, so the loss of one acre of agricultural land represents a loss of 2.17 acres of global bioproductive space (Venetoulis and Talberth 2005).

To estimate direct footprint impacts, we used a Geographic Information System (GIS) to overlay the GIR vision and the Specific Plan (Figures 2 and 3) on a series of maps produced by the City of San José depicting existing land uses and sensitive habitats in Coyote Valley.⁵ After consolidating the different land uses and habitat types illustrated on these maps into four major "biomes" – agricultural land, pasture land, wetlands, and built space – we were able to calculate the number of acres in each biome allocated to development by each proposal. These acreage figures were then converted into global bioproductive space by using appropriate equivalence factors.⁶ Table 3 displays the results.

As shown in Table 3, the direct ecological footprint estimate for the Specific Plan, as currently configured, is 5,899 acres, or .22 acres per household for 26,302 households. The direct ecological footprint estimate for GIR is 5,086, or .20 acres per household for 25,000 households.

⁴ In terms of direct impacts, the most common biomes used in footprint analysis are agricultural land, pasture land, forest land, wetlands, built space, and marine ecosystems.

⁵ Those maps can be found at: <http://www.sanjoseca.gov/coyotevalley/maps.html>.

⁶ Equivalence factors were taken from Venetoulis and Talberth (2005).

Thus, largely as a result of impacting fewer acres of cropland and pastureland, GIR results in a direct ecological footprint roughly 17% smaller than the footprint generated by the Specific Plan.

B. Indirect footprint acres – carbon sequestration land.

The ecological footprint also accounts for the amount of global bioproductive space needed to assimilate wastes. In terms of this application of S2, there are two major waste products to consider: carbon dioxide emissions and stormwater runoff. Based on the expected magnitude of the waste stream, S2 provides an estimate of global carbon sequestration land and stormwater runoff land needed for assimilation.

S2's estimates of carbon sequestration land demanded by a particular development take into account carbon dioxide emissions generated by traffic and by residential energy use. Calculating emissions generated by traffic necessitates assumptions about how vehicle miles traveled (VMT) differ under each scenario. A brief discussion of how VMT can be expected to differ under the Specific Plan and GIR and what that means in terms of carbon sequestration land follows.

(1) Carbon sequestration land based on differences in vehicle miles traveled (VMT).

A key benefit of developments designed in accordance with smart growth standards is reduced travel distances for residents, decreased household resources spent on transportation, and more time available for leisure. Vehicle miles traveled (VMT) is the most common indicator used to evaluate the impacts of policy and planning alternatives from a transportation perspective. VMT is exceedingly complex to predict, with a range of variables as diverse as vehicle ownership, transit provision, urban design, land use mixes and personal preferences incorporated into statistical models. Such detailed information is not yet available for Coyote Valley. Nonetheless, we generate preliminary VMT estimates based in part on the "4D" methodology developed by Criterion Planners, and in part on the Urban Emissions Model (URBEMIS) developed by Jones & Stokes Associates, Inc.

The 4D methodology converts incremental differences in urban characteristics (density, diversity, design and destinations) into changes in VMT. Criterion Planners determined the coefficients used in the conversions by consulting metropolitan studies across the United States and by incorporating the findings into tailored software packages. Users of the methodology include the Environmental Protection Agency as well as city and county governments (Criterion Planners 2005).

Density is the first variable within the 4D methodology. In calculating the density of a developed area, open spaces utilized for travel purposes are included while others, particularly on the periphery, are excluded. Accommodating a projected 80,000 residents and 50,000 jobs, the Specific Plan calls for 2,766 developed acres, while GIR calls for 2,372 developed acres. The precise formula for density is:

$$\text{Measured Density} = \text{Percent Change in } [(\text{Population} + \text{Employment}) \text{ per Square Mile}]$$

Applying this formula, we find that GIR results in a density over 26% higher than the Specific Plan – 31,000 jobs and residents per square mile versus the Specific Plan’s 24,600. That increase in density results in an overall VMT reduction of 1.31% in Coyote Valley, typical of denser development in which people have to travel shorter distances between home, employment, and retail locations (MSI 2).

The second D in the 4D methodology is diversity, addressing the mix of jobs and housing in a given planning area. Balance between jobs and housing in an area increases opportunities for people to live and to work in the same area—thereby reducing VMT. Calculation of the diversity variable depends on the boundaries of the areas chosen. Differences between the Specific Plan and GIR become apparent when the area is broken down into smaller components; Coyote Valley-wide, the jobs and housing balances between the two plans are similar. At the suggestion of Criterion Planners and to ensure comparability, we have divided each plan roughly into quadrants.

Diversity is calculated as:

Percent Change in:

$$\{1 - [\text{ABS}(b * \text{population} - \text{employment}) / (b * \text{population} + \text{employment})]\}$$

where: b = regional employment / regional population

Overall, GIR results in a better balance of jobs and housing at the neighborhood level. Its diversity factor is nearly 7% higher than the alternative—.55 in GIR as opposed to .51 in Specific Plan. That margin translates into a roughly .34 % decrease in VMT, achieved through implementation of GIR’s more community-balanced vision (MSI 3).

The third D, design, is a composite index of three other variables: sidewalk completeness, street density, and route directness. Sidewalk completeness refers to the proportion of roadsides with paved sidewalks; street density to the amount of road length per square mile of development; and route directness, the ratio of distances ‘as the crow flies’ to distances in driving routes.⁷ These three variables interact to create a more or less hospitable pedestrian environment; the former would result in decreased VMT for a given planning area. Design is calculated through a percent change in the overall Design Index:

$$\text{The Design Index} = 0.0195 * \text{street network density} + 1.18 * \text{sidewalk completeness} + 3.63 * \text{route directness}.$$

In Coyote Valley, we first assume that both the Specific Plan and GIR will have 100% sidewalk completeness. GIR’s street density is around 30% higher, with more than 94 miles of paved road across 2,400 urbanized acres; the Specific Plan includes 91 miles of road across 3,100 acres. GIR’s walking routes tend to be more direct than the Specific Plan, with pedestrians needing to walk 28% further than the crow flies to reach their destination, and pedestrians in the Specific Plan walking 44% further. This difference is largely due to Monterey Highway and the parkway’s presence requiring Specific Plan pedestrians to access overpasses and underpasses.

⁷ Route directness is based on a sample of 20 routes per plan.

Overall, GIR boasts an approximate 11% design advantage over Specific Plan, resulting in a small VMT reduction of about .44% (MSI 4).

The fourth D, destinations, is the only variable that accounts for factors external to the development. Specifically, this variable measures the accessibility of regional jobs to Coyote Valley. For the purposes of this analysis, 'destinations' would provide an opportunity to evaluate the impact of improved regional transit provision in GIR versus the Specific Plan. GIR's plan to link the Coyote Valley rapid transit system to San José light rail could potentially reduce travel times to jobs in San José. Following the 4D methodology, such a reduction would also reduce VMT. Due to the reality that even a dramatic decrease would be unlikely to significantly affect 'destinations', since few jobs in San José are accessible by transit, and only about 3% of commuters in Santa Clara County use transit, we have not at present attempted to predict by how much the light rail link might shorten commuting times. Thus while Greenbelt Alliance's more integrated rapid transit provision would likely help to reduce VMT in Coyote Valley, we have not yet quantified by how much it might do so.

Those factors that we have quantified through the 4D methodology add up to a 2.1% decrease in VMT in Coyote Valley if GIR is adopted instead of the Specific Plan. 4D is intended to indicate how differing land use plans might produce different VMT, but it cannot account for the full range of human, physical, political, and economic factors that ultimately determine automobile usage. In this regard, the fact that at least three out of four of the Ds suggest lower VMT in GIR speaks positively for that plan. In addition, other non-design related factors, for which 4D does not account, could also impact the difference in VMT that would result from the two plans.

In addition to the 4D model, we have employed a second analysis tool. Developed by Jones & Stokes Associates, Inc., the URBEMIS (Urban Emissions Model) software package estimates emissions associated with California land development projects. URBEMIS allows calculation of Coyote Valley VMT differentials for the mix and density of housing types, along with two key elements omitted by the 4D model: level of transit provision and transit demand management (TDM).

URBEMIS estimates the absolute levels of impact of a development, consolidating large amounts of academic research to produce a single figure for VMT. Because URBEMIS compiles extensive quantitative data, its inputs and outcomes are not quite as transparent as the 4D methodology. However, URBEMIS provides a valuable alternative, taking into account a wider range of variables— including some that are explicitly absent from 4D. In particular, URBEMIS accounts for the possibility of shifting personal habits through both design and policy, whereas 4D does not (ARB 2002).

According to URBEMIS modeling of Coyote Valley's housing type variables, unmitigated VMT figures for the two plans demonstrate that GIR results in nearly 4% less VMT than does the Specific Plan. The provision of slightly less housing units in GIR (25,000 versus 26,302) gives GIR a slight advantage due to the fact URBEMIS generates VMT from the number of trips per housing unit. However, that factor does not account for the entire gap. When supplementary, mitigating policies to lessen VMT are incorporated, the VMT gap between plans increases dramatically. We assume that the provision of rapid transit will be equal between the two plans:

Supplementary bus service, however, is omitted from Specific Plan's documentation, while GIR contains suggested routes and service levels. GIR also includes a number of TDM policies, including pricing of parking, free transit passes, and bike parking facilities. To date the Specific Plan has made no mention of such policies. The mitigated VMT figures for the two plans, accounting for TDM policies, result in GIR achieving a 12% reduction in VMT as compared to Specific Plan (MSI 5).

Therefore, we may consider the outputs of the 4D and URBEMIS analysis tools to form the estimated upper (12%) and lower (2.1%) bounds of VMT variances between GIR and the Specific Plan, with GIR resulting in less VMT by all measures.

Taking the range of values calculated through the 4D and URBEMIS analysis tools, it is possible to estimate the difference in ecological footprint resulting from variance in VMT carbon emissions. Based on per capita Bay Area VMT trends, the Specific Plan would result in about 730,000,000 VMT annually, which translates into a total carbon sequestration land footprint of 189,972 acres (MSI 6). GIR, on the other hand, would produce between 642,400,000 and 714,670,000 annual VMT, and a resulting carbon sequestration footprint of between 167,175 and 185,982 global acres.

In addition to the carbon footprint savings revealed through 4D and URBEMIS analysis, two qualitative aspects of Specific Plan and GIR suggest significant VMT differences resulting from implementation of the two plans. One of these relates to GIR's foodbelt concept. Rather than a traditional greenbelt, GIR includes a fully functioning agricultural area as an urban buffer for Coyote Valley. The urban community would secure a stable agricultural land base, create new markets for local goods via local schools and businesses, and reduce farmers' operational costs by providing recycled water and compost. This localized food system would result in further VMT reductions by replacing food that would otherwise travel long distances to Coyote Valley, as well as the consumer travel to access those products elsewhere. Also, as mentioned earlier, GIR makes a stronger commitment to public transit accessibility than does the Specific Plan—putting forth policy measures to further reduce VMT and increase environmental sustainability in Coyote Valley.

(2) Carbon sequestration land based on differences in residential energy use.

Aspects of Coyote Valley's environmental and economic sustainability may be gauged by the amount of energy needed to support new development. To project residential energy, we applied a formula in which average gas and electricity consumption by unit type is applied to the total number of dwellings in a given area. In this case, the two aggregate study areas are defined by the Specific Plan and GIR.

Based on this analysis, residential energy consumption varies significantly under the two approaches. Specific Plan residents would consume about 371,800 MM British Thermal Units (MMBTUs) per year, whereas GIR residents would use 291,324. That amounts to an average difference of 15.7 MMBTUs per household, as opposed to 11.65, annually—over 25% less in GIR (MSI 7). The higher density in GIR's community building blocks contributes to this outcome, as building types with a higher proportion of common walls tend to use less energy.

As with differences in VMT, the expected difference in residential energy consumption translates into a difference in the carbon sequestration land footprint (MSI 8). We estimate annual carbon dioxide emissions to be 8,234 metric tons in the Specific Plan while only 5,808 in GIR. The resulting carbon sequestration footprint difference between the Specific Plan and GIR is significant: 233,899 global acres versus 164,983, respectively.

B. Indirect footprint acres – stormwater runoff land.

New residential developments use significant quantities of water for consumptive purposes and landscaping, and discharge polluted water in the form of effluent, grey water, and stormwater runoff. While there is no widely endorsed method for footprinting water consumption⁸, one method is to calculate the energy required to supply clean water to the facility, and transform that into a CO₂ footprint. For wastewater, a method analogous to the CO₂ footprinting method calculates the wetland area needed to purify effluent, stormwater runoff, and grey water generated by the facility. For example, federal guidelines for constructed wetlands to mitigate stormwater runoff suggest a size equivalent to 2% of the impervious surface area drained by a proposed development (Schueler 1992).

Because both the Specific Plan and the GIR vision are in a preliminary state, we do not have the data needed to estimate the energy footprint of water consumption, nor the wetland area needed to filter effluents. We can, however, project the stormwater runoff land based on the amount of impervious surface created by each of the development options.⁹ For the Specific Plan, the amount of impervious surface is expected to be 1,293 acres, based on information provided by the City of San José. For GIR, that figure is 996 acres. Taking the 2% figure as a rough approximation for the amount of wetlands needed to filter stormwater runoff from these impervious surfaces yields wetlands demands of 24.5 and 19.9 acres, respectively.

The final step in calculating the stormwater footprint is to translate these figures into global acres. Wetlands are some of the most productive biomes on the planet. As such, the equivalency factor for converting wetlands into global acres is quite high at 6.02, meaning that wetlands are over 6 times more productive than the average acre of bioproductive space on the planet. Multiplying this factor by our wetlands acreages yields stormwater runoff land demands of 147 acres with the Specific Plan and 120 acres – or 18% less – for GIR.

Given this, and as shown in Table 4, we estimate the total indirect (carbon sequestration and stormwater runoff land) footprint for the Specific Plan to be 424,018 acres, or 16.12 per household. Due to the variance in 4D and URBEMIS VMT bounds, the total indirect footprint for GIR would be between 332,278 and 351,085 total acres, or 13.29-14.04 per household.

⁸ There are studies which calculate water footprints, but those refer to acre feet of water and not global acres as is the standard for ecological footprinting.

⁹ Total impervious area calculations include the major land use categories of residential, commercial, industrial, retail, and mixed use; roads are not included.

C. Total footprint acres.

By using the S2 methods discussed above and in Appendix 2, we estimate the total footprint associated with the Specific Plan to be 429,917 acres of global bioproductive space, with the largest component by far being carbon sequestration lands. Our footprint estimate for GIR is 356,171 or 17% less. On a per capita basis, the Specific Plan's footprint is 16.12 global acres per household while GIR's is 14.24. Thus, we can say that by promoting density, diversity, and design factors that reduce vehicle miles traveled and by converting fewer acres of biologically productive land to impervious surface, GIR's ecological footprint per household will be at least 17% less than that of the Specific Plan. The 17% figure is a lower bound since it is based on the more conservative 2.1% VMT reduction figure. The footprint reduction would be considerably more if we used the upper bound figure of 12% VMT reduction.

IV. Economic Sustainability

The second major component of our S2 analysis is to compare the Specific Plan and GIR vision in terms of economic sustainability. Here, we consider three separate measures: (a) economic costs associated with lost farmland; (b) damage associated with carbon dioxide emissions, and (c) export of income needed to pay for oil from afar.

A. Economic costs of lost farmland.

The loss of productive farmland to urban and suburban encroachment is a pressing environmental and food security concern in California and throughout the United States. According to the American Farmland Trust, every day we lose more than 3,000 acres of productive farmland to urban sprawl. More than 75 percent of our fruits and vegetables are produced near urban areas, directly in the path of development. Each year, we lose an area of productive farmland the size of Delaware.¹⁰ Loss of this essential form of natural capital deprives future generations of the ability to grow food and fiber or reap the multiple benefits of open space. In California, agricultural land loss on a county by county basis is tracked by the Division of Land Resource Protection. Between 1984 and 2004, Santa Clara County lost 33,288 acres of agricultural land to development, or 1,664 acres per year (CDC 2005a). A Coyote Valley development would significantly increase this total. The economic costs of lost cropland, pasture, vineyards, and orchards is a critical issue from the standpoint of economic sustainability and should be addressed in a rigorous manner as the EIR process continues.

Economists distinguish between two major types of economic costs associated with lost farmland – market and non-market. Market costs are the forgone revenues associated with annual food or fiber production. These costs are further subdivided into direct costs and indirect costs, where direct costs represent the value of lost agricultural production from each acre converted and indirect costs represent the secondary economic costs incurred by businesses that provide infrastructure and services in support of such production. Direct costs are capitalized into per acre land values reported by agencies such as the U.S. Department of Agriculture in their

¹⁰ See <http://www.partnershipsforchange.cc/planningeduc0148.asp>

periodic Census of Agriculture reports. Indirect costs are estimated by the product of standard industry multipliers available on a statewide or county basis times this acreage (Nef 1996).

Non-market costs include the loss of open space, scenery, wildlife habitat, traditional lifestyles, and local food security as well as ecosystem services such as flood control, water filtration, and pollination. Such costs are referred to as “non-market” because they are not reflected in the market prices developers pay for agricultural lands. However, there are techniques for estimating such costs. These include: (a) actual market transactions by governments or private non-profits to preserve agricultural land as open space; (b) related market transactions such as land or housing price differentials that reflect the premium home owners are willing to pay to live near protected agricultural land, and (c) social science research methods such as contingent valuation surveys that explore people’s willingness to pay to protect agricultural land in hypothetical market situations (Loomis et al. 2000).

Both the Specific Plan and GIR will incur market costs by converting existing cropland, orchards, or pastureland to non-agricultural use. Based on a preliminary geographic information system (GIS) analysis by Haskins (2005), the Specific Plan will convert approximately 2,537 acres while GIR will convert approximately 2,174 acres or 14% less. In Santa Clara County, the 2002 Census of Agriculture reports a mean agricultural land value of \$2,887 per acre, or \$3,122 in 2005 dollars (USDA 2002). If we use this average, the direct market cost in terms of lost agricultural income would be \$7,895,144 each year under the Specific Plan and \$6,787,228 under the GIR vision. Using the statewide agriculture multiplier provided by the Minnesota Implan Group (2002), this direct loss of annual agricultural income translates into an additional loss to businesses that provide infrastructure or support services on the order of \$12,316,425 each year for the Specific Plan and \$10,588,075 for the GIR vision.¹¹

Here, due to the preliminary nature of our analysis, we base our estimates for non-market costs on actual market transactions for conservation easements or outright purchases of land for conservation purposes. Ideally, cost estimated would be calibrated using this method in conjunction with a hedonic pricing study to quantify the actual market premiums nearby homeowners are paying to live near Coyote Valley’s open spaces, or an original contingent valuation survey of nearby residents (Loomis et al. 2000).

Easement costs reflect the difference between the current market value of developed land and its value in permanent agricultural use. Of course, easement costs vary significantly depending on the proximity of the agricultural parcel to urban centers or amenities such as coastlines, the relative productivity of the parcel, types of crops, immanency of development, and other factors. Machado et al. (2003) developed an econometric model to account for these factors. Their model predicted a total easement value of \$113 million for 31,000 acres of farmland in the Bay Area bioregion, or an average of \$3,650 per acre. In addition to this model, actual market data is available for easement transactions from the California Department of Conservation (CDC). According to the latest tabulations, the average per acre easement value for agricultural lands in California is \$6,482 (CDC 2005b). If we assume that average easement values in Coyote Valley fall within the range bounded by Machado et al. (2003) and CDC, we can take the midpoint as a rough approximation of the non-market costs associated with lost agricultural land in Coyote

¹¹ These are preliminary estimates using average agricultural land values for the whole county.

Valley.¹² Applying a midpoint value of \$5,066, we can then estimate non-market costs of \$12,852,442 per year for the Specific Plan and \$11,013,484 for GIR.

Taken together, we estimate the market and non-market costs of lost farmland in Coyote Valley to be \$33,064,011 under the Specific Plan and \$28,388,787 – or 14% less – for GIR. These results are summarized in Table 5.

B. Carbon dioxide emissions damage.

There is now widespread scientific consensus that anthropogenic carbon dioxide emissions are contributing to global warming and increasing the risk of killer heat waves and droughts, raging wildfires, collapsing ecosystems, tropical disease epidemics, devastating storms and inundated coastlines. Of course, these disastrous outcomes come at a very steep price. Given this, and given the ongoing urgency of adopting effective but efficient climate policy at the global level, there has been a profusion of studies over the past 15 years to estimate the expected value of both market and non-market damages caused by carbon emissions on a per ton basis. Of particular importance are two recent meta- analyses completed by Clarkson and Deyes (2002) and Tol (2005).

Clarkson and Deyes (2002) limited their review to eight of the most sophisticated published models and, after calibration, concluded that using a marginal damage figure of approximately \$119 USD per ton is a pragmatic approach given the current range of uncertainties. Tol (2005) evaluated and calibrated 103 estimates published in 28 separate studies and reported a mean of \$93 per ton. To be conservative, we use Tol's value.

Any development in Coyote Valley will increase carbon dioxide emissions from both vehicles and residential energy use. The Specific Plan and GIR differ, however, in the amount of such emissions and, consequently, in the amount of annual carbon dioxide damage. In terms of vehicle miles traveled, we previously estimated that the Specific Plan would generate 730 million VMT annually and GIR would generate between 642 and 715 depending upon whether VMT is reduced by 2.1% (the high VMT scenario) or 12% (the low VMT scenario). By incorporating local fuel efficiency data and standard conversion factors, we estimate that VMT under the Specific Plan would generate 340,667 tons of carbon dioxide annually and under GIR would generate between 299,787 and 333,513 tons. In terms of residential energy consumption, we previously found that the Specific Plan could be expected to generate 8,234 metric tons of carbon dioxide each year while GIR would generate roughly 5,808 metric tons. In terms of short tons, these figures are 9,076 and 6,402.

Combining emissions generated by VMT as well as residential energy use, we can expect the Specific Plan to generate 349,852 short tons of carbon dioxide each year and GIR between 306,189 and 339,915 tons. Applying the Tol (2005) figure, we estimate the social costs of carbon emissions under the Specific Plan to be \$32,536,236 and under GIR to range between \$28,475,577 and \$31,612,095 or between 3 and 13% less depending on the VMT scenario chosen.

¹² Since proximity to urban encroachment and immanency of development are two key factors driving up easement value, it is reasonable to expect that Coyote Valley's agricultural lands would exceed the Bay Area average.

C. Export of income for oil purchases.

Throughout the United States there is growing concern over the degree to which our communities are dependent upon imports of energy, manufactured goods, food, and services from abroad or from distant regions within the country. As communities become highly dependent on distant places, they also become highly vulnerable to supply disruptions. Moreover, money spent on imports is not recycled locally and, thus, deprives communities of the multiple beneficial effects generated by purchases from local establishments. In response to these concerns, economists are increasingly engaged in “leakage” studies which assess just how much local income is exported and how to keep more of that income in the local economy.

One major leakage is money spent on gasoline made from imported oil. Urban planning – by increasing or decreasing VMT – indirectly determines the magnitude of this cost. Since we have already estimated VMT for the Specific Plan and GIR, we can approximate these costs for Coyote Valley. To do this, we take VMT figures and translate them into annual gallons of gasoline consumed under each scenario using local fuel efficiency data provided by the Environmental Protection Agency. Using California Energy Commission (CEC) data, these figures are converted into raw expenditures on gasoline, then to expenditures on oil, using an appropriate gas to oil conversion factor. Again using CEC data, we estimate the share of these expenditures exported. Our results indicate that gasoline expenditures under the Specific Plan will result in \$35,965,243 of income exported, while expenditures under the GIR vision will result in \$31,649,413 to \$35,209,972 depending on whether the low or high VMT scenario occurs. A detailed methodology is included in Appendix 2 (MSI 9).

D. Total environmental deficit.

All tolled, we can think of the costs of lost farmland, carbon dioxide damages, and the export of capital needed to pay for oil imports as an environmental deficit passed on to future generations in the form of lost ecosystem services and lost economic capital available for productive investments in the local economy. The total environmental deficit associated with the Specific Plan and GIR is displayed in Table 6. As shown in Table 6, we estimate the total environmental deficit of the Specific Plan to be \$101,565,490 per year, and the environmental deficit of GIR to be \$95,210,854, or roughly 7% less using the conservative figures for VMT reduction discussed earlier.

Therefore, by preserving more productive agricultural land, reducing carbon dioxide emissions damage, and exporting fewer dollars out of the local economy to pay for imported oil, the GIR vision will cost at least \$6.4 million less each year than the Specific Plan in terms of externalized economic costs to future generations.

V. Social Sustainability

In terms of social sustainability, we selected two measures of equity: equity in the distribution of housing types and equity in access to open space. The relationship between equity and sustainability has been well documented. Stated simply, a more equitable community is more

stable and more cohesive. In contrast, an inequitable community – e.g., one dominated by exclusionary housing patterns or one where the poor are exposed to a disproportionate share of toxic pollutants – suffers from a number of social pathologies and economic inefficiencies that undermines its ability to sustain its quality of life over the long run. Thus, equity is a necessary component of sustainability (Daly 1990; Templet 1994).

Exclusionary housing patterns are a quintessential example of social inequity. Whether they evolve through conscious planning and zoning decisions or by market fiat, exclusionary housing patterns exclude affordable housing from the most desirable portions of an urban area. An exclusionary housing pattern segregates a city into regions of high-cost housing near good schools, jobs, parks, open space, arts and cultural events, and other municipal amenities, and low-cost housing in areas nearly devoid of these quality of life elements. As noted by Clingermayer (2004) “[t]hose excluded are virtually always poor and quite often non-white.” Exclusionary housing patterns adversely impact a local economy in a number of ways:

- Segregated housing erodes a community’s social capital – the social links and networks which help to create a cohesive, productive society (Putnam 1998).
- Tourism depends on the image and substance of a city or region as diverse, multi-cultural, equitable, and tolerant. As noted by Berry (2002) “[t]he reality – or even the public perception – of communities rent by polarizing differences, visible poverty and homelessness, souring crime and an impoverished public realm raises strong barriers to the influx of investors and key workers.”
- Valuable service workers such as police officers, bus drivers, sales persons, nurses, and teachers are forced to live far away from jobs and community attractions. This spatial separation increases their cost of living, diminishes their quality of life, and creates labor shortages that undermine regional economic efficiency (Berry 2002; EPS 2002).

To insure that future development does not promote exclusionary housing patterns, some index of equality in the distribution of new housing units should be used. S2 contains such a measure. It is a housing variant of the popular “GINI” coefficient, a figure used to gauge the extent to which a nation’s wealth is concentrated in the hands of a few. The GINI coefficient divides a nation’s population into income quintiles, then calculates the share of wealth owned by all persons in each quintile and compares that with an ideal distribution where each quintile owns 20%. The GINI measures the degree of deviation from this ideal distribution. A GINI close to 1 indicates severe concentration of wealth, while a GINI close to 0 indicates almost perfect equality.

In a similar vein, S2’s housing GINI measures the deviation of a proposed distribution in the number of housing units affordable to each income quintile from an ideal distribution in which the same number of units are made available to each quintile. In this way, the housing GINI measures the degree to which a proposed housing development is exclusionary (largely catering to just one or two income strata) or inclusionary (catering to a balanced mix of incomes). To calculate the housing GINI, we would need to estimate how many units under the Specific Plan

and GIR will be affordable to each quintile. Since development plans are still in their preliminary stage, this complete analysis is not possible at this time.

In lieu of this, we can use the proposed distribution of housing units by density type as a proxy under the assumption that housing prices will vary with density – i.e. units sold in areas where the density is 100 units per acre will be less expensive than those selling in areas where the density is 25 units per acre or less. Tables 7 and 8 provide a breakdown of units by density class under GIR and the Specific Plan. To approximate GINI with this data, we use a simple metric known as the “Index of Dissimilarity” or ID. The ID represents the sum of the absolute value of differences between the proportion of housing units in each density class and the “ideal” distribution based on 1/8 shares (since there are 8 density classes listed here), all divided by two.

Tables 7 and 8 summarize the results. Using the density classes under GIR as a basis for comparison, we estimate the Index of Dissimilarity (ID) for the Specific Plan to be .312 and the ID for the GIR vision to be .220. Thus the GIR vision represents a 30% improvement in the equitable distribution of housing types as compared with the distribution envisioned by the Specific Plan. This is because GIR does a better job of distributing housing units amongst all eight density classes while the Specific Plan is skewed towards lower densities and, presumably, less affordable housing. In fact, over 57% of the units proposed under the Specific Plan fall into the bottom three density classes.

Another dimension of equity involves access to environmental and cultural amenities, which are often concentrated in wealthier neighborhoods and neglected in poorer communities. In a land use planning framework, physical accessibility (as opposed to economic or cultural) is one measure that can be quantified with relative ease. Physical accessibility measures how well people can reach key features such as jobs, transit, retail, and open space. For example, Sustainable Seattle takes as one of its key indicators of sustainability the amount of residential acreage within a certain distance of open space. Based on analysis of the preliminary Specific Plan and GIR maps, we estimated that 205 acres of purely residential area in the Specific Plan would be further than 1/8 mile from open space. In GIR only 112 acres, or 7% less, would be further than 1/3 mile from open space. Coupled with its better mix of affordable housing, GIR is more likely to provide equitable access to open space to a broader range of socioeconomic groups.

Although not yet fully measurable for this comparison, access to transit is another aspect of social equity in which GIR is likely to exceed the Specific Plan. GIR’s incorporation of multiple public transit options suggests that low-income residents would be more likely able to commute to work without the expense of a car.

VI. Conclusion and Future Refinements

In this analysis, we compare two preliminary development scenarios for Coyote Valley using six quantitative measures of environmental, economic, and social sustainability taken from RP’s Scenarios for Sustainability (S2) toolkit. These included the ecological footprint, the economic costs of lost farmland, carbon dioxide damage costs, export of income needed to pay for

imported oil, a measure of equity in the distribution of housing types, and a measure of equitable access to open space.

Under each measure, the *Getting it Right* (GIR) vision advanced by the Greenbelt Alliance is superior to the City of San José Specific Plan. These differences initially suggest that GIR would preserve more open space, discourage unnecessary trips by automobile, foster energy conservation, and create a more livable local and regional environment than would the City's plan. By promoting a more compact urban form, a better mix of jobs and residences, and fewer vehicle miles traveled, and by converting fewer acres of biologically productive land to impervious surface, GIR's ecological footprint will be at least 17% smaller than that of the Specific Plan. By preserving more productive agricultural land, reducing carbon dioxide emissions damage, and exporting fewer dollars out of the local economy to pay for imported oil relative to the Specific Plan, the GIR vision will cost at least \$6.4 million less each year in terms of externalized economic costs to future generations. GIR represents a 30% improvement in the equitable distribution of housing types as compared with the distribution envisioned by the Specific Plan. In addition, GIR would allow 7% more families to have easy access to open space, thereby mitigating the tendency for open space to be clustered near high income areas alone.

With the City of San José Specific Plan still under development and subject to change, and with a large amount of information still to emerge from the Environmental Impact Report (EIR) process, an updated assessment will likely be needed to insure that the findings presented here hold true. For example, more refined GIS analyses will yield better estimates needed for calculating both the direct and indirect footprints. More precise information on the configuration of the development proposals will improve the VMT analysis and the analyses based on VMT differentials. Better housing type distribution data coupled with affordability data from the local market will improve the housing GINI calculations.

This report is intended as an exploratory analysis at the pre-EIR stage before these data are made available. As such, it highlights important differences between the two plans, with significant implications for the sustainability of Coyote Valley's development and the entire Bay Area region. These nuances may become even more apparent as the EIR process unfolds over the coming months.

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Appendix 1: Tables and Figures

Table 1
Selected Excerpts from Development Alternatives

Sustainability Domain	<i>Getting it Right</i>	San José Specific Plan
Environment	Integrate development with the natural environment in a manner that preserves ecosystem function and protects the biological diversity and productivity of Coyote Valley.	Secure South Coyote Valley as a permanent greenbelt and create a rich system of parks, trails, and recreation areas.
Economics	Promote long term economic stability and profitability.	Maximize efficient land usage and be financially feasible for private development.
Social	Provide broad and equitable access to meaningful work, affordable housing, community services, and an attractive and healthy living environment.	Make 20 percent of all units affordable housing.
Social	Create a distinct and identifiable community that nurtures pride of place among those who live and work there.	Create an urban, pedestrian and transit oriented community with a mixture of housing densities, supportive businesses and services and campus industrial uses.

Table 2
Comparison of Selected Elements

Element	<i>Getting it Right</i>	Specific Plan
Minimum assumptions	80,000 Residents 25,000 Housing units 50,000 jobs	80,000 Residents 26,302 Housing units 50,000 jobs
Residential density	28.5 units per acre	18 units per acre
Developed area (inc. urban parks)	2,400 acres	3,100 acres
Average Employment Floor to Area Ratio ^{*****}	1	.55
Circulation system	Grid-based	Parkway with underlying neighborhood grids
Main hydrological feature	Existing streams	Artificial lake
Land use pattern	Multiple neighborhood centers	Single center
Regional transit links	Caltrain and other rapid transit	Caltrain only
Greenbelt agricultural policies	Food belt	No specific policies

Table 3
Direct Footprint Results

Biome	<i>Getting it Right</i> (global acres)	Specific Plan (global acres)
Agricultural land	3,654	4,142
Pasture land	1,205	1,520
Wetlands	169	157
Built space	58	81
<i>Total:</i>	5,086	5,899
<i>Total per household:</i>	.20	.22

***** A ratio of the gross floor area of a building or study area to the total area of the site.

Table 4
Indirect Footprint Results

Biome	<i>Getting it Right</i> (global acres)	Specific Plan (global acres)
Carbon sequestration land (vehicles miles traveled)	167,175 -185,982	189,972
Carbon sequestration land (household energy use)	164,983	233,899
Stormwater runoff land	120	147
<i>Total:</i>	332,278-351,085	424,018
<i>Total per household:</i>	13.29-14.04	16.12

Table 5
Economic Costs of Lost Farmland in Coyote Valley

Cost Component	Annual Costs <i>Getting it Right</i>	Annual Costs Specific Plan
Market value of lost farmland	\$6,787,228	\$7,895,144
Secondary costs incurred by support businesses	\$10,588,075	\$12,316,425
Non-market costs	\$11,013,484	\$12,852,442
<i>Total:</i>	\$28,388,787	\$33,064,011

Table 6
Annual Environmental Deficit

Deficit Component	Annual Deficit <i>Getting it Right</i>	Annual Deficit Specific Plan
Market value of lost farmland	\$6,787,228	\$7,895,144
Secondary costs incurred by agricultural support businesses	\$10,588,075	\$12,316,425
Non-market costs of lost farmland	\$11,013,484	\$12,852,442
Carbon dioxide emissions damage	\$31,612,095	\$32,536,236
Export of capital to pay for oil imports	\$35,209,972	\$35,965,243
<i>Total environmental deficit:</i>	\$95,210,854	\$101,565,490
<i>Environmental deficit per household:</i>	\$3,808	\$3,862

Table 7
Index of Dissimilarity or "Housing GINI" for GIR

Density class	GIR Distribution	% by class GIR (x)	% by class Equality (y)	Abs (x-y)
10 units or less per acre	1,000	0.040	0.125	0.085
11-20 units per acre	2,500	0.100	0.125	0.025
21-25 units per acre	6,250	0.250	0.125	0.125
26-30 units per acre	3,500	0.140	0.125	0.015
31-35 units per acre	3,250	0.130	0.125	0.005
36-45 units per acre	5,000	0.200	0.125	0.075
46-75 units per acre	2,500	0.100	0.125	0.025
75 units or greater per acre	1,000	0.040	0.125	0.085
<i>Total:</i>	25,000	1.0	1.0	0.440
			<i>Total/2(ID):</i>	0.220

Table 8
Index of Dissimilarity or "Housing GINI" for the Specific Plan

Density class	Specific Plan Distribution	% by class GIR (x)	% by class Equality (y)	Abs (x-y)
10 units or less per acre	2003	0.076	0.125	0.049
11-20 units per acre	5057	0.192	0.125	0.067
21-25 units per acre	7269	0.276	0.125	0.151
26-30 units per acre	2382	0.091	0.125	0.034
31-35 units per acre	279	0.011	0.125	0.114
36-45 units per acre	5746	0.218	0.125	0.093
46-75 units per acre	2988	0.114	0.125	0.011
75 units or greater per acre	578	0.022	0.125	0.103
<i>Total:</i>	26302	1.000	1.0	0.624
			<i>Total/2 (ID):</i>	0.312

Figure 1
Coyote Valley Base Map

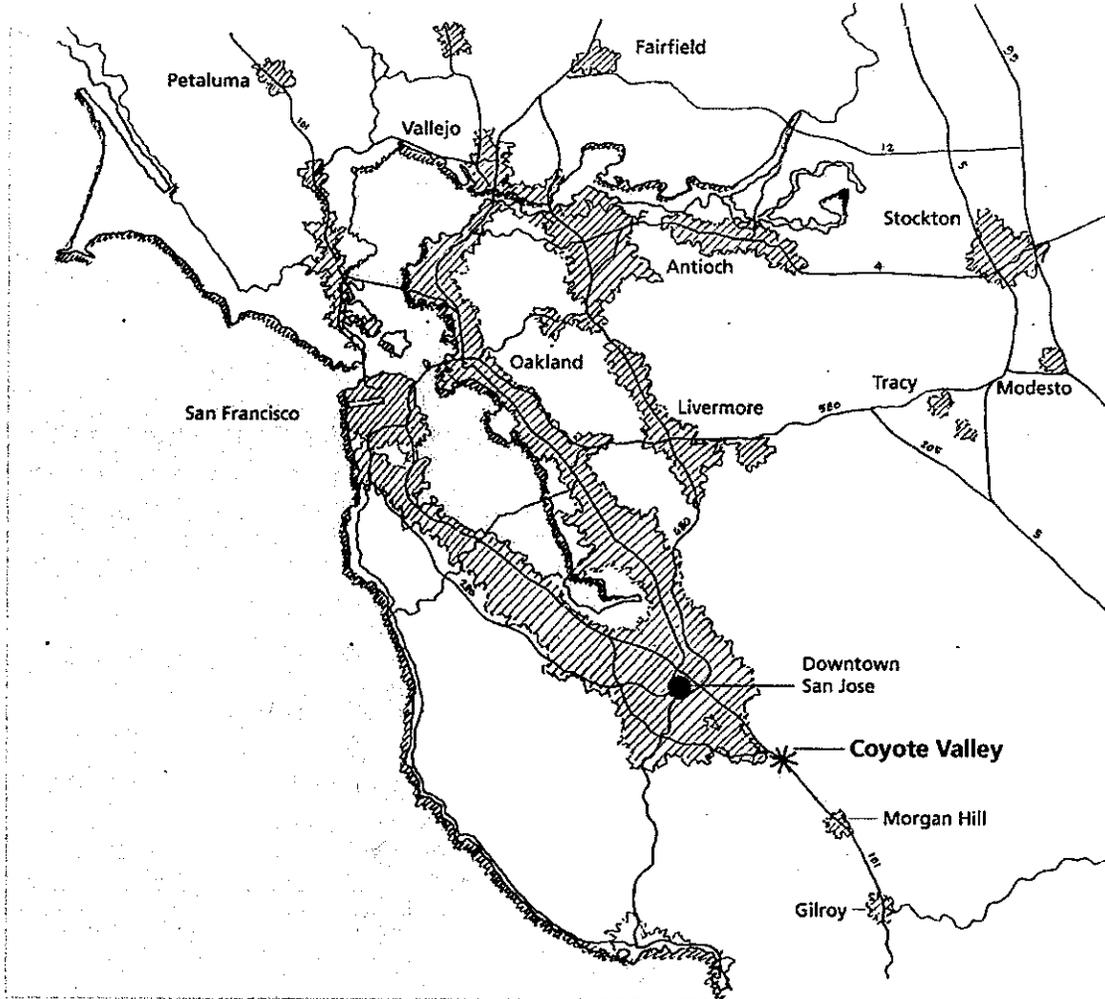


Figure 2
City of San José Specific Plan Conceptual Map

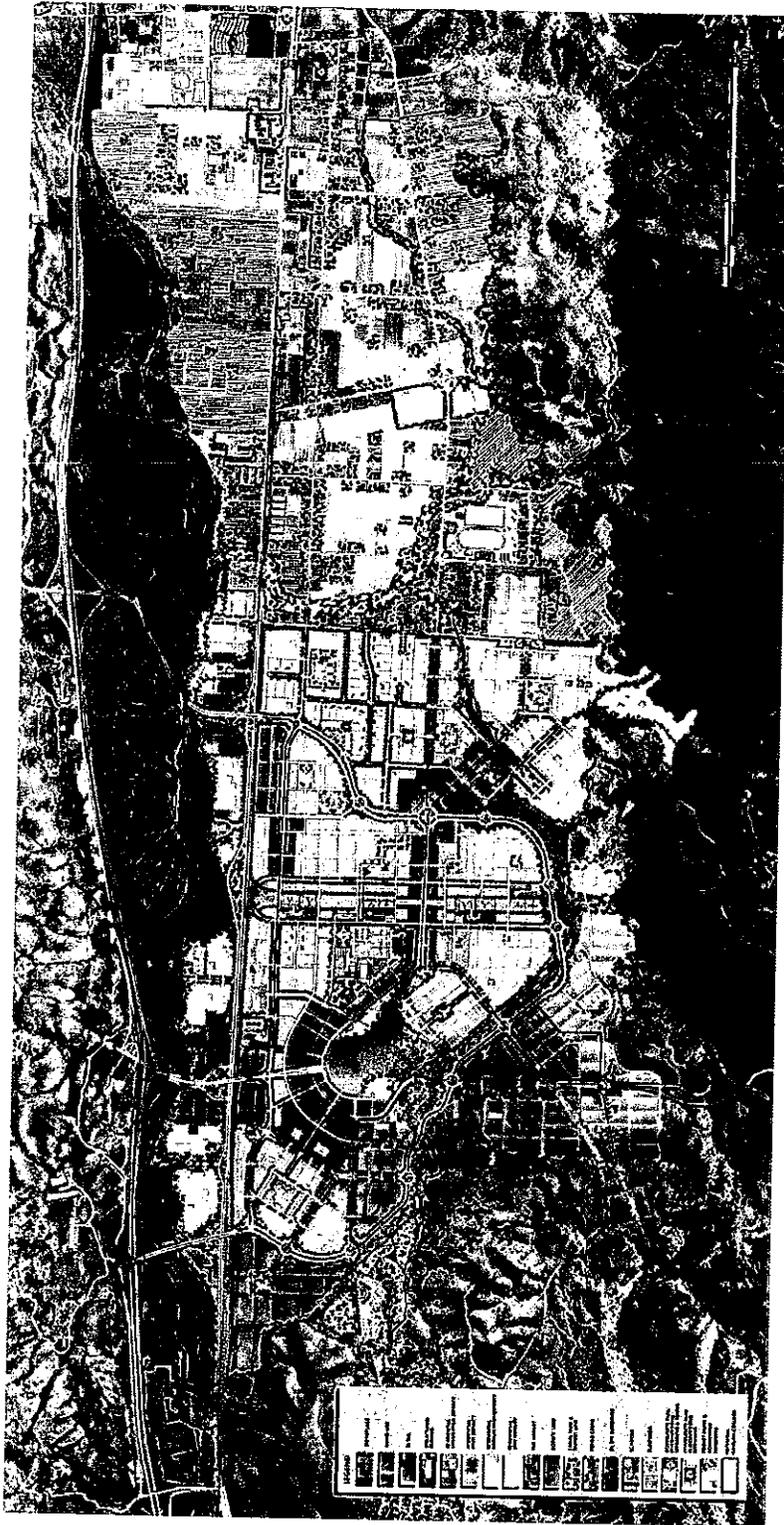
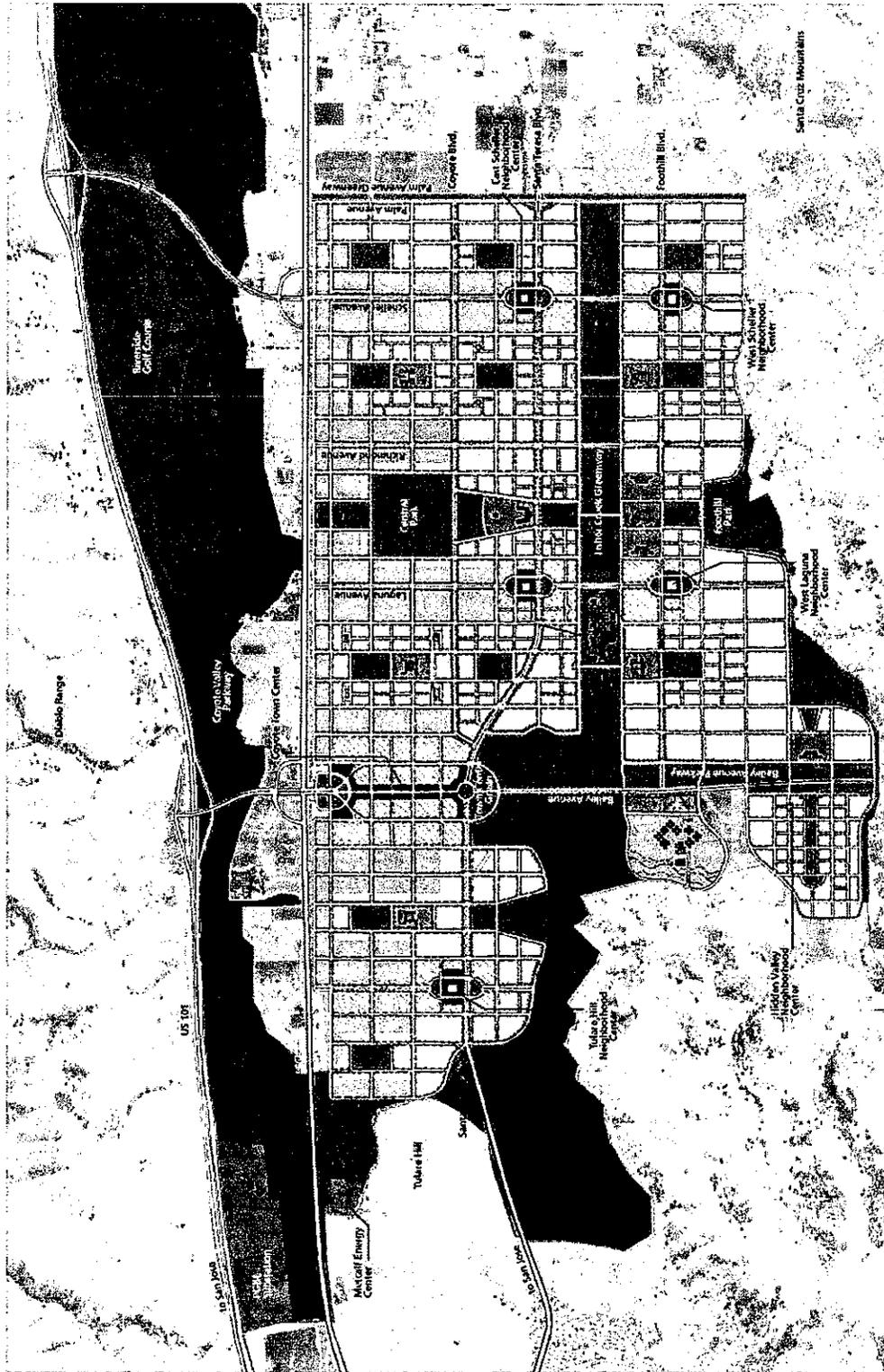


Figure 3
Getting it Right Vision Conceptual Map



Appendix 2: Methods & Sources of Information

MSI 1: Global Acre Conversions

The common unit used to compare areas with different biological productivity is called a global acre. A global acre is a measure equivalent to one acre with world-average productivity. To calculate a global acre of impact, acres directly impacted are multiplied by the following equivalency factors:

Biome	Equivalencé Factors
Agricultural land developed	2.18
Pasture land developed	2.42
Wetlands developed	2.06
Built space	0.50

MSI 2: Density

To extrapolate the impact of higher density on vehicle miles traveled (VMT), the 26% density increase achieved through implementation of GIR's vision is multiplied by a -.05 VMT density elasticity coefficient. Elasticity is a measure of the percentage change that occurs in a dependent variable, such as VMT, resulting from a percentage change in an influential variable, such as density. For example, if vehicle trips decrease by 0.05% for each 1% increase in density, then vehicle trips are said to have an elasticity of -.05 with respect to density. The elasticity rate used is based on analysis of over forty studies done by Criterion Planners. Taken as a group, the studies indicate how changes in land-use characteristics, such as density, relate to changes in travel generation as measured by vehicle trips and vehicle miles of travel (Criterion Planners 2005).

VMT baseline travel forecasts are based on the Association of Bay Area Governments' 2003 series of demographic / economic / land use forecasts, and MTC interpolations for 2006 (ABAG 2002, MTC 2005). The projected growth rate is extended out to 2050, and Coyote's proportional share of Bay Area travel is applied.

MSI 3: Diversity

The impact of higher diversity on vehicle miles traveled (VMT) is calculated by multiplying the 7% community diversity increase by a -.05 VMT diversity elasticity coefficient (see Density methodology, above).

MSI 4: Design

The coefficients and definitions utilized in calculating the design index are as follows (Criterion Planners 2005):

Street network density = length of street in miles/area of neighborhood in square miles
0.0195 = coefficient applied to street network density, expressing the relative weighting of this variable relative to the other variables in the Design Index formula;

Sidewalk completeness = total sidewalk centerline distance/total street centerline distance
1.18 = coefficient applied to sidewalk completeness, expressing the relative weighting of this variable relative to the other variables in the Design Index formula;

Route directness = average airline distance to center/average road distance to center
3.63 = coefficient applied to route directness, expressing the relative weighting of this variable relative to other variables in the Design Index formula;

The impact of design on vehicle miles traveled (VMT) is calculated by multiplying the 11% change in the design index by a -0.05 VMT design elasticity coefficient (see Density methodology, above).

MSI 5: URBEMIS

URBEMIS calculates VMT in two main steps (JSA 2003). First, URBEMIS turns land use data into trips and VMT by applying average trip generation rates to different land use types. For example, an average single family housing unit generates 9.57 trips per day. Second, the program reduces the resulting figures by applying mitigation factors based on policy changes. These include mix of uses, local serving retail, pedestrian environment, transit provision and TDM (ARB 2002).

MSI 6: Ecological footprint of vehicle miles traveled

In order to calculate the annual carbon footprint of VMT in a given area, daily VMT is first annualized. The annualized amounts are then divided by the average miles per gallon of vehicles in the United States according to the Energy Information Administration, multiplied by the amount of carbon dioxide (CO₂) emitted per gallon, and divided by the number of pounds per metric ton. Carbon is then converted to land area using standard conversion factors for tons of carbon absorption per hectare, percent of carbon not absorbed by oceans, global hectares acres per hectare, and hectares per acre.

MSI 7: Residential Energy Footprints

Energy use footprints are based on local consumption of electricity and natural gas. The data source for the amount of energy consumed is based on numbers found in the *Final Report of the California Statewide Residential Appliance Saturation Study Volume 2*, completed by Kema-Xenergy, Itron, and Roperasw in June 2004 (CEC 2004). Specifically, the electricity data in Table 2-5, along with the natural gas data found in Table 2-21 for single family and multi-family homes, was applied to the data found in the Specific Plan and GIR.

Fossil-fuel based electricity generation is converted to carbon emissions using conversion factors developed by Lawrence Berkeley National Lab based on PG&E's mix of sources in 1999. This was described by a scientist as a conservative estimate because sources have become more numerous and further flung as energy provision is deregulated in the state. Carbon is then converted to land area using standard conversion factors for tons of carbon absorption per hectare, percent of carbon not absorbed by oceans, global hectares acres per hectare, and hectares per acre.

Natural gas consumption is converted to carbon emissions using emissions factors developed by the Bay Area Alliance. This is then converted to area using the same method as fossil-fuel based electricity.

MSI 8: Income exports for oil purchases

Income exports for oil purchases begin with VMT figures described above for the Specific Plan and the GIR low and high scenarios. Assuming U.S. average fuel efficiency for cars and light duty trucks of 21 mpg according to the EPA, we estimate gallons of gas consumed, then translate these figures into barrels of oil using standard conversion factors. Money spent on energy imports is calculated using estimates for imports from foreign origins (36%) and Alaska (21%). We then apply a price of \$36.40 price per barrel of oil based on 2004 data.

MSI 9: Housing GINI

$$ID = .5 \sum_1^n |X_i - Y_i|$$

Where n is the number of classes, X the percentage of units falling into class i , and Y the percentage based on equal shares. As with GINI, an ID close to 1 indicates a skewed distribution while an ID close to 0 indicates an equitable distribution.

Exhibit

B.

ECONOMIC BENEFITS OF

Parks AND Open Space

How Land Conservation

**Helps Communities Grow Smart
and Protect the Bottom Line**



BY

STEVE LERNER

AND

WILLIAM POOLE



Introduction

Too often we hear that communities cannot afford to “grow smart” by conserving open space. But accumulating evidence indicates that open space conservation is not an expense but an investment that produces important economic benefits. Some of this evidence comes from academic studies and economic analysis. Other evidence is from the firsthand experience of community leaders and government officials who have found that open space protection does not “cost” but “pays.”

This casebook presents data and examples that can help leaders and concerned citizens make the economic case for parks and open space conservation. Some communities protect open space as a way to guide growth and avert the costs of urban and suburban sprawl. In others, new parks have invigorated downtown businesses and neighborhood economies.

Some communities work to conserve economically important landscapes, such as watersheds and farmland, or they preserve open space as a way to attract tourists and new business. And many communities are learning that conserved open space contributes to the quality of life and community character that supports economic well-being.

Too many community leaders feel they must choose between economic growth and open space protection. But no such choice is necessary. Open space protection is good for a community’s health, stability, beauty, and quality of life. It is also good for the bottom line.

By
Will Rogers
President
Trust for Public Land

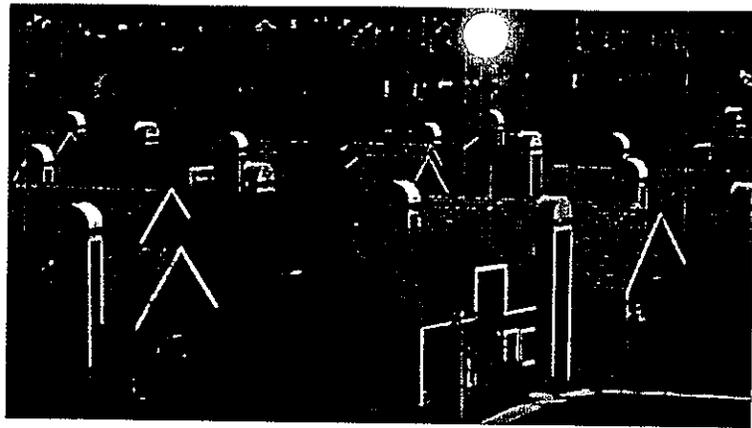


PHIL SCHERMEISTER
TPL President Will Rogers.

*Opposite: Chattanooga Riverwalk,
Chattanooga, Tennessee.*

BILLY WEEKS

Increased density saves in infrastructure costs and contains sprawl.



LARRY ORMAN

The Costs of Sprawl Outpace Tax Revenues

Sprawl development not only consumes more land than high-density development, it requires more tax-supported infrastructure such as roads and sewer lines. Police and fire services and schools also must be distributed over a wider area.

One study found that New Jersey communities would save \$1.3 billion in infrastructure costs over 20 years by avoiding unplanned sprawl development.³

Another predicted that even a modest implementation of higher-density development would save the state of South Carolina \$2.7 billion in infrastructure costs over 20 years.⁴ And a third found that increasing housing density from 1.8 units per acre to 5 units per acre in the Minneapolis/St. Paul area would slash \$3 billion in capital infrastructure costs over 20 years.⁵

Many community leaders expect that the taxes generated by growth will pay for the increased costs of sprawl, but in many instances this is not the case.

- In the island community of Nantucket, Massachusetts, each housing unit was found to cost taxpayers an average of \$265 a year more than the unit contributed in taxes. "Simply stated, new dwellings do not carry their own weight on the tax rolls," a town report concluded.⁶
- And in Loudoun County, Virginia—the fastest growing county in the Washington, D.C. area—costs to service 1,000 new development units exceeded their tax contribution by as much as \$2.3 million.⁷
- Studies in DuPage County, Illinois, and Morris County, New Jersey, suggest that even commercial development may fail to pay its own way. In addition to making its own demands on community resources, commercial development can attract costly residential sprawl.⁸

But do people want to live in clustered housing?

Many communities are saving money and land by encouraging—or even mandating—clustered housing.

In a typical clustered development, homes are built closer together on smaller lots and surrounded by protected open space or conservation land.

Clustered housing is cheaper for a community to service than houses on larger lots, largely because it consumes less land and requires shorter roads, shorter utility lines and less infrastructure of other types.

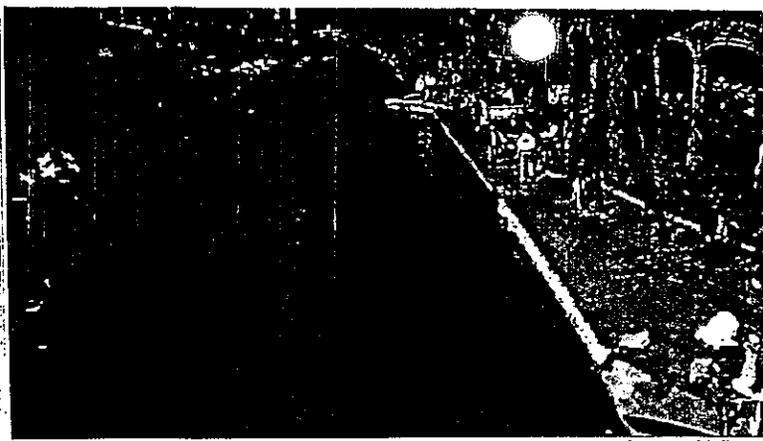
But do people really want to live in clustered housing?

A 1990 study attempted to answer this question for two communities in New England, where sprawl is rapidly overwhelming the original clustered development pattern of houses gathered around a village green and surrounded by farms, forests, and other open space.

Researchers used the rate of real estate appreciation as a measure of consumer demand for homes in two clustered developments in Concord and Amherst, Massachusetts. In both communities the average clustered home appreciated faster than comparable homes on conventional lots.

Clustered housing can allow a community to meet its land protection goals without endangering property values or the tax base while allowing construction of the same number of units, the report suggests.

"The home-buyer, speaking . . . through the marketplace, appears to have demonstrated a greater desire for a home with access . . . to permanently protected land, than for one located on a bigger lot, but without the open-space amenity."⁹



Laura A. McElroy

The San Antonio Riverwalk is the most popular attraction in the city's \$3.5-billion tourist industry.

Remember the Riverwalk

In the early 1900s, engineers in San Antonio, Texas, planned to bury the San Antonio River to prevent recurrent flooding. But citizens envisioning a riverfront park stopped the project.

Eventually a channel was cut, and flood-gates were added to control flooding. Trees and shrubs were planted, and a mile and a half of walkways were added along the shore. Stairways connected the walkways to city streets, and 21 pedestrian bridges spanned the river. Riverside buildings, which had long faced away from the waterway, were given new entrances facing the park.

Created for \$425,000, the park has been enlarged twice, including the addition of new canals and walkways. Today, Paseo del Rio is lined with outdoor cafés, shops, bars, art galleries, and hotels—an irreplaceable retreat for city residents and workers. The Riverwalk has also overtaken the Alamo as the single most popular attraction for the city's \$3.5-billion tourist industry.⁶⁵

“The lake frontage, river frontage, hillsides and ridges—those are the places people want to build homes,” says Tom Steinbach, the AMC's director of conservation. “But if communities don't preserve these lands, they will lose their future economic base.”

The Impact of Trails and Wildlife Tourism

Hiking and biking trails can also stimulate tourism. Each year 100,000 people come to ride the famous Slickrock Mountain Bike Trail near Moab, Utah. The trail generates \$1.3 million in annual receipts for Moab, part of \$86 million spent by visitors to nearby desert attractions that include Arches and Canyonlands National Parks. In 1995, tourism in Moab supported 1,750 jobs, generated nearly \$1.7 million in taxes, and accounted for 78 percent of the local economy.⁶⁰

Trails along former railroad corridors also pay handsome dividends. In recent years the federal government has invested more than \$300 million in more than 9,500 miles of rail trails in 48 states, and this investment is already paying off.⁶¹ For example, in Dunedin, Florida, store vacancy rates tumbled from 35 percent to zero after the Pinellas Trail was built through town beginning in 1990.⁶² In 1994 the Maryland Greenway Commission authorized a study of the 20-mile Northern Central Rail Trail near Baltimore. Researchers found that whereas the trail cost \$191,893 to maintain and operate in 1993, that same year it returned \$304,000 in state and local taxes.⁶³ In another study, the National Park Service found that three rail trails—in Iowa, Florida, and California—contributed between \$1.2 million and \$1.9 million per year to their home communities.⁶⁴

Natural open space supports fishing, hunting, and other wildlife-based tourism. Sport fishing alone boosted the nation's economy by \$108.4 billion in 1996, supporting 1.2 million jobs and generating household income of \$28.3 billion.

*At present rates of growth, the tourism/
leisure industry will soon become the leading
U.S. industry of any kind.*

—NATIONAL PARK SERVICE

Sport fishing added \$2.4 billion to state tax coffers—nearly 1 percent of all state tax receipts—while contributing \$3.1 billion in federal income taxes.⁶⁶ Another \$85.4 billion is generated for the U.S. economy each year by people who feed birds or observe and photograph wildlife.⁶⁷

Funding Resources for Tourists

Recognizing the connection between open space and tourism, some communities have begun taxing tourists to raise funds for park and open space preservation. In 1985 the Montana legislature authorized some small communities that derive a large portion of their income from tourism to levy a sales tax of up to 3 percent on tourist-related goods and services to pay for infrastructure and tourist services, including parks and recreational services. Using receipts from this tax, the town of Whitefish, Montana is building a bike path.⁶⁸

Flagstaff, Arizona, is another community that supports parks and land acquisition using funds generated by tourists. Two million tourists visit this community of 50,000 people each year, attracted by nearby Indian ruins, skiing, national forests and Grand Canyon National Park. In 1988, the city passed a 2 percent "bed, board, and booze" tax (known locally as the BBB tax), which currently raises \$3.3 million each year. A third of the money goes to city park improvements, and an additional portion goes to city beautification and land acquisition. The funds are helping to build a 27.5-mile urban trail system connecting neighborhoods, commercial areas, and national forest lands.⁶⁹

As travel and tourism swells to become the nation's leading industry within the next few years, communities from coast to coast are coming to see their parks and open lands in a new light. Long appreciated as resources for residents, increasingly they are being appreciated for their attraction to visitors and as economic engines for the next millennium. ■

In 1996, sport fishing contributed \$7.1 billion to California's economy. East Walker River, Bridgeport, California.

Recreation = Fun + Profit

- Annual contribution of river-rafting and kayaking to the economy of Colorado: **\$50 million**⁷⁰
- Amount outdoor recreation adds to the economy of Arkansas each year: **\$1.5 billion**⁷¹
- Amount of this figure contributed by canoeing: **\$20.1 million**⁷²
- Amount spent by Americans on the purchase of canoes and kayaks in 1996: **\$99.1 million**⁷³
- Amount spent on hiking footwear each year: **\$374 million**⁷⁴
- Contribution of sport fishing to the economy of California in 1996: **\$7.1 billion**⁷⁵
- Annual value of hunting, camping, fishing, and horseback riding on federal Bureau of Land Management lands: **\$376 million**⁷⁶
- Annual value of sport fishing on U.S. Forest Service land: **\$1.2 billion**⁷⁷
- Rank of recreation among all economic activities on U.S. Forest Service lands: **278**
- Visits to national wildlife refuges in 1995: **27.7 million**⁷⁹
- Revenue of local businesses from these visitors: **\$401 million**⁸⁰
- Income from the 10,000 jobs supported by these visitors: **\$162.9 million**⁸¹



Exhibit
C.

The
SAN FRANCISCO BAY AREA CONSERVANCY PROGRAM
Regional Needs Briefing Book



prepared by the
BAY AREA OPEN SPACE COUNCIL
April 5, 1999

About this Publication...

This Briefing Book has been prepared by the Bay Area Open Space Council, a cooperative effort of nearly 40 public agencies and land trusts with responsibilities to acquire, preserve, restore and manage permanently protected open space lands in the San Francisco Bay Area. The purpose of the Briefing Book is to provide an overview of the preservation themes and needs of the nine-county region. The information contained in this publication is derived from adopted plans and policies, published reports, and discussions with key professionals. This Briefing Book is thus a compilation and interpretation of the individual plans and policies of numerous agencies and organizations, and does not replace or modify the plans and policies of any individual agency or organization. Financial support for the preparation and distribution of this Briefing Book has been provided by the Walter and Elise Haas Fund and the members of the Council. Questions or comments regarding this publication should be directed to John Woodbury, Program Director, Bay Area Open Space Council at the address below.

Map Credits

All maps, with the exception of the Ridge Trail map, are the work of the Bay Area Open Space Council and its members, working in cooperation with GreenInfo Network.

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Contributors include:

Bob Walker/IDG Films, and the Oakland Museum

David Hansen

Golden Gate National Recreation Area

Greenbelt Alliance

Santa Clara County Open Space Authority

Santa Clara County Department of Parks and Recreation

Solano County Farmlands and Open Space Foundation

South Livermore Valley Agricultural Land Trust

Sonoma County Agricultural Preservation and Open Space District

U.S. Fish and Wildlife Service



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What We've Learned...

Through a combination of low-tech data collection, high-tech computer mapping, and analysis and review by the best professional expertise in the region, we now know some very powerful facts about the San Francisco Bay Area:

We've Done a Lot.

The Bay Area currently has about 950,000 acres of permanently protected open space, ranging from city parks to natural habitats to cultivated farmland. That's about 20 percent of the total land area of the nine counties.

The Old Ways Are Changing.

Conservation easements (both purchased and donated) now account for about 8 percent of all permanently protected open space. That's up from about 5 percent in 1992. Most significantly, during the 1990's easements have accounted for about half of all new acres protected. Most of these easements have had protection of agriculture as a primary purpose, though many are also designed to preserve habitat, water quality, viewsheds, and community open space buffers.



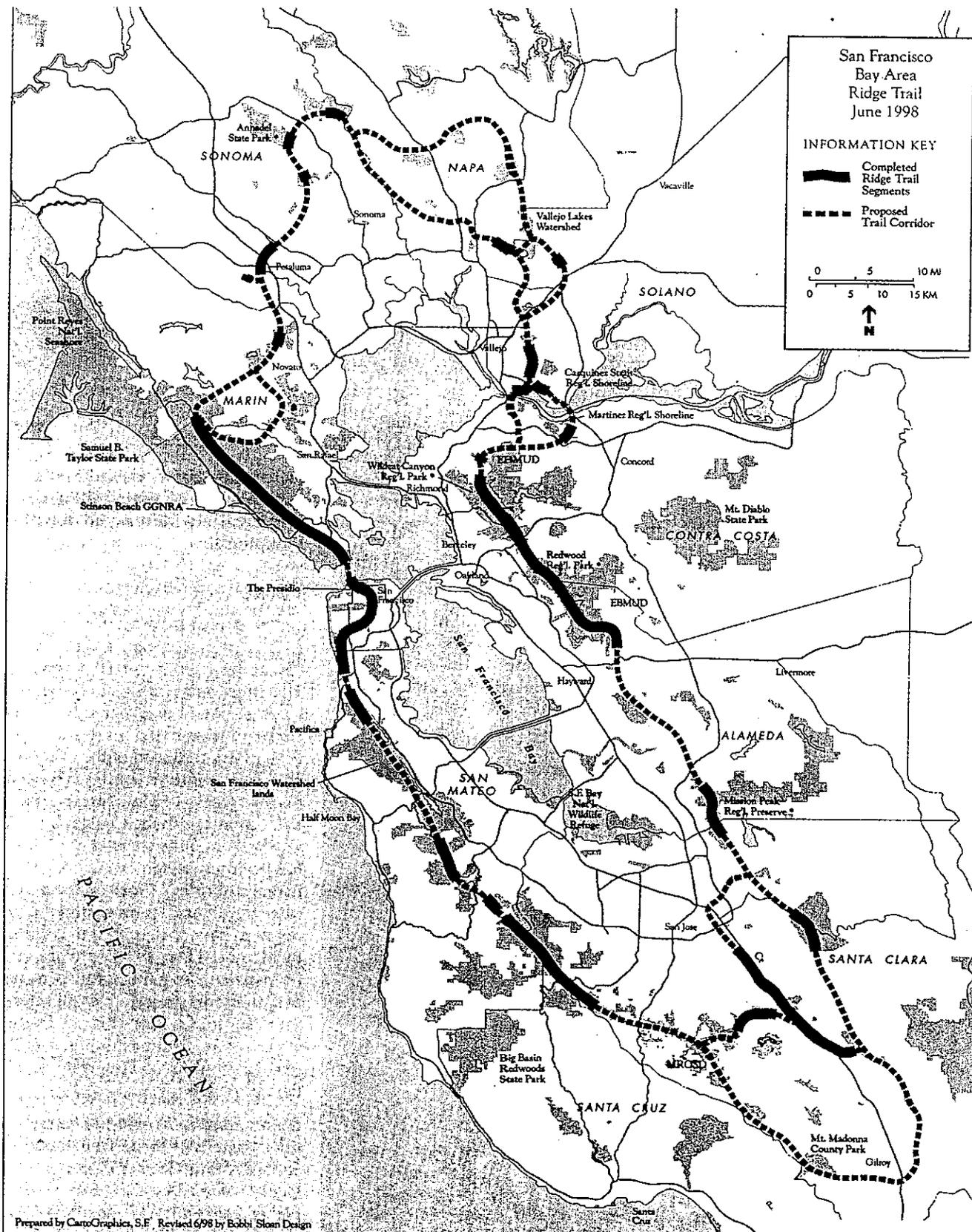
Despite Our Best Efforts, We're Not Keeping Up.

During the 1990's we've been adding permanent protection to open space lands at a rate of about 10,000 to 15,000 acres per year. That represents an increase of between 1.1 and 1.6 percent per year. By contrast the population of the Bay Area has been increasing at a rate of nearly 2 percent per year. Bottom line: Our recent efforts to permanently protect open space are not keeping pace with population growth. Stated another way: The amount of permanent open space per person is declining.

It's Getting Harder to Get Away From It All.

Considering that most agricultural and conservation easements have limited or no public access, and that many of the wetlands and other critical habitats which we have been acquiring also have little or no public access, the rate at which we've been adding publicly-accessible open space protection is only about one-third the rate of population growth.

The Bay Area Ridge Trail



Goal

Complete the Bay Area Ridge Trail and the system of connecting trails

The non-profit Bay Area Ridge Trail Council is the prime advocate for a continuous trail system circling the bay and linking the main ridges rising from the bay. Most segments of the trail which pass through existing public lands have been designated and identified through signage by the respective public agency owners. Where private property is involved, broad corridors through which the trail would pass have been identified, and most of the relevant public agencies have conceptually adopted these corridors.

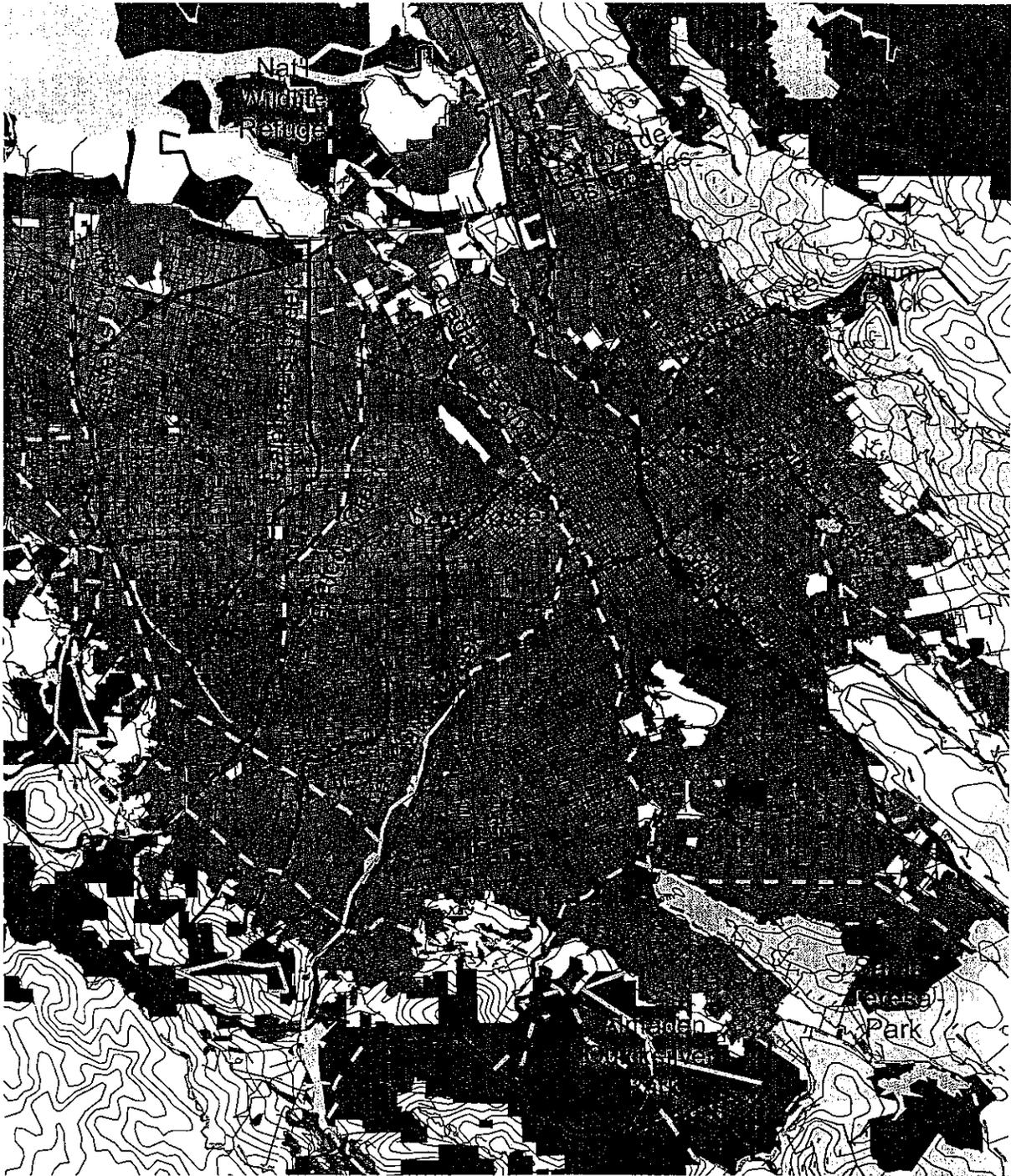
In many of the areas where gaps in the trail remain, the race is on between threats of development and efforts to protect needed open space lands and secure trail right of ways. Although there is broad public support for the Ridge Trail, property owners have in some cases sought to block efforts to secure trail right of ways. Also, the SF Public Utilities Commission has so far refused to permit location of the Ridge Trail along the most attractive alignment in their Crystal Springs Reservoir watershed, citing water quality concerns

Numerous local park and recreation agencies, cities and counties have endorsed the concept of the Ridge Trail, and are actively working to close remaining gaps.



The establishment of the Bay Area Conservancy Program within the Coastal Conservancy means there is now an institutional structure for implementing the Ridge Trail in those areas where there is no local agency to do the job.

SIGNIFICANT STREAMS AND TRAILS-- SANTA CLARA COUNTY DETAIL



Goal

Preserve and restore bay area streams and watersheds

After 150 years of urbanization, channelization, culverting and misuse, bay area streams have lost much of their habitat, recreational and aesthetic value. Many streams today function as little more than storm water conveyance systems, effective only at transporting water runoff, sediments, toxic chemicals and other pollutants to the bay and ocean.



Amazingly, however, salmon can still be found struggling up Coyote Creek in the heart of San Jose, up Walnut Creek past oil refineries, and up many other less impacted streams. Our riparian corridors still provide crucial habitat and habitat linkages, and streamside trails give many city residents their one remaining taste of nature close to home.

Most exciting of all, there are today numerous homegrown creek protection groups, and what were once single-purpose flood control agencies are joining forces with these citizen groups and with regulatory agencies to preserve and restore the water quality, habitat and recreational benefits of our bay area streams. This new watershed management approach is encouraged by the federal Clean Water Act and other environmental laws.



Some restoration and protection can be accomplished through the proper design of new developments and through mitigation requirements.

However, new sources of funding are needed to be able to comprehensively correct past mistakes, restore habitat and provide trails that reconnect the urban population to our streams.

Exhibit

D.

SAVING THE FARM

A HANDBOOK FOR CONSERVING AGRICULTURAL LAND

Prepared by
American Farmland Trust
Western Office

Briggs Nisbet, Public Education Director
Will Shafroth, Director

JANUARY 1990

Mitigation of Farmland Conversion

Local governments can also require that measures to mitigate a proposed project's conversion of agricultural land be discussed in the EIR. There are three basic types of mitigation measures, those that require 1) modification of the development project to reduce the effect of farmland conversion, 2) replacement of lost farmland by protecting farmland in another location, and 3) a fee or exaction paid by the developer or by homeowners within the development project area. Examples of measures that local governments in California can implement to mitigate the loss of farmland are summarized below.

Developer Fees

- Require a per-acre mitigation fee on development projects to be used for the acquisition of development rights on farmland in another location.
- Require developer to establish and provide initial funding for a Mello-Roos District for the purpose of conserving farmland.



Mitigation Measures for Farmland Conversion

Project Modifications

- Require a reduction in the proposed number of developed units.
- Require development projects to include a surrounding buffer of or for agricultural land.
- Establish agricultural buffer area.
- Require clustering of development units to reduce the amount of farmland converted.
- Require the consideration of alternate sites if significant farmland would be affected by development.

Replacement or Protection of Farmland

- Enact a right-to-farm ordinance.
- Require that remaining farmland, or an equal or greater amount of farmland be placed under Williamson Act contract.
- Require a conservation easement to be placed on remaining or alternate farmland.
- Require new agricultural land to be brought into production.

ATTACHMENT C

Exhibit

E.

From: Boyd, Darryl [mailto:Darryl.Boyd@sanjoseca.gov]
Sent: Monday, May 21, 2007 3:26 PM
To: 'Brian'; 'Michele Beasley'; melissa.hippard@sierraclub.org
Cc: 'Jodi Starbird'; Ketchum, Stan; Hart, Jared
Subject: RE: Follow-up clarification on farmland preservation as mitigation for farmland loss in the Coyote Valley DEIR

Your understanding of our comments is correct. We will clarify the explanation in the FEIR with a text amendment. Thank you for bringing this to our attention.

Darryl D. Boyd, AICP
Principal Planner

Dept. of Planning, Building & Code Enforcement
Voice mail: (408) 535-7898
Fax: (408) 292-6055
email: darryl.boyd@sanjoseca.gov

City of San Jose
200 East Santa Clara Street
San Jose, CA 95113-1905

From: Brian [mailto:brian@greenfoothills.org]
Sent: Monday, May 14, 2007 6:01 PM
To: 'Boyd, Darryl'; 'Michele Beasley'; melissa.hippard@sierraclub.org
Subject: Follow-up clarification on farmland preservation as mitigation for farmland loss in the Coyote Valley DEIR
Dear Darryl,

I want to thank you for the information you gave verbally at the last Coyote Valley TAC meeting about the DEIR's "Protection of Existing Farmland" on page 115 of the DEIR. I recently learned that a lawyer besides myself, one with even more experience than I have in CEQA and reading DEIRs, interpreted that section in the same way I had described at the TAC meeting. Our combined 20-year plus experience told us that the section stating that "protection of existing farmland...is not considered by the City of San Jose as adequate mitigation under CEQA" meant that the City was rejecting protection of existing farmland as a feasible mitigation. This reading was reinforced by the explanation in the DEIR that preservation was supposedly inadequate "because the net result of such actions would still be a loss of farmland acreage." The City used a virtually-identical explanation to justify doing

no farmland mitigation at all for the Coyote Valley Research Park, so our reading seems reasonable.

I'm attempting to confirm with this email what I understood from your comments on behalf of the City at the TAC meeting. I understood you to say that the City Staff's position is that farmland preservation is in fact a feasible mitigation for the loss of agricultural land, and the reference to preservation as not being adequate only meant that preservation, by itself, would not reduce the impact to a less-than-significant level.

If you could reply to this email confirming that I understood you correctly, it would be very helpful.

Best,
Brian

Brian Schmidt, Legislative Advocate
Committee for Green Foothills
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<http://www.greenfoothills.org>
We're blogging! <http://www.greenfoothills.org/blog>

Michele Beasley
South Bay Field Representative
Greenbelt Alliance

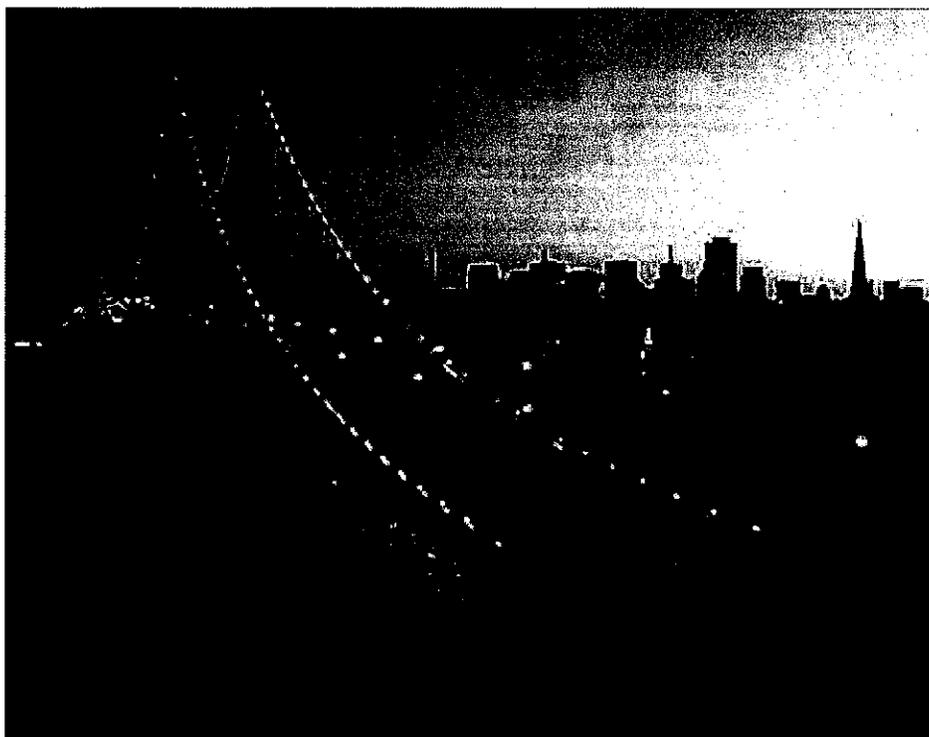
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Greenbelt Alliance protects open space and promotes livable communities in the San Francisco Bay Area.
Join us today at www.greenbelt.org. Your donation helps make the Bay Area a great place to live, work, and play.

Exhibit

F.

THE SAN FRANCISCO/OAKLAND BAY BRIDGE



FACTS AT A GLANCE

Location: Interstate 80 between San Francisco and Alameda Counties.

Length: 23,000 feet (4.5 miles), total project: structural and roadway including approaches, toll plaza, etc.,
8.4 miles.

Structure: Suspension, tunnel, cantilever and truss

West Bay Suspension Bridge:

Length 9260 feet (2822 meters)

Vertical clearance 220 feet

Span Length 2,310 feet

Tower Height 526 feet (from water level)

East Bay Cantilever Bridge:

Length 10,176 feet

Vertical clearance 191 feet

Span length 1,400 feet

Deepest Bridge Pier: 242 feet below water level - 396 feet high

Tunnel: Largest bore tunnel in the world: 76' wide, 58' high (546 meters (1700') long)

Opened: November 12, 1936

Cost: \$77 million (Including Transbay Transit Terminal)

Traffic Lanes: Upper level: five lanes westbound

Lower level: five lane eastbound

Avg. Daily Traffic: 270,000 vehicles

CONSTRUCTING THE IMPOSSIBLE

Conceived in the Gold Rush Days, a bridge spanning the San Francisco Bay linking The cities of San Francisco and Oakland always seemed like an engineering and financial impossibility. The water separating the cities was too deep and wide. In fact, in 1921 a transbay underwater tube crossing was recommended as the best way of crossing the bay. However this idea was soon deemed inappropriate for automobile traffic.

Practical and economic concerns would make the bridge a reality. Oakland streetcar lines were laid out to feed passengers to a fleet of ferry boats traversing the bay. In 1928, ferries carried over 46 million passengers between the two shorelines. Finally, with the popularity and mass production of the automobile, it was determined that a bridge was necessary and such a structure could support itself with tolls.

In 1926, the California Legislature created the Toll Bridge Authority, a policy-making body charged with the responsibility for bridging San Francisco and Alameda County.

The challenges facing the Toll Bridge Authority were monumental. California State Highway Engineer Charles C. Purcell was put in charge of organizing the design and construction of the Bay Bridge. Fortunately, between the two shorelines was a mountain of shale rock rising above the Bay: Yerba Buena Island. The island divides the Bay into two sections allowing for two crossings, which would meet at the island. Permission was granted from the Army and Navy, tenants of the island, to use it as an anchorage.

Yet spanning the 1.78 miles between the San Francisco and Yerba Buena Island required ingenuity on a grand scale. The water, 100 feet deep at some points, and the underlying soil conditions required new techniques for placing bridge foundations. The solution: build two suspension bridges.

Using plans conceived by Daniel E. Moran of New York, the nation's top expert on deep-water foundations, Purcell decided to build a center anchorage between the shoreline and Yerba Buena Island. The anchorage would be a monolithic concrete pier supporting one end of each of the two suspension bridges connecting Yerba Buena Island with San Francisco.

New techniques were implemented in the construction of the center anchorage. Fifty-five steel tubes, each 15 feet in diameter were filled with compressed air, bound within a caisson and towed via tugboat to the middle of the channel. Anchors were installed on the bay bottom and cables from the anchors were used to guide the

caisson into place. The steel pipes were sunk through the water into the Bay mud. Clamshells, a digging apparatus lowered by chain, were dropped through the huge pipes to excavate the bay mud. Water jets were used to clear the mud in the spaces between the pipes. As one pipe was lowered to a desired depth it was capped and filled with compressed air, while the next pipe was lowered. Through this process the caisson was lowered over 100 feet through the bay mud and clay until it sat on bedrock 220 feet below the water at low tide.

The west bay's first suspension tower was installed using coffer dams to provide a dry work area for the foundation. Steel sheet piles were driven into the bay floor, eventually forming a water tight coffer dam. The sea water was then pumped out and the suspension bridge tower's foundation was laid. Hammerhead cranes, rising from atop the tower itself, were used to raise the steel structure. Four suspension towers were constructed in this manner, two on each side of the center anchorage.

A total of 17,464 wires, each 0.195 inches in diameter, were spun in each of the two cables supporting each bridge. A shuttle wheel took a loop of wires from one anchorage and carried it over the towers to the other anchorage, hooking it to anchored eyebars. The shuttle then picked up another loop of wire and shuttled it back, hooking this loop on an eyebar at the other end. In this manner the cables were spun, forming a cable which is 28.75 inches in diameter. Each cable exerts a pull of 37 million pounds of dead and live load on its anchorage.

THE EAST BAY CROSSING

The crossing from the Oakland shoreline to Yerba Buena Island was an immense feat of engineering, although less difficult than the deep water crossing on the other side. It was spanned by a 10,176 foot cantilever bridge, the longest bridge of its kind at the time. This bridge employs the world's deepest bridge pier, sunk 242 feet below the water level.

The cantilever and suspension bridges meet at Yerba Buena Island via a tunnel through the shale hill on the island. The Yerba Buena Tunnel is listed in the Guinness book of World Records as the largest diameter bore tunnel in the world, measuring 76 feet wide by 56 feet high.

Construction took three years, and was completed six months ahead of schedule. The bridge had consumed over six percent of the total steel output of the nation in 1933. Total costs were \$77 million, including the construction of the Transbay Transit Terminal.

UNFORSEEN EXPANSION

Almost as soon as the bridge was opened in 1936, traffic on the Bay Bridge exceeded levels predicted for 1950. This was partly due to the lack of other bridges crossing the bay, but also because passengers abandoned the ferry services and chose to cross via the bridge. The bridge operators lowered tolls in an attempt to lure ferry users. The strategy was successful.

In the early years, the bridge carried three lanes of auto traffic in each direction on the upper deck. The lower deck was reserved for truck traffic and the inter-urban railway, including the Key System street cars that ran through the East Bay.

Auto traffic increased greatly. In 1958, \$49 million was allocated to re-configure the bridge. The railway system was removed and the upper deck was re-aligned to carry five lanes of westbound truck and auto traffic. The lower deck carried five lanes of eastbound traffic. The road deck through Yerba Buena Island had to be lowered to accommodate the large trucks that would now be allowed on the upper lanes. This work was done while traffic continued to use the bridge.

IMPROVEMENTS/INNOVATIONS

Increasing traffic volumes have made additional innovations necessary.

In 1971, tolls were reduced in priority lanes for high occupancy vehicles (HOV), encouraging bus and carpool use. By 1973, more than half the 50,000 commuters entering the toll plaza between the commute hours of 6 a.m. and 9 a.m. used the HOV lanes. In March of 1975 the tolls for these lanes were dropped entirely.

One of the most important innovations on the Bay Bridge was the installation of a signal system to regulate traffic on the bridge. The traffic metering system functions through roadway sensors linked to a main computer which activates signals that rhythmically merge 15 lanes into five and allows carpools and buses to bypass any backup before entering the bridge itself.

Traffic accidents were reduced 15 percent after the metering system was installed. As many as 500 more vehicles per hour can cross the bridge during peak periods due to metering.

EARTHQUAKE RETROFITTING

A section of the bridge was damaged in the 1989 Loma Prieta earthquake which measured 7.1 on the Richter scale. Bolts holding a section of the upper deck on the truss section sheared causing a portion of the deck to unhinge and fall onto the lower deck. The earthquake demonstrated that despite the Bay Bridge's behemoth stature and deep piers, it was vulnerable to damage during strong quakes.

Retrofit work to prevent any future failures has begun.

Financing

Construction of the Bay Bridge was financed through a series of bonds. Net revenues from the Bay Bridge have been combined with funds generated from the San Mateo-Hayward and Dumbarton Bridges.

This fund financed the Bay Bridge reconstruction in 1958, the new San Mateo-Hayward Bridge (\$ 70 million), and the new Dumbarton Bridge (\$70 million). The bulk of toll revenues currently are turned over to the regional transportation planning agency The Metropolitan Transportation Commission, and redistributed to the Bay Area Rapid Transit District (BART), San Francisco Municipal Railway and Alameda County Transit.