FINAL
Environmental Impact Report
Tassajara Parks Project
Contra Costa County, California

State Clearinghouse Number 2014052089

APPENDICES

Prepared for:

Contra Costa County
Department of Conservation and Development
30 Muir Road
Martinez, CA 94553-4601

County File Numbers:
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Appendix A: Attachments 1 through 8 of the Danville Draft EIR Comment Letter

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Stantec

July 15, 2016

Attention: Andrew Dillard
adillard@danville.ca.gov

Dear Andrew,

Reference: Peer Review of Tassajara Parks Traffic Impact Study

Stantec is pleased to provide you with this peer review of the Traffic Impact Study (TIS), dated May 2016, prepared for the Tassajara Parks project in Contra Costa County prepared by Kimley Horn and Associates, Inc. In general, the report is a comprehensive traffic analysis of the proposed project in accordance with the guidelines established by the Contra Costa County, Town of Danville, and City of San Ramon. This letter presents a few of the peer review findings that are meant to be part of the study responses by the Town of Danville for the public review comments period of the Draft Environmental Impact Report (DEIR). The issues raised in this letter should be addressed and rectified prior to the final issuance of the EIR.

Listed below are the specific comments on the report:

TRAFFIC OPERATIONS

- The Synchro file prepared for the study does not completely match with the Town's signal timing plans. The all-red numbers do not match for most of the intersections. The all-red used by the Town of Danville is higher (1.2 seconds) than the Synchro model (1.0 second), which means that the LOS shown in the Synchro model would show lower delay. All parameters in the Synchro model should match with the field implementation such that the model replicates field conditions.

- The Synchro file does not match the Town's signal timing plan with respect to the phasing and phase sequences. Please verify that the phases used in Synchro match with the timing sheet. For example: Intersection #4, does not use Phase 8, but it is being used in the Synchro model. The TIS's approach would result in showing overestimated benefits of signal optimization as being shown under the mitigation measures.

- For intersection #4, the westbound movement is LOS F during the AM Peak period. The proposed project is expected to add all traffic in the westbound direction during the AM peak, thereby increasing the delay at the movements that are already failing. Although, overall the intersection may operate at acceptable levels, the project should provide improvement measures for such scenarios. The study intersections are commute routes and directional split in traffic volume is high. Therefore, in addition to the overall intersection LOS, directional LOS should also be considered.

- The analysis shows unrealistic results at multiple intersections. For example: Intersection #9 has only one car making the westbound left turn movement and 24 seconds are allocated

ATTACHMENT 1

for that movement. However, the Synchro result shows that the movement operates as LOS F with 88 seconds/vehicle of delay. There seems to be an error that needs to be corrected. The results should be checked for all intersections, as intersection #15 and others were noted with similar issues.

- The review of the 2014 and the 2012 Town of Danville LOS Studies shows significant increase in volume on Camino Tassajara between 2012 and 2014. The report states that the growth is expected, since the economy is getting better and traffic volume is rising. The trend has continued between 2014 and 2016. However, the following discrepancies were noticed in the growth patterns on Camino Tassajara:

    a. Based on the 2014 study, traffic on Camino Tassajara east of Crow Canyon increased by 26.3%. However, the TIS reports that the change in traffic between existing and near-term conditions is expected to be approximately 7.1%. This prediction seems too low, based on the recent levels of growth and development that are occurring in San Ramon and adjacent cities like Dublin.

    b. Based on the 2014 study, traffic on Camino Tassajara west of Crow Canyon increased by 13.7%. However, the TIS reports that the change in traffic between existing and near-term conditions is expected to be approximately 3.5%. This prediction seems too low based on the recent levels of growth and development occurring in San Ramon and adjacent cities like Dublin.

    c. Based on these discrepancies, the near-term analysis should consider other near-by approved projects and should not be limited to the two projects; doing so fails to incorporate the background growth in traffic expected along the study corridor. Growth in San Ramon and Dublin is expected to use Camino Tassajara as the connecting route.

- Town of Danville encourages conducting multimodal LOS analysis for all proposed projects. The multimodal LOS was not conducted for this project, rather only qualitative analysis was conducted for bicycle, pedestrian, and transit. Multimodal LOS analysis should be conducted, especially at the locations with heavy pedestrian and bicycle volumes.

- Review of the 2014 Town of Danville LOS study indicates that the TIS is showing unrealistic intersection LOS improvements between 2014 and now. The intersection #5 was operating at LOS B in 2014 during the PM peak period. However, currently it is reporting to be operating at LOS A. There are similar results at other intersections, including intersection #12. These discrepancies should be corrected or explanations provided for why the signal operations have improved over time.

- The 2014 Town of Danville LOS analysis reports school PM peak period analysis and multiple intersections showing worse LOS during school PM as compared to PM peak. Intersection #15 is an example where the school PM operation is expected to be worse than the PM peak. The project's TIS should conduct school PM peak analysis for these intersections.

- The near-term analysis does not incorporate the effect of new roadway projects that would open up, which will affect traffic circulation patterns on Camino Tassajara. Example: Dougherty Road extension between Bollinger Canyon, north and south, is expected to reduce travel time on Dougherty and attract more traffic to and from the proposed project.

- Based on the discrepancies identified as part of the traffic signal operation and synchro model, mitigation measures #5, #10, #11, #12 and others related to signal timing improvements are over-estimating the benefits of signal timing. These mitigation measures should be revisited and revised as necessary after the discrepancies in the modeling are resolved.

- The TIS identifies two critical intersections for conducting the queuing analysis. Currently queuing analysis is provided only for Camino Tassajara/Tassajara Elementary School Driveway and Camino Tassajara/Blackhawk Road-Crow Canyon Road. However, there are other intersections that have LOS F for multiple turning movements under Existing plus project and Cumulative plus project conditions. The queuing analysis for the Existing, Near-term and the Cumulative Conditions should include the intersections with LOS E or worse for any turning movements.

- Queuing analysis based turn-lane mitigations should be included for all the intersections where the proposed project is adding traffic.

REGIONAL AND TRANSIT

- Does this project have any impacts relevant to Plan Bay Area? Is it documented that there is other residential development being built in the Priority Development Areas of Contra Costa County to help the region reach targets related to housing within close proximity to high-capacity transit lines?

- Although County Connection's Line 35 is mentioned as the nearest transit line, that line runs along Bollinger Canyon. How would the residents access the nearest transit stop on that bus line? How close is the nearest bus stop on Route 35? Is there a feasible option for future residents?

- The report mentions CCCTA flex service, but there was no further discussion on how this flex service can be used by future residents.

- CCTA Congestion Management Plan shows that I-680 between Bollinger Canyon and Alameda County line operates at LOS B or better for the northbound direction and LOS C or better for the southbound direction. This does not match with the findings in this study for the I-680 corridor.

- The I-580 Express Lane project and mitigation fee payment for partially mitigating the impact of the project is mentioned. However, the I-580 Express Lane project is already operational. The study should conduct updated analysis of the freeway segment with the Express Lanes in place to show whether the project contributions are partially getting mitigated by the Express Lane operations.

LAND USE AND MODELING

- The Traffic Analysis Zone (TAZ) which represents the Tassajara Park in the CCTA model only shows 14 dwelling units (43 people) in the build out year, which does not match with the proposed 125 units. The land use for this TAZ should be revised to represent the proposed project land use before conducting the select link analysis to determine the project trip distribution. This also suggests that the proposed development is significantly higher than the expected growth in this TAZ.

- The build out year in the CCTA 2013 model was Year 2035, while the most recent CCTA model has Year 2040 as the build out year. Cumulative analysis should be updated with the latest CCTA model.

- The 2013 CCTA model does not represent the accurate land uses in San Ramon, especially for the Windermere and Gale Ranch areas.

- Stantec conducted select link run using the San Ramon Traffic Impact Fee model, which was built based on the most recent CCTA 2015 model developed as part of the Direct Access Route (DAR) project, with the land uses in Windermere and Gale Ranch revised to match the most recent Windermere and Gale Ranch Compliance reports. The land uses in the TAZ representing the Tassajara Parks were also revised to match the proposed project. Attached are the select link run results for both morning and afternoon peak hours. The select link patterns observed with the updated model are significantly different from the trip distribution patterns used for the TIS. An example of a discrepancy shows that the TIS reported less than 2% of traffic using Blackhawk Road, while the revised model indicates that percentage to be considerably higher. These additional trips could adversely impact the intersection on Blackhawk Road north of Camino Tassajara. The inbound PM peak percentage, which is the peak direction for the project, is lower on Sycamore Valley West (18% instead of 22%), and Blackhawk Road (2% instead of 6%). The outbound AM peak percentage, which is also the peak direction for the project is again lower on Sycamore Valley West (15% instead of 20%) and Blackhawk Road (2% instead of 6.5%). These

roadway segments are critical to the Town of Danville, and with higher trip distribution on these roadways, project trips would result in more significant impacts on the Town's roadway system.

SCHOOL RELATED

- Why was there no mention of the pathway between residential parcels connecting to the elementary school that is shown in the parcel map of the planned development?

- The traffic circulation analysis for the schools located within the project study area should be included and discussed as necessary. The schools that should be considered for analysis and discussion should include Diablo Vista Middle School, Creekside Elementary School and Tassajara Montessori School at the minimum

CONCLUSION AND RECOMMENDATION

In general, the report is a comprehensive traffic analysis of the proposed project in accordance with the guidelines established by the Contra Costa County, Town of Danville, and City of San Ramon. However, the inadequacies listed in this letter should be addressed and rectified prior to finalizing the next draft of the EIR. In addition, all mitigations proposed in the Town of Danville should be checked for consistency and adequacy. The list below summarizes the peer review findings:

- The Draft EIR's Traffic Impact Study uses parameters that do not match the Town of Danville's signal timing plans at many intersections;

- Multimodal LOS analysis was not conducted and it should be conducted at least at intersections with high pedestrian/bike volume;

- School PM peak analysis was not, but should be conducted at intersections next to the schools;

- Several mitigation measures related to signal timing improvements overestimate the benefits of signal timing, since the phase numbering does not match with the Town's timing plans. These mitigation measures should be revisited and additional mitigation measures identified as needed;

- Stantec conducted select link analysis using the latest CCTA/San Ramon model, which provides more accurate assumptions about the project and surrounding land uses. The model results show significantly different trip distribution patterns than those used in the Draft EIR's study; and

Reference: Reference: Peer Review of Tassajara Parks Traffic Impact Study

- Traffic circulation analysis for the schools within the project study area was not conducted and should be analyzed.

Stantec appreciates the opportunity to provide preliminary review findings on the Tassajara Parks traffic study. Please call (925) 296-2107 if you have any questions.

Regards,

Stantec Consulting Services, Inc.

Joy Bhattacharya

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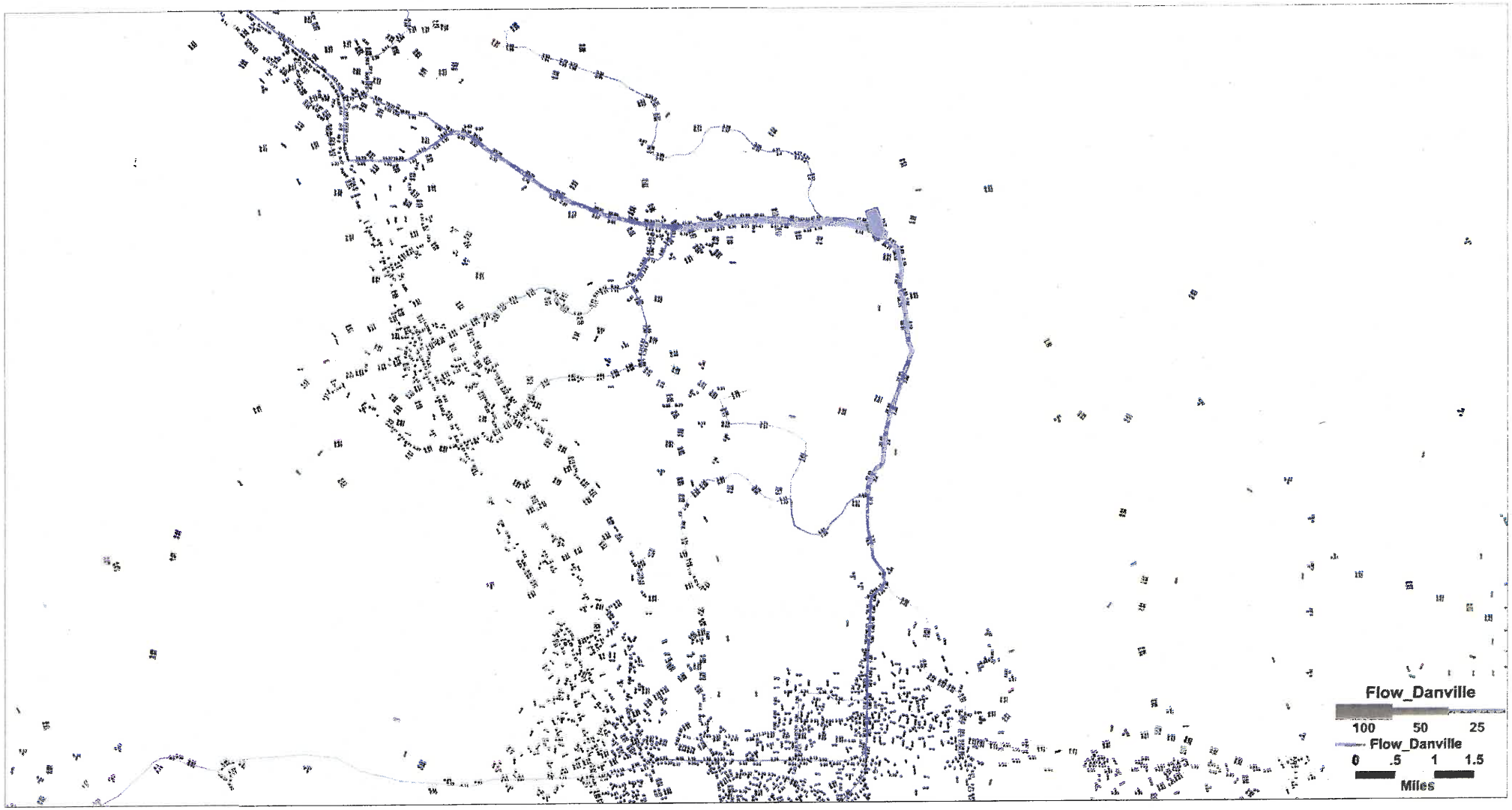
Attachment: Select link analysis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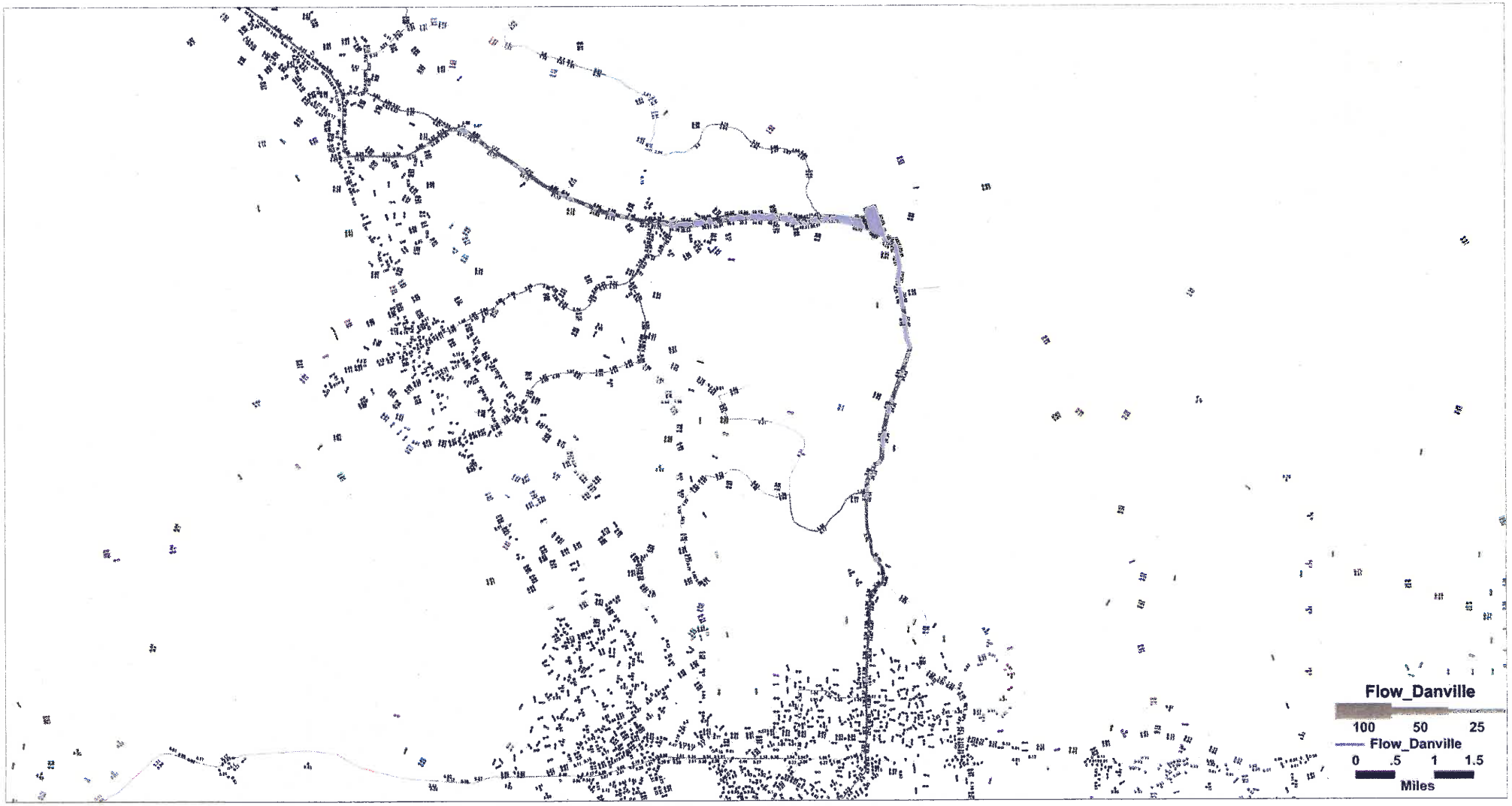
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Geotechnical and Grading Concerns:

The following is an excerpt from Appendix E: Geotechnical Supporting Information – Preliminary Geotechnical Report Tassajara Parks Subdivision 9280 (Page 16 of the Engeo Report dated 2-26-15):

> 5.10 SLOPE STABILIZATION
>
> Landslides or unstable hillsides, which pose a potential hazard to the proposed development, should be mitigated. Once final 40-scale grading plans are developed for the project, more detailed mitigation measures for the landslides should be developed by the geotechnical engineer or engineering geologist. *Potential mitigation measures for landslides and slope instability at the project site include avoiding placement of structures in or downslope of slide areas*, removing the landslide debris to bedrock and replacing it with engineered fill, buttressing the toes of landslides with engineered fill, and constructing keyways, debris benches, wide runout or landslide catchment areas with surface and subsurface drainage. (*Emphasis Added*)

The fact the property has several "explored landslides found to be at least 30 to 40 feet thick" (Engeo Preliminary Geotechnical Report – Page 3 Section 2.1.1.1 Landslides) should not be "buried" in Appendix E of the DEIR.

To allow adequate analysis of the project's conformance to applicable County General Plan Safety Element policies, this information, as well as information from Figure 2 Site Plan of the Engeo Preliminary Geotechnical Report for the project showing the locations of landslides, needs to pulled forward into the main body of the DEIR.

Figure 2 of the Engeo report indicates that half a dozen earth flows are in direct contact with, or overlap, the proposed residential lots in the project. One of these earthflows is identified to be a "deep seated earth slump/flow". That deep seated slide occupies in excess of six acres with its "footprint" overlapping all or portions of proposed Lots 34-39 and Lots 51-59. More than half the horizontal footprint of the slide has an existing slope gradient in excess of 20%. The topmost reaches of the slide, as well as the area above the mapped location of the slide extending up to the top of the ridge, has an existing slope gradient of $\geq$40%. The "hinge point" at the point slide transitions from the lower, flatter area of the slide through the top of the slide and the area above the mapped top of the slide scales to a vertical rise of$\approx$80' across a horizontal distance of $\approx$200').

The DEIR and the Draft ENGEO report should address the fact that a review of Google Earth oblique aerial mapping appears to readily indicate the presence of a related slide that is not indicated on Figure 2 – a slide that is located above and slightly east of the centerline of the deep seated slide and that appears to extends to the ridge. Page 3 of the Engeo Report includes the statement "In 2005, we performed a site-specific landslide evaluation, including interpretation of low-altitude stereo-paired aerial photographs, and a field reconnaissance to map the landslides, as part of an ENGEO geotechnical feasibility study." It may be that the apparent upper slide occurred after that analysis.

The slide (or slides); the steepness of slopes in and above the slide (or slides); and the highly visible "scar" that likely would be left after slide mitigation (i.e., exposed bedrock from the ridgeline down 80-100 vertical feet of the repair area and/or use of geogrid reinforcing in this region) all fly in the face of the intent and requirements of General Plan Safety Element Policies 10-22; through 10-24, Policy 10-26, and Policies 10-28 and 10-29.

The Engeo report indicates they did not have access to 40-scale grading plans during their review of the project.

The Engeo report does not indicate how the deep seated slide would be repaired from the list of repair options in Section 5.10 of the report or comment on the adequacy of the schematic preliminary grading plans on depicting the nature or extent of corrective work that would be necessary.

It is the Town's opinion that the schematic preliminary grading plan ENGEO used for their review drastically understates what it will take to "correct" this slide.

The schematic preliminary grading plan infers that the corrective work for the slide:

(a) could stop 4/5ths of the way up the slide (i.e., that mitigation for the slide would not need to include "removing the landslide debris to bedrock and replacing it with engineered fill" as called for in the Engeo Report);
(b) would be adequately served by a 20'width debris bench at the base of the partially "corrected" slide; and
(c) could avoid need for intermediary drainage benches despite depicting placement of engineered fill which would be a minimum of 80 vertical feet in height at an indicated 3 horizontal-to-1 vertical slope gradient – despite the ENGEO report's indication that concrete or asphalt lined drainage facilities may be appropriate for slopes with heights greater than 30 feet.

To analysis the actual impacts of the minimal amount of work that will be necessary to mitigate the deep seated slide the applicant should be required to prepare appropriately-scaled grading plans and to provide these plans to ENGEO and to prepare a worse case corrective grading plan for the slide repair.

It is anticipated that it is more than likely that the visual face of the corrective work will:

(a) need to extend all the way to the top of the ridgeline (i.e., expand to cover >500 horizontal feet and >175 vertical feet to the ridgeline);
(b) will result in the creation of areas steeper than 3 horizontal to 1 vertical that can't be receive and/or hold slope stabilization planting;
(c) will need intermediary benches that would push the toe of the engineered fill slope into the back of the lots shown at the base of slide repair and/or increase the extent of area at the upper reaches of the repair to >3:1 slopes or needing geo-grid mitigation treatment; and
(d) require a much wider debris bench at the toe of the repair.

Since it is reasonable to assume some or all of these anticipated revisions to the schematic preliminary grading plan would be necessary, the DEIR is inadequate as it could have, and should have, anticipated these potential impacts and addressed them with appropriate mitigation measures.

Contra Costa County Ordinance 82-1.018

Changes to the urban limit line

(a) There shall be no change to the urban limit line that violates the 65/35 standard set forth in Section 82-1.006. Except as otherwise provided in this section, as long as there is no violation of the 65/35 standard, the urban limit line can be changed by a four-fifths vote of the board of supervisors after holding a public hearing and making one or more of the following findings based on substantial evidence in the record:

(1) A natural or man-made disaster or public emergency has occurred which warrants the provision of housing and/or other community needs within land located outside the urban limit line;

(2)An objective study has determined that the urban limit line is preventing the county from providing its fair share of affordable housing, or regional housing, as required by state law, and the board of supervisors finds that a change to the urban limit line is necessary and the only feasible means to enable the county to meet these requirements of state law;

(3)A majority of the cities that are party to a preservation agreement and the county have approved a change to the urban limit line affecting all or any portion of the land covered by the preservation agreement;

(4)A minor change to the urban limit line will more accurately reflect topographical characteristics or legal boundaries;

(5)A five-year cyclical review of the urban limit line has determined, based on the criteria and factors for establishing the urban limit line set forth in Section 82-1.010 above, that new information is available (from city or county growth management studies or otherwise) or circumstances have changed, warranting a change to the urban limit line;

(6)An objective study has determined that a change to the urban limit line is necessary or desirable to further the economic viability of the East Contra Costa County Airport, and either (i) mitigate adverse aviation-related environmental or community impacts attributable to Buchanan Field, or (ii) further the county's aviation related needs; or

(7)A change is required to conform to applicable California or federal law.

(b)Except as otherwise provided in this subsection, any proposed general plan amendment that would expand the urban limit line by more than thirty acres will require voter approval of the proposed general plan amendment in addition to and following a four-fifths vote of the board of supervisors approving the general plan amendment and

making one or more of the findings required by subsection (a) of this section. Notwithstanding the foregoing, a proposed general plan amendment to expand the urban limit line by more than thirty acres does not require voter approval if, after a public hearing, the board of supervisors by a four-fifths vote makes either of the following findings based on substantial evidence in the record: (i) the expansion of the urban limit line is necessary to avoid an unconstitutional taking of private property; or (ii) the expansion of the urban limit line is necessary to comply with state or federal law. Proposed expansions of thirty acres or less do not require voter approval.

(c)The board of supervisors may conduct a cyclical review of the urban limit line every five years.

(d)The board of supervisors will review the boundary of the urban limit line in the year 2016. The purpose of the year 2016 review is to determine whether a change to the boundary of the county's urban limit line map is warranted, based on facts and circumstances resulting from the county's participation with the cities in a comprehensive review of the availability of land in Contra Costa County sufficient to meet housing and job needs for twenty years. This review of the urban limit line is in addition to any other reviews of the urban limit line the board of supervisors may conduct.

(e)Any change to the urban limit line proposed as a result of any review authorized by this section will not be effective unless it is approved pursuant to the procedures set forth in this section.

(Ords. 2006-06 § 4, 91-1 § 2, 90-66 § 4).

Contra Costa County Ordinance 82-1.032 (b)

(a)
As used in this chapter, the phrase "land within the county" shall mean all of the acreage within the boundaries of Contra Costa County except the water area of the county west of Stake Point.
(b)
As used in this chapter, the term "nonurban uses" shall mean rural residential and agricultural structures allowed by applicable zoning and facilities for public purposes, whether privately or publicly funded or operated, which are necessary or desirable for the public health, safety or welfare or by state or federal law.

(Ords. 91-1 § 2, 90-66 § 4).

MEASURE C - 1990

THE 65/35 CONTRA COSTA COUNTY LAND PRESERVATION PLAN

The People of the County of Contra Costa hereby ordain as follows:

Section 1 Title
This ordinance shall be entitled the "65/35 Contra Costa County Land Preservation Plan."

Section 2 Summary
Through this ordinance the people approve the policies contained in the 65/35 Contra Costa County Land Preservation Plan and direct the Contra Costa County Board of Supervisors to reflect those policies in the new general plan (the "New General Plan") for the County. These "65/35 Land Preservation Plan" policies are intended to:

- Restrict urban development to 35% of the land in the County and preserve 65% of the land in the County for agriculture, open space, wetlands, parks and other non-urban uses;
- Prohibit any changes to the 65/35 Land Preservation Plan standard except by a vote of the people;
- Create an Urban Limit Line to identify the outer boundaries of urban development in the County;
- Protect and promote the economic viability of agricultural land by appropriate standards and policies, including a policy that increases the minimum parcel size for prime productive agricultural land outside the Urban Limit Line to 40 acres;
- Protect open hillsides and significant ridgelines throughout the County from development by zoning and other measures;
- Manage growth in the County by allowing new development only when infrastructure and service standards are met;
- Advise the Local Agency Formation Commission to honor the County's 65/35 Land Preservation standard,
- Urban Limit Line and growth management standards in annexation and incorporation decisions;
- Promote cooperation between the County and cities to preserve agricultural and open space land, wetlands and parks, by requiring the County to pursue preservation agreements with cities where feasible; and
- Safeguard the County's obligation to provide its fair share of safe, decent and affordable housing.

Section 3 Statement of Findings and Policy
The voters of Contra Costa County approve the 65/35 Land Preservation Plan based on the following facts and considerations:

A. Contra Costa County (the "County") is nearing completion of a major revision of its general plan. The New General Plan will represent a comprehensive, balanced approach for accommodating the diverse variety of needs and interests of the

people of the County. To maximize public participation in preparing the New General Plan, the County has held thousands of hours of public meetings and received extensive written comments on the New General Plan. All segments of Contra Costa County society have participated, including ranchers, developers, farmers, environmentalists, labor groups, cities, special districts, business and industrial associations. The proposed New General Plan expresses the variety of concerns and hopes stated in this public process. The proposed New General Plan consists of over 400 pages and represents years of research and analysis by the staff of the County Conservation and Development Department and outside consultants. In addition, in accordance with the California Environmental Quality Act ("CEQA"), the County has prepared and circulated for public review a draft environmental impact report ("EIR") to assess the environmental impacts of the New General Plan. The draft EIR, comments and responses to comments have been circulated to agencies and individuals and readily available at County offices, libraries and other public places.

B. During this process of preparing the New General Plan, the voters expressed a number of concerns related to future planning and development of the County. The most important of those concerns were:
    1) Growing urbanization of the County is threatening the long term viability of the County's agricultural and open space land, parks, wetlands, hillsides and ridgelines. Preservation and buffering of agricultural land is critical to maintaining a healthy and competitive agricultural economy and assuring a balance in land uses in the County. Moreover, preservation and conservation of open space, wetlands, parks, hillsides and ridgelines is imperative to ensure the continued availability of unique habitats for wildlife and plants, to protect the unique scenery in the County and to provide a wide range of recreational opportunities for County residents.
    2) Growth is a natural and proper part of the life of the community. However, growth should be managed responsibly to preserve the quality of life for current and future generations. New development should be guided into appropriate locations, and should be allowed only after appropriate infrastructure (transportation, schools, water, fire and police protection) can be assured.
    3) There is a critical need to make decent, safe and affordable housing available to all Contra Costa County residents. Fair housing opportunities should prevail for all economic segments of the County, and housing should be available in reasonable proximity to employment centers. In addition, the County's land use policies should not restrict growth so severely that they preclude these affordable housing opportunities.

C. The 65/35 Land Preservation Plan implemented in Section 4 is intended to address these concerns of the voters. The 65/35 Land Preservation Plan is intended to carry out the voters' desire to both preserve agriculture and open space land, parks, wetlands, hillsides and ridgelines, manage growth to protect the

quality of life, and provide for the County's fair share of decent, safe and affordable housing.

D. It is appropriate and reasonable to present to the voters for their approval the key policies that would guide the County's future under the New General Plan, as those policies are set forth in the 65/35 Land Preservation Plan. With the guidance and confirmation the voters can provide through approval of the 65/35 Land Preservation Plan, the County can complete the environmental review and detailed documentation necessary for implementing these principles.

E. The approval of the 65/35 Land Preservation Plan by the voters is not intended to be an amendment of the County's existing general plan. Rather, the 65/35 Land Preservation Plan, if approved by the voters, is intended to be reflected in the County's New General Plan and will thereby become the official policy of the County with respect to the preservation of open space and agricultural lands and the protection of valuable environmental resources such as wildlife, wetlands, hillsides and ridgelines.

Section 4 Implementation of 65/35 Land Preservation Plan
To implement the 65/35 Land Preservation Plan, the following chapter is hereby added to the Contra Costa County Ordinance Code as Chapter 82-1 and numbered appropriately:

A. New General Plan
The County shall adopt a new general plan by December 31, 1990 (the "New General Plan").

B. 65/35 Land Preservation Plan
The policies contained in this chapter shall be reflected in the New General Plan, as ultimately adopted by the Board of Supervisors in accordance with the California Environmental Quality Act and State Planning Law.

1) **65/35 Land Preservation Standard**
Urban development in the County shall be limited to no more than 35% of the land in the County. At least 65% of all land in the County shall be preserved for agriculture, open space, wetlands, parks and other non-urban uses.
2) **Changes to the 65/35 Land Preservation Plan**
No change shall be made in the New General Plan after its adoption that would result in greater than 35% of the land in the County being permitted for urban development. This limitation shall not prevent any increase in agriculture, open space, parks, wetlands or other nonurban uses to greater than 65% of the land in the County.
3) **Urban Limit Line**
To ensure the enforcement of the 65/35 standard set forth in (B)(1) above, an Urban Limit Line shall be established, in approximately the location depicted on the illustrative 65/35 Contra Costa County Land Preservation

Plan Map attached as Exhibit A. The Urban Limit Line shall be incorporated into the County's Open Space Conservation Plan. The Urban Limit Line shall limit potential urban development in the County to 35% of the land in the County and shall prohibit the County from designating any land located outside the Urban Limit Line for an urban land use. The criteria and factors for determining whether land should be considered for location outside the Urban Limit Line should include (a) land which qualifies for rating as Class I and Class II in the soil Conservation Service Land use Capability Classification, (b) open space, parks and other recreation areas, (c) lands with slopes in excess of 26 percent, (d) wetlands, and (e) other areas not appropriate for urban growth because of physical unsuitability for development, unstable geological conditions, inadequate water availability, the lack of appropriate infrastructure, distance from existing development, likelihood of substantial environmental damage or substantial injury to fish or wildlife or their habitat, and other similar factors.

4) **Growth Management**
In accordance with the Contra Costa Transportation Improvement and Growth Management Program adopted on August 3, 1988, the County shall manage growth by allowing new development only when infrastructure and service standards are met for traffic levels of service, water, sanitary sewer, fire protection, public protection, parks and recreation, flood control and drainage and other such services. Land located inside the Urban Limit Line may be considered for changes in designated land uses, subject to County growth management policies and any other applicable requirements. Location of land within the Urban Limit Line shall provide no guarantee that the land may be developed. If land is developed within the Urban Limit Line, a substantial portion of this land shall be retained for open space, parks and recreational uses.

5) **Agricultural Protection Policies; Minimum Parcel Sizes**
The County shall establish standards and policies designed to protect the economic viability of agricultural land. These standards and policies shall include a minimum parcel size for prime productive agricultural land located outside the Urban Limit Line to 40 acres. These standards and policies may also include, but shall not necessarily be limited to, preservation agreements, conservation easements, clustering, establishment of an agricultural soils trust fund, and agricultural mitigation fees.

6) **Hillside Protection**
Development on open hillsides and significant ridgelines throughout the County shall be restricted, and hillsides with a grade of 26% or greater, shall be protected through implementing zoning measures and other appropriate actions.

7) **Changes to the Urban Limit Line**
There shall be no change to the Urban Limit Line that violates the 65/35 standard set forth in B(1) above. After adoption of the New General Plan, as long as there is no violation of the 65/35 standard, the Urban Limit Line can be changed by a 4/5 vote of the Board of Supervisors after holding a public hearing and making one or more of the following findings based on substantial evidence in the record:

a) a natural or man-made disaster or public emergency has occurred which warrants the provision of housing and/or other community needs within land located outside the Urban Limit Line;
b) an objective study has determined that the Urban Limit Line is preventing the County from providing its fair share of affordable housing, or regional housing, as required by state law, and the Board of Supervisors finds that a change to the Urban Limit Line is necessary and the only feasible means to enable the County to meet these requirements of state law;
c) a majority of the cities that are party to a preservation agreement and the County have approved a change to the Urban Limit Line affecting all or any portion of the land covered by the preservation agreement;
d) a minor change to the Urban Limit Line will more accurately reflect topographical characteristics or legal boundaries;
e) a five (5) year periodic review of the Urban Limit Line has determined, based on the criteria and factors for establishing the Urban Limit Line set forth in B(3) above, that new information is available (from city or County growth management studies or otherwise) or circumstances have occurred, that warrant a change to the Urban Limit Line;
f) an objective study has determined that a change to the Urban Limit Line is necessary or desirable to further the economic viability of the East Contra Costa County Airport, and either (I) mitigate adverse aviation related environmental or community impacts attributable to Buchanan Field, or (ii) further the County's aviation related needs; or
g) a change is required to conform to applicable California or federal law. Any such change shall be subject to referendum as provided by law. Changes to the Urban Limit Line under any other circumstances shall require a vote of the people.

8) **Annexations and Incorporations**
The Local Agency Formation Commission ("LAFCO") shall be advised to (a) respect and support the County's 65/35 Preservation Standard, Urban Limit Line and growth management standards when considering requests for incorporation or annexation to cities or service districts, (b) apply the

stricter of the growth management standards of either the County the incorporating city or the annexing city or service district, when considering requests for incorporation or annexations of land to cities or service districts, and (c) require unincorporated land located within the Urban Limit Line that is included in the incorporation of a new city or annexed to a city to provide a fair share of affordable housing when and if such land is developed.

9) **Housing**
As required by the State Planning Act, the County shall periodically review and update the New General Plan to conform to state housing requirements and to ensure its capacity to accommodate a variety of housing types and prices throughout the County. In accordance with the provisions of B(7) above, the Board of Supervisors may make findings of necessity that the Urban Limit Line should be changed to allow the County to meet its fair share of affordable housing and other state housing requirements.

10) **Cooperation with Cities**
To the extent feasible, the County shall enter into preservation agreements with cities in the County designed to preserve certain land in the County for agriculture and open space, wetlands or parks.

C. Application to Projects Prior to Adoption of New General Plan
From the effective date of this chapter to adoption of the New General Plan, prior to issuing a permit for any project or adopting any legislation which requires an initial study under the California Environmental Quality Act, and prior to issuing a permit for any demolition, conversion, or change or use, and prior to taking any action which requires a finding of consistency with the general plan, the County shall adopt findings as to whether or not the proposed project or legislation is consistent with the policies established above.

D. Duration
The provisions of this chapter shall be in effect until December 31, 2010, to the extent permitted by law.

E. No Violation of Law by this Ordinance
1) Nothing in this chapter shall be construed or interpreted in such a manner as to operate to deprive any landowner of substantially all of the market value of his/her property or otherwise constitute an unconstitutional taking without compensation. If application of any of the provisions of this chapter to any specific project or landowner would create an unconstitutional taking, then the Board of Supervisors may allow additional land uses, otherwise adjust permit requirements or take such other actions to the

extent necessary to avoid what otherwise might be construed to be a taking. Any such additional land uses or other adjustments shall be designed to carry out the goals and provisions of this section to the maximum extent feasible.

2) Nothing contained in this chapter shall constitute an amendment of the existing general plan. Upon approval of this chapter by the voters, the County shall take all necessary and appropriate steps to reflect the policies of the 65/35 Land Preservation Plan in the New General Plan for the County, consistent with the requirements of CEQA and the State Planning Law. Nothing contained herein shall prevent the County from complying with applicable requirements of state law relating to the adoption and amendment of general plans.

F. Definitions

1) As used in this chapter, the phrase "land within the County" shall mean all of the acreage within the boundaries of Contra Costa County except the water area of the County west of Stake Point.
2) As used in this chapter, the term "non-urban uses" shall mean rural residential and agricultural structures allowed by applicable zoning and facilities for public purposes, whether privately or publicly funded or operated, which are necessary or desirable for the public health, safety or welfare or by state or federal law.

Section 5 Amendment and Repeal

This ordinance may be amended or repealed only by a vote of the people, except as expressly provided herein.

Section 6 Conflicts with Other Measures

The following provisions shall apply in the event that the voters approve any other initiative or referendum related to the
County's general plan contemporaneously with approval of this ordinance:

1) In the event that the voters approve any other initiative or referendum related to the County's general plan, or zoning, planning or land use regulations within the County contemporaneously with approval of this ordinance and this ordinance receives a higher number of votes than such other initiative or referendum, the provisions of this ordinance shall supersede and are hereby deemed to be inconsistent with the provisions of such other initiative or referendum, and no provision of such other initiative or referendum shall be implemented. This provision shall apply regardless of whether all or any part of this ordinance is invalidated by a court of competent jurisdiction.
2) In the event that the voters approve any other initiative or referendum related to the County's general plan contemporaneously with the approval of this ordinance, and such other initiative or referendum receives a higher number of votes than this ordinance, the provisions of this ordinance shall nevertheless be implemented to the maximum extent legally feasible.

Section 7 Severability

If any portion of this ordinance is hereafter determined to be invalid by a court of competent jurisdiction, all remaining portions of this ordinance shall remain in full force and effect. Each section, subsection, sentence, phrase, part or portion of this ordinance would have been adopted and passed regardless of whether-any one or more sections, subsections, sentences, phrases, parts or portions was declared invalid or unconstitutional.

Contra Costa County General Plan 2005 - 2020

January 18, 2005

(Reprint July 2010)

http://www.co.contra-costa.ca.us/4732/General-Plan

ATTACHMENT 4

1. INTRODUCTION

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1. INTRODUCTION

1.1 PURPOSE

The purpose of the Contra Costa County General Plan is to express the broad goals and policies, and specific implementation measures, which will guide decisions on future growth, development, and the conservation of resources through the year 2020. The goals, policies and implementation programs contained in the General Plan represent the hopes and concerns of the residents of the County in terms of defining and preserving a "quality of life." The various elements or chapters of the plan are intended to provide objectives, principles and standards to decision-making bodies in the County, as well as numerous other public agencies, that will be making decisions about the development of private and public lands and the locations and extent of infrastructure improvements such as sewers and roadways.

Although a General Plan is primarily concerned with the physical development of property, the consequences of a plan's growth policies also impact the social fabric of a community. For example, if a General Plan allows the development of an industrial or business park in a specific location, more jobs may eventually become available to local residents. Similarly, if a plan designates a park or other public facility, or if a program encourages the construction of affordable housing, the policy will have a social and economic impact upon the quality of life in those affected locations.

1.2 PUBLIC PARTICIPATION IN GENERAL PLAN PROCESS

Preparation of the General Plan 2005-2020 involved a unique and extensive process of public participation and outreach. In early 1986, the County Board of Supervisors established a General Plan Congress to advise the County staff on how to revise the County's General Plan. The 67-member General Plan Congress represented a broad range of interests in the County, including the City Councils from each of the 18 cities in the County, County service districts, environmental groups, landowners, developers, and public interest groups including the League of Women Voters, Citizens for a Better Contra Costa, Sierra Club, Audubon Society, and the Greenbelt Alliance.

The General Plan Congress met monthly from July 1986 through January 1989. In addition, each Congress member sat on one of three subcommittees: Agriculture and Open Space, Infrastructure and Jobs/Housing Balance. These subcommittees met on a weekly or biweekly basis to take public comment, debate important issues and develop reports and position papers for the entire Congress. The subcommittees kept lists of the public attendance at the meetings, and advised those attendees of the meeting times by mail.

With the help of the General Plan Congress, the County prepared a draft General Plan in November 1988. After recommending additional changes to that draft, the Congress voted to pass the draft General Plan onto the Conservation and Development Department staff and Planning Commission without recommendation, and to disband.

In March 1989, the County made available for public review and hearing a draft of the General Plan. Between March 1989 and August 1990, the County Board of Supervisors held numerous public hearings and received extensive written comments on the March 1989

draft. All segments of the Contra Costa County population participated in that public comment period, including representatives of ranchers, developers, farmers, environmentalists, labor groups, cities, special districts, business and industrial associations.

In response to the public comments received, the County then prepared a revised and updated draft of the General Plan, which was made available for additional public comment and review in October 1990. Between October and December 1990, the County Planning Commission and Board of Supervisors held additional public hearings on the October 1990 draft. As a result of those comments and the passage on November 6, 1990 of Measure C, the 65/35 Contra Costa County Land Preservation Plan (described below), the County again revised the document, resulting in the Contra Costa County General Plan 1990-2005.

1.3 PUBLIC PARTICIPATION THROUGH VOTING PROCESS

In addition to the extensive public participation and input process through which this General Plan evolved, the voters of the County also influenced various aspects of this General Plan through the referendum process. Two initiative measures in particular have and will continue to impact the physical development of the County during the horizon of this General Plan. These two measures, "the Revised Contra Costa Transportation Improvement and Growth Management Program" adopted on August 3, 1988 ("Measure C 1988"), and "The 65/35 Contra Costa County Land Preservation Plan" adopted on November 6, 1990 ("Measure C - 1990"), expressed voters' concerns, goals, and principles relating to a vision of long-term growth in Contra Costa County.

The policies and principles expressed by the voters in Measure C - 1988 and Measure C - 1990 have guided the evolution of most of the elements of this General Plan. Generally speaking, these two measures guided the preparation and completion of this General Plan in such areas as growth management, land use, transportation and circulation, housing, public facilities and services, and conservation and open space issues. To underscore the importance these measures have had on the General Plan process culminating in the adoption of this General Plan and in the interest of making this constitution of land use document more meaningful for the public, the text of Measure C - 1988 and Measure C - 1990 is set forth in its entirety in Section 1.10 of this Introduction section. Where appropriate or required, provisions of these two measures have been integrated throughout the various elements of this General Plan.

The approval by the voters of Measure C - 1988 in 1988 was a major factor in the creation and establishment of the scope of the Growth Management Element found in this General Plan. Measure C - 1988 requires that the County and other jurisdictions must adopt a Growth Management Element in accordance with various terms of the measure in order to receive local street maintenance and improvement funds. The influence of Measure C - 1988 is reflected throughout this General Plan since the Growth Management Element has necessarily been correlated with the other elements in this General Plan.

In addition to responsibly listening and responding to the concerns and hopes of the public expressed through the General Plan Congress, including thousands of hours of public meetings and hearings, the Board of Supervisors placed Measure C - 1990 on the ballot prior to the completion of this comprehensive General Plan process. Through this initiative measure, the voters affirmed key policies concerning open space and agricultural preservation, creation of an Urban Limit Line, protection of open hillsides and significant ridge lines, growth management, affordable housing and other issues which the County had been preparing to adopt as part of its General Plan. The success of this measure evidenced the broad support for these policies. In addition, as part of this successful Board of Supervisors' initiated measure, the voters approved a 65/35 land preservation standard which limits urban

development in the County to no more than 35 percent of the land in the County and requires that at least 65 percent of all land in the County be preserved for agriculture, open space, wetlands, parks and other non-urban uses. Following this mandate of the voters, the Board proceeded to reflect the Measure C - 1990 policy in this General Plan.

1.4 PLAN RECONSOLIDATIONS

The Contra Costa County General Plan 1995-2010 was an updated version of the plan prepared by the General Plan Congress. It was modified to reflect all plan amendments adopted between the General Plan Congress' work and January 1995. It also corrected some errors or inconsistencies found in the 1990-2005 version of the plan and updates certain facts. This second reconsolidation entitled Contra Costa County General Plan 2005-2020 includes all plan amendments since 1995 including a totally revised Housing Element, and Urban Limit Line amendments. It also corrects facts and maps. It eliminates extraneous and dated textual material and obsolete maps. Lastly, it adjusts the Land Use Plan Map to reflect park and open space acquisitions, and better reflects city general plan policies within incorporated areas.

1.5 LEGAL AUTHORITY

State law, specifically Sections 65300 through 65403 of the California Government Code, mandates that all cities and counties prepare and adopt a comprehensive, long-term, and internally consistent General Plan to guide the future physical development of their jurisdictions. According to recent court decisions clarifying the intent of the State legislation, the role of each community's General Plan is to act as a "charter" for development; it is the foundation upon which all land use decisions are to be based.

At one time, local General Plans were looked upon as a set of broad policies that had small roles in development decisions. However, changes in State law since the original statutes were adopted in the 1950's have vastly boosted the importance of the General Plan in local decision-making. A General Plan must now provide more concrete direction for land use and facility approvals, while providing flexibility for balancing necessarily competing goals and policies.

State law requires that once a local government has adopted its General Plan, local officials must implement it. The Government Code provides general direction to the planning agency for implementing the overall plan, but requires that more specific implementation programs be adopted for some of the individual portions of the plan, such as the Housing and Open Space Elements. The most commonly recognized form of implementation is the zoning ordinance, which specifies exact development standards (types of uses allowed, building heights and setbacks, etc.) for the various zones or districts within a jurisdiction.

Accordingly, State law requires that the zoning and subdivision ordinances for almost all jurisdictions in California must be consistent with the adopted General Plan (Section 65860). In addition, the following city or county land use approvals must be consistent with its General Plan: all subdivisions, rezonings, specific plans, capital improvement programs, redevelopment plans, development agreements, park dedication ordinances, agricultural preserve contracts, housing authority projects, local coastal plans, and several other specific approvals. Although not specifically required by State statute, a 1984 Appellate Court decision also held that the approval of all use permit applications must be consistent with the local General Plan. Thus, recent State legislation and court decisions effectively make most implementing ordinances used by local jurisdictions in day-to-day land use decision-making subservient, or secondary, to General Plan policies and maps.

1.6 COMPONENTS OF THE GENERAL PLAN

California statutes require that all cities and counties prepare and adopt a General Plan that contains the following seven mandatory "Elements" or subject categories:

Land Use Element. This Element describes the general distribution and intensity of uses of land for housing, business, industry, open space, public facilities, etc., with accompanying maps.

Circulation Element. This Element identifies the location and extent of existing and proposed streets, arterials, highways, transportation routes and terminals, and other related facilities.

Housing Element. This Element contains a comprehensive assessment of current and projected housing needs for all segments of the community, a list of policies to meet the needs, and an inventory of specific action programs to implement the policies.

Conservation Element. This Element addresses the conservation, development, and use of natural resources such as water, forests, soils, rivers, and mineral deposits.

Open Space Element. This Element details plans and measures for preserving open space areas in order to manage the production of resources, to provide outdoor recreation, to preserve the public health and safety, and to identify important agricultural lands.

Safety Element. This Element establishes policies and programs to protect the community from risks associated with seismic, geologic, flooding, wildfire, and other hazards.

Noise Element. This Element identifies noise problems in the jurisdiction; defines standards and mitigation measures; and provides coordination with land use policies.

The degree of detail to which each issue is discussed in the plan depends upon local conditions and its relative perceived importance. In addition to the seven element categories listed above, State law encourages local jurisdictions to prepare and adopt any other elements or address any other issues germane to the jurisdiction's physical development.

The Contra Costa County General Plan includes the seven mandated elements. The plan also includes two optional elements, namely, a Public Facilities and Services Element and a Growth Management Element. For ease of discussion, the Public Facilities Element contains some of the mandatory components of the other statutory elements. The plan is organized as follows:

Chapter 1: Introduction

Chapter 2: Planning Framework

Chapter 3: Land Use Element
(Includes all Countywide land use goals, policies, and implementation measures, as well as more detailed land use policies applied to specific unincorporated areas. As referenced in the Land Use Element, many of the remaining required components of this Element are contained in the Public Facilities/Services Element.)

Chapter 4: Growth Management Element
(Includes a Growth Management Program and policies from Measure C-1988.)

Chapter 5: Transportation and Circulation Element
(Includes goals and policies regarding major thoroughfares, railroad and transit routes, terminals, and other local public transportation systems.)

Chapter 6: Housing Element
(Includes goals and policies regarding programs, improvements, development and preservation of housing needs to meet all economic sectors of the community.)

Chapter 7: Public Facilities/Services Element
(Includes policies regarding water and sewer service; flood control; landfills; public buildings; police and fire protection; solid and hazardous waste management; schools; childcare; and other public facilities.)

Chapter 8: Open Space Element
(Includes overall goals and policies for the County, as well as policies regarding scenic resources; historic/cultural resources; the 65/35 preservation standard and parks and recreation.)

Chapter 9: Conservation Element
(Includes overall goals and policies for the County, as well as policies regarding vegetation and wildlife; agricultural resources; renewable energy resources; mineral, soil, and oil and gas resources; water resources; harbors; and air resources.)

Chapter 10: Safety Element
(Includes goals and policies regarding the protection of the community from seismic and geological hazards and other natural disasters.)

Chapter 11: Noise Element
(Includes goals and policies regarding noise levels and sources that are used in setting land use policies and for developing and enforcing a local noise ordinance.)

INTERNAL CONSISTENCY

State planning law requires that all parts of the General Plan comprise an integrated, internally consistent and compatible statement of policies. These standards imply that: 1) all elements of the General Plan have equal legal status; 2) all goals, objectives, policies, principles, standards and plan proposals in the General Plan must be internally consistent; and 3) any implementation programs set out in the plan must follow logically from the plan's goals and policies. Hence, each chapter of the General Plan clearly states its legal authority, relationship to other elements, relationship to other General Plan documents, and its organization.

1.7 DEFINITION OF MAPS, GOALS, POLICIES, AND IMPLEMENTATION MEASURES

The California Government Code states that "the General Plan shall consist of a statement of development policies and shall include a diagram or diagrams and text setting forth objectives, principles, standards, and plan proposals" (Section 65302). The purpose of this section is to define these terms in the context of this General Plan.

GENERAL PLAN DIAGRAMS (MAPS)

The diagrams that are required in a General Plan under the State law have been defined as graphic expressions of the plan's development policies. However, there is a debate among planners and lawyers alike about how detailed or general the maps (and text) should be in a General Plan. The diagrams or maps in a General Plan need not be as detailed as other regulatory maps, such as zoning maps, but they should be detailed enough so that the users of the plan, after reviewing all other pertinent maps and portions of this plan, can reach the same general conclusion regarding the appropriate use of any parcel of land at a particular phase of a city's or county's physical development.

In many instances, a specific parcel may be located in more than one General Plan land use designation, since these designations tend to follow natural features of the land, which are not always contiguous with property lines. For a large vacant parcel, the hilly, unbuildable portion of the site may be designated for open space uses, while the flat areas may be designated for housing or commercial uses. Similarly, portions of parcels may be located in or outside the Urban Limit Line.

Decision makers should be able to use the General Plan, including its diagrams or maps, in coordinating day-to-day land use and infrastructure decisions. At the same time, given the long-range nature of a General Plan, its text and maps should be general enough to allow a degree of flexibility in decision making as conditions change. For example, a General Plan may recognize the need and desirability of a community park in a proposed residential area, but the precise location of the park may not be known when the plan is adopted. The plan does not need to pinpoint the location, but it should include a generalized designation on the diagram showing the general location, along with policies indicating that the park site will be selected and reserved when the area is developed.[1]

GOALS

A goal statement sets the direction for more specific policies and implementation programs. A goal is an ideal future end, condition, or state which is related to the public health, safety, or general welfare toward which planning measures are directed. A goal is a general expression of community values and, therefore, is abstract. Consequently, a goal is generally not quantifiable, time dependent or suggestive of specific actions for its achievement.[2]

POLICIES

A policy is a specific statement intended to guide decision making. Policies are based upon General Plan goals and are arrived at through planning experience, studies, and an interpretation of the best available data and information at a particular point in time. Decisions as to whether a particular action, program or project is consistent with this General Plan will consider whether all aspects of a future action will further the objectives and policies of this General Plan without obstructing the attainment of these policies. Policies in this General Plan appropriately strike a balance between clarity for guiding decision makers and a framework for comprehensively weighing necessarily competing policies in a county as diverse as Contra Costa County. The policies expressed in this General Plan are intended to be part of an integrated document encompassing concerns, which are both compatible and competing, and it is inappropriate to assess consistency of a singular policy without reference to this framework. As a constitution-type document, the policies in this General Plan are intended to guide decision makers through this difficult balancing process. At the General Plan level, polices are not static as ironclad regulations. The policies expressed in this General Plan were based on the best available information at the time the Plan was prepared. New and better information will necessarily be presented to the decision makers during the life of this Plan, therefore requiring that, as an evolutionary document, the policies expressed in this General Plan will be evaluated in light of this new and better information and, where necessary, policies will be updated.

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1. State of California Office of Planning and Research, General Plan Guidelines, Sacramento, June 1987, pages 14-18 (paraphrased).
2. Ibid., page 17.

While cautioning the reader of this General Plan document against myopically focusing on a particular policy without reference to its harmonized context, it is important that certain of these guiding policies be expressed with stronger levels of commitment than others. When considering policies in this General Plan, the use of the word "shall" indicates more directive than the use of the word "should." While there are occasions where a proper balancing of the hundreds of policies contained in this document, when viewed as an integrated whole, would not warrant strict adherence to a particular policy, the level of compelling or countervailing policies would appropriately be less to offset competing policies using the word "should," than to offset a policy or policies using the word "shall."

IMPLEMENTATION MEASURES

An implementation measure is a specific action, procedure, program, or technique that carries out a General Plan policy. The most obvious example of an implementation measure is a jurisdiction's zoning ordinance. Often, implementation measures cited in a General Plan will consist of a list of specific programs that should be carried out after the plan is adopted. When a plan is updated, a careful review of the list of previously adopted implementation measures can indicate how realistic and effective the plan has been during the previous years.

1.8 THE DIFFERENCE BETWEEN ZONING AND GENERAL PLAN DESIGNATIONS

One of the most common misunderstandings about General Plans in California is their relationship to adopted zoning ordinances. As the previous discussion has already indicated, zoning is the implementation of a General Plan and it must be consistent with General Plan policies and land use designations for specific properties. In simple language, this means that zoning is secondary or subservient to the General Plan; in the event of a conflict, the General Plan is followed.

Unfortunately, due to staffing limitations and community opposition, a zoning ordinance will often not be revised to be made consistent with the new General Plan (or General Plan Amendment (GPA)), which causes confusion to members of the public for years to come.

County staff has initiated a program to begin the systematic review and revision of zoning and other ordinances, major rezoning programs are now accomplished in North Richmond, Bay Point, and underway in Rodeo. These actions will ensure that the ordinances governing day-to-day land use decisions do not conflict with adopted plan policies.

1.9 HOW TO USE THE GENERAL PLAN

The General Plan includes maps in each Element, as well as accompanying text that lays out goals, policies, and implementation measures grouped around specific issues. Thus, if a property owner or other member of the public wants to know what General Plan policies might apply to a specific property, he or she can begin by examining the Land Use Element map to determine what land use designation is applied to the property (e.g., "Single Family Residential-Low Density," "Commercial," etc.).

The owner should use the land use map in conjunction with the other maps within the plan (e.g., the flooding and seismic hazard maps), as well as note the interplay with other element's specific written goals, policies, and implementation measures (e.g., growth management), to determine whether a development proposal for a particular site is fully consistent with the County General Plan.

As an example only, the property owner would follow the steps outlined below to find the maps and policy language in the Land Use and other General Plan Elements which could affect development or redevelopment of the property:

1) Examine the Land Use Element map to determine the land use designation for the property and the location of the Urban Limit Line.

2) Check the maps and text in the other General Plan Elements, especially the Open Space, Conservation and Safety Elements, to see if the property is located within or adjacent to some type of resource or hazard area (e.g., a "significant ecological resources area," a flood hazard area, an area of high liquefaction potential, etc.) or has slopes over 26 percent grade subject to hillside protection policies.

3) Read the general goals and policies in the Land Use Element, the provisions of the County's Growth Management Program (Chapter 4), and other relevant Elements as cross-referenced in each Chapter's subheading "Relationship to other General Plan Elements," to determine how they might affect development or redevelopment of the area in which the property is located.

4) Check Chapter 3 to determine if any detailed policies or development standards apply to the area in which the property is located (e.g., if the property is located in Crockett, read the section entitled "Policies for the Crockett Area").

5) If the property is located in a rural area, check whether public facilities such as water or sewer serve the area and read the relevant parts of the Public Facilities/Services Element.

6) Check the general goals and policies in the Land Use Elements and the Open Space Element to understand the potential limitations presented by the 65/35 Land Preservation Standard.

Note that the above sequence of examination is an example of what may be the bare minimum that should be followed and is probably not sufficient in many instances. Depending on the specific location or characteristic of the area or property, several other steps should be added so that other portions of the General Plan are consulted. For example, if the property is located adjacent to a known noise generator, such as a highway or heavy industrial area, the Noise Element should be examined to determine whether the property is included within a mapped noise "contour" line of a certain level. If it is located within a specific noise contour, General Plan policies in that element direct that noise impacts affecting new development on the property must be properly mitigated. A thorough reading of the General Plan text and maps is advisable.

Similarly, if a proposed project is located on a property that is crossed by a riparian vegetation or a creek, the specific policies that apply to the preservation and maintenance of creeks and adjacent lands must be consulted in the appropriate section of the Open Space or Conservation Element.

1.10 THE GENERAL PLAN AMENDMENT PROCESS

State law stresses that a General Plan can no longer be viewed as a static, "end state" document, but must adequately address the changing issues and policies of a jurisdiction during the designated "planning period." Thus, a process for considering amendments to the plan must be available to reflect changing conditions and community values.

Amendments to the plan can be initiated by the County (through the Planning Commission or Board of Supervisors) or requested by private individuals. A typical General Plan amendment ("GPA") involves changing a land use designation on a property or series of properties to allow urban development of what were previously agricultural lands within the Urban Limit Line, or to allow development of a different use or density than what is permitted under the existing plan. For example, a typical GPA will request a change in designation for a group of properties within the Urban Limit Line from "Agricultural Lands" to "Single Family Residential-High Density," or from a "Single Family" designation to a "Multiple Family" category. A GPA may also involve the reclassification of a roadway from a "collector" to an "arterial."

In accordance with Measure C - 1990, no General Plan amendment can change the 65/35 Land Preservation standard without a vote of the people by initiative. This standard limits urban development in the County to no more than 35 percent of the land in the County and preserves at least 65 percent of all land in the County for agriculture, open space, wetlands, parks and other non-urban uses.

State law generally limits the number of amendments to any mandatory element of a jurisdiction's plan to four each calendar year (Government Code Section 65358 (a). However, State law does not limit the number of individual requests which can be packaged into each of the adopted General Plan Amendments.

When a request for a GPA is received by the County from a private individual, staff forwards the request to the Board of Supervisors with a recommendation on whether to proceed with a study of the application. After the Board authorizes the GPA study, staff collects the appropriate application fees and prepares an environmental evaluation of the proposal as required by the California Environmental Quality Act. After the environmental documentation has been prepared, staff analyzes the request and prepares a staff recommendation. The GPA request is then scheduled for a public hearing at the appropriate planning commission (i.e., County Planning Commission, East County Regional Planning Commission, San Ramon Valley Area Planning Commission). After receiving public testimony, the commission votes to recommend approval, denial, or modification of the request. The recommendation is then sent to the Board of Supervisors for another public hearing and a final decision.

Each GPA request must be carefully weighed as to its consistency with the adopted goals and policies of the existing General Plan. In reviewing proposals for GPA's, officials should remember that the General Plan is a policy document for the entire community and that it may only be amended "in the public interest" (Government Code Section 65358(a)). Every adopted GPA must be consistent with the rest of the plan and appropriate changes need to be made to maintain consistency.

1.11 THE TEXT OF MEASURE C - 1988 AND MEASURE C - 1990

MEASURE C - 1988

CONTRA COSTA TRANSPORTATION IMPROVEMENT AND GROWTH MANAGEMENT PROGRAM

Contra Costa Transportation Partnership Commission, adopted August 3, 1988

MEMBER JURISDICTIONS: Cities of Antioch, Brentwood, Clayton, Concord, El Cerrito, Hercules, Lafayette, Martinez, Orinda, Pinole, Pittsburg, Pleasant Hill, Richmond, San Pablo, San Ramon, Walnut Creek, Towns of Danville and Moraga, and the County of Contra Costa.

This Program contains the Contra Costa Transportation Improvement and Growth Management Expenditure Plan and Ordinance. The Ordinance, which is required to be adopted by the Contra Costa Transportation Authority (Contra Costa Transportation Partnership Commission) pursuant to Public Utilities Code commencing with Section 180000, is the legal document implementing the local retail transportation and use tax and specifying the method of allocation of the local retail transactions and use tax revenues and other requirements of the Measure. The Ordinance becomes effective at the close of the polls on the day of the election at which the local transportation measure is approved by the voters. The full text of the Expenditure Plan and the Ordinance are provided on the following pages.

CONTRA COSTA TRANSPORTATION PARTNERSHIP COMMISSION

The Contra Costa Transportation Partnership Commission, a Transportation Authority under the provisions of Public Utilities Code Section 180000, was created by the Mayors' Conference and the Board of Supervisors to provide a forum for transportation issues in Contra Costa and to propose ways to reduce traffic congestion.

CHAIR: Ronald K. Mullin
VICE-CHAIR: Sunne Wright McPeak

CENTRAL
Ronald K. Mullin, Councilmember, Concord
(Alternate: Carolyn Bovat, Councilmember, Clayton)
Ed Skoog, Mayor, Walnut Creek
(Alternate: Sherry Sterrett, Councilmember, Pleasant Hill)

EAST
Taylor Davis, Councilmember, Pittsburg
(Alternate: Richard Lettman, Councilmember, Pittsburg)
Cathryn Freitas, Councilmember, Antioch
(Alternate: Joel Keller, Mayor, Antioch)

SOUTHWEST
Beverly Lane, Mayor, Danville
(Alternate: Diane Schinnerer, Mayor, San Ramon
Avon Wilson, Vive Mayor, Lafayette
(Alternate: Don Tatzin, Councilmember, Lafayette)

WEST
Sharon Brown, Mayor, San Pablo
David MacDiarmid, Councilmember, Richmond

BOARD OF SUPERVISORS
Sunne Wright McPeak, District 4
(Alternates: Robert I. Schroder District 3, Tom Powers, District 1, Nancy Fahden, District 2)
Tom Torlakson, District 5
(Alternates: Robert I. Schroder District 3, Tom Powers, District 1, Nancy Fahden, District 2)

MAYORS' CONFERENCE
Anna McCarty, Councilmember, Pinole
(Alternate: Ann Earnest, Councilmember, Hercules)

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CONTRA COSTA TRANSPORTATION IMPROVEMENT AND GROWTH MANAGEMENT EXPENDITURE PLAN STATEMENT OF PRINCIPLES

The Contra Costa Transportation Partnership Commission was created by the Mayors' Conference and the Board of Supervisors to provide a countywide forum for transportation issues and to propose ways to reduce traffic congestion.

To achieve this goal, the Transportation Partnership Commission, also established as the Transportation Authority under State Law (SB 142), has established principles to guide its efforts to develop a Countywide Comprehensive Transportation Plan and to develop an Expenditure Plan for a one-half cent retail transactions and use tax measure to be placed before Contra Costa voters in November, 1988.

The Commission's principles are as follows:

1. A balanced transportation network of highways, local streets, public transit, growth management and regional planning are necessary to preserve the quality of life and a healthy viable economy for Contra Costa residents.
2. Public input, through both the Citizen Advisory Committee and the Regional Transportation Planning Committees, is a critical element of a successful comprehensive transportation and growth management process to reduce traffic congestion.
3. State and Federal monies are insufficient to meet Contra Costa's transportation needs. A local retail transactions and use tax increase for transportation improvements is the only funding method available to local jurisdictions.
4. The Transportation Improvement and Growth Management Expenditure Plan is focused on alleviating existing traffic congestion through funding major regional projects and the establishment of a transportation and growth management process.
5. Transportation planning and growth management are needed to assure that new growth pays for the facilities required to meet the demands resulting from that growth. A cooperative planning process will be established on a countywide basis, while maintaining local authority over land use decisions and the establishment of performance standards, exclusive of operating budgets.
6. A complementary, but separate ballot measure, will provide for the acquisition and preservation of open space.

These principles are the basis of the Expenditure Plan which is presented by the Commission, its Citizen Advisory Committee, Regional Transportation Planning Committees and Technical Staff for approval by local jurisdictions and the voters of Contra Costa.

EXPENDITURE PLAN PROJECTS AND PROGRAMS

	Allocation
Highways and Arterials	
Interstate 680 Corridor	$100,000,000
North Richmond/Interstate 80 Bypass (Route 93)	70,000,000
Route 4 (east)	80,000,000
Route 4 (west)	45,000,000
Gateway/Lamorinda Traffic Program	19,000,000
Major Arterials - Southwest Region	13,600,000
Camino Pablo (San Pablo Dam Road Corridor)	4,500,000
Transit	
Rail Extension — from Concord to North Concord and	178,000,000

Eastern Contra Costa	
Contra Costa Regional Commuterway	46,000,000
BART Parking	5,500,000
Trails	
Regional Bicycle and Pedestrian Trails	3,000,000
Programs	
Elderly and Handicapped Transit Service	25,900,000
Local Street Maintenance and Improvements	155,500,000
Carpools, Vanpools, and Park-and-Ride Lots	8,600,000
Bus Transit Improvements and Coordination	42,400,000
Regional Transportation Planning and Growth Management	10,000,000
TOTAL	**$807,000,000**

EXPENDITURE PLAN PROJECTS AND PROGRAM DESCRIPTIONS - PROJECTS

Interstate 680 Corridor

Widen and improve Interstate 680 between the Alameda County Line and the Benicia-Martinez Bridge, and Route 242 between Route 4 and Interstate 680. Project involves interchange, arterial and access improvements necessary to supplement already funded improvements. On Interstate 680, the project includes, but is not limited to, interchange improvements at Concord Avenue, Willow Pass Road, and North Main Street; auxiliary lanes between El Cerro Boulevard and Bollinger Canyon Road; and the Fostoria Overcrossing. On Route 242, the project includes, but is not limited to, interchange improvements at Solano Way, Concord Avenue, and Clayton Road. The Authority may loan funds to the State to speed completion of already funded improvements to Interstate 680.

North Richmond/Interstate 80 Bypass (Route 93)

Complete an expressway between Interstate 580 (the Knox Freeway) near the Richmond-San Rafael Bridge and Interstate 80 at a new Atlas Road interchange near Hilltop.

Route 4 (East)

Widen and improve Route 4 between Willow Pass Road in Concord to at least Railroad Avenue in Pittsburg. Project includes freeway widening, lowering the grade over the Willow Pass, and interchange improvements at various locations.

Route 4 (West)

Widen and improve Route 4 to a full freeway between Interstate 80 and Cummings Skyway. Project includes reconstruction of the Route 4/Interstate 80 interchange.

Gateway/Lamorinda Traffic Program

To identify action/measures to mitigate the traffic density between Highway 24 and the Town or Moraga including cost benefit analysis. Implementation of preferred project alternative (Lamorinda cities to jointly review and establish criteria for project implementation).

Major Arterials – Southwest Region

Funds to improve major arterials as jointly determined by the local jurisdictions of the Southwest Region (Danville, Lafayette, Moraga, Orinda, San Ramon, and the portions of the County). It is the intent of the Authority that local jurisdictions give priority to the following projects: Widen San Ramon Valley Boulevard from Hartz to Alcosta; widen Dougherty Road from the County line to Crow Canyon Road; widen Crow Canyon Road from the County line to Bollinger Canyon Road; widen eastbound Route 24 off-ramp at Brookwood and up-grade signals; and improve the St. Marys Road-Glenside Drive-Reliez Station Road corridor.

Camino Pablo (San Pablo Dam Road Corridor)

Improve and realign Camino Pablo in Orinda as a two-lane roadway with protected left turn lanes and separated pedestrian and bicycle paths.

Rail Extension From Concord to North Concord and Eastern Contra Costa

Extend rail transit (BART or light rail) from the Concord BART Station to North Concord and over the Willow Pass Grade to eastern Contra Costs.

Contra Costa Regional Commuterway

Develop bus/van commute lanes connecting the residential areas of eastern and central Contra Costa with job centers in central and southern Contra Costa. The project will use available rights-of-way and planned highway widening along the Route 4 and Interstate 680 corridors. Project shall use the Interstate 680 right-of-way in southern Contra Costa. Development of the project shall be sensitive to adjacent land uses, including a study of route realignment in Walnut Creek as part of mitigation of impacts. Project includes constructing park and ride lots, including those at Sycamore Valley and Bollinger Canyon Roads. Project also includes planning and right of way preservation for future connections to western Contra Costa.

BART Parking at the El Cerrito del Norte Station

Provide additional parking at the El Cerrito del Norte BART station. The Authority shall work with BART to speed completion of already funded BART parking projects and to fund additional parking at other BART stations.

Regional Bicycle and Pedestrian Trails
Complete regional bicycle and pedestrian trails including the Iron Horse Trail in San Ramon Valley, central Contra Costa Trails, and connections to eastern Contra Costa and the Martinez Shoreline Park.

PROGRAMS

Elderly and Handicapped Transit Service
Improve paratransit service for elderly and handicapped persons, including additional service and new vehicles.

Local Street Maintenance and Improvements
Funds returned to local jurisdictions on a formula basis for local, subregional and regional transportation projects as determined by cities and the county, including street and road maintenance and/or transit improvements.

Funds shall be allocated annually to each local jurisdiction, provided that the Authority finds the jurisdiction in compliance with the Growth Management Program. Eighteen percent of the annual net retail transactions and use tax revenue shall be distributed as follows: each jurisdiction shall receive a basic allocation of $50,000, and the remaining amount shall be allocated using a formula of 50% based on population and 50% based on road miles.

It is the intent of the Authority that local jurisdictions give priority to using these funds for improving major arterial streets.

Carpools, Vanpools, and Park and Ride Lots
Funds to provide and promote use of these commute alternatives to be allocated on a grant basis.

Bus Transit Improvements and Coordination
Provide funds to increase ridership, efficiency, and coordination among the transit agencies. The Authority shall allocate funds on a grant basis to support coordinated service proposals submitted by the transit agencies. Service proposals shall focus on major commute corridors such as Ygnacio Valley Road.

A plan for the implementation of transportation improvements in the Ygnacio Valley Road corridor shall be developed by the Central Contra Costa Transit Authority, in cooperation with the City of Walnut Creek.

Regional Transportation Planning and Growth Management
Develop a countywide Comprehensive Transportation Plan and computer model and update it every two years, provide technical support for the Regional Transportation Planning Committees, and conduct transportation and growth management studies. The Authority shall annually budget a percentage of the net tax revenue for regional transportation and growth management purposes.

EXPENDITURE PLAN GROWTH MANAGEMENT PROGRAM

To Be Met By Local Jurisdictions For Receipt Of Local Street Maintenance and Improvements Funding

Introduction

The overall goal of the Growth Management Program is to achieve a cooperative process for Growth Management on a countywide basis, while maintaining local authority over land use decisions and the establishment of performance standards.

The transportation retail transactions and use tax is intended to alleviate existing major regional transportation problems. Growth management is needed to assure that future residential, business and commercial growth pays for the facilities required to meet the demands resulting from that growth.

It is the intent of the Transportation Authority to create a process that results in the maintenance of the quality of life in Contra Costa.

Local Street Maintenance and Improvements

Portions of the monies received from the retail transactions and use tax will be returned to the local jurisdictions (the cities and the county) for use on local, subregional and/or regional transportation improvements and maintenance projects. Receipt of all such funds requires compliance with the Growth Management Program described below. The funds are to be distributed on a formula based on population and road miles.

Allocation of Funds

The Authority will annually review and allocate funds to cities and the county. In allocating funds, the Authority shall make findings based on a statement of compliance regarding the Growth Management Program.

To receive local street maintenance and improvement funds from the Authority, each jurisdiction shall submit a statement of compliance with the Growth Management Program. Jurisdictions may use funds allocated under this provision to comply with these administrative requirements. The Authority will review this statement and make findings regarding the jurisdiction's efforts. If the jurisdiction's efforts are found satisfactory, the jurisdiction will be allocated its share of local street maintenance and improvement funding.

Because of the great variation among the jurisdictions, it is expected that the Authority will need some flexibility in determining compliance with the Growth Management Program. Generally, this flexibility may take the form of the Authority setting deadlines for achieving one or more requirements as a condition of receiving local street maintenance and improvement funds.

Growth Management Program

To receive its local street maintenance and improvement funds, each jurisdiction must:

1. **Adopt a Growth Management Element**

   Each jurisdiction is to develop a Growth Management Element of its General Plan to be applied in the development review process. The element must include Sections 2 and 3 below, and jurisdictions must comply with Sections 4-8 below. The Authority and the Regional Transportation Planning Committees shall jointly prepare a model element and administrative procedures to guide the local jurisdictions. Local jurisdictions shall develop their Growth Management Element within one year after receipt of the Authority's model element.

2. **Adopt Traffic Level of Service (LOS) Standards Keyed to Types of Land Use**

   - **Rural** - LOS low-C (70 to 74) Volume to Capacity (V/C)
   - **Semi-Rural** - LOS high-C (75 to 79) V/C
   - **Suburban** - LOS low-D (80 to 84) V/C
   - **Urban** - LOS high-D (85 to 89) V/C
   - **Central Business District** - LOS low-E (90 to 94) V/C

   Based on the categories established above, each jurisdiction shall determined how the Traffic Service standards are to be applied to their General Plan land use and circulation elements, and the land areas to be defined as Rural, Semi-Rural, Suburban, Urban, and Central Business District (as suggested in the Guidelines in Appendix A). Each jurisdiction shall comply with the adopted standards. Jurisdictions may adopt more stringent standards without penalty.

   Level of Service (LOS) would be measured by Circular 212 or the method described in the most commonly used version of the Highway Capacity Manual. Any issues with respect to the application of the Highway Capacity Manual or measurement of level of service shall be referred to the Authority's Technical Coordinating Committee for review and recommendation to the Authority. In the event that an intersection(s) exceeds the applicable Traffic Service standard, the Authority shall, jointly with local jurisdictions, establish appropriate mitigation measures or determine that a given intersection is subject to a finding of special circumstances.

   Any intersection that presently exceeds the Traffic Service standards and which will be brought into compliance in the most current Five Year Capital Improvement Program (see Section 6) shall be considered to be in compliance with the applicable standard.

   The Authority, jointly, with affected local jurisdictions, shall determine and periodically review the application of Traffic Service Standards on routes of regional significance. The review will take into account traffic originating outside of the county or jurisdiction, and environmental and financial considerations. Local jurisdictions, through the forum provided by the Authority, shall jointly determine the appropriate measures and programs for mitigation of regional traffic impacts (see Section 5).

   Capital projects necessary to meet and/or maintain the Traffic Service standards are to be included in the required Five Year Capital Improvement Program (see Section 6).

3. **Adopt Performance Standards, Maintained Through Capital Projects, for the Following Items, Based on Local Criteria:**

   a. fire
   b. police
   c. parks
   d. sanitary facilities
   e. water
   f. flood control

   Jurisdictions may have already adopted performance standards for some or all of these items.

   Performance standards shall be adopted for inclusion in each local jurisdiction's General Plan. Each jurisdiction shall comply with the adopted standards. The Performance Standards should take into account fiscal constraints, and how the standards are to be applied in each jurisdiction's development review process. To ensure the continued applicability of these standards, each jurisdiction may annually review and modify their adopted standards, in consultation with special districts where appropriate, and provide an opportunity for public comment.

   Capital projects, exclusive of operating budgets, to achieve and/or maintain Performance Standards are to be included in the required Five Year Capital Improvement Program (see Section 6).

4. **Adopt a Development Mitigation Program to Ensure that New Growth is Paying its Share of the Costs Associated with that Growth**

   Local jurisdictions, for the most part, already impose fees for a variety of purposes including site specific traffic improvements. Only a few jurisdictions impose fees for regional traffic mitigation.

To meet the requirements of this Section, each jurisdiction shall:

1) Ensure that revenue provided from this measure shall not be used to replace private developer funding which has been or will be committed for any project.

2) Adopt a development mitigation program to ensure that development is paying its share of the costs associated with that development.

In addition, the Authority shall:

1) Develop a program of regional traffic mitigation fees, assessments or other mitigations, as appropriate, to fund regional and subregional transportation projects, as determined in the Comprehensive Transportation Plan of the Authority.

2) Consider such issues as jobs/housing balance, carpool and vanpool programs and proximity to transit service in the establishment of the regional traffic mitigation program.

3) The development mitigation program will be implemented with the participation and concurrence of local jurisdictions in determining the most feasible methods of mitigating regional traffic impacts. Existing regional traffic impact fees shall be taken into account by the Authority.

5. **Participate in a Cooperative, Multi-Jurisdictional Planning Process to Reduce Cumulative Regional Traffic Impacts of Development**

The Authority shall establish a forum for jurisdictions to cooperate in easing cumulative traffic impacts. This will be accomplished through the Regional Transportation Planning Committees, and be supported by an ongoing countywide comprehensive transportation planning process in which all jurisdictions shall participate.

As part of this process, a uniform database on traffic impacts will be created, based on the countywide transportation computer model.

Use of the countywide transportation computer model provides an opportunity to test General Plan(s) transportation and land use alternatives, and to assist cities and the county in determining the impact of major development projects proposed for General Plan Amendments. This would provide a quantitative basis for inter-jurisdictional negotiation to mitigate cumulative regional traffic impacts.

Input for the model shall include each jurisdiction's Five Year Capital Improvement Program of transportation projects (see Section 6) and the projects of federal, state and regional agencies such as Caltrans, transit operators, the Metropolitan Transportation Commission, etc. In addition, the computer model database will include each local jurisdiction's anticipated land use development projects expected to be constructed within the next five years.

6. **Develop a Five Year Capital Improvement Program to Meet and/or Maintain Traffic Service and Performance Standards (Defined in Sections 2 and 3)**

Each jurisdiction shall determine the capital projects needed to meet and/or maintain both its adopted Traffic Service and Performance Standards. Capital financial programming will be based on development to be constructed during (at a minimum) the following five year period. The Capital Improvement Program shall include approved projects and an analysis of the costs of the proposed projects as well as a financial plan for providing the improvements.

7. **Address Housing Options and Job Opportunities**

As part of its Five Year Capital Improvement Program and pursuant to the state mandated housing element of its General Plan, each jurisdiction shall develop an implementation program that creates housing opportunities for all income levels.

Each jurisdiction shall also address land use information as it relates to transportation demand as well as discussion of each jurisdiction's efforts to address housing options and job opportunities on a city, subregional and countywide basis.

8. **Adopt a Transportation Systems Management (TSM) Ordinance or Alternative Mitigation**

To promote carpools, vanpools and park and ride lots, the Transportation Authority will draft and adopt a Model Transportation Systems Management Ordinance for use by local jurisdictions in developing local ordinances for adoption and implementation. Upon approval of the Authority, cities with a small employment base may adopt alternative mitigation measures in lieu of adopting a TSM Ordinance.

EXPENDITURE PLAN GROWTH MANAGEMENT PROGRAM

APPENDIX A - INFORMATION ON LAND USE DEFINITION

These definitions are for information, guidance and are subject to local jurisdictions' determination in the application of Traffic Service Standards.

Rural

Rural areas are defined as generally those parts of the jurisdiction which have been designated in the General Plan for agricultural or open space uses and which are characterized by medium to very large parcel sizes (10 acres to several thousand acres). These areas have very low population densities, usually no more than 1 person per acre or 500 people per square mile.

Semi-Rural

Semi-Rural areas are defined as generally those parts of the jurisdiction that are designated in the General Plan for agricultural, open space or very low density residential uses, with predominant parcel sizes down to as small as 2 to 3 acres. These areas may support viable agricultural operations, but the operations generally occur on small to medium sized lots. These areas are also characterized by clusters of farm housing or very low density "ranchette" development. The population densities in these areas usually range between 500 to 1,000 persons per square mile (1.0 to 1.5 persons per acre).

Suburban

Suburban areas are defined as generally those parts of the jurisdiction that are designated in the General Plan for low and medium density single family homes; low density multiple family residences; low density neighborhood and community oriented commercial/industrial uses; and other accompanying uses. Individual structures in suburban areas are generally less than 3 three stories in height and residential lots vary from about 6,000 square feet up to 2 or 3 acres. Population densities in suburban areas fall within a wide range, from about 1,000 to 7,500 persons per square mile (1.5 to 12.0 people per acre).

Urban

Urban areas are defined as generally those parts of the jurisdiction that are designated in the General Plan primarily for multiple family housing, with smaller areas designated for high density single family homes; low to moderate density commercial/industrial uses; and many other accompanying uses. Urban areas usually include clusters of residential buildings (apartments and condominiums) up to three or four stories in height and single family homes on relatively small lots. Many commercial strips along major arterial roads are considered urban areas.

Examples of urban areas in Contra Costa County are the older neighborhoods in Richmond, El Cerrito, Pittsburg, and Antioch and the downtown commercial districts in smaller cities such as Martinez, Danville, and Lafayette. Population densities in urban areas are usually at least 7,500 persons per square mile (12.0 people per acre). Employment densities in commercial areas may range up to about 15 jobs per acre.

Central Business District/Major Commercial Center

Central business districts or major commercial centers are defined as those areas designated in the General Plan for high density commercial and residential uses. They consist of either the downtown area of a major city (Concord, Walnut Creek, Richmond, and the Pleasant Hill BART station area) or a large business park (such as Bishop Ranch). These areas are characterized by large concentrations of jobs and consist of clusters of buildings four stories or more in height. CBD's or major commercial centers generally have high employment densities.

Routes of Regional Significance

Routes of regional significance are generally those that serve travel across Contra Costa County (for example, eastern Contra Costa to central Contra Costa), or between Contra Costa County and adjacent counties. Examples of routes of regional significance include: the Interstate and State Highway system, Ygnacio Valley Road, Treat Boulevard, San Pablo Avenue, San Pablo Dam Road, Lone Tree Way, etc.

CONTRA COSTA TRANSPORTATION IMPROVEMENT AND GROWTH MANAGEMENT ORDINANCE #88-01

The Contra Costa Transportation Authority ordains as follows:

SECTION 1 - TITLE

This Ordinance shall be known and may be cited as the Contra Costa Transportation Improvement and Growth Management Ordinance (#88-01) which shall establish and implement a retail transaction and use tax.

SECTION 2 - EXPENDITURE PLAN PURPOSES

This Ordinance provides for the implementation of the Contra Costa Transportation Improvement and Growth Management Expenditure Plan, as approved and adopted by the Contra Costa Transportation Authority, which will result in countywide transportation facility and service improvements including highway improvements, public transit improvements, trail facility improvements, local street maintenance and improvements and related transportation programs. These needed improvements shall be funded by the retail transactions and use tax provided for in Section 3 of this Ordinance. The revenues shall be deposited in a special fund and used solely for transportation projects and programs. The specific projects and programs to be implemented as well as the required growth management program are described in the Expenditure Plan which is considered a part of this Ordinance and hereby incorporated by reference as if fully set forth herein.

The revenues received by the Authority from this Ordinance, after deduction of required Board of Equalization costs for performing the functions specified in Section 180204 of the Public Utilities Code, and for the administration of the Contra Costa Expenditure Plan commencing with Public Utilities Code Section 180200, in an amount not to exceed one percent (1%), shall be used for transportation projects and programs countywide as set forth in the Expenditure Plan and in a manner consistent with the Comprehensive Transportation Plan developed by the Authority.

SECTION 3 - IMPOSITION OF RETAIL TRANSACTIONS AND USE TAX

In addition to any other taxes authorized by law, there is hereby imposed in the incorporated and unincorporated territory of the County of Contra Costa, in accordance with the provisions of Part 1.6 (commencing with Section 7251) of Division 2 of the Revenue and Taxation Code which provisions are adopted by reference and Division 19 of the Public Utilities Code commencing with Code Section 180000, a retail transaction and use tax at the rate of one-half of one percent (1/2%) for a period not to exceed twenty years in addition to any existing or future authorized state or local transactions and use tax.

A. **Amendments.** All amendments subsequent to the effective date of this Ordnance to Part 1 of Division 2 of the Revenue and Taxation Code relating to sales and use taxes and which are not inconsistent with Part 1.6 of Division 2 of the Revenue and Taxation Code, shall automatically become a part of this Ordinance; provided, however, that no such amendments shall operate so as to affect the rate of tax imposed by this Ordinance.

B. **Enjoining Collection Forbidden.** No injunction of writ of mandate or other legal or equitable process shall issue in any suit, action or proceeding in any court against the State or the Authority, or against any officer of the State or the Authority, to prevent or enjoin the collection under this Ordinance, or Part 1.6 of Division 2 of the Revenue and Taxation Code, of any tax or any amount of tax required to collected.

SECTION 4 - REQUEST FOR ELECTION

The Authority hereby requests the Contra Costa County Board of Supervisors place this Ordinance before the voters for approval on the November 8, 1988 ballot.

The proposition to be placed on the ballot shall contain a summary of the projects and programs and shall read substantially as follows:

> Shall the Contra Costa Transportation Authority be authorized to establish, by Ordinance, a one-half of one percent retail transactions and use tax with an Article XIII B appropriations limit of $765 million, for a period not to exceed twenty years, with the proceeds placed in a special fund solely for the transportation construction and planning program?

SECTION 5 — TRANSPORTATION IMPROVEMENT PROGRAM PURPOSES

In the allocation of all revenues made available from the retail transactions and use tax, the Authority shall make every effort to maximize state and federal transportation funding to the region. The Authority may amend the Expenditure Plan, in accordance with Section 8, as needed, to maximize the transportation funding to Contra Costa County. The revenues shall be allocated in accordance with the Expenditure Plan subject to the following provisions:

A. The revenues made available for specified highway, transit and trail projects and programs shall be allocated in accordance with the Expenditure Plan, subject to the following provisions:

1. For All Projects:

   a. No revenue shall be allocated for any state projects until the Authority has certified that Contra Costa is receiving, at a minimum, its fair share of funds from state and federal sources for transportation projects and programs. The determination of fair share shall consider all relevant factors including the degree to which the Contra Costa region is receiving its statutory county minimum funding for all budgeted, expended, and programmed state funds and federal funds available for capital projects and operating subsidies. The policies and project approval actions of the California Transportation Commission, the State Department of Transportation (hereafter referred to as Caltrans) and the federal Department of Transportation (e.g., Federal Highway Administration and Urban Mass Transportation Administration) will also be reviewed to ensure that Contra Costa is receiving full consideration in the allocation of any additional uncommitted state and federal funding. Part of the certification shall include a finding that the state has not reduced any state fund allocations to the Contra Costa region as a result of the addition of any local revenues as provided herein. The certification shall be made annually.

   b. If the Authority finances the construction of transportation facilities by the issuance of bonds or any similar financing device, the Authority shall first allocate the funds necessary to meet all debt service requirements.

   c. Each project shall have a local jurisdiction(s) or special district as a sponsor of the project. If there is no local jurisdiction or special district as a project sponsor for a specific Project or Program, the Authority shall be the sponsor for that Project or Program.

d. All state improvements to be funded with revenues as provided in this Ordinance, including project development and overall project management, shall be a joint responsibility of Caltrans, the Authority and the affected local jurisdiction(s) or special district(s). All major project approval actions including the project concept, the project location, and any subsequent change in project scope shall be jointly agreed upon by Caltrans, the Authority and the project sponsors, and where appropriate, by the Federal Highway Administration and/or the California Transportation Commission.

e. The Authority may use the proceeds of this Ordinance to accelerate projects which are anticipated to be funded through the State Transportation Improvement Program (STIP). It must be demonstrated by Caltrans that a meaningful acceleration can be accomplished using Authority funds and the State must commit to refunding those proceeds in dollars or in the acceleration or completion of other Expenditure Plan Projects and Programs and/or STIP projects.

In the event that the refund of acceleration funds impact the implementation of any Expenditure Plan Project or Program, the Authority shall amend the Expenditure Plan under Section 8.

f. Any local funds already allocated, committed or otherwise included in the financial plan for any project on the Expenditure Plan shall be made available for project development and implementation as required in the project's financial and implementation program. All local jurisdictions and special districts are encouraged to seek all available funding from private and public sources to further the purposes of the Expenditure Plan and this Ordinance.

2. **For Highway Projects:**

a. Once any state highway facility or usable portion thereof is constructed to at least minimum acceptable state standards, the state shall be responsible for the maintenance and operation thereof.

3. **For Transit Projects:**

a. Prior to the construction of any transit facility or usable portion thereof, the Authority, in cooperation with affected transit operators and agencies, shall determine the entity to be responsible for the maintenance and operation thereof.

4. **For Trail Projects:**

a. Prior to the construction of any trail facility or usable portion thereof, the Authority, in cooperation with affected agencies, shall determine the entity(ies) to be responsible for the maintenance and operation thereof.

B. Funds made available for local street and road purposes shall be allocated annually to all local jurisdictions on a formula basis for transportation projects. In addition to local street and road projects and maintenance, funds may be used for subregional and regional transportation projects and to meet the administrative requirements of the Growth Management Project. Funds shall be allocated annually to each local jurisdiction, provided that the Authority finds the jurisdiction in compliance with the Growth Management Program. Available funds will be allocated to eligible jurisdictions as follows:

1. Each jurisdiction will receive a basic allocation of $50,000, and the remaining funds will be allocated to jurisdictions by formula based fifty percent (50%) on current population and fifty percent (50%) on maintained street and road mileage.

2. Population figures used shall be the most current figures available from the Department of Finance. Road mileage figures shall be the most current figures from the State Controller's Annual Report of Financial Transactions for Streets and Roads.

3. Any new incorporation or annexations which take place after July 1 of any fiscal year shall be incorporated into the formula beginning with the subsequent fiscal year, providing there is full compliance with all other sections of this Ordinance. The Association of Bay Area Governments' population estimates of such new incorporation or annexations shall be used until such time that Department of Finance population estimates are available.

C. Funds allocated for the Programs specified in the Expenditure Plan shall be allocated pursuant to the following provisions:

1. **Elderly and Handicapped Transit Service.** These funds are intended to improve paratransit service for elderly and handicapped persons, including additional service and new vehicles. To stabilize the resources available for this program, the Authority may manage funds allocated for this program on a trust fund basis.

The Paratransit Coordinating Council shall develop a capital and operating plan for Authority approval prior to the allocation of any funds pursuant to this Ordinance. Only eligible recipients of Transportation Development Act 4.5 funds are eligible to receive retail transaction and use tax funds from the Authority.

2. **Carpools, Vanpools and Park/Ride Lots.** These funds are to be used to provide and promote use of commute alternatives. On a grant basis, the Authority shall annually allocate one percent of the net tax revenue to this program. Local jurisdictions and transit operators are eligible to seek funds from this grant program.

3. **Bus Transit Improvements and Coordination.** In order to receive funds under this category, bus operators and the Authority staff are to develop a coordinated program for submission to the Authority. This program should encompass all areas of the county, should involve affected jurisdictions, should focus on major commute corridors, and should work to provide a viable alternative to the single-occupant vehicle for intra-county travel.

   Projects funded through the Bus Transit Improvement and Coordination Program shall include, but are not limited to:

   a. services designed to improve regional (defined by the Authority) travel and coordination among eligible transit operators to strengthen the linkages between transit service areas and linkages to rail stations in the county;

   b. transit services along major commute corridors, such as Ygnacio Valley Road and Interstate 80, to assist in relieving peak-period traffic congestion;

   c. transit services to assist in alleviating traffic during major highway construction projects; and

   d. focus on linkages between residential areas and job centers.

   Projects, prior to approval by the Authority, must be endorsed by the transit operators' governing boards and be included in the respective operators' annual operating plans. All projects shall be subject to a public participation process and a financial capacity analysis as required by the Urban Mass Transportation Administration (UMTA).

   Projects submitted under the Bus Transit Improvement and Coordination Program will be evaluated and reviewed by a Transit Council comprised of the General Managers (or his/her designated representative) of the eligible applicants (AC Transit, Central Contra Costa Transit Authority, Eastern Contra Costa Transit Authority, and Western Contra Costa Transit Authority) and the San Francisco Bay Area Rapid Transit District as an ex officio member, and the Authority Executive Director or his/her designated representative. On an annual basis, this Transit Council will compile a recommended Coordinated Transit Proposal consisting of the selected projects for Authority and respective policy Board approval.

   The Authority shall assist with technical support to develop, coordinate, and review the Transit Council's Coordinated Service Proposal.

   The Transit Council shall develop its administrative procedures, subject to approval by all eligible operators' governing boards and the Authority. The Transit Council in conjunction with the Authority shall be responsible for the development of evaluation criteria regarding the continued funding of projects, on a project-by-project basis. Criteria may included:

   - Farebox Recovery Ratio
   - Passenger Boarding per Revenue Vehicle hour
   - Operating Cost per Revenue Vehicle
   - Constrained Increases in Operating Costs
   - Transportation Development Act Standards Performance Indicators
   - Cost per Revenue Vehicle Mile
   - Cost per Trip
   - Vehicle Hours per Employee
   - Trips per Revenue Vehicle Hour
   - Trips per Revenue Vehicle Mile

   These funds must:

   - be spent to alleviate traffic congestion in Contra Costa;
   - be for the purchase and operation of transit vehicles;
   - be used for operations, maintenance, and capital programs; and
   - assist the operators in the implementation of developed plans.

   Bus operators are responsible for funding their service commitments at the end of the period of this tax. Bus operators are required to seek all funds available to support operations.

4. Regional Transportation Planning and Growth Management. The Authority shall provide a forum for the discussion and resolution of countywide transportation planning and related issues.

The Authority, through the retail transactions and use tax and any other available funds, shall support the planning efforts of the Regional Transportation Planning Committees established under the Authority and shall support efforts to develop and maintain an ongoing planning process with the cities and the county through the funding and development of a Comprehensive Transportation Plan.

The Authority shall coordinate its efforts with all appropriate and affected agencies in order to assure that the retail transactions and use tax and other funds are used effectively to develop and implement a comprehensive transportation planning process in cooperation with the cities and the county.

Regional transportation planning may also include studies of major new transportation facilities and programs.

SECTION 6 - TRANSPORTATION IMPROVEMENT PROGRAM PROCEDURES

It is the intent of the Legislature and the Authority that revenues provided from this Ordinance be used to supplement existing revenues being used for transportation improvements and programs. Each local jurisdiction receiving Local Street Maintenance and Improvements funds pursuant to Section 5 shall meet the requirements in that section.

Under state enabling legislation, a jurisdiction cannot redirect monies currently being used for transportation purposes to other uses, and then replace the redirected funds with local street maintenance and improvement dollars from the retail transactions and use tax. To meet the requirements of state law, a jurisdiction must demonstrate maintenance of a minimum level of local street and road expenditure in conformance with one of the requirements below.

A. The same level of local discretionary funds expended for street and road purposes as was reported in the State Controller's Annual Report of Financial Transactions for Streets and Roads — Fiscal Year 1986-87.

B. If any local jurisdiction had extraordinary local discretionary fund expenditures during FY 1986-87, it may use, as a base for determining the minimum level of local discretionary funds:

1. the average amount of such funds reported to the State Controller for the three-year period FY 1984-85 through FY 1986-87; or
2. the net contribution obtained by subtracting those extraordinary expenses (including but not limited to SB 300 funds, assessment district contributions, development impact funds, redevelopment agency contributions, or other non-recurring contributions) from its total expenditures; or
3. a petition to the Authority for special consideration. A local jurisdiction may need to revise its minimum expenditure base beyond the subtraction of extraordinary expenses. In this instance, the Authority may allow the establishment of a new base for that jurisdiction's maintenance of effort requirement. A local jurisdiction petitioning the Authority under this provision must supply evidence of the need for special consideration.

The use of provisions B. 1, 2, or 3 of this Section by a local jurisdiction shall be subject to Authority approval.

The Authority shall annually update the base year and preceding three year base period for the establishment of an annual minimum based on the information available from the State Controller's Annual Report of Financial Transactions for Streets and Roads.

An annual independent audit may be conducted to verify that the Maintenance of Effort requirements were met by the local jurisdictions. Any local jurisdiction which does not meet its Maintenance of Effort requirement in any given year may have its Local Street Maintenance and Improvements funding reduced in the following year by the amount by which the jurisdiction did not meet its required Maintenance of Effort. Such funds shall be redistributed to the remaining eligible jurisdictions.

SECTION 7 - GROWTH MANAGEMENT PURPOSES AND PROCEDURES

In order to receive Local Street Maintenance and Improvements Funds, local jurisdictions must meet the requirements of the Growth Management Program. The specific requirements of the growth management program are described in the Expenditure Plan which is considered a part of this Ordinance and hereby incorporated by reference as if fully set forth herein. The Authority shall develop administrative requirements, in consultation with local jurisdictions, to implement the Growth Management Program.

SECTION 8 - AMENDMENTS TO THE EXPENDITURE PLAN

The Authority may annually review and propose amendments to the Expenditure Plan to provide for the use of additional federal, state and local funds, to account for unexpected revenues, or to take into consideration unforseen circumstances. The Authority shall establish a process for proposed Expenditure Plan amendment(s) which ensures that the affected Regional Transportation Planning Committee(s) participate in the development of the proposed amendment(s). Upon completion of this process, amendment(s) to the Expenditure Plan must be passed by a roll call vote entered in the minutes and must have a majority of the Authority concurring with the proposed amendment(s). Subsequently, the Authority shall notify the Board of Supervisors, the City Council of each city in the county and the Mayors' Conference and provide each entity with a copy of the proposed amendment(s). Pursuant to Public Utilities Code 180207, proposed amendment(s) shall become effective 45 days after notice is given, unless appealed under the process outlined in the following paragraph. The Authority shall hold a public hearing on the proposed amendment(s) within this 45-day period.

In the event that a local jurisdiction does not agree with the Authority's amendment(s), the jurisdiction's policy decision-making body must, by a majority vote, determine to appeal and shall, within 45 days after notice is given by the Authority, formally notify the Authority of its intent, in writing via registered mail, to obtain an override of the Authority's amendment(s). The appealing jurisdiction will have 45 days from the date of its determination to appeal the proposed amendment(s) to obtain resolutions supporting its appeal for an override of the amendment(s) from a majority of the cities representing a majority of the population residing in the incorporated areas of the county and from the Board of Supervisors. If a jurisdiction does not obtain the necessary resolutions supporting its appeal, the Authority's amendment(s) to the Expenditure Plan will stand.

SECTION 9 - AMENDMENTS TO THE ORDINANCE

With the exception of Section 3, which requires a majority vote of the electors of the County of Contra Costa to be amended, this Ordinance may be amended to further its purposes. The Authority shall establish a process for proposed Ordinance amendment(s) which ensures that the Regional Transportation Planning Committees participate in proposed Ordinance amendment(s). Upon completion of that process, amendment(s) to this Ordinance must be passed by a roll call vote entered in the minutes and must have two-thirds of the Authority concurring with the proposed amendment(s).

In the event that a local jurisdiction does not agree with the Authority's amendment(s), the jurisdiction's policy decision-making body must, by a majority vote, determine to formally notify the Authority of its intent, in writing via registered mail, to obtain an override of the Authority's amendment(s). The appealing jurisdiction will have 45 days from the date the Authority adopts the proposed amendment(s) to obtain resolutions supporting its appeal for an override of the amendment(s) from a majority of the cities representing a majority of the population residing within the incorporated areas of the county and from the Board of Supervisors. If a jurisdiction does not obtain the necessary resolutions supporting its appeal, the Authority's amendment(s) to the Ordinance will stand.

SECTION 10 - AUTHORITY COMMITTEES

It is the intent of the Authority to continue the committees which were established as part of the Transportation Partnership Commission organization. The committees are:

A. The Regional Transportation Planning Committees which were established to develop transportation plans on a geographic basis for sub-areas of the County;

B. The Transportation Partnership Advisory Committee which will serve as the Authority's citizens advisory committee;

C. The Technical Coordinating Committee which will serve as the Authority's technical advisory committee.

SECTION 11 - PRIVATE SECTOR FUNDING

Revenues provided from this Ordinance shall not be used to replace private developer funding which has been or will be committed for any project.

SECTION 12 - BONDING AUTHORITY

"Pay as you go" is the preferred method of financing transportation improvements and programs. However, the Authority may use bond financing as an alternative method in the event that the scope of planned expenditures makes "pay as you go" financing infeasible. Upon voter approval of the Ordinance, the Authority shall have the authority to issue bonds payable from the proceeds of the tax for the construction of needed transportation facility improvements. The Authority, in allocating the annual revenues from the Ordinance, shall meet all debt service requirements prior to allocating funds for other projects.

SECTION 13 - ADMINISTRATIVE EXPENSES

Revenues may be expended by the Authority for salaries, wages, benefits, overhead, auditing and those services including contractual services necessary to administer the Ordinance; however, in no case shall the annual expenditures for the salaries and benefits of the staff of the Authority exceed one percent of the annual revenues provided by the Ordinance. Costs of performing or contracting for project related work shall be paid from the revenues allocated to the appropriate purpose as set forth herein.

An annual independent audit shall be conducted to assure that the revenues expended by the Authority under this section are necessary and reasonable in carrying out its responsibilities under the Ordinance.

SECTION 14 - ESTABLISHMENT OF SEPARATE ACCOUNTS

The Authority shall allocate funds to Expenditure Plan Projects and Programs as necessary to meet contractual and program obligations. The Authority may allocate funds as described but may reserve the right not to disburse monies until needed to meet contractual projects or program obligations, exclusive of the Local Street Maintenance and Improvement Funds. Each agency receiving funds from this Ordinance shall deposit said funds in a separate interest bearing Transportation Improvement Account. Any interest earned on funds allocated pursuant to this Ordinance shall be expended only for those purposes for which the funds were allocated or shall be returned to the Authority. The Authority reserves the right to audit such accounts.

SECTION 15 - IMPLEMENTING ORDINANCES

Upon approval of this Ordinance by the voters the Authority shall, in addition to the local rules required to be provided pursuant to this Ordinance, adopt implementing ordinances, rules and administrative procedures, including Authority terms of office, and take such other actions as may be necessary and appropriate to carry out its responsibilities to implement the Contra Costa Transportation Improvement and Growth Management Expenditure Plan.

SECTION 16 - EFFECTIVE AND OPERATIVE DATES

This Ordinance shall become effective on November 8, 1988 only if a majority of the electors voting on the Ordinance at the election held on November 8, 1988 vote to approve the Ordinance. If so approved, the provisions of this Ordinance shall become operative on April 1, 1989.

SECTION 17 - DESIGNATION OF FACILITIES

Each project or program in excess of $250,000 funded in whole or in part by revenues from the Ordinance shall be clearly designated in writing via signs and/or documents, during its construction or implementation as being funded by revenues from the Ordinance.

SECTION 18 - CONTRACTS, LOCAL PREFERENCE

It is the preference of Authority, where feasible, and allowed under applicable law, to contract with Northern California organizations and businesses and to maximize contract opportunities for minority and women owned businesses. The Authority shall develop administrative procedures for contracts.

SECTION 19 - SEVERABILITY

If any section, part, clause or phrase of this Ordinance is for any reason held invalid or unconstitutional, the remaining portions shall not be affected but shall remain in full force and effect.

If a state law is passed in the future which prevents local jurisdictions from establishing standards for any of the six Growth Management Performance Standards in the Authority's Growth Management Program, the Authority may elect to delete or modify the requirements for that Performance Standard.

SECTION 20 — ANNUAL APPROPRIATIONS LIMIT

Article XIII(B) of the California constitution requires the establishment of an annual appropriations limit for certain governmental entities. The maximum annual appropriations limit for the Authority has been established as $765 million. The appropriations limit shall be subject to adjustment as provided by law. All expenditures of the retail transactions and use tax revenues imposed in Section 3 are subject to the appropriations limit of the Authority.

SECTION 21 — COORDINATION

The Authority shall consult and coordinate its actions to secure funding for the completion and improvement of the priority regional projects with the California Transportation Commission, transit operators and other interested and affected parties for the purpose of integrating its transportation improvements with other planned improvements and operations impacting the county. In addition, the Authority shall seek all ways to expedite the completion of Expenditure Plan projects, the implementation of which is the responsibility of other agencies. Use of acceleration as described in Section 5.A.1.e as well as supporting and advocating for Caltrans to contract out are both means through which the Authority can work to achieve timely project implementation.

SECTION 22 — ALLOCATION OF RELEASED FUNDS

If additional funds become available for a specific project or projects on the Expenditure Plan, the Authority may reallocate the retail transactions and use tax funds released by the receipt of those additional funds. In the allocation of the released funds, the Authority shall give first priority to Expenditure Plan Project and Programs which provide congestion relief in the geographic region which received the additional funds. Second priority shall be given to other projects and programs within the affected geographic region which may be placed on the Expenditure Plan through the amendment process described in Section 8. Third priority shall be given to all other Expenditure Plan Projects and Programs. Fourth priority shall be given to other projects of regional significance which may be placed on the Expenditure Plan through the amendment process described in Section 8.

SECTION 23 — ALLOCATION OF EXCESS FUNDS

In the event, that the retail transactions and use tax revenues generated by this Ordinance are greater than projected or contingency fund requirements are less than projected, the Authority may allocate those excess funds. Determination of when the contingency funds become excess funds shall be established by a process to be developed by the Authority.

In the allocation of excess funds, the Authority shall give first priority to Expenditure Plan Projects and Programs, and second priority to other projects of regional significance which are consistent with the Comprehensive Transportation Plan of the Authority and may be placed on the Expenditure Plan through the amendment process described in Section 8.

SECTION 24 — TRANSPORTATION AUTHORITY EMINENT DOMAIN

The Authority will not use its power of eminent domain as provided in Public Utilities Code Section 180152.

SECTION 25 — SUNSET OF THE AUTHORITY

In the event that this Ordinance does not succeed in obtaining a majority of the vote of the electorate at the November, 1988 election, the legal entity known as the Contra Costa Transportation Authority will sunset within 30 days after the election.

SECTION 26 — CALDECOTT TUNNEL

The Authority shall make every effort to secure state and/or federal funds to increase the capacity of the Caldecott Tunnel. The Authority shall work with other affected jurisdictions, particularly Alameda County and the City of Oakland to assist this effort. The Authority may, subject to the provisions of this Ordinance, loan funds to the State of California to commence the preliminary planning for this project.

SECTION 27 — MAJOR ARTERIALS

The Southwest Regional Transportation Planning committee will determine the financial programming of the Major Arterials — Southwest Region Project. For the Southwest Arterial Projects, it is the intent of the Authority that local jurisdictions give priority to the following projects: Widen San Ramon Valley Boulevard from Hartz to Alcosta; widen Dougherty Road from the County line to Crow Canyon Road; widen Crow Canyon Road from the County line to Bollinger Canyon Road; widen and eastbound Route 24 off-ramp at Brookwood and upgrade signals; and improve the St. Marys Road-Glenside Drive-Reliez Station Road corridor.

For the I-680 Corridor project, the central county Regional Transportation Planning Committee (TRANSPAC) may use up to $20 million of I-680 central county funds for improvements to arterials. TRANSPAC will determine the programming of these funds.

SECTION 28 — DEFINITIONS

A. **Authority.** Means the Contra Costa Transportation Authority. The Contra Costa Transportation Partnership Commission has been designated as the Contra Costa Transportation Authority by the Contra Costa County Board of Supervisors with the concurrence of a majority of the cities having a majority of the population within the incorporated area of the County.

B. **Bicycle and Pedestrian Trail Facilities**. Means all purposes necessary and convenient to the design, right-of-way acquisition and construction of facilities intended for use by bicycles and pedestrians. Bicycle facilities shall also mean facilities and programs which help to encourage the use of bicycles such as secure bicycle parking facilities, bicycle promotion programs and bicycle safety education programs.

C. **Bonds**. Means indebtedness and securities of any kind or class, including but not limited to bonds, notes, revenue anticipation notes, commercial paper, and certificates of participation.

D. **Comprehensive Transportation Plan.** Means the long-range transportation planning document prepared and adopted by the Authority.

E. **Expenditure Plan.** Means the expenditure plan required by Section 180206 of the Public Utilities Code to be adopted prior to the call of an election on this Ordinance. The expenditure plan includes the allocation of revenues for each authorized purpose.

F. **Highways and Arterials.** Means all purposes necessary and convenient to the design, right-of-way acquisition, and construction of highway and arterial street facilities, including all interstate highway routes and any other facilities so designated in the Expenditure Plan.

G. **Local Street Maintenance and Improvements.** Means all purposes necessary and convenient to the maintenance, operation and construction of local streets and roads and transit purposes. Local street and road purposes shall include all purposes allowable under Article XIX, Section 1(a) of the State Constitution.

H. Transit. Means all purposes necessary and convenient to the construction, operation and maintenance of transit services and facilities including the acquisition of vehicles and right-of-way. Transit services include, but are not limited to, bus, light rail, rapid transit and commuter rail services and facilities.

PASSED AND ADOPTED by the Contra Costa Transportation Authority, the 3rd day of August, 1988 by the following vote:

AYES: Sharon Brown, Taylor Davis, Cathryn Freitas, Beverly Lane, David MacDiarmid, Anna McCarty, Sunne Wright McPeak, Ed Skoog, Tom Torlakson, Avon Wilson, and Ronald K. Mullin, Chair

NOES: None

ABSENT: None

/s/ Ronald K. Mullin

Chair

August 3, 1988
Date

ACKNOWLEDGEMENTS

Transportation Partnership Advisory Committee

CHAIR: Byron Campbell

Louise Aiello (County Planning Commissioner)
Frank Baker (Paratransit Coordinating Council)
Guy Bjerke (Chambers of Commerce)
Ron Berkhimer (Contra Costa Taxpayers Association)
Alternate: Don Christen
Byron Campbell, Chair (Residents for a Better Contra Costa)
Alternate: Colleen Coll
Ernestine DeFalco (League of Women Voters)
Alternate: Nancy Oswald
Ed Dimmick (Citizens for a Better Walnut Creek)
Alternate: Peggy Cappiali
Bob Doyle (Save Mt. Diablo)
Alternate: Mike Gleason
Joseph Duarte (Farm Bureau)
Mark Evanoff (People for Open Space)
Alternate: Kent Fickett
Lou Ferrero (Contra Costa Office on Aging)
Alternate: Roberta Lumb
Kevin Garrett (City of Hercules)
Gary Gibbs (Coalition of Labor and Business)
Peter N. Hellmann (Home Builders Association)
Alternate: Rich Jensen
Darlyne Houk (Contra Costa Board of Realtors)
Alternate: Roy McKinney
Neal Johnson (Western Contra Costa Transportation Advisory Committee)
Sarge Littlehale (Southwest Regional Planning Committee)
Alternate: William C. Rust, Jr.
Steve Ohmsted (East County BART Coalition/Highway 4 Task Force)
Peter Oswald (Contra Costa Council)
Alternate: Darryl A. Foreman
Steve Roberti (Central Labor Council)
Alternate: John A. Matheis
Phyllis Roff (TRANSPAC)
Keith Samson (Industrial Association)
Laura Selfridge (Sierra Club)
Alternate: Michele Perrault
Tim Tinnes (Organization to Save Our Communities)
Alternate: Bruce Benzler
Brian Way (Oakley Municipal Advisory Council/TRANSPLAN)
Alternate: Richard Dillon

Technical Coordinating Committee

The following members of the Technical Coordinating Committee assisted in the development of the Contra Costa Transportation Improvement and Growth Management Expenditure Plan.

CHAIR: Stanford Davis

Phil Agostini, Public Works Department, City of San Ramon
Stanford Davis, Chair, Public Works Director, City of Antioch
Tony Donato, City Manager, City of Pittsburg
Anne Drew, Transit Manager, Eastern Contra Costa County Transit Authority (Tri-Delta Transit)
Hilmer A. Forsen, Senior Transportation Engineer, State Department of Transportation District 4 (Caltrans)
Dale Fousel, Access Coordinator, Bay Area Rapid Transit District
Al Jelton, Public Works Department, City of Richmond

Roy Parker, Dean Howland, Public Works Department, City of Concord
Frank Kennedy, City-County Engineer's Liaison, City Engineer, City of Walnut Creek
Doug Kimsey, Assistant Transportation Planner, Metropolitan Transportation Commission
Steve Lake, Public Works Director, City of Danville
Don Larson, AC Transit
Alternate: Peter Tannen
Marilyn Leuck, City Manager, City of Hercules
Barbara A. Neustadter, Commission Executive Staff
Alternate: Robert Chung
Jim Robinson, City Manager, City of San Ramon
Ron Serviss, Transit Manager, West Contra Costa Transit Authority
Maurice Shiu, Assistant Public Works Director, Contra Costa County
Alternate: Robert Faraone
John Sindzinski, Contra Costa County Transit Authority
Alternate: Mallory Nestor
Mike Uberaga, City Manager, City of Concord

Commission Staff

Commission Staff members were loaned to the Commission by Contra Costa County and the City of Concord to assist in the development of the Transportation Improvement and Growth Management Program.

Barbara A. Neustadter, Executive Staff, County
Robert Chung, Senior Staff, County
Gregory R. Gleichman, Senior Staff, County
Laurel Weil, Commission Counsel, Concord
Diane S. Page, Secretary, County

The Transportation Partnership Commission would like to acknowledge the Contra Costa Council's generosity for providing funding to secure secretarial services and to Smith, Gray and Company for their assistance in the development of this program.

MEASURE C - 1990

THE 65/35 CONTRA COSTA COUNTY LAND PRESERVATION PLAN

TEXT OF PROPOSED ORDINANCE
The People of the County of Contra Costa hereby ordain as follows:

Section 1 Title

This ordinance shall be entitled the "65/35 Contra Costa County Land Preservation Plan."

Section 2 Summary

Through this ordinance the people approve the policies contained in the 65/35 Contra Costa County Land Preservation Plan and direct the Contra Costa County Board of Supervisors to reflect those policies in the new general plan (the "New General Plan") for the County. These "65/35 Land Preservation Plan" policies are intended to:

- Restrict urban development to 35% of the land in the County and preserve 65% of the land in the County for agriculture, open space, wetlands, parks and other non-urban uses;
- Prohibit any changes to the 65/35 Land Preservation Plan standard except by a vote of the people;
- Create an Urban Limit Line to identify the outer boundaries of urban development in the County;
- Protect and promote the economic viability of agricultural land by appropriate standards and policies, including a policy that increases the minimum parcel size for prime productive agricultural land outside the Urban Limit Line to 40 acres;
- Protect open hillsides and significant ridgelines throughout the County from development by zoning and other measures;
- Manage growth in the County by allowing new development only when infrastructure and service standards are met;
- Advise the Local Agency Formation Commission to honor the County's 65/35 Land Preservation standard, Urban Limit Line and growth management standards in annexation and incorporation decisions;
- Promote cooperation between the County and cities to preserve agricultural and open space land, wetlands and parks, by requiring the County to pursue preservation agreements with cities where feasible; and
- Safeguard the County's obligation to provide its fair share of safe, decent and affordable housing.

Section 3 Statement of Findings and Policy

The voters of Contra Costa County approve the 65/35 Land Preservation Plan based on the following facts and considerations:

A. Contra Costa County (the "County") is nearing completion of a major revision of its general plan. The New General Plan will represent a comprehensive, balanced approach for accommodating the diverse variety of needs and interests of the people of the County. To maximize public participation in preparing the New General Plan, the County has held thousands of hours of public meetings and received extensive written comments on the New General Plan. All segments of Contra Costa County society have participated, including ranchers, developers, farmers, environmentalists, labor groups, cities, special districts, business and industrial associations. The proposed New General Plan expresses the variety of concerns and hopes stated in this public process. The proposed New General Plan consists of over 400 pages and represents years of research and analysis by the staff of the County Conservation and Development Department and outside consultants. In addition, in accordance with the California Environmental Quality Act ("CEQA"), the County has prepared and circulated for public review a draft environmental impact report ("EIR") to assess the environmental impacts of the New General Plan. The draft EIR, comments and responses to comments have been circulated to agencies and individuals and readily available at County offices, libraries and other public places.

B. During this process of preparing the New General Plan, the voters expressed a number of concerns related to future planning and development of the County. The most important of those concerns were:

(1) Growing urbanization of the County is threatening the long term viability of the County's agricultural and open space land, parks, wetlands, hillsides and ridgelines. Preservation and buffering of agricultural land is critical to maintaining a healthy and competitive agricultural economy and assuring a balance in land uses in the County. Moreover, preservation and conservation of open space, wetlands, parks, hillsides and ridgelines is imperative to ensure the continued availability of unique habitats for wildlife and plants, to protect the unique scenery in the County and to provide a wide range of recreational opportunities for County residents.

(2) Growth is a natural and proper part of the life of the community. However, growth should be managed responsibly to preserve the quality of life for current and future generations. New development should be guided into appropriate locations, and should be allowed only after appropriate infrastructure (transportation, schools, water, fire and police protection) can be assured.

(3) There is a critical need to make decent, safe and affordable housing available to all Contra Costa County residents. Fair housing opportunities should prevail for all economic segments of the County, and housing should be available in reasonable proximity to employment centers. In addition, the County's land use policies should not restrict growth so severely that they preclude these affordable housing opportunities.

C. The 65/35 Land Preservation Plan implemented in Section 4 is intended to address these concerns of the voters. The 65/35 Land Preservation Plan is intended to carry out the voters' desire to both preserve agriculture and open space land, parks, wetlands, hillsides and ridgelines, manage growth to protect the quality of life, and provide for the County's fair share of decent, safe and affordable housing.

D. It is appropriate and reasonable to present to the voters for their approval the key policies that would guide the County's future under the New General Plan, as those policies are set forth in the 65/35 Land Preservation Plan. With the guidance and confirmation the voters can provide through approval of the 65/35 Land Preservation Plan, the County can complete the environmental review and detailed documentation necessary for implementing these principles.

E. The approval of the 65/35 Land Preservation Plan by the voters is not intended to be an amendment of the County's existing general plan. Rather, the 65/35 Land Preservation Plan, if approved by the voters, is intended to be reflected in the County's New General Plan and will thereby become the official policy of the County with respect to the preservation of open space and agricultural lands and the protection of valuable environmental resources such as wildlife, wetlands, hillsides and ridgelines.

Section 4 Implementation of 65/35 Land Preservation Plan

To implement the 65/35 Land Preservation Plan, the following chapter is hereby added to the Contra Costa County Ordinance Code as Chapter 82-1 and numbered appropriately:

A. **New General Plan**

The County shall adopt a new general plan by December 31, 1990 (the "New General Plan").

B. **65/35 Land Preservation Plan**

The policies contained in this chapter shall be reflected in the New General Plan, as ultimately adopted by the Board of Supervisors in accordance with the California Environmental Quality Act and State Planning Law.

(1) **65/35 Land Preservation Standard**

Urban development in the County shall be limited to no more than 35% of the land in the County. At least 65% of all land in the County shall be preserved for agriculture, open space, wetlands, parks and other non-urban uses.

(2) **Changes to the 65/35 Land Preservation Plan**

No change shall be made in the New General Plan after its adoption that would result in greater than 35% of the land in the County being permitted for urban development. This limitation shall not prevent any increase in agriculture, open space, parks, wetlands or other nonurban uses to greater than 65% of the land in the County.

(3) **Urban Limit Line**

To ensure the enforcement of the 65/35 standard set forth in (B)(1) above, an Urban Limit Line shall be established, in approximately the location depicted on the illustrative 65/35 Contra Costa County Land Preservation Plan Map attached as Exhibit A. The Urban Limit Line shall be incorporated into the County's Open Space Conservation Plan. The Urban Limit Line shall limit potential urban development in the County to 35% of the land in the County and shall prohibit the County from designating any land located outside the Urban Limit Line for an urban land use. The criteria and factors for determining whether land should be considered for location outside the Urban Limit Line should include (a) land which qualifies for rating as Class I and Class II in the soil Conservation Service Land use Capability Classification, (b) open space, parks and other recreation areas, (c) lands with slopes in excess of 26 percent, (d) wetlands, and (e) other areas not appropriate for urban growth because of physical unsuitability for development, unstable geological conditions, inadequate water availability, the lack of appropriate infrastructure, distance from existing development, likelihood of substantial environmental damage or substantial injury to fish or wildlife or their habitat, and other similar factors.

(4) **Growth Management**

In accordance with the Contra Costa Transportation Improvement and Growth Management Program adopted on August 3, 1988, the County shall manage growth by allowing new development only when infrastructure and service standards are met for traffic levels of service, water, sanitary sewer, fire protection, public protection, parks and recreation, flood control and drainage and other such services. Land located inside the Urban Limit Line may be considered for changes in designated land uses, subject to County growth management policies and any other applicable requirements. Location of land within the Urban Limit Line shall provide no guarantee that the land may be developed. If land is developed within the Urban Limit Line, a substantial portion of this land shall be retained for open space, parks and recreational uses.

(5) **Agricultural Protection Policies; Minimum Parcel Sizes**

The County shall establish standards and policies designed to protect the economic viability of agricultural land. These standards and policies shall include a minimum parcel size for prime productive agricultural land located outside the Urban Limit Line to 40 acres. These standards and policies may also include, but shall not necessarily be limited to, preservation agreements, conservation easements, clustering, establishment of an agricultural soils trust fund, and agricultural mitigation fees.

(6) **Hillside Protection**

Development on open hillsides and significant ridgelines throughout the County shall be restricted, and hillsides with a grade of 26% or greater, shall be protected through implementing zoning measures and other appropriate actions.

(7) **Changes to the Urban Limit Line**

There shall be no change to the Urban Limit Line that violates the 65/35 standard set forth in B(l) above. After adoption of the New General Plan, as long as there is no violation of the 65/35 standard, the Urban Limit Line can be changed by a 4/5 vote of the Board of Supervisors after holding a public hearing and making one or more of the following findings based on substantial evidence in the record:

(a) a natural or man-made disaster or public emergency has occurred which warrants the provision of housing and/or other community needs within land located outside the Urban Limit Line;

(b) an objective study has determined that the Urban Limit Line is preventing the County from providing its fair share of affordable housing, or regional housing, as required by state law, and the Board of Supervisors finds that a change to the Urban Limit Line is necessary and the only feasible means to enable the County to meet these requirements of state law;

(c) a majority of the cities that are party to a preservation agreement and the County have approved a change to the Urban Limit Line affecting all or any portion of the land covered by the preservation agreement;

(d) a minor change to the Urban Limit Line will more accurately reflect topographical characteristics or legal boundaries;

(e) a five (5) year periodic review of the Urban Limit Line has determined, based on the criteria and factors for establishing the Urban Limit Line set forth in B(3) above, that new

information is available (from city or County growth management studies or otherwise) or circumstances have occurred, that warrant a change to the Urban Limit Line;

(f) an objective study has determined that a change to the Urban Limit Line is necessary or desirable to further the economic viability of the East Contra Costa County Airport, and either (I) mitigate adverse aviation related environmental or community impacts attributable to Buchanan Field, or (ii) further the County's aviation related needs; or

(g) a change is required to conform to applicable California or federal law.

Any such change shall be subject to referendum as provided by law. Changes to the Urban Limit Line under any other circumstances shall require a vote of the people.

(8) Annexations and Incorporations

The Local Agency Formation Commission ("LAFCO") shall be advised to (a) respect and support the County's 65/35 Preservation Standard, Urban Limit Line and growth management standards when considering requests for incorporation or annexation to cities or service districts, (b) apply the stricter of the growth management standards of either the County the incorporating city or the annexing city or service district, when considering requests for incorporation or annexations of land to cities or service districts, and (c) require unincorporated land located within the Urban Limit Line that is included in the incorporation of a new city or annexed to a city to provide a fair share of affordable housing when and if such land is developed.

(9) Housing

As required by the State Planning Act, the County shall periodically review and update the New General Plan to conform to state housing requirements and to ensure its capacity to accommodate a variety of housing types and prices throughout the County. In accordance with the provisions of B(7) above, the Board of Supervisors may make findings of necessity that the Urban Limit Line should be changed to allow the County to meet its fair share of affordable housing and other state housing requirements.

(10) Cooperation with Cities

To the extent feasible, the County shall enter into preservation agreements-with cities in the County designed to preserve certain land in the County for agriculture and open space, wetlands or parks.

C. Application to Projects Prior to Adoption of New General Plan

From the effective date of this chapter to adoption of the New General Plan, prior to issuing a permit for any project or adopting any legislation which requires an initial study under the California Environmental Quality Act, and prior to issuing a permit for any demolition, conversion, or change or use, and prior to taking any action which requires a finding of consistency with the general plan, the County shall adopt findings as to whether or not the proposed project or legislation is consistent with the policies established above.

D. Duration

The provisions of this chapter shall be in effect until December 31, 2010, to the extent permitted by law.

E. No Violation of Law by this Ordinance

(1) Nothing in this chapter shall be construed or interpreted in such a manner as to operate to deprive any landowner of substantially all of the market value of his/her property or otherwise constitute an unconstitutional taking without compensation. If application of any of the provisions of this chapter to any specific project or landowner would create an unconstitutional taking, then the Board of Supervisors may allow additional land uses, otherwise adjust permit requirements or take such other actions to the extent necessary to avoid what otherwise might be construed to be a taking. Any such additional land uses or other adjustments shall be designed to carry out the goals and provisions of this section to the maximum extent feasible.

(2) Nothing contained in this chapter shall constitute an amendment of the existing general plan. Upon approval of this chapter by the voters, the County shall take all necessary and appropriate steps to reflect the policies of the 65/35 Land Preservation Plan in the New General Plan for the County, consistent with the requirements of CEQA and the State Planning Law. Nothing contained herein shall prevent the County from complying with applicable requirements of state law relating to the adoption and amendment of general plans.

F. Definitions

(1) As used in this chapter, the phrase "land within the County" shall mean all of the acreage within the boundaries of Contra Costa County except the water area of the County west of Stake Point.

(2) As used in this chapter, the term "non-urban uses" shall mean rural residential and agricultural structures allowed by applicable zoning and facilities for public purposes, whether privately or publicly funded or operated, which are necessary or desirable for the public health, safety or welfare or by state or federal law.

Section 5 Amendment and Repeal
This ordinance may be amended or repealed only by a vote of the people, except as expressly provided herein.

Section 6 Conflicts with Other Measures

The following provisions shall apply in the event that the voters approve any other initiative or referendum related to the County's general plan contemporaneously with approval of this ordinance:

(1) In the event that the voters approve any other initiative or referendum related to the County's general plan, or zoning, planning or land use regulations within the County contemporaneously with approval of this ordinance and this ordinance receives a higher number of votes than such other initiative or referendum, the provisions of this ordinance shall supersede and are hereby deemed to be inconsistent with the provisions of such other initiative or referendum, and no provision of such other initiative or referendum shall be implemented. This provision shall apply regardless of whether all or any part of this ordinance is invalidated by a court of competent jurisdiction.

(2) In the event that the voters approve any other initiative or referendum related to the County's general plan contemporaneously with the approval of this ordinance, and such other initiative or referendum receives a higher number of votes than this ordinance, the provisions of this ordinance shall nevertheless be implemented to the maximum extent legally feasible.

Section 7 Severability
If any portion of this ordinance is hereafter determined to be invalid by a court of competent jurisdiction, all remaining portions of this ordinance shall remain in full force and effect. Each section, subsection, sentence, phrase, part or portion of this ordinance would have been adopted and passed regardless of whether-any one or more sections, subsections, sentences, phrases, parts or portions was declared invalid or unconstitutional.

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3. LAND USE ELEMENT

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3. LAND USE ELEMENT

3.1 INTRODUCTION

State law requires every city and county to formulate and adopt a Land Use Element which, through the development of policies, plans, and standards, shows the proposed general distribution, location, density, and intensity of land uses for all parts of the jurisdiction. Section 65302(a) of the California Government Code reads:

> "A Land Use Element that designates the proposed general distribution and general location and extent of the uses of the land for housing, business, industry, open space, including agriculture, natural resources, recreation, and enjoyment of scenic beauty, education, public buildings and grounds, solid and liquid waste disposal facilities, and other categories of public and private uses of land."

The State Code further stipulates that Land Use Element shall include a:

> "Statement of the standards of population density and building intensity recommended for the various districts and other territory covered by the Plan. The land use element shall identify areas covered by the plan which are subject to flooding and shall be reviewed annually with respect to such areas. . . . "

As with other elements of the General Plan, the goals, directive policies, and implementation measures of the Land Use Element are mandatory, rather than advisory. Under State law, many land use approvals made by planning commissions and boards of supervisors, including rezoning, subdivisions, development agreements, redevelopment and specific plans, park dedications, and others, must be consistent with and conform to the jurisdiction's General Plan.

This General Plan supersedes the County's prior 1995 - 2010 General Plan (and each of the previously adopted elements such as the 1963 Land Use and Circulation Plan), including area general plans. The policies and maps of many prior general plan amendments and area plans have been reflected in this General Plan. The Land Use Element retains consistency with, and reflects the general plan level of goals, policies and implementation measures as prior adopted Specific Plans.

3.2 RELATIONSHIP TO OTHER GENERAL PLAN ELEMENTS

Although the Land Use Element and its accompanying map are often thought by many to be the most important part of the General Plan, State legislation requires that the various elements comprise an integrated, internally consistent, and compatible statement of goals, policies, and programs. This means that each of the General Plan Elements are equal in legal status and that the direction given by one element may not be superior or subordinate to that of any other element.

Many of the issues that are discussed in the Land Use Element overlap issues that may be addressed in other General Plan Elements. Almost any issue dealing with

the physical characteristics of land in the County will have land use implications, even if specific issues such as flooding or prime agricultural soils are not extensively addressed in the Land Use Element.

Readers of this General Plan should therefore be aware that the policies which may affect development of a specific property are not necessarily stated in only one portion of the maps and text in each element. The applicability of policies described in other elements should be taken into consideration when determining the General Plan policies for a particular area or property.

Readers are referred to the section in Chapter 1, Introduction, entitled "How to Use the General Plan" for a recommended process by which to begin determining the applicability of General Plan maps and policies to specific properties.

The Land Use Element contains the following components, suggested by the Governor's Office of Planning and Research (OPR) or required by statute:

- inventory and distribution of existing land uses, including residential, commercial, industrial, open space and agricultural;
- general assessment of housing needs based on projected community growth trends;
- projections for land use and space for residential, commercial, and industrial development, based upon projections of future population and economic conditions;
- population density standards for each land use category with residential potential;
- land use goals and policies: County and Area Specific; and
- programs for implementation of the land use policies.

Description and analysis of additional land use components are located in the following General Plan Elements:

- housing analysis - a detailed discussion is contained in Chapter 6, Housing Element;
- educational facilities: assessment of the need for and diagram of existing and proposed future school sites is located in Chapter 7, Public Facilities/Service Element;
- public buildings and grounds: assessment of existing sites and the location of approved and pending landfill applications is in Chapter 7, Public Facilities/Service Element;
- infrastructure, water and sewer locations and projections, goals, policies and implementation measures are discussed in Chapter 7, Public Facilities/Service Element, in addition to the Growth Management Elements in Chapter 4;
- natural resources: land uses associated with agriculture, vegetation and wildlife, fisheries, mineral and renewable energy, oil and gas, water (bay, delta, creek), and flood zones; discussed in Chapter 8, Conservation Element;
- open space, Urban Limit Line, 65/35 Land Preservation Standard: analysis of existing and proposed open space land use is discussed and mapped in Chapter 9, Open Space Element, including recreational, scenic, and historic/cultural resources; and
- additional implementation programs relating to land use policies and infrastructure standards are located in Chapter 4, Growth Management Element.

The Elements are internally consistent and they support policies stated in the other elements, the land use plan maps and the accompanying text to represent a consciously selected balance among the various goals and objectives included in all of the Elements.

The balance between governing growth and preserving non-urban areas, for example, must reflect the key interplay in this General Plan between the 65/35 Land Preservation Standard, the Urban Limit Line, the Housing Element goals, and the Growth Management Element infrastructure requirements.

Additionally, the Land Use Element's relationship to the other elements of the General Plan provide that:

- the land uses are based on the County's best currently available information concerning land use patterns;
- actual land use and development decisions may depend upon information not currently available; and
- the timing of development of the identified land uses will depend on satisfying the requirements of the Growth Management Element.

3.3 RELATIONSHIP TO SPECIFIC PLANS

SPECIFIC PLANS

A specific plan is a more detailed plan for a specific area within the County. Specific plans address the planning needs of a particular area, including necessary infrastructure and facilities, land uses and open space. Specific plans, while not a part of this General Plan, must be consistent with all aspects of the General Plan.

3.4 ORGANIZATION OF ELEMENT

The Land Use Element is organized in six parts. First, existing land uses are described. A general discussion is given of the various land use characteristics that exist in the West, Central and East sectors of the County. Second, the projected levels of growth used in the General Plan for land uses in the sectors are described.

Also discussed are the County's Urban Limit Line (ULL) and the 65/35 Land Preservation Standard in relation to the Land Use Element. (Further discussion is also provided in Section 4.0, Growth Management Element and in Section 9.0, Open Space Element.)

The final three sections of this Land Use Element enumerate the goals, policies and implementation plans of the County.

These policies, which apply only to unincorporated areas, are implemented through other general plan and area plan policies; land use controls, such as the zoning and subdivision ordinances; the requirements within the public service and facility standards; and use of the ULL.

3.5 EXISTING LAND USE

For a summary description of the analytical basis of the existing land uses, see Chapter 3.6, Planned Levels of Development. The General Plan generally recognizes the land use policies of the cities' plans within the city limits with some slight modifications to fit existing land use densities into consistent plan categories.

GENERAL INVENTORY OF LAND USES BY SUBAREA

Ranging from urban to rural, land is used in Contra Costa County for many purposes. In the West and Central County areas, primary uses of suburban cities and towns are residential, commercial and industrial. In the East Central County and East County Area, land is used primarily for agriculture and general open space. References to land within the County or to percentages of the County refer to all of the acreage within the boundaries of the County except the water area of the County west of Stake Point.

As a whole, the County is relatively undeveloped. Although located in the San Francisco Bay Area, one of the most populated urban areas of the nation, approximately 25 percent of the County was devoted to urban uses in 1990, while the balance is used for non-urban uses such as agriculture, wetlands, parks, recreation, or general open space and other non-urban uses. Non-urban uses shall also include rural residential and agricultural structures and facilities for public purposes, whether privately or publicly funded or operated, which are necessary or

desirable for the public health, safety or welfare or required by State or federal law. None of the land is used for timber harvesting. The amount of land in each major land use category in the County is summarized in Table 3-1.

TABLE 3-1
CONTRA COSTA COUNTY EXISTING LAND USE (2000)

	Acres[1]	Percent of Total County Land
Residential[2]	67,910	14.1
Local[3]	15,100	3.1
Basic[4]	14,800	3.1
Streets/Highways	24,300	5.1
Total Developed Land	122,100	25.4
Total Acreage	**480,000**	**100**

[1] Acreages are rounded to nearest 10 acres.
[2] Residential land uses are occupied by single- and multiple-family homes including mobile homes.
[3] Local Serving Employment land uses are occupied by local serving industries and businesses, including: 1) offices; 2) churches; 3) schools below the state level; 4) hospitals; 5) local and rapid transit; 6) communications and utilities; 7) restaurants; 8) banks, credit agencies, insurance brokers and agents' offices, and real estate offices; and 9) local government facilities.
[4] Basic employment land uses are occupied by manufacturing industries and those which export products or act as suppliers to other regional industries, including: 1) heavy industry; 2) food processing; 3) high technology manufacturing; 4) miscellaneous manufacturing; 5) long distance transportation; 6) wholesale trade; 7) finance and insurance carriers, holding and other investment companies; 8) business services; 9) schools at the state level (4-year colleges and universities) and museums; and 10) federal and State governments.

West County

Population

In 1980 approximately 213,000 people lived in West County's urbanized areas. By 1990 the population had increased to 226,000 and by 2000 the population was 241,042. In 2000 the largest city was Richmond (99,216) and the smallest was Pinole (19,039). In the unincorporated developed areas, the largest area was El Sobrante (12,260) but there are several other unincorporated areas; Bay View-Montalvin Manor, East Richmond Heights, Kensington, North Richmond, Rodeo, Crockett, Tara Hills and Port Costa.

Predominant Land Uses

West County consists of five cities (El Cerrito, Hercules, Pinole, Richmond and San Pablo) plus the unincorporated urbanized areas. This area contains approximately 20 percent of the urbanized land in the County, and is developed with a wide variety of land uses. Most cities contain a proportional mix of principal urban land uses. However, in some cases, one use predominates. During the last several decades, urbanization has steadily moved eastward from the flat baylands into the foothills near Mt. Diablo and further East to Bay Point, Pittsburg, Antioch, Oakley, Brentwood and Discovery Bay. This elongated corridor of cities and towns is strung together by a network of major transportation routes linking the County directly to employment centers in San Francisco County.

1. Residential. Although the situation is changing, Contra Costa has been comprised of "bedroom communities" populated by a commuter work force. In 2000 there were approximately 87,700 housing units in West County. Fifty-nine percent of the work force still commutes outside the County each day, primarily to San Francisco and Alameda Counties. It is not surprising, then, that the West County is predominantly developed with residential land uses. Overall West County had a density of 3,185 persons per square mile in 1990, which increased to 3,418 in 2000.
2. Commercial. Commercial use accounts for approximately 10 percent of the developed land in West County. Commercial uses are found in the historic central business districts of each city and in a narrow business strip which runs the full length of I-80, West County's major north/south regional thoroughfare, and San Pablo Avenue, its major arterial roadway. Recently, major regional shopping centers have been built outside of these areas.

3. Industrial. Industrial uses also cover approximately 10 percent of developed land. Industrial uses are concentrated in a few industrial parks. The industries in these areas are predominantly light and relatively clean, and generally include warehouse; distribution facilities; assembling and processing plants; and offices.
4. Open Space. Shoreline and interior parks are interspersed in West County. Examples include San Pablo Reservoir and Briones Hills.

Central County

Population

A suburban population of 414,000 people lived in the Central County area in 1990. By 2000, the population had increased to 471,800. Most of this population is concentrated in large subdivided areas strung along I-680, State Route 24, and State Route 4.

Predominant Land Uses

The suburban Central County Area is used predominantly for residential, commercial, recreation, grazing, or general open space.

1. Residential. As in the West County Area, residential development in the Central County area covers approximately 30 percent of the total developed land. There were approximately 168,000 housing units in Central County in 1990 and 188,000 by 2000. Densities are the highest in Pleasant Hill (4,633 persons/square mile), Concord (4,041 persons/square mile) San Ramon (3,862 persons/square mile) and Walnut Creek (3,230 persons/square mile) and the lowest in Orinda (1,398 persons/square mile) and Lafayette (1,572 persons/square mile).
2. Commercial. Commercial use accounts for approximately 11 percent of the developed land in the County. Commercial uses such as office parks and business strips are located on the major thoroughfares of I-680, State Route 242, and others. Other major locations are in San Ramon Valley and Walnut Creek.
3. Industrial. The predominate industrial uses of Central County include oil refineries in the northern part of Central County.
4. Open Space. Because of the Central County's hilly and large open space areas, and because of its proximity to urban areas, the State, County, and East Bay Regional Parks District (EBPRD) and East Bay Municipal Utility District (EBMUD) have open space uses framing the communities.

East County

Population

Roughly, 165,000 people lived in the East County in 1990 and 236,000 in 2000. Most of the population is concentrated in the Pittsburg-Antioch-Bay Point area. While 74,000 people live in the more sparsely settled "Other East County," primarily in and around the Cities of Pittsburg, Oakley, and Brentwood; and the unincorporated communities of Byron, Knightsen, Bethel Island and Discovery Bay.

Predominant Land Uses

The East County Area has predominantly residential, agricultural, recreational, and open space uses. Development is concentrated in collections of small urban communities and mid-sized cities.

1. Residential. In 2000 there were approximately 78,700 housing units in East County, up from 63,200 in 1990. Most of the residential areas are in the north end of East County in the Pittsburg-Antioch area, within the cities of Oakley, Pittsburg, Brentwood, and in Discovery Bay.

2. Commercial. The largest commercial area in the East County exists in and adjacent to the central business districts of Pittsburg and Antioch. Other neighborhood centers are scattered throughout the subregion.
3. Industrial. There is a major complex near the Pittsburg-Antioch area consisting of heavy chemical and steel industries and some light industry. Bay Point shoreline also has some heavy and light industrial facilities. Other smaller facilities are scattered throughout the remainder of the East County.
4. Open Space. Agricultural uses, farmland, and particularly grazing land, consume most of the acreage in the East County. Crops are grown on broad coastal terraces and in narrow alluvial stream valleys, while cattle grazing and dry farming occur on the surrounding foothills. Recreation uses in East County include the Delta area and the Antioch shoreline; a recreation facility at Big Break; Black Diamond Mines and the Contra Loma Regional Park; plus others run by the East Bay Regional Park District.

3.6 PLANNED LEVELS OF DEVELOPMENT

METHODOLOGY

The analytical basis for determining the projected levels of development and land use was used consistently throughout other elements of this General Plan and is a modeling framework and database consisting of the following Elements:

- review of relevant data sources, including: summary of City and County General Plans; 1980, 1990, and 2000 Census data; ABAG "Projections 1985, 1987, 1990 1992, 1994, 2002; various map overlays depicting various environmental characteristics; and Contra Costa Land Information System, showing assessor parcel maps with building permit information;
- the County modeling program utilized the above sources for determining exact projects under construction, projects approved, projects proposed, and lists of vacant land and their zoning designation, for both city and County lands; and
- projecting to the year 2020, the model assigned "default" values to all vacant land uses not covered by projects in the cities and the County, and developed a potential estimate of demand for these land uses. This provided projected population, housing, and employment generation estimates.

PROJECTED DEMAND FOR CONVERSION OF LAND USES

This Land Use Element and the other elements of the General Plan reaffirm many of the goals and policies of the prior County plan and plan amendments that have been adopted incrementally over the years. The General Plan will accommodate an ultimate population of slightly more than one point one million persons.

The Growth Management Element, in regulating the timing of development to meet various infrastructure and facility standards, could affect whether the land use conversions set forth in the Element actually occur during the horizon of this General Plan. Development contemplated by this Land Use Element, even without possible timing delays caused by implementation of the Growth Management Element, would comply with the 65/35 Land Preservation Standard.

Table 3-2 shows the existing and projected population, number of households and employment for the County as a whole for 2000 and 2020.

TABLE 3-2
CONTRA COSTA COUNTY DEMOGRAPHIC PROJECTIONS

	2000	ABAG 2020	# Change	Percent Change
Population	948,816	1,128,800	179,984	18.9
Housing Units	344,129	428,870	68,760	24.6
Jobs	361,110	470,480	109,370	30.3
Employed Residents	483,898	647,500	163,602	33.8

Source: 2000 U.S. Census and ABAG's Projections 2002.

SUBAREA DEVELOPMENT SUMMARY

The Contra Costa County Land Use Element map is included at the back of this document. Note: The ability to develop under the land use designations shown on this Land Use Element Map could be affected by restrictions contained in the Growth Management Element, and many other factors.

As noted previously in Section 3.1, California planning laws advise counties to include incorporated cities within their General Plans, even though a county has land use jurisdiction only in the unincorporated areas. Thus, this General Plan covers all of Contra Costa County, and the following analysis includes the impacts of buildout of the 19 city plans.

RESIDENTIAL GROWTH

The Plan will, subject to compliance with growth management, the 65/35 standard, and other policies and standards, allow a significant amount of new housing development within the Urban Limit Line in the Dougherty Valley and Discovery Bay areas and smaller amounts of "in-fill" development in unincorporated Bay Point, Alamo, El Sobrante, Saranap, and other smaller unincorporated places.

West County

In North Richmond, hundreds of acres of vacant industrial land are expected to be developed or redeveloped during and after the planning period, now that completion of a major flood control and expressway project makes the area more attractive to investors.

East County

Much of the future growth in the County is planned for Pittsburg-Antioch-Oakley areas of East Contra Costa County. Approximately 10,500 new housing units are projected in the Pittsburg-Antioch-Bay Point area, between 2000 and 2010. Approximately 11,300 were built in this area between 1990 and 2000.

The remainder of East County includes the unincorporated Bethel Island, and Discovery Bay communities, as well as the Cities of Brentwood and Oakley. In this area, an additional 29,600 homes are projected by ABAG between 2000 and 2010 which would result in a population of about 97,800 more people by the year 2020.

Central County

While residential growth has been very strong in the central portion of the County through the 1980s, many of the cities along the I-680 corridor are now reaching "buildout," as the last remaining lands are developed. Housing growth will continue and at least 10,000 more units may be added in the North Central area. This plan continues the policies of the Pleasant Hill BART Station Specific Plan, which allows high-density commercial and residential development in that unincorporated area.

San Ramon Valley

Very large residential projects that were approved in the San Ramon Valley during the early 1980s have been built. However, Dougherty Valley may add up to 11,000 new homes over a twenty year period beginning in 1999.

COMMERCIAL/INDUSTRIAL GROWTH

In terms of future commercial and industrial growth, the General Plan is expected to result in the creation of approximately 109,370 new jobs between 2000 and 2020.

It should be noted that the job projections included in Table 3-2 assume that only a portion of the vacant lands planned for commercial or industrial uses will be developed during the planning period. The General Plan projections assume that market constraints and other factors will limit the amount of commercial and industrial development that is planned in the fast-growing East Contra Costa area. Thus, some of the job growth is not expected until after the 15-year planning period, during the second or third decades of this century.

THE URBAN LIMIT LINE AND LAND USES

It is imperative that the readers of this General Plan appreciate the interrelationship between the ULL, the 65/35 standard and the land use designations identified in this Land Use Element. The establishment of the ULL, community support for which was affirmed by the voters in their adoption of Measure C - 1990, is an integral feature of this Land Use Element. In general, the purpose of the ULL is twofold: (1) to ensure preservation of identified non-urban agricultural, open space and other areas by establishing a line beyond which no urban land uses can be designated during the term of the General Plan, and (2) to facilitate the enforcement of the 65/35 Land Preservation Standard.

To establish the location of the initial ULL, the County considered a number of criteria and factors. The factors for properties to be considered for location outside the ULL included: (1) land which qualifies for rating as Class I and Class II in the Soil Conservation Service Land Use Capability Classification; (2) open space, parks and other recreation areas; (3) lands with slopes in excess of 26 percent; (4) wetlands; and (5) other areas not appropriate for urban growth because of physical unsuitability for development, unstable geological conditions, inadequate water availability, the lack of appropriate infrastructure, distance from existing development, likelihood of substantial environmental damage or substantial injury to fish or wildlife or their habitat, and other similar factors. No one criterion was necessarily determinative of whether a property was located inside or outside the ULL. Where properties had characteristics that would locate them either inside or outside the ULL, the County, based upon the best information available at the time, weighed the competing characteristics and determined the most appropriate location for the property.

During the term of the General Plan, properties that are located outside the ULL may not obtain General Plan Amendments that would re-designate them for an urban land use. In addition, those properties outside the Urban Limit Line may be subject to various agricultural and open space preservation measures identified in the other portions of the General Plan. These measures could include the following: (1) permitting owners of large acre parcels to subdivide and sell off two one-acre parcels from their property that could be developed with one residential unit on each parcel; (2) encouraging the dedication of open space and conversation easements; (3) implementing a transfer of development rights (TDR) program; (4) requiring payment of an agricultural mitigation fee for conversion of agricultural land;

(5) promoting non-urban "preservation" agreements between the County and cities to prevent annexation by cities of certain appropriate properties; (6) promoting special legislation for preferential tax treatment for agricultural and open space lands; and (7) establishing an "agricultural soils trust fund" to fund possible purchase of easements or title to agricultural or open space lands. In general, the purpose of these measures is to preserve open space and agricultural lands and contribute to the continued economic viability of agricultural property. Inclusion of the measures in the General Plan does not necessarily mean that all or any of them is endorsed by the County. Actual implementation of any of the measures will require further study and analysis and implementation through appropriate zoning measures.

Properties that are located inside the ULL would be governed by the land use designations contained in the General Plan. These properties would continue to be subject to the goals, policies and implementation measures of the General Plan as a whole. The fact that a property is located inside the ULL provides no guarantee or implication that it may be developed during the lifetime of the General Plan. Development of property within the ULL would be restricted by the limitations imposed by the County's Growth Management Program, as well as by other General Plan limitations. In addition, those properties within the ULL that do not currently have land use designations that would permit urban development would have to apply for and obtain a General Plan Amendment re-designating the property with a land use designation permitting development. Moreover, even if land is developed within the Urban Limit Line, a substantial portion of this land shall be retained for non-urban uses such as open space, parks and recreational uses. These non-urban uses within the ULL shall be considered "non-urban" in monitoring the 65/35 Land Preservation Standard. This goal shall be applied within the ULL on a Countywide basis as it may be more or less applicable to various development projects within the ULL. Therefore, the only actual effect of locating a property within the ULL is that a General Plan Amendment may be considered for that property within the term of the General Plan, while no such application would be considered for property located outside the ULL.

CHANGES TO THE URBAN LIMIT LINE

There shall be no change to the ULL that would violate the 65/35 Land Preservation Standard. The ULL will only be able to be changed by a 4/5 vote of the Board of Supervisors after holding a public hearing and making one or more of the following findings based on substantial evidence in the record:

(a) a natural or man-made disaster or public emergency has occurred which warrants the provision of housing and/or other community needs within land located outside the ULL;

(b) an objective study has determined that the ULL is preventing the County from providing its fair share of affordable housing or regional housing as required by State law, and the Board of Supervisors finds that a change to the ULL is necessary and the only feasible means to enable the County to meet these requirements of State law;

(c) a majority of the cities that are party to a preservation agreement and the County have approved a change to the ULL affecting all or any portion of the land covered by the preservation agreement;

(d) A minor change to the ULL will more accurately reflect topographical characteristics or legal boundaries;

(e) an objective study has determined that a change to the ULL is necessary or desirable to further the economic viability of the east Contra Costa County Airport, and either (I) mitigate adverse aviation related to environmental or community impacts attributable to Buchanan Field, or (ii) further the County's aviation related needs;

(f) a change is required to conform to applicable California or federal law; or

(g) a five (5) year periodic review of the ULL has determined, based on the criteria and factors for establishing the ULL set forth above, that new information is available (from city or County growth management studies or otherwise) or circumstances have changed, warranting a change to the ULL.

Any General Plan amendment that would expand the ULL by more than 30 acres shall require voter approval of the proposed General Plan amendment following the public hearing and the four-fifths vote of the Board of Supervisors approving the General Plan amendment and making one or more of the findings set forth in subsections (a) through (g) above. Notwithstanding the foregoing, a proposed General Plan amendment to expand the ULL by more than 30 acres does not require voter approval if, after a public hearing, the Board of Supervisors by a four-fifths vote approves the General Plan amendment and makes either of the following findings based on substantial evidence in the record: (i) the expansion of the ULL is necessary to avoid an unconstitutional taking of private property; or (ii) the expansion of the ULL is necessary to comply with state or federal law. Expansion of the ULL totaling 30 acres or less does not require approval.

The Board of Supervisors may conduct a cyclical review of the ULL every five years.

The Board of Supervisors will review the boundary of the ULL in the year 2016. The purpose of the year 2016 review is to determine whether a change to the boundary of the County's Urban Limit Line Map is warranted, based on facts and circumstances resulting from the County's participation with the cities in a comprehensive review of the availability of land in Contra Costa County sufficient to satisfy housing and jobs needs for 20 years thereafter. This review of the ULL is in addition to any other reviews of the ULL the Board of Supervisors may conduct.

Any change to the ULL proposed as a result of any review authorized by this section must be adopted pursuant to the procedures set forth in this section. These provisions are effective until December 31, 2026.

The ULL is shown on Figure 3-1. A larger scale map showing the ULL and any changes to the ULL can be obtained from the County Conservation and Development Department. Table 3-3 shows the estimates of how the initial ULL relates to the 65/35 Land Preservation Standard in terms of acreage.

This percentage breakdown of land use translated to the acreage figures within and outside the ULL is provided in Table 3-3. The figures were developed by planimeter readings of the ULL as drawn on the Land Use Maps by the Contra Costa County Conservation and Development Department. They demonstrate that of the 481,430 acres in the County, 168,500 acres (35 percent) could be devoted to a maximum urban use under the interplay of the 65/35 standard with the ULL program. This would require future General Plan amendments. The calculations indicate that there are about 144,018 acres designated in the General Plan for urban use within the ULL, after deducting the existing 23, 982 acres of agricultural and open space land inside the ULL.

TABLE 3-3
CONTRA COSTA COUNTY
ESTIMATES OF URBAN LIMIT LINE
IN RELATION TO 65/35 LAND PRESERVATION STANDARD

A.	Total County Land Area (100 percent)		481,430	acres
B.	Minimum Non-Urban Land (65 percent)		312,930	acres
C.	Maximum Potential Urban Land (35 percent)		168,500	acres
D.	Total Land Area in Urban Limit Line (ULL)	219,000		
E.	- Dedicated to Open Space in ULL	(43,150)		
	- Dedicated to Agricultural Use in ULL	(26,720)		
F.	General Plan Urban Use in ULL		144,018	acres
G.	Maximum Potential Urban Conversion Acreage[1]		23,982	acres

1. If GPAs were approved, this is the maximum amount of land within the initial Urban Limit Line that could be converted to urban use.

65/35 Land Preservation Standard

The 65/35 Land Preservation Standard was a fundamental component of Measure C - 1990. The standard limits urban development in the County through at least the horizon of this General Plan to no more than 35 percent of the land in the County and requires that at least 65 percent of all land in the County shall be preserved for agriculture, open space, wetlands, parks and other non-urban uses. (For definitions, see Chapter 3.5) The Urban Limit Line works to enforce the 65/35 Land Preservation Standard and establish a line beyond which no urban land uses can be designated. The standard ensures that both within and outside the ULL, a maximum of not more than 35 percent urban development could occur in the County, irrespective of potential General Plan Amendments in the future. As described above, substantial portions of land to be developed within the ULL will be required for the open space, parks, recreation and other non-urban uses. The 65/35 standard operates on a Countywide basis and therefore includes urban and non-urban uses within cities as well as unincorporated areas.

ULL 65/35 Land Preservation Standard, Growth Management and LAFCO

In accordance with Measure C - 1990, LAFCO shall be advised by the County to (a) respect and support the County's 65/35 Preservation Standard, Urban Limit Line and growth management standards when considering requests for incorporation **or** annexation to cities or service districts, (b) apply the stricter growth management standards of either the County, the incorporating city or the annexing city or service district, when considering requests for incorporation or annexations of land to cities or service districts, and (c) require that unincorporated land located within the Urban Limit Line that is to be incorporated into a new city or annexed to a city be used to provide a fair share of affordable housing when and if such land is developed.

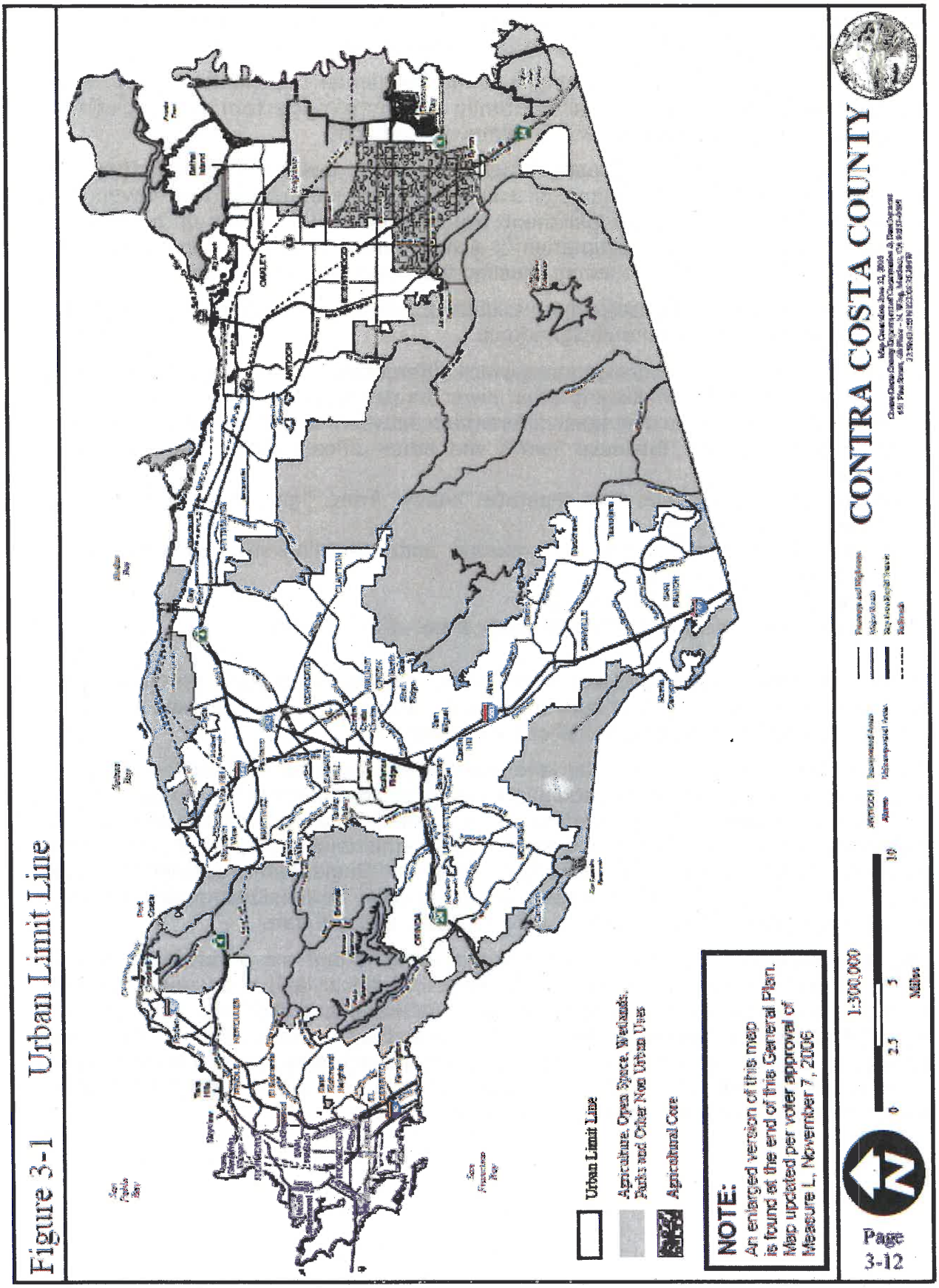


Figure 3-1 Urban Limit Line
CONTRA COSTA COUNTY
Urban Limit Line
Agriculture, Open Space, Wetlands, Parks and Other Non Urban Uses
Agricultural Core
NOTE:
An enlarged version of this map is found at the end of this General Plan.
Map updated per voter approval of Measure L, November 7, 2006
1:300,000
0 2.5 5 10
Miles
Page 3-12

3.7 LAND USE DESIGNATIONS - RESIDENTIAL DENSITY AND LAND USE INTENSITY

The following section describes the 32 land use designations which are used in this General Plan and on the accompanying Land Use Element map.

The Plan includes four different single family residential designations, and seven multiple family designations. The single family categories range from a density of rural residences on one-acre lots up to 7.3 homes per net acre.

The Plans of multiple family (usually attached housing) designations range from low density townhouses, condominiums or trailer homes at a density of over seven units per net acre up to very dense apartment projects that could contain up to 100 units per acre. A multiple family designation is also included to describe congregate care projects at defined densities (senior housing with some shared facilities).

The largely commercial/industrial non-residential, job-generating land uses specified in this General Plan include nine designations:

- four commercial (retail) designations which differentiate between regional-oriented, large-scale shopping malls and other lower-density retail centers;
- two office designations that again differentiate between large-scale, master planned office parks (called "Business Park") and other office buildings or clusters of buildings ("Office");
- two industrial categories that separate "heavy" from "light" manufacturing and wholesaling processes;
- a special category applied to marina and shoreline-oriented retail uses ("Commercial Recreation");
- a category for Airport Commercial;
- a "Mixed Use" category applied in many areas of the County;

In addition, there is a "Public and Semi-Public" category and eight categories that differentiate between types of non-urban uses, including rural, open space, parks, outdoor recreation, and agricultural-oriented uses.

Table 3-4 lists the 32 General Plan land use designations and the densities that are associated with each. The designations are closely related to the density requirements defined in the County's Zoning Ordinance, and are continuous, without gaps, across the density range. For example, the density requirements of units per net acre for the Single Family Residential - Very Low (0.2 - 0.9) and Single Family Residential - Low (1.0 - 2.9) mean that the very low designation will allow for densities ranging from 0.2 units per net acre up to but not including 1.0 units per net acre.

The densities of the General Plan's residential designations are generally defined in terms of housing units per net acre. Net acreage includes all land area used exclusively for residential purposes, and excludes streets, highways, and all other public rights-of-way. Net acreage for residential densities is assumed to constitute 75 percent of gross acreage for all uses, except for the multiple family designations, where it is assumed to comprise 80 percent. However, actual measurements used on an application may be based on analysis of the proposed development site plan.

TABLE 3-4
SUMMARY OF GENERAL PLAN
LAND USE DESIGNATIONS

Abbreviation On Land Use Map		Units Per Net Acre[1]
	SINGLE-FAMILY RESIDENTIAL	
SV	Very Low	0.2 - 0.9
SL	Low	1.0 - 2.9
SM	Medium	3.0 - 4.9
SH	High	5.0 - 7.2
	MULTIPLE-FAMILY RESIDENTIAL	
ML	Low	7.3 - 11.9
MM	Medium	12.0 - 20.9
MH	High	21.0 - 29.9
MV	Very High	30.0 - 44.9
MS	Very High-Special	45.0 - 99.9
CC	Congregate Care-Senior Housing	N/A
MO	Mobile Home	1.0 - 12.0
	COMMERCIAL/INDUSTRIAL	Floor Area Ratio[2]
RC	Regional Commercial	(subject to city plans)
CO	Commercial	0.1 - 1.0
ACC	Airport Commercial	0.1 - 1.5
OF	Office	0.1 - 1.5
BP	Business Park	0.25 - 1.5
LI	Light Industry	0.25 - 0.67
HI	Heavy Industry	0.1 - 0.4
CR	Commercial Recreation	0.1 - 1.0
M1, etc.	Mixed Use (M1, M2, M3, etc.)	varies (see text)
LC	Local Commercial	varies (see text)
MC	Marina Commercial	varies (see text)
	OTHER	
PS	Public and Semi-Public	
LF	Landfill	
BA	Off-Island Bonus Area	0.2
	OPEN SPACE	
PR	Parks and Recreations	
OS	Open Space	
AL	Agricultural Lands	0.2
AC	Agricultural Core	0.025
DR	Delta Recreation	0.05
WA	Water	
WS	Watershed	

[1] Net acreage includes all land area used exclusively for residential purposes, and excludes streets, highways, and all other public rights-of-way. Net acreage is assumed to constitute 75% of gross acreage for all uses, except for the Multiple Family designations, where it is assumed to comprise 80%.

[2] Floor area ratio is calculated by dividing building square footage by lot size.

When calculating the allowed density of a parcel, readers should keep in mind that unique environmental characteristics may justify a reduced number of units or intensity of use than is normally allowed under the General Plan designation. Notwithstanding this caveat, one single-family residential unit is allowed on any existing, legally created lot designated in all residential and open space categories. Variances from the minimum lot size and dimensional requirements are provided for in the County Zoning Ordinance, in accordance with State law.

The commercial and industrial General Plan categories are defined in terms of floor area ratio (FAR). The FAR is calculated by dividing the square footage of a building by the square footage of its lot. Thus, a structure composed of 10,000 square feet constructed on a 20,000 square foot lot has a FAR of 0.5.

Table 3-5 summarizes the relationship between the land use designations used in this General Plan and the zoning districts defined in the County's current Zoning Ordinance. The table outlines which specific zoning districts are already consistent with each General Plan designation and those which might be considered consistent with the Plan category, depending on the particular use.

TABLE 3-5
CONSISTENCY BETWEEN THE GENERAL PLAN AND THE ZONING ORDINANCE

General Plan Land Use Designation	Zoning Ordinance Districts[1]	
	Consistent	Could be Consistent[2]
Single Family Residential		
-Very Low Density	R-40, R-65, R-100	P-1, all A districts
-Low Density	R-15, R-20, R-40	P-1, all A districts
-Medium Density	R-10, R-15	P-1, all A districts
-High Density	R-6, R-7, R-10, D-1	P-1, all A districts
Multiple Family Residential		
-Low Density	R-6, D-1, T-1, M-6, M-9	P-1
-Medium Density	T-1, M-9, M-12, M-17	P-1
-High Density	M-17, M-29	P-1
-Very High Density	M-29	P-1
-Very High Density-Special	P-1	
-Congregate Care-Senior Housing	P-1	
Mobile Home	T-1	P-1
Regional Commercial	C, O-1	P-1, R-B
Commercial	C, C-B, R-B, N-B,	P-1
Local Commercial	C, R-B, N-B	P-1
Marina Commercial	C, R-B	P-1
Airport Commercial	P-1	P-1
Office	O-1, A-O	P-1
Business Park	C-M, A-O	C C, P-1
Light Industry	L-I	C, P-1
Heavy Industry	L-I, H-I, W-3	C, P-1
Commercial Recreation[3]	C, C-B, N-B,	R-B, P-1
Mixed Use	P-1	all R, all M, all C and O, LI, P-1, Public and Semi-Public
Public and Semi-Public		all
Parks and Recreation	all A districts	all
Open Space	all A districts	P-1
Agricultural Lands	all A districts	P-1
Agricultural Core	A-40, A-80	P-1
Delta Recreation	A-20, A-40, A-80	P-1
Water		P-1
Watershed	all A districts	P-1
Landfill	A-2	P-1

[1] This inventory presumes that four antiquated zoning districts will be deleted from the County Zoning Ordinance: F-R (Forestry-Recreation); U (Unrestricted); F-1 (Water Recreational); and A-1 (Light Agriculture).

[2] The zoning districts listed under the "Could be Consistent" column could be found consistent with the General Plan designation under certain circumstances, depending upon the specific use that is proposed.

[3] A new district should be added to the Zoning Ordinance which would allow commercial uses specifically related to waterfront areas.

For example, R-6 and R-7 zoning districts (which require a minimum lot size for new housing units of 6,000 and 7,000 square feet, respectively) are already consistent with the General Plan category of "Single-Family Residential-High Density," because the zoning falls within the density mandated by the Plan designation (5.0 to 7.2 units per net acre). The County's Planned Unit (P-1) zoning district could be considered consistent with any of the General Plan designations. When considering standards referenced in Table 3-5 and in the category definitions, the P-1 district is intended to allow flexibility in the relationship of various buildings, structures, lot sizes, and open spaces while ensuring compliance with the General Plan and County codes and standards that protect public health, safety and the general welfare of the County. The County Conservation and Development Department shall determine plan compliance to standards found in this plan, without exceeding the total density or intensity of the project site as a whole, as specified in the General Plan.

The County Ordinance Code specifies a range of uses which are allowed by right or through the granting of a land use permit within each zoning district. A major implementation measure included in this plan calls for the County Ordinance Code to be reviewed and revised to ensure that the provisions of the code conform to the intent and spirit of the Plan. However, as a matter of County policy, the staff reports prepared for all applications shall discuss whether the application complies with the spirit and intent of this updated General Plan. In instances where consistency between allowable uses under current zoning and the General Plan cannot clearly be determined (due to scope, scale or use), use permit applications shall either be denied or directed to apply for a rezoning.

RESIDENTIAL USES

The General Plan map utilizes ten designations of residential use, four of which describe single family densities and seven describe multiple family densities. The abbreviation in parentheses following the name of each land use designation is a code used on the General Plan land use map to identify the areas so designated.

The following two criteria define residential land use categories:

- housing units per net acre (excluding the area required for local streets and other public uses, which is assumed to consume approximately 25 percent of the gross single-family and 20 percent of the multi-family residential area); and
- the population density range (persons per net acre) which is associated with the category.

The prohibitions on attached or detached structures found within the residential plan categories can be modified if found to be appropriate, to comply with the General Plan intent, and to respond to site environmental factors but only if considered through use of the Planned Unit District Zoning process.

It should be noted that the Planned Unit Development ordinance is intended to provide flexibility of site design, building massing, setbacks, height, etc. As indicated in Table 3-5 and discussed above, Planned Unit Development projects may be approved in any of the land use categories, provided that the overall density of the project is within the range specified in that category.

The residential land use designations are as follows:

a. Single-Family Residential-Very Low Density (SV).

This designation allows a maximum of up to 0.9 single family units per net acre. No maximum site area per unit is defined. With an average of 2.5 persons per household, population density would normally range between one to three persons per acre.

Primary land uses which shall be permitted in this designation include detached single-family homes and accessory structures, and the keeping of a limited number of livestock, consistent with a rural lifestyle. Secondary uses generally considered to be compatible with very low density homes may be allowed, including home occupations, small residential care and childcare facilities, churches and other similar places of worship, secondary dwelling units and other uses and structures incidental to the primary uses.

b. Single-Family Residential-Low Density (SL).

This designation allows a range of 1.0 and 2.9 single family units per net acre. Sites can be as large as 43,560 square feet. Unique environmental characteristics of a parcel may justify larger lot sizes. With an average of 2.5

persons per household, population densities would normally range from about two to about 7.5 persons per acre.

Primary land uses which shall be permitted in this designation include detached single-family homes and accessory structures. Secondary uses generally considered to be compatible with low density homes may be allowed, including home occupations, small residential care and childcare facilities, churches and other similar places of worship, secondary dwelling units, and other uses and structures incidental to the primary uses.

c. Single-Family Residential-Medium Density (SM).

This designation allows between 3.0 and 4.9 single family units per net acre. Sites can range up to 14,519 square feet. With an average of 2.5 persons per household, population densities would normally range from about 7.5 to about 12.5 persons per acre.

Primary and secondary land uses which shall be permitted in this category are the same as above in (b).

d. Single-Family Residential-High Density (SH).

This designation allows between 5.0 and 7.2 single family units per net acre. Sites can range up to 8,729 square feet. With an average of 2.5 to 3 persons per household, population densities would normally range from about 12.5 to about 22 persons per acre.

Primary and secondary land uses which shall be permitted in the Single Family Residential-High Density designation are the same as above in (b). In addition, in specified areas of the County with conventional zoning, attached single family units (duplexes or duets) may be allowed.

e. Multiple-Family Residential-Low Density (ML).

This designation allows between 7.3 and 11.9 multiple family units per net acre. Sites can range up to 5,999 square feet. With an average of 2.5 persons per unit, population densities would normally range between about 18.5 to about 30 persons per acre.

Primary land uses shall include attached single-family residences (such as duplexes or duets), multiple family residences such as condominiums, town houses, apartments, mobile home parks, and accessory structures normally auxiliary to the primary uses. Secondary land uses which do not conflict with primary uses may be allowed, including churches, second dwelling units, home occupations, and group care and/or childcare facilities.

f. Multiple-Family Residential-Medium Density (MM).

This designation allows between 12.0 and 21.9 multiple family units per net acre. Sites can range up to 3,349 square feet. With an average of 2.5 persons per unit, population densities would normally range between about 30 to about 55 persons per acre.

g. Multiple-Family Residential-High Density (MH).

This designation allows between 22.0 and 29.9 multiple family units per net acre. Sites can range up to 1,979 square feet. With an average of 2.5 persons per unit, population densities would normally range from about 55 to about 75 persons per acre.

Primary and secondary land uses permitted in the designation are the same as in (e) above.

h. Multiple-Family Residential-Very High Density (MV).

This designation allows between 30.0 and 44.9 multiple family units per net acre. Sites and can range up to 1,451 square feet. With an assumed average of 2 persons per unit, population densities would normally range from about 60 to about 90 persons per acre.

Primary land uses shall include multiple family residences such as condominiums, apartments, and accessory structures normally auxiliary to the primary uses. Secondary land uses which do not conflict with primary uses may be allowed, including second dwelling units, home occupations, and group care and/or childcare facilities.

i. Multiple-Family Residential-Very High Special Density (MS).

This designation allows between 45.0 and 99.9 multiple family units per net acre. Sites can range up to 967 square feet. With an average of 2.0 persons per unit, population densities would normally range from about 90 to about 200 persons per acre.

Primary land uses shall include multiple family residences such as condominiums, apartments, and accessory structures normally auxiliary to the primary uses. Secondary land uses which do not conflict with primary uses may be allowed, including second dwelling units, home occupations, and group care and/or childcare facilities.

j. Multiple-Family Residential-Congregate Care (CC).

The density and uses allowed in this General Plan designation are limited specifically to those senior housing with shared facility projects outlined in the text of the individual plan amendments that are adopted for these uses.

k. Mobile Homes (MO).

This designation allows between one and 12 mobile home units per net acre. Minimum site size is 3 acres for a mobile home park and minimum lot size is 2,500 square feet. With an average of 1.8 persons per unit, population densities would normally range from 1.8 to 21.6 persons per acre.

l. Off-Island Bonus Area

A bonus density is identified in the off-island area of the Bethel Island planning area east of Jersey Island Road. The base density of this area is 1 dwelling unit per 5 acres. This density shall be increased through the bonus program if the applicant participates in one of the following programs:

Recreational Projects. Residential projects which include a distinct, identifiable recreational character by including substantial recreational facilities shall be allowed a density of 1.0-2.9 units per net acre. Recreational amenities may include marinas or launching areas off the project site on Sandmound or Rock Sloughs, a lake community, a sailing/boating club on a project lake, an equestrian facility, a tennis club or golf course.

Purchase of Development Rights. The development rights for one acre increments of land in the County with an Agricultural Land designation may be purchased and dedicated to the County to increase the base density up to ½ dwelling unit per net acre. Acquiring development rights in one acre increments of land in the County with an Agricultural Core designation will increase the base density up to a maximum of 3 dwelling units per net acre. A program for acquisition of development rights shall be implemented by the Conservation and Development Department.

CONGREGATE CARE

This category allows for the development of clustered residential units for the location of senior citizen congregate care housing projects. While this is a specific County general category, it is adopted with unique criteria for each site it is applied to. Those special criteria are:

- Perma-Built Congregate Care

The site has been developed as a congregate care facility in the Walnut Creek area and was operational in 1991.

COMMERCIAL/OFFICE/INDUSTRIAL USES

This General Plan designates eight non-residential, job-generating land use activities. The designations are described in terms of uses allowed; the maximum coverage that a building may occupy on the parcel; the maximum floor area ratio; and the average number of employees per gross acre that could be expected.

a. Commercial (CO).

This designation allows for a broad range of commercial uses typically found in smaller scale neighborhood, community and thoroughfare commercial districts, including retail and personal service facilities, limited office and financial uses. The following standards shall apply to uses in this designation:

(1)	maximum site coverage:	40 percent
(2)	maximum building height:	35 feet
(3)	maximum floor area ratio:	1.0
(4)	average employees per gross acre:	160 employees

b. Regional Commercial (RC).

This designation allows large centers of commercial land use concentrations, including regional shopping malls and similar uses, with retail, personal service, financial and associated facilities, and hospitals. There are no regional commercial areas within the unincorporated County. The standards which apply to these areas are outlined in the respective city General Plans and zoning ordinances:

(1)	maximum site coverage:	(subject to city plans)
(2)	maximum building height:	(subject to city plans)
(3)	maximum floor area ratio:	(subject to city plans)
(4)	average employees per gross acre:	(subject to city plans)

c. Local Commercial (LC)

The local Commercial designation in the Bethel Island Area allows for the continued maintenance of the existing commercial core along Bethel Island Road, at both ends of the bridge. Land uses under this designation shall support existing businesses and further the variety of services and retail products available to the residents and visitors. Limited local commercial may be considered in other portions of the off-island area if incorporated into a residential community.

d. Marina Commercial (MC)

Land uses with a Marina Commercial designation in the Bethel Island Area shall be tied directly to water-oriented activities such as boat sales, repairs, storage, fishing supplies and water skiing.

e. Commercial Recreation (CR)

This designation allows a range of privately operated recreational uses of a commercial character, including marinas and similar facilities, campgrounds, golf courses, outdoor sports and athletic complexes. The following standards apply to these areas:

(1)	maximum site coverage:	40 percent
(2)	maximum building height:	35 feet
(3)	maximum floor area ratio:	1.0
(4)	average employees per gross acre:	15 employees

f. Airport Commercial (ACC)

This category reflects commercial uses that could stand separate from the airport, but serve to support the airport function. The Sheraton Inn and adjacent lands are found within this designation.

(1)	maximum site coverage:	30 percent
(2)	maximum building height:	40 feet
(3)	maximum floor area ratio:	0.67
(4)	average employees per gross acre:	45 employees

g. Office (OF)

This designation allows office facilities of an administrative character including branch and head offices, multi-tenant structures and similar uses, and medical offices. The following standards apply:

(1)	maximum site coverage:	40 percent
(2)	maximum building height:	50 feet
(3)	maximum floor area ratio:	1.5
(4)	average employees per gross acre:	100 employees

h. Business Park (BP)

This designation allows a mix of commercial, office, and light industrial uses which, by the high quality of their development and the nature of their operations, demonstrate compatibility with adjacent commercial and residential uses. In addition, smaller commercial establishments which serve on-site employees such as business services and local-serving retail uses are allowed. Adherence to landscaping, buffering and design standards provides the means for achieving a high level of amenity for employees and neighboring uses. The following standards apply:

(1)	maximum site coverage:	40 percent
(2)	maximum building height:	60 feet
(3)	maximum floor area ratio:	1.5
(4)	average employees per gross acre:	100 employees

i. Light Industry (LI)

This designation allows light industrial activities such as processing, packaging, machinery repair, fabricating, distribution, warehousing and storage, research and development, and similar uses which emit only limited amounts of smoke, noise, light, or pollutants. The following standards apply:

(1)	maximum site coverage:	50 percent
(2)	maximum building height:	50 feet
(3)	maximum floor area ratio:	0.67
(4)	average employees per gross acre:	60 employees

j. Heavy Industry (HI)

This designation allows activities requiring large areas of land with convenient truck and rail access. These uses are typically not compatible with residential uses in close proximity and the operations conducted may be characterized by noise or other conditions requiring spatial separation. Uses may include metalworking, chemical or petroleum product processing and refining, heavy equipment operation and similar activities. Light industrial land uses will be allowed within lands designated Heavy Industrial and they can be developed according to light industrial definition and standards found in that designation. The following standards apply:

(1)	maximum site coverage:	30 percent
(2)	maximum floor area ratio:	0.67
(3)	average employees per gross acre:	45 employees

MIXED USES

This General Plan utilizes a "Mixed Use" land use designation. All mixed use areas are shown on the land plan map with an M designation. For unincorporated mixed-use areas, an abbreviation of M and a specific reference numbers is used (M1, M2, etc.). There are numerous mixed-use areas found in City General Plans or city designations which do not fit easily into County general plan designations; these are simply shown as "M" without a reference number. The appropriate city plan needs to be referenced for more detailed information. The Mixed Use designations employed in the unincorporated areas are described below:

The purpose of the mixed use designation is to provide for the integration in a single project of both residential and commercial/office uses. In the mixed use category housing is specifically permitted but not required.

a. Parker Avenue Mixed Use (M1).

The Parker Avenue Mixed Use district in Rodeo (M1 on the Land Use map) represents the revival of a once common concept: the placement of residential units over street level businesses. This designation applies to properties along a portion of Parker Avenue, and behind them along the flood control channel. Due to the limited frontage dimensions of existing parcels, it will be necessary to consolidate properties to create at least 100 feet of continuous frontage on Parker Avenue as a prerequisite for retail or office uses in this area. Without such consolidation, parcels will be restricted to multiple family residential uses in the high density residential ranges.

Additional development guidelines that are to be applied to projects proposed in this area are included under the "Policies for the Rodeo Area" in this chapter.

b. Downtown/Waterfront Rodeo Mixed Use (M2).

Mixed Use – Downtown/Waterfront Rodeo. This mixed use area encourages the revitalization of downtown Rodeo through efforts to concentrate commercial/office uses into logical groupings and to provide for economic reuse of the area through the provision of multiple family residential housing (primarily townhouses) structures.

The Rodeo Waterfront/Downtown Specific Plan will provide added detail to the implementation of this mixed use area and provide for Design Guidelines for downtown Rodeo.

c. Pleasant Hill BART Mixed Use (M3).

The Pleasant Hill BART station Mixed Use District (M3 on the Land Use map) applies to three sub-areas defined by the Pleasant Hill BART Station Specific Plan. The mixed use areas are located generally south of Las Juntas Way.

Specific development guidelines for these areas are included in the "Policies for the Pleasant Hill BART Station Area" section in this chapter.

d. Willow Pass Road Mixed Use (M4).

The Willow Pass Road Mixed Use Corridor designation ("M4" on the Land Use map) has been applied to many properties on either side of Willow Pass Road. A range of neighborhood shopping, residential, and office uses are permitted in this designation to stimulate the upgrading and redevelopment of properties. Development guidelines that are to be applied to projects proposed in this area are included under the "Policies for the Bay Point Area" section of this chapter.

e. Willow Pass Road Commercial Mixed-Use (M-5).

The Willow Pass Road Commercial Mixed-Use designation ("M-5" on the Land Use map) has been applied to properties on the south side of Willow Pass Road, west of Bailey Road in the Pittsburg/Bay Point BART Station Area Specific Plan area. The intent of this designation is to create a Neighborhood Commercial District as a focal point of the Bay Point Community. It is further intended that the area should be pedestrian-oriented district with adequate parking, with its placement subservient to the shopping uses orientation to Willow Pass Road. Uses within the area are intended to serve residents who live nearby or are passing by from the greater neighborhood.

f. Bay Point Residential Mixed-Use (M-6).

The Residential Mixed-Use designation ("M-6" on the Land Use map) has been applied to properties in the southeast quadrant of the State Route 4/Bailey Road intersection in the Pittsburg/Bay Point BART Station Area. The intent of this designation is to encourage moderately high density, residential development which takes advantage of the area's close proximity to both the BART Station and Ambrose Park. Limited commercial uses are intended as secondary to the residential development and oriented to providing goods and services to neighborhood residents and visitors to Ambrose Park.

g. Pittsburg/Bay Point BART Station Area Mixed-Use (M-7).

The Pittsburg/Bay Point BART Station Area Mixed-Use designation ("M-7" on the Land Use map) has been applied to property on the southwest quadrant of the State Route 4/Bailey Road intersection in the Pittsburg/Bay Point BART Station Area, as described in the plans adopted by the City of Pittsburg.

Other General Plan designations included within the Specific Plan area include the following:

- Multiple-Family Residential-Medium Density (MM): This density allows between 12.0 and 21.9 multiple-family units per net acre. Sites can range up to 3,349 s. ft. With an average of 2.5 persons per unit, population densities would normally range between about 30 and 55 persons per acre.
- Multiple-Family Residential-High Density (MH): This density allows between 22.0 and 29.9 multiple-family units per net acre. Sites can range up to 1,979 s. ft. With an average of 2.5 persons per unit, population densities would normally range from about 55 to about 75 persons per acre.
- Commercial (CO): This designation allows for a broad range of commercial uses typically found in smaller scale neighborhood, community and thoroughfare commercial districts, including retail and personal service facilities, limited office and financial uses.

- Public and Semi-Public (PS): As the title implies, the "Public and Semi Public" designation includes properties owned by public governmental agencies such as libraries, fire stations, schools, etc. This designation is also applied to public transportation corridors (freeways, highways, and BART), as well as privately owned transportation and utility corridors such as railroads, PG&E lines and pipelines.
- Parks and Recreation (PR): The "Parks and Recreation" designation includes publicly-owned city, district, County and regional parks facilities, as well as golf courses, whether publicly or privately owned. Appropriate uses in the designation are passive and active recreation-oriented activities, and ancillary commercial uses such as snack bars, and restaurants. The Specific Plan policies allow for the construction of multi-family residences on areas designated Park and Recreation, subject to the preparation of a master plan.

h. Dougherty Valley Village Center Mixed Use (M-8).

This Mixed-Use designation identifies approximately 42 acres for the Village Center located at the confluence of the two main branches of Alamo Creek. This Mixed-Use category will permit a combination of high density residential, retail and office uses, civic uses, parks, playas, and open space. Within the Village Center portions of the project densities up to 40 units per net acre will be allowed. Up to 680,000 square feet of retail/office/civic uses could be allowed in the Village Center.

i. Montalvin Manor Mixed Use (M-9)

The Montalvin Manor Mixed Use designation applies to two sites located at the intersection of Tara Hills Drive and San Pablo Avenue a site consisting of one parcel at the northeast corner of the intersection and a site consisting of two parcels at the southeast corner of the intersection. A range of neighborhood retail, residential, and office uses are permitted in this designation to stimulate the upgrading and redevelopment of the properties.

The site at the northeast corner of the intersection of Tara Hills drive and San Pablo Avenue is one parcel (APN: 403-030-005) comprising approximately 13 acres. The mixed use designation is intended to encourage the mix of both residential and neighborhood retail uses on this site. Residential uses could include a range of multi-family or single-family residential uses, including but not limited to a mobile home park and senior housing. As a general guide the permitted density for multi-family residential development on this site should be within the range of 12 to 20.9 units to the acre, comparable to the Multiple Family Residential – Medium Density (MM) designation under the General Plan.

It is acknowledged that the site is bisected by Garrity Creek a riparian corridor that presents potential constraints to site development which may further limit development density. To the extent feasible, the development of neighborhood retail on the site should be oriented toward San Pablo Avenue. As a general guide the permitted density for single family residential development on this site shall be comparable to the single family high designation in the range of 6,000 to 7,000 square foot lots.

The site at the southeast corner of the intersection Tara Hills Drive and San Pablo Avenue is approximately 3 acres on two parcels (APN: 403-202-011/012). The mixed use designation is intended to encourage the mix of both residential and neighborhood retail uses on this site. Residential uses could include a range of multi-family or single-family residential uses. As a general guide the permitted density for multi-family residential development on this site should be

within the range of 7.3 to 11.9 units to the acre, comparable to the Multiple Family Residential – Low Density (ML) designation under the General Plan. To the extent feasible, the development of neighborhood retail on the site should be oriented toward San Pablo Avenue.

j. Willow Pass Business Park Mixed Use (M-10)

The Willow Pass Business Park Mixed-Use designation has been applied to a group of properties known as the Lesher and Steuli properties located on Evora Road, immediately east of the Contra Costa Canal and north of the intersection of Evora Road/Willow Pass Road. The intent of this designation is to create a broad-based commercial development that allows for the establishment of a wide range of light industrial, retail, office and service-oriented uses. Development on this site is limited to 357,500 square feet in a ratio of uses stated in the approved Preliminary and Final Development Plan (County File #DP043096) and Major Subdivision (County File #SD048918) permit. This designation does not apply to the 15.42-acre "Frito-Lay" properties."

k. Appian Way General Mixed Use (M-11)

The Appian Way General Mixed Use designation applies to select parcels along Appian Way. This mixed use designation is not intended to apply to sites where there is already established a public or private institutional use (e.g. church or private school), or to those locations where there is already an existing multiple family residential building (e.g. apartments and senior housing) or to those locations that may have physical development constraints (e.g. close proximity to a creek).

The purpose of the designation is to enable Appian Way to develop into a unified, well designed neighborhood, rather than an incremental accumulation of unrelated developments, by providing opportunities for the integration of both residential and commercial uses in a single development. The range of commercial uses under this designation are those that are typically found in a neighborhood retail district, including a retail shop on a single parcel; or, a shopping area offering a range of local serving retail and personal services. In addition to retail shops, the allowable commercial uses under this designation would include professional offices, business services, and restaurants.

The emphasis for the commercial use component under this mixed use designation shall be on neighborhood serving uses, or those uses that would serve the El Sobrante community. Residential is specifically permitted but it is not required under this designation. Residential uses may include duplexes, apartments, condominiums, townhouses or attached or detached single-family residences (in compliance with P-1 design criteria, to be adopted), senior or congregate care housing, and live work quarters. Creative mixing of types of residential development will be encouraged.

Building(s) may be located close to street frontage with windows and entries facing Appian Way. Building(s) may be clustered on the site towards street corners to maximize street frontage. The retail and/or commercial uses should be located along ground floor street frontages although offices for professional and business services may be located above retail use. The residential component should be located above or in the rear of commercial frontage. Surface parking should be located behind commercial frontage. This designation also strongly encourages the consolidation of parcels along those segments of Appian Way where mixed use is to be encouraged so as to provide an improved development footprint and combined access and parking areas.

Building height and mass under this designation should maintain a low profile with a height limit up to 27 feet to preserve a view corridor and the suburban-to-rural character of El Sobrante. However, a maximum building height up to 35 feet for a mixed use development may be allowed when the following findings can be made: (1) the building height will not create substantial shading or adversely affect the privacy of nearby properties; (2) the building height, shape, and massing will not unduly restrict view potential from other properties to a view corridor; (3) there is variation in the mass and height of building(s) and the building roofline will be such that the overall building height and mass will not be out of character with the pattern of suburban-to-rural development in El Sobrante; and, (4) when there are several parcels under multiple ownership, a well-coordinated design has been prepared which substantially meets the findings listed above and has been agreed upon by the affected property owners. Visual documentation of the relationship of the proposed mixed use building(s) height to existing adjacent buildings shall be provided to illustrate how the building height and massing would relate to the Appian Way corridor in making findings to allow building height in excess of 27 feet.

Density under the Appian Way General Mixed Use (M-11) designation is a follows: Residential use - attached dwelling units at a maximum density up to 8 units per net acre.[1] Commercial use – 0.1 to 1.0 Floor Area Ratio (FAR).[2]

I. Triangle Area Mixed Use (M-12)

The Triangle Area Mixed Use (M-12) designation applies to select parcels along Appian Way, Valley View Avenue, and Sobrante Avenue which form a triangular block in El Sobrante known as the Triangle area. This mixed use designation is not intended to apply to sites where there is already established a public or private institutional use (e.g. church or private school), or to those locations where there is already an existing multiple family residential building (e.g. apartments and senior housing). The Triangle block itself will remain under the Commercial (CO) designation, and residential use will not be permitted.

The purpose of this designation is to maintain the Triangle Area as a distinct neighborhood retail district while providing opportunities for the integration of both residential and commercial uses in a single development in limited and selected block locations. The range of commercial uses under this designation are those that are typically found in a neighborhood retail district, including a retail shop on a single parcel; or, a shopping area offering a range of local serving retail and personal services. In addition to retail shops, the allowable commercial uses under this designation would include professional offices, business services, and restaurants. The emphasis for the commercial use component under this mixed use designation shall be on neighborhood serving uses, or those uses that would serve the El Sobrante community. Residential is specifically permitted but only in limited and selected block locations and only when included in a commercial development. Residential is not required under this designation. Residential uses may include duplexes, apartments,

[1] Net acreage is calculated at 80% of a lot's land area. It is the portion of a site that can actually be built upon. Typically public or private roadway, public open space, creek setback and flood zones, are not included in the calculation of net acreage.
[2] The gross floor area of all building on a lot divided by the lot area, expressed in decimals to one to two places.

condominiums, townhouses or attached or detached single-family residences (in compliance with P-1 design criteria, to be adopted), and live work quarters. Residential units will only be approved if safe walking and recreational opportunities can be made available. New residential developments will not rely on major thoroughfares (Appian Way and Valley View Road) for parking access, but rather will have ingress and egress on feeder streets.

Building(s) should be located close to street frontage with windows and entries facing the street. Building(s) may be clustered on the site towards street corners to maximize street frontage. The retail and/or commercial uses should be located along ground floor street frontages although offices for professional and business services may be located above retail use. Where allowed, the residential use component should be located above or in the rear of commercial frontage. Surface parking should be located behind commercial frontage. This designation also strongly encourages the consolidation of parcels so as to provide an improved development footprint and combined access and parking areas.

Building height and mass under this designation should maintain a low profile with a height limit up to 27 feet to preserve a view corridor and the suburban-to-rural character of El Sobrante. However, a maximum building height up to 35 feet for a mixed use development may be allowed when the following findings can be made: (1) the building height will not create substantial shading or adversely affect the privacy of nearby properties; (2) the building height, shape, and massing will not unduly restrict view potential from other properties to a view corridor; (3) there is variation in the mass and height of building(s) and the building roofline will be such that the overall building height and mass will not be out of character with the pattern of suburban-to-rural development in El Sobrante; and, (4) when there are several parcels under multiple ownership, a well-coordinated design has been prepared which substantially meets the findings listed above and has been agreed upon by the affected property owners. Visual documentation of the relationship of the proposed mixed use building(s) height to existing adjacent buildings shall be provided to illustrate how the building height and massing would relate to the Appian Way corridor in making findings to allow building height in excess of 27 feet.

Density under the Triangle Mixed Use (M-12) designation is as follows: Residential use – attached dwelling units at a maximum density up to 8 units per net acre.[1] Commercial use – 0.1 to 1.0 Floor Area Ratio (FAR). [2]

m. San Pablo Dam Road Mixed Use (M-13)

The San Pablo Dam Road Mixed Use (M-13) designation applies to select parcels along San Pablo Dam Road between El Portal Drive and Appian Way. This mixed use designation is not intended to apply to sites where there is already established a public or private institutional use (e.g. church or private school), or to those locations where there is already an existing multiple family residential building (e.g. apartments and senior housing), or to those locations that may have physical development constraints (e.g. close proximity to a creek). The purpose of this designation is to promote the revitalization of El Sobrante's commercial core along the section of San Pablo Dam Road between El Portal Drive and Appian Way in order to develop into a unified, well designed pedestrian oriented retail district. Simultaneously, this will also provide the

opportunity to integrate both residential and commercial uses in a single development. The range of commercial uses under this designation are those that are typically found in a neighborhood retail district, including a retail shop on a single parcel; or, a shopping area offering a range of local serving retail and personal services. In addition to retail shops, the allowable commercial uses under this designation would include professional offices, business services, and restaurants. The emphasis for the commercial use component under this mixed use designation shall be retail or service uses that serve the El Sobrante community and that promote the development of a pedestrian and bicycle friendly retail district.

This mixed use designation envisions a town square or pedestrian plaza for the block along San Pablo Dam Road between Hillcrest Avenue and Pitt Way which contains the Mechanics Bank. It is intended that this town square or plaza would be developed in conjunction with a new collector street connecting Pitt Way to Hillcrest Avenue so as to improve local circulation and parking. The town square or plaza would include a public parking area allowing pedestrians to easily access commercial and public uses in the town square/plaza. This designation also strongly encourages the consolidation of parcels along those segments of San Pablo Dam Road where mixed use is to be designated so as to provide an improved development footprint and combined driveway access and parking areas.

While residential is specifically permitted, it is not required under this designation. The development of a residential component under this mixed use designation is contingent upon resolving parking and access issues, including the new collector street that would connect Pitt Way to Hillcrest Avenue. Residential uses may include duplexes, apartments, condominiums, townhouses or attached single-family residences (in compliance P-1 design criteria, to be adopted), senior or congregate care housing, and live work quarters.

Building(s) should be located close to street frontage with windows and entries facing the street. Building(s) may be clustered on the site towards street corners to maximize street frontage. The retail and/or commercial uses should be located along ground floor street frontages although offices for professional and business services may be located above retail use. The residential component should be located above or in the rear of commercial frontage. Surface parking should be located behind commercial frontage. Residential parking lots should empty onto feeder streets, rather than San Pablo Dam Road.

Building height and mass under this designation should generally maintain a low profile in order to preserve a view corridor and the suburban-to-rural character of El Sobrante. While the existing 50 foot building height limit will be retained under this mixed use designation, as currently allowed under the Retail-Business District (RB) zoning, visual documentation of the relationship of the proposed mixed use building(s) shall be provided to illustrate how the building height, mass, or shape would relate to the El Sobrante community's interest in preserving a view corridor or maintaining the suburban-to-rural character.[2]

Density under the San Pablo Dam Road Mixed Use (M-13) designation is as follows: Residential use - attached dwelling units at a maximum density up to 12 units per net acre.[1] Commercial use – 0.1 to 1.0 Floor Area Ratio (FAR).[2]

PUBLIC, SEMI-PUBLIC, LANDFILL AND OPEN SPACE USES

A total of eight land use designations have been defined for these uses. These include open space, agricultural, and recreational uses, as well as public/semi-public uses such as schools; public offices; highways and major flood control rights-of-way; and railroads. These use designations generally comprise non-urban uses under the 65/35 Land Preservation Standard.

(a) Public and Semi-Public (PS).

As the title implies, the "Public and Semi-Public" designation includes properties owned by public governmental agencies such as libraries, fire stations, schools, etc. This designation is also applied to public transportation corridors (freeways, highways, and BART), as well as privately owned transportation and utility corridors such as railroads, PG&E lines, and pipelines. The largest properties in this category are those of the U.S. Naval Weapons Station in Concord and Port Chicago.

A wide variety of public and private uses are allowed by this General Plan category. However, the construction of private residences or private commercial uses and the subdivision of land are not considered compatible with this designation.

(b) Agricultural Lands (AL).

This land use designation includes most of the privately owned rural lands in the County, excluding private lands that are composed of prime soils or lands that are located in or near the Delta. Most of these lands are in hilly portions of the County and are used for grazing livestock, or dry grain farming. The category also includes non-prime agricultural lands in flat East County areas, such as outside Oakley, which are planted in orchards. Some of the Agricultural Lands east of Oakley and Byron are included in the 100-year flood plain, as mapped by the Federal Emergency Management Agency (FEMA).

The purpose of the Agricultural Lands designation is to preserve and protect lands capable of and generally used for the production of food, fiber, and plant materials. The title is intended to be descriptive of the predominant land-extensive agricultural uses that take place in these areas, but the land use title or description shall not be used to exclude or limit other types of agricultural, open space or non-urban uses such as landfills, except as noted below in the descriptions of "Agricultural Core," "Delta Recreation and Resources," "Watershed," "Parks and Recreation," and "Open Space." The maximum allowable density in this category is one dwelling unit per 5 acres.

The uses that are allowed in the Agricultural Lands designation include all land-dependent and non-land dependent agricultural production and related activities. In addition, the following uses may be allowed by issuance of a land use permit, which shall include conditions of approval that mitigate the impacts of the use upon nearby agricultural operations through the establishment of buffer areas and other techniques:

- facilities for processing agricultural products produced in the County such as dairies, rendering plants, and feed mills;
- commercial agricultural support services which are ancillary to the agricultural use of a parcel, such as veterinarians, feed stores, and equipment repair and welding; and
- small-scale visitor serving uses including small tasting rooms, stands for the sale of products grown or processed on the property, guest or "dude" ranches, horse training and boarding ranches, improved

campgrounds, and "bed and breakfast" inns of five or fewer bedrooms which are on lots of 20 acres or more, extensive recreational facilities and private retreats.

The following standards shall apply to all uses allowed in the Agricultural Lands designation:

(1) Any subdivision of lands shall include conditions of approval which conform with the requirements of the "Ranchette Policy," which is outlined in the "Agricultural Resources" section of the Conservation Element (Chapter 8); and

(2) Residential and non-residential uses proposed in areas of special flood hazards, as shown on FEMA maps, shall conform to the requirements of the County Floodplain Management Ordinance (County Ord. #87-45) and the further requirements outlined in the "Delta Recreation" section (d) (5) below.

(c) Agricultural Core (AC).

This designation applies to agricultural lands that are composed primarily of prime (Class I or II) soils in the Soil Conservation Service Land Use Capability Classifications, which are considered the very best soils for farming a wide variety of crops. Lands designated as Agricultural Core are located in East County outside the ULL to the east, south, and west of the City of Brentwood. Much of the land in this designation is under active cultivation of intensive row crops, such as tomatoes and other vegetables. A portion of the Agricultural Core lands are included within the 100-year flood zone, as identified by the U.S. Federal Emergency Management Agency (FEMA).

The purpose of the Agricultural Core designation is to preserve and protect the farmlands of the County which are the most capable of, and generally used for, the production of food, fiber, and plant materials. Agricultural operations in the Agricultural Core shall, in accordance with Measure C - 1990, be protected by requiring a higher minimum parcel size than the Agricultural Lands designation, to attempt to maintain economically viable, commercial agricultural units. The creation of small uneconomical units will be discouraged by land use controls and by specifically discouraging minor subdivisions and "ranchette" housing development.

The uses that are allowed in the Agricultural Core designation are the same as those allowed, without the issuance of a land use permit, in the Agricultural Lands designation, specified above. Except for wineries and olive oil mills, each of which typically includes tasting rooms and a limited retail sales area, none of the uses described as conditional uses in the Agricultural lands designation are considered appropriate in the Agricultural Core designation. A land use permit for a winery in conjunction with a planted vineyard, or olive oil mill in conjunction with a planted orchard, may be issued for a parcel of 5 acres or greater and upon a determination that such agricultural processing facilities and their accessory uses will not conflict with the goal of preserving and protecting the prime farmlands in the Agricultural Core. This Plan discourages the placement of public roadways or new utility corridors which would adversely affect the viability of the Agricultural Core if economically feasible alternatives exist.

Residential uses are allowed in the Agricultural Core according to the following standards (in accordance with Measure C - 1990):

(1) the maximum permitted residential density shall be one unit per 40 acres;

(2) subdivision of land which would create a cluster of "ranchette" housing is inconsistent with this plan; and

(3) residential and non-residential uses proposed in areas of special flood hazards, as shown on FEMA maps, shall conform to the requirements of the County Floodplain Management Ordinance (County Ord. #87-45) and the further requirements outlined in the "Delta Recreation and Resources" section (d) (5) below.

(d) Delta Recreation and Resources (DR).

This land use designation encompasses the islands and adjacent lowlands of the San Joaquin-Sacramento Delta, excluding Bethel Island and the community of Discovery Bay which have separate land use designations on the Land Use Map. Most of the lands designated Delta Recreation and Resources are within the 100-year flood plain mapped by FEMA, which means that the area is subjected to periodic flooding. Many of the Delta islands, and the tracts adjacent to the Delta, are currently in agricultural production of dry grains and other special crops suited to the soils and climate, such as asparagus. There are limited public water or sewer services currently available to the area.

The serious flooding danger in the area is due to the possibility that bay and river waters will overtop the existing levees during periods of storms or other high water, as well as the possibility that portions of the earthen levees may fail entirely during storms or earthquakes, resulting in the inundation of whole islands or tracts. The flooding danger is exacerbated by the effects of subsidence (sinking of Delta islands) and the rising of global sea waters caused by the "greenhouse effect." In recent years, during 1973, 1980, 1983, and 1986 one or more Delta island levees failed or were overtopped, and some of these were summer breaks that did not occur at a time of high storm runoff. Some islands in the Delta have been flooded two or three times since 1980. Upper Jones Island, in adjacent San Joaquin County, flooded in the summer of 2004.

Additionally, lands within this designation include lands with valuable wildlife habitat, some of which support species of ecological value to the County and the State. These areas are an important component of the Pacific Flyway, a major waterfowl migration route in North America.

Public preservation of portions of these resources is encouraged by this plan. Private utilization of the resources for hunting and fishing is appropriate, if the activities do not harm the long-term resource value of the Delta.

Due to their proximity to the Delta waterways, these lands have potential recreational value. The purpose of the Delta Recreation and Resources designation is to balance the recreational opportunities of the area against the need to allow only low intensity uses which will not subject large numbers of residents or visitors to flood dangers. Agriculture and wildlife habitat is to be considered the most appropriate uses in the area, with limited recreation uses allowed which do not conflict with the predominant agricultural and habitat uses.

The primary uses that are allowed in the Delta Recreation and Resources designation are those agricultural production and processing activities allowed in the Agricultural Lands designation, listed in section (b) above.

Additional uses that may be allowed through the issuance of a land use permit include: marinas, shooting ranges, duck and other hunting clubs, campgrounds, and other outdoor recreation complexes.

Conditional uses allowed in the Delta Recreation and Resources designation shall be limited to those low- to medium-intensity establishments that do not rely on urban levels of service or infrastructure, i.e., a public water or sewer system, and

which will not draw large concentrations of people to flood-prone areas. Uses allowed within areas designated for Delta Recreation and Resources shall be subject to the following standards:

(1) the maximum permitted residential density shall be one unit per twenty acres;
(2) all recreational uses shall be accessible by a publicly maintained road;
(3) any subdivision of lands shall include conditions of approval which conform with the requirements of the "Ranchette Policy," which is outlined in the "Agricultural Resources" section of the Conservation Element;
(4) development shall not be permitted on lands designated by FEMA as flood-prone until a risk assessment and other technical studies have been prepared and have shown that the risk is acceptable;
(5) all approved entitlements (land use permits, tentative, final, and parcel maps, development plan permits, and variances) and ministerial permits (building and grading permits) shall conform to the requirements of the Floodplain Management Ordinance (County Ord. #87-45), which are incorporated into this General Plan by reference;
(6) all entitlements shall include conditions of approval which require that a "flood-prone area" notification statement be included in the deeds for all affected properties. The same notification statement shall be recorded on the face of all subdivision maps, along with the specific elevations that will be required of all new building pads and habitable floors; and
(7) dock and marina standards as described in policy 3-48.

(e) Watershed (WS).

Areas designated "Watershed" in this General Plan includes much of land owned by the two major water suppliers in the County, the East Bay Municipal Utility District (EBMUD) and the Contra Costa Water District (CCWD). EBMUD property designated as "Watershed" surrounds the Lafayette, Briones, San Pablo, and Upper San Leandro Reservoirs (which are in a separate "Water" designation). Other EBMUD lands designated in this designation are located north and south of the Caldecott Tunnel and along Pinole Valley Road. CCWD lands placed in the "Watershed" designation category include properties acquired for the proposed Los Vaqueros reservoir in the southeastern portion of the County.

In order to safeguard the public water supplies stored in the reservoirs, only a very limited number of uses are allowed in "Watershed" areas. These uses include extensive agriculture, primarily grazing of livestock; intensive agriculture that does not rely upon pesticides or other chemical fertilizers, such as Christmas tree farming; passive, low intensity recreational uses such as hiking and biking, as well as small-scale commercial uses that support picnicking, boating, and fishing activities on the adjacent reservoirs.

(f) Open Space (OS).

This General Plan designation includes publicly owned, open space lands which are not designated as "Public and Semi-Public," "Watershed," or "Parks and Recreation." Lands designated "Open Space" include, without limitation, wetlands and tidelands and other areas of significant ecological resources, or geologic hazards.

The "Open Space" designation also includes privately owned properties for which future development rights have been deeded to a public or private agency. For example, significant open space areas within planned unit developments identified as being owned and maintained by a homeowners association fall under this designation. Also included are the steep, unbuildable portions of approved

subdivisions which may be deeded to agencies such as the, EBRPD but which have not been developed as park facilities. Other privately owned lands have been designated as "Open Space" consistent with adopted city General Plans.

The most appropriate uses in "Open Space" areas involve resource management, such as maintaining critical marsh and other endangered habitats or establishing "safety zones" around identified geologic hazards. Other appropriate uses are low intensity, private recreation for nearby residents. The construction of permanent structures, excluding a single-family residence on an existing legally established lot, not oriented towards recreation or resource conservation, is inconsistent with this open space designation. One single family residence on an existing legal lot is consistent with this designation.

(g) Parks and Recreation (PR).

The "Parks and Recreation" designation includes publicly owned city, district, County and regional parks facilities, as well as golf courses, whether publicly or privately owned.

Appropriate uses in the designation are passive and active recreation- oriented activities, and ancillary commercial uses such as snack bars, and restaurants. The construction of new privately owned residences or commercial uses, and the subdivision of land, is inconsistent with this General Plan designation.

(h) Water (WA).

This designation is applied to approximately 68 square miles of water in the San Francisco-San Pablo Bay and Sacramento-San Joaquin River estuary system which is within the County. The designation is also applied to all large inland bodies of water such as reservoirs.

Uses allowed in the "Water" designation area include transport facilities associated with adjacent heavy industrial plants, such as ports and wharves; and water-oriented recreation uses such as boating and fishing.

The construction of new residences or commercial uses and the subdivision of land are inconsistent with this General Plan designation.

(i) Landfill (LF).

"LF" designates sites for public or private landfills. Landfills and related uses are allowed in LF areas. A use permit shall be required to develop a landfill. Uses in any buffer areas within an LF designation shall be limited to landfill-related uses, open space uses, and agricultural uses.

Prior to landfill development, open space or agricultural uses allowed by the AL designation are allowed in LF areas. After a landfill is closed, these AL uses, plus monitoring and other necessary or desirable post-closure activities, are allowed.

To satisfy the requirements for building intensity and population density standards, the following provisions apply to areas designated for landfills: (a) one landfill shall be allowed within each LF area; (b) no new residential units shall be allowed; and (c) accessory buildings shall be limited to a maximum of three stories in height (excluding towers or antennae relating to landfill operation). These provisions are maximums, and the actual height of any landfill facilities shall be set forth in the use permit and accompanying plans. The specific dimensions of each landfill will depend upon the features of the designated site, and must be determined in considering a use permit for the landfill.

The LF designation also implements Section F(2) of the Board of Supervisors' 65/35 Land Preservation Plan, approved by the County voters as Measure C in November 1990. Section F(2) provides that facilities for public purposes are a non-urban use allowed outside the Urban Limit Line.

3.8 LAND USE GOALS, POLICIES AND IMPLEMENTATION MEASURES

GOALS

The following broad goals form the basis from which the County's land use policies and implementation measures, presented later in this chapter, are derived. In the following goals, policies and implementation measures, note that when the word "urban" is employed (as in the phrase "urban development" and "urban uses"), the broad definition of the word is intended. This broad definition is the definition of Measure C - 1990 used to distinguish between the maximum of 35 percent of the County land that can be used for urban development and the 65 percent minimum of land in the County that must be preserved for agriculture, open space, wetlands, parks and other non-urban purposes.

This broad definition of "urban" is in contrast to the more restrictive use of the word "urban" in the Growth Management Program, which is included in Chapter 4. These more restrictive definitions were used in Measure C - 1988 solely for information and guidance in applying traffic service standards for growth management.

3-A To coordinate land use with circulation, development of other infrastructure facilities, and protection of agriculture and open space, and to allow growth and the maintenance of the County's quality of life. In such an environment all residential, commercial, industrial, recreational and agricultural activities may take place in safety, harmony, and to mutual advantage.

3-B To provide opportunities for increasing the participation of Contra Costa County in the economic and cultural growth of the region, and to contribute to, as well as benefit from, the continued growth in importance of the Bay Region and the State of California.

3-C To encourage aesthetically and functionally compatible development which reinforces the physical character and desired images of the County.

3-D To provide for a range and distribution of land uses that serve all social and economic segments of the County and its subregions.

3-E To recognize and support existing land use densities in most communities, while encouraging higher densities in appropriate areas, such as near major transportation hubs and job centers.

3-F To permit urban development only in locations of the County within identified outer boundaries of urban development where public service delivery systems that meet applicable performance standards are provided or committed.

3-G To discourage development on vacant rural lands outside of planned urban areas which is not related to agriculture, mineral extraction, wind energy or other appropriate rural uses; discourage subdivision down to minimum parcel size of rural lands that are within, or accessible only through, geologically unstable areas; and to protect open hillsides and significant ridgelines.

3-H To adopt and implement an innovative Countywide Growth Management Program which effectively links land use policy with transportation and other infrastructure improvements.

3-I To coordinate effectively the land use policies of the County General Plan with those plans adopted by the cities and special service districts.

3-J To encourage a development pattern that promotes the individuality and unique character of each community in the County.

3-K To develop a balance between job availability and housing availability with consideration given to wage levels, commute distance and housing affordability. The individual characteristics of the several subregions of the County and their interaction with other regions shall be considered when establishing criteria for delivering that balance.

3-L To safeguard the County's obligations to provide its fair share of safe, decent and affordable housing.

3-M Protect and promote the economic viability of agricultural land.

3-N To coordinate effectively the policies of the Land Use Element with appropriate Local Agency Formation Commission (LAFCO) determinations.

POLICIES

Countywide

The following are broad, Countywide policies which apply to all properties. More detailed development policies for specific areas in the County are found in the "Local Plan Policies" section at the end of this chapter.

Jobs/Housing Balance

3-1. Housing infill shall be supported and stimulated where the jobs/housing ratio shows an overabundance of jobs to housing.

3-2. Job infill shall be supported and stimulated where the jobs/housing ratio shows an overabundance of housing to jobs.

3-3. As feasible, areas experiencing rapid urban growth shall be developed so as to provide a balance of new residential and employment opportunities.

3-4. Financing mechanisms shall be developed which spread the costs of facilitating jobs/housing balance between existing and new development.

Growth Management, 65/35 Land Plan, and Urban Limit Line

3-5. New development within unincorporated areas of the County may be approved, providing growth management standards and criteria are met or can be assured of being met prior to the issuance of building permits in accordance with the growth management.

3-6. Development of all urban uses shall be coordinated with provision of essential Community services or facilities including, but not limited to, roads, law enforcement and fire protection services, schools, parks, sanitary facilities, water and flood control.

3-7. The location, timing and extent of growth shall be guided through capital improvements programming and financing (i.e., a capital improvement program, assessment districts, impact fees, and developer contributions) to prevent infrastructure, facility and service deficiencies.

3-8. Infilling of already developed areas shall be encouraged. Proposals that would prematurely extend development into areas lacking requisite services, facilities and infrastructure shall be opposed. In accommodating new development, preference shall generally be given to vacant or under-used sites within

urbanized areas, which have necessary utilities installed with available remaining capacity, before undeveloped suburban lands are utilized.

3-9. Areas not suitable for urban development because of the lack of availability of public facilities shall remain in their present use until the needed infrastructure is or can be assured of being provided.

3-10. The extension of urban services into agricultural areas outside the Urban Limit Line, especially growth-inducing infrastructure, shall be generally discouraged

3-11. Urban uses shall be expanded only within an Urban Limit Line where conflicts with the agricultural economy will be minimal.

3-12. Preservation and buffering of agricultural land should be encouraged as it is critical to maintaining a healthy and competitive agricultural economy and assuring a balance of land uses. Preservation and conservation of open space, wetlands, parks, hillsides and ridgelines should be encouraged as it is crucial to preserve the continued availability of unique habitats for wildlife and plants, to protect unique scenery and provide a wide range of recreational opportunities for County residents.

3-13. Promote cooperation between the County and cities to preserve agricultural and open space land.

3-14. Protect prime productive agricultural land from inappropriate subdivisions.

Community Identity and Urban Design

3-15. The design of new buildings and the rehabilitation of existing buildings shall reflect and improve the existing character of the commercial districts in the County.

3-16. Community appearance shall be upgraded by encouraging redevelopment, where appropriate, to replace inappropriate uses.

3-17. Opportunities shall be provided for retaining, enhancing and diversifying the cultural activities available to the County.

3-18. Flexibility in the design of projects shall be encouraged in order to enhance scenic qualities and provide for a varied development pattern.

3-19. Buffers shall be provided between new industrial developments and residential areas by establishing setbacks, and park-like landscaping or other appropriate mechanisms.

3-20. Where new electrical transmission lines are proposed, they should be developed parallel to existing transmission lines to the extent feasible. Mitigation of the environmental impact of building these facilities should be in close proximity to the area of impact.

Residential Uses

3-21. The predominantly single family character of substantially developed portions of the County shall be retained. Multiple-family housing shall be dispersed throughout the County and not concentrated in single locations. Multiple-family housing shall generally be located in proximity to facilities such as arterial roads, transit corridors, and shopping areas.

3-22. Housing opportunities for all income levels shall be created. Fair affordable housing opportunities should exist for all economic segments of the County.

3-23. A diversity of living options shall be permitted while ensuring community compatibility and quality residential development.

3-24. Housing opportunities shall be improved through encouragement of distinct styles, desirable amenities, attractive design and enhancement of neighborhood identity.

3-25. Innovation in site planning and design of housing developments shall be encouraged in order to upgrade quality and efficiency of residential living arrangements and to protect the surrounding environment.

3-26. Efforts to maintain and rehabilitate existing dwelling units in established neighborhood areas shall be supported.

3-27. Existing residential neighborhoods shall be protected from incompatible land uses and traffic levels exceeding adopted service standards.

3-28. New residential development shall be accommodated only in areas where it will avoid creating severe unmitigated adverse impacts upon the environment and upon the existing community.

3-29. New housing projects shall be located on stable and secure lands or shall be designed to mitigate adverse or potentially adverse conditions. Residential densities of conventional construction shall generally decrease as the natural slope increases.

Business and Employment Uses

3-30. A variety of appropriately-sized, well-located employment areas shall be planned in order that industrial and commercial activities can contribute to the continued economic welfare of the people of the County and to the stable economic and tax bases of the County and the various cities.

3-31. Employment centers in the County area shall be designed to be compatible with the nature of the surrounding area.

3-32. Commercial areas of appropriate size and location shall be provided to accommodate the needs of the present and anticipated population in each subregion or community of the County.

3-33. Well-defined commercial areas oriented to community shopping shall be provided in the County.

3-34. Local shopping facilities shall be distributed and spaced at intervals to accommodate the requirements of residential neighborhoods, minimize travel times, and reduce energy costs.

3-35. The limits of business areas shall be established, where practical, by the use of boundaries set by creeks, major roads, significant changes in topography, and other physical features in order to avoid conflicts and provide a buffer between commercial and nearby residential uses.

3-36. New areas of strip commercial development shall be discouraged except as provided in this plan. ("Strip commercial" shall be generally defined as commercial development of shallow depth limited to the parcels fronting on a street and extending in a linear manner for a considerable distance.)

3-37. New local convenience shopping shall generally be located at the intersections of major streets and highways. Such uses shall be discouraged on more than two corners of an intersection.

3-38. Business and professional office development shall be encouraged in areas designated for commercial land use within shopping areas and where a transition or buffer use is appropriate between commercial and residential areas.

3-39. Existing employment areas shall be improved to create better pedestrian circulation, bicycle paths and adequate parking.

3-40. Adaptive reuse of structures (i.e., remodeling or upgrading original commercial and industrial buildings) shall be encouraged.

3-41. The continuing orderly development of research facilities, regional offices, and light industrial uses shall be encouraged in designated areas in order to improve the economic base and provide local employment.

3-42. Industrial development shall be concentrated in select locations adjacent to existing major transportation corridors and facilities.

3-43. Industrial employment centers shall be designed to be unobtrusive and harmonious with adjacent areas and development.

3-44. Industries which employ the skills of County residents shall be encouraged to locate within the County.

3-45. The development of agriculturally related industries which will enhance the continued productivity of agriculture shall be encouraged.

3-46. Water-oriented recreation uses shall be permitted in East County provided that such development is compatible with the Delta's unique ecology.

IMPLEMENTATION MEASURES

The following specific measures should be implemented in order to carry out the land use goals and policies outlined in this chapter. The major implementation measure for this plan is a Growth Management Program, a 65/35 Preservation Standard and a ULL. The programs are described earlier in this Land Use Element (see Chapter 3.6) and in Section 4, Growth Management Element. (To the extent implementation measures referenced earlier in Chapter 3.6 are identified, they are incorporated into this list of land use implementation measures.)

Overall Measures

3-a. Revise the County Zoning Ordinance and other ordinances to conform with the land use designations included in this General Plan, e.g., delete the F-R, U, A-1, and F-1 zoning districts; create a new Commercial Recreation district.

3-b. During project review, require that proposed uses on the edges of land use designations be evaluated to ensure compatibility with adjacent planned uses.

3-c. Where appropriate, require the dedication of deeded development rights to the County (or cooperate in dedication to other public agencies) for lands to be protected as open space.

3-d. Review proposed land development projects for consistency with land use designations and relevant policies and standards of each Element of the General Plan.

3-e. Review proposed amendments to the General Plan to ensure continued internal consistency among the Elements.

3-f. The County shall conduct a study of minimum parcel sizes in agricultural districts needed to implement General Plan policies and adopt such parcel sizes.

Jobs/Housing Balance

3-g. Adopt land use regulations which allow mixed-use developments as a mechanism for achieving a jobs/housing balance.

3-h. Require staff reports on development applications for residential developments of 100 or more units to address the impact of that development upon the subregional jobs/housing balance.

3-i. Require staff reports on development applications for commercial, light industrial and office developments of more than 10,000 square feet or generating 25 or more jobs to address the impact of that development upon the subregional jobs/housing balance.

3-j. Provide incentives to encourage the construction of affordable housing in areas where few such opportunities exist and significant employment centers exist or are proposed.

Growth Management, 65/35 Plan and Urban Limit Line

3-k. Institute the Growth Management Program described in Section 4, taking into account fiscal constraints in accordance with Measure C - 1988. Enforce traffic level of service (LOS) standards and performance standards for fire, police, parks, sanitary facilities, water, and flood control.

3-l. Prepare and adopt a five-year capital improvement and financing program for the purpose of meeting or maintaining traffic service and facilities performance standards for fire, police, parks, sanitary facilities, water and flood control.

3-m. Review and amend as necessary all adopted fee schedules to ensure that they meet the cost of planned improvements. In conjunction with the County's CEQA mitigation monitoring program, assess and monitor mitigation measures and consider adopting other development mitigation programs as needed to ensure that development is paying its share of the costs associated with new growth.

3-n. Work with the Contra Costa Transportation Authority to determine what specific situations merit a "finding of special circumstances" under Measure C - 1988, requiring additional mitigation and/or exemption from traffic standards.

3-o. Seek funds to maintain and expand a Countywide comprehensive transportation model for the purpose of monitoring Countywide traffic service levels and other infrastructure.

3-p. Maintain the 65/35 Land Preservation Standard and devise a means of tracking urban and non-urban development and uses in the cities and unincorporated areas.

3-q. Maintain and enforce the ULL in accordance with the terms of this Land Use Element and Measure C - 1990. Incorporate the ULL into the County's Open Space Conservation Plan.

3-r. Perform an initial review of the ULL and a five (5) year periodic review of the ULL to determine whether changes are warranted, as described in this Land Use Element.

3-s. Establish standards and policies designed to protect the economic viability of agricultural land which may include, but not necessarily be limited to, preservation agreements, conservation easements, clustering, and establishment of agricultural mitigation fees.

3-t. Enforce the restrictions on open hillsides and significant ridgelines in the Open Space Element and protect hillsides with a grade of 26 percent or greater through implementing zoning and other appropriate measures and actions.

3-u. To the extent feasible, enter into preservation agreements with cities designed to preserve land for agriculture, open space, wetlands or parks.

3-v. To the extent legally permitted, advise LAFCO to (a) respect and support the County's 65/35 Preservation Standard, Urban Limit Line and growth management standards when considering requests for incorporation or annexation to cities or service districts, (b) apply the stricter of the growth management standards of either the County, the incorporating city or the annexing city or service district, when considering requests for incorporation or annexations of land to cities or service districts, and (c) require unincorporated land located within the Urban Limit Line that is included in the incorporation of a new city or annexed to a city to provide a fair share of affordable housing when and if such land is developed.

Community Identity and Urban Design

3-w. Within the Urban Limit Line, maintain visual separations between communities where the opportunity still exist.

3-x. Promote, devise and maintain appropriate development/redevelopment themes, including design review criteria to provide community identities for the commercial districts of unincorporated communities in the County.

3-y. Amend the County Code to included design review of development projects as a function of the Planning Commission.

3-z. Initiate and enforce, if necessary, specific development standards for both proposed and existing businesses to achieve appropriate landscaping, design and sign structures.

Residential Uses

3-aa Amend the R-40 district to require a minimum lot size of 43,560 square feet; create new multiple family district(s).

3-ab Periodically review and update the Housing Element of this General Plan, to ensure that it accommodates a variety of housing types and prices throughout the County.

Business and Employment Uses

3-ac Stimulate increased quantities and different types of local economic development and employment growth through the adoption and implementation of a comprehensive economic development strategy for communities within the County.

3-ad Identify and target suitable growth industries for future contacts to encourage their establishment within the County.

3-ae Expand and pursue joint ventures between the County, cities, and private sector which attract appropriate economic development into economically depressed areas of the County.

3-af Delineate precise boundaries for central commercial districts to protect adjacent residential areas and prevent thoroughfare (strip) commercial development patterns.

3-ag Require new commercial development to provide separate parking areas or contribute to community parking facilities.

3-ah Develop and implement a specific strategy for providing additional off-street public parking in the central commercial districts.

3-ai Stimulate the sound economic development of the County by participating in efforts to coordinate industrial development policies with relevant private and public agencies.

3-aj Define auto-dismantling activity in the County Zoning Ordinance as an industrial use, and confine its future development to designated industrial areas.

Pedestrian and Bicycle Facilities

3-ak Review and revise all commercial districts defined in the Zoning Ordinance to ensure that the regulations do not allow uses in the districts that are inconsistent with this General Plan.

3-al Refer to the Transportation and Circulation Element of this General Plan and related policy guidance of its Specific Plans, to ensure that the pedestrian and bicycle facilities are routinely accommodated in land use development.

3-am With the assistance of appropriate advisory bodies, periodically review and update the Open Space Element of the General plan, to reflect the network of non-motorized pedestrians, bicycle and equestrian facilities in the County.

3-an To the extent feasible, require new residential and commercial developments to provide pedestrian and bicycle facilities within the development.

3-ao When appropriate residential and commercial developments should contribute to off-site improvements of pedestrian and bicycle facilities to ensure safe and efficient connections from the development to major destination areas.

POLICIES FOR SPECIFIC GEOGRAPHIC AREAS

There are adopted policies for specific geographic areas of the County which need to be referenced in addition to the countywide policies and implementation measures discussed throughout this plan. The areas for which these policies exist are shown on Figure 3-2 entitled "Unincorporated Communities with Adopted Area Policies." The policies for the areas shown on Figure 3-2 are as follows:

POLICIES FOR THE EAST COUNTY AREA

Land Use

The following policies shall guide development in the East County Area:

3-47. This Plan directs most of the residential and commercial growth that is anticipated to occur in the unincorporated East County area during the planning period into the Oakley community, with smaller amounts of recreation-oriented development allowed on Bethel Island.

3-48. Docks and marinas permitted by the implementing zoning district shall be considered for approval in certain designated Delta Recreation areas based upon the following criteria:

(a) where projects can be clustered and located adjacent to similar uses;
(b) along waterways having an adequate channel width as defined by the State Harbors and Navigation Code;
(c) in areas having adequate public vehicular access;
(d) where off-site improvements, such as required access roads, can be assigned to development;
(e) where adequate on-site sewage disposal can be provided;
(f) where located in an area served by a public fire protection district; and
(g) where such uses will not conflict with adjacent agricultural uses.

3-49. The density and development of single family homes in the East County area, in lands designated for residential or other urban uses, shall be related to service availability criteria, as defined below"

Service Availability	Minimum Allowable Parcel Size
No public water or sewer connection available.	5 acres
One public service (sewer or water) connection available.	1 acre
Both public water and sewer connections available.	Minimum parcel size consistent with the specified General Plan densities, as well as drainage, health, and other applicable standards.

Transportation

3-50. Restrict access on to State Route 4 and within those areas designated for residential development.

3-51. Improve existing interchanges and establish new interchanges over State Route 4 by developing plans in coordination with Caltrans and the Cities of Pittsburg, Antioch and Brentwood.

3-52. Encourage the State to incorporate the Delta Expressway into the State Highway System as a bypass to State Route 4 and upgrade the facility to a freeway.

3-53. The County shall encourage the expansion of regularly scheduled transit service and express bus service to urbanizing areas east of Antioch.

POLICIES FOR THE PRIMARY ZONE OF THE DELTA

3-54. All public and private management and development activities within the Primary Zone of the Delta shall be consistent with the goals, policies and provisions of the "Land Use and Resource Management Plan" for the Primary Zone of the Delta as adopted and as may be amended by the Delta Protection Commission.

POLICIES FOR THE BETHEL ISLAND AREA

The Bethel Island Area is comprised of on- and off-island areas (Hotchkiss Tract). The two areas differ with respect to soils, topographic and geographic conditions, and levee stability. As a result, different development and planning considerations must be given to each area. The on-island area consists of weak, organic soils that underlie the perimeter levee system, provides limited opportunities for evacuation in the event of a levee failure, is generally below sea level and subsiding, and provides limited opportunities for safe disbursement of flood water because it is a small island closed by levees. In the off-island area, on the other hand, the soil is sandy and less subject to subsidence, the elevation is higher, the levee system is in an improved condition and not as long, there are several evacuation alternatives, it is part of the mainland, and disbursements of flood waters are not artificially contained such that internal systems around new development will not adversely affect existing residences and structures in the flood plain. The concept for the Bethel Island Area is to preserve and enhance the rural and recreational quality of the unique area, while providing opportunities for additional residential and commercial growth tied to water-oriented recreation. The following policies shall guide development in the Bethel Island Area:

3-55. The approval of new development shall be limited to 2,909 primarily recreation-oriented units in the off-island area (i.e., 3,000 additional units including the 91 units already approved, but not yet built).

3-56. New residential development in the on-island area shall be limited at this time to approved development and one dwelling unit per parcel.

3-57. Additional residential density in the on-island area may be considered through subsequent amendment at the discretion of the Board of Supervisors, provided at least the following are accomplished:

(a) a financing mechanism is fully and completely assured for improvements to the entire perimeter on-island levee system;
(b) the levee improvement plans are approved by Bethel Island Municipal Improvements District and the Army Corps of Engineers; and
(c) subsidence, as well as impacts on wetlands, are adequately mitigated.

3-58. Levee breaches on-island are prohibited unless the entire perimeter levee is improved to Army Corps of Engineers' standards.

3-59. Levee breaching off-island shall be permitted on a project-by-project basis and shall only be allowed subject to the Army Corps of Engineers approval.

3-60. Any internal levees must meet Army Corps of Engineers' standards. New construction must be set back from levee centerlines a minimum of 100 feet unless adequate substantiation for reduction is approved by RD-799 or BIMID. New construction not protected by certified levees must meet FEMA standards.

3-61. Stilt residential structures shall be allowed only on the basis of one unit per existing parcel. Such elevated structures shall not be allowed in any new subdivisions.

3-62. The off-island and on-island areas can develop 100,000 square feet of commercial development and 500 hotel rooms, consistent with FEMA standards.

3-63. Marine and waterfront facilities will require a use permit to address site-specific aquatic and other issues such as wetlands, water quality, public access, and the Delta's carrying capacity for such facilities in the Bethel Island Area.

3-64. To retain the characteristics of Bethel Island that make it a unique place in the Delta with its own separate identity, development shall be limited to a low overall density, and open space buffers shall be required. In addition, agricultural, open space, and wetland areas, along with rare plant communities, shall be preserved and protected.

3-65. Residential development on Agricultural Lands, to the extent permitted beyond one unit per parcel in the off-island area, shall be clustered with development rights on the undeveloped land dedicated to the County.

3-66. A Protection Fee shall be imposed on each new residential unit in the Bethel Island Area to acquire development rights on agricultural lands, open space or wetland areas, or to provide financing for farmers to continue agricultural production. Priority for the acquisition of open space and wetlands shall be given to the on-island area. Additional funding sources shall be explored to supplement or replace the Protection Fee.

3-67. New development in the Bethel Island Area must comply with an improved financing plan for infrastructure improvements.

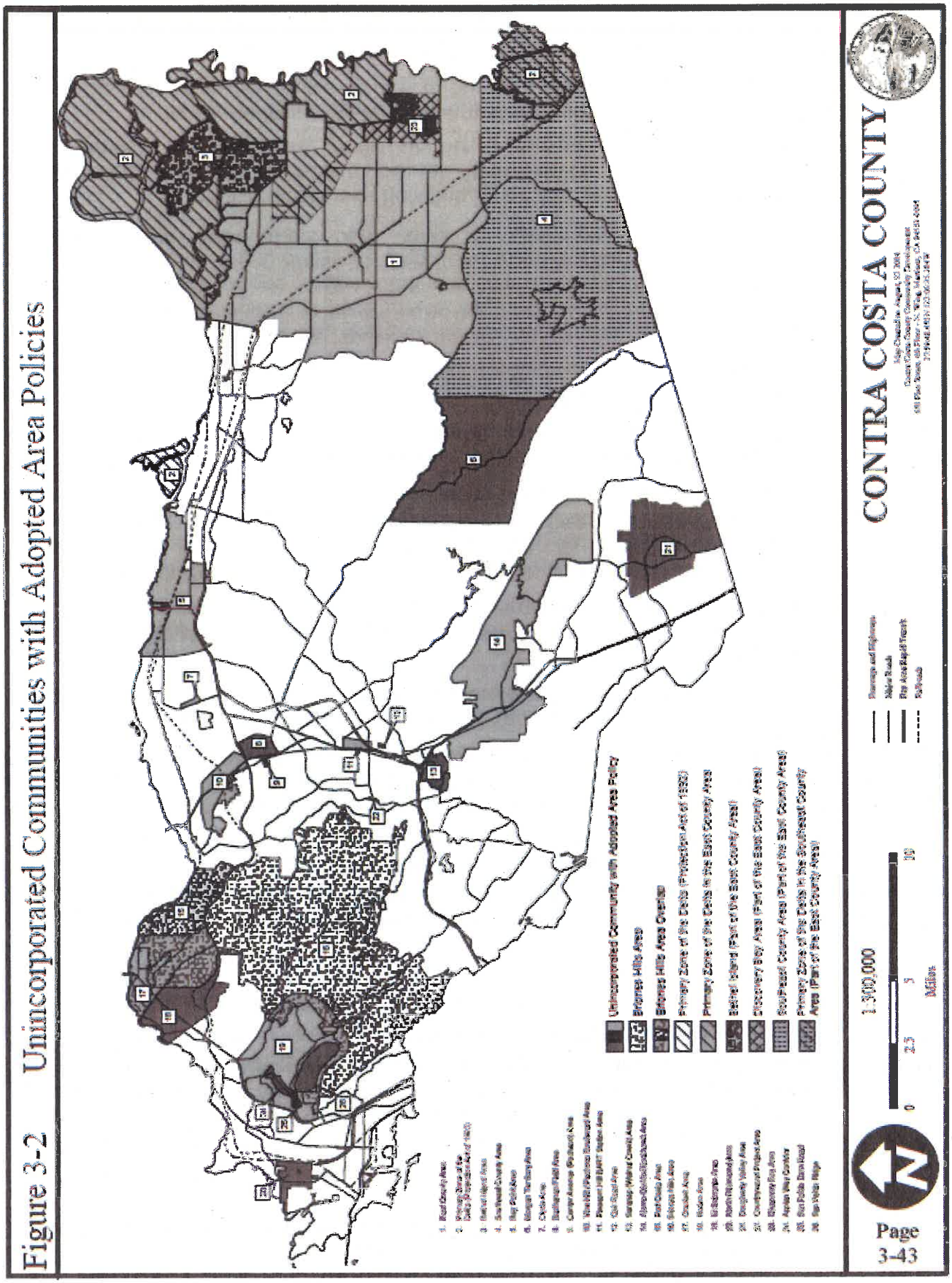


Figure 3-2 Unincorporated Communities with Adopted Area Policies
CONTRA COSTA COUNTY
Unincorporated Community with Adopted Area Policy
Briones Hills Area
Briones Hills Area Overlay
Primary Zone of the Delta (Protection Act of 1992)
Primary Zone of the Delta in the East County Area
Bethel Island (Part of the East County Area)
Discovery Bay Area (Part of the East County Area)
Southeast County Area (Part of the East County Area)
Primary Zone of the Delta in the Southeast County Area (Part of the East County Area)
Streams and Flyways
Major Roads
Bay Area Rapid Transit
Railroads
1:300,000
0
2.5
5
10
Miles
Page 3-43

POLICIES FOR THE SOUTHEAST COUNTY AREA

Land Use

3-68. Many of the specific policy statements of this plan support the concept of allowing for multiple uses, compatible with the predominantly agricultural watershed and public purposes of the area. The policies stress the need to preserve designated agricultural lands for agricultural use, and also to allow certain other uses in the area, such as wind energy farms, mineral extraction, and reservoirs.

3-69. The Southeast County area is almost exclusively planned for agricultural, watershed, or public purposes. New land uses within this plan area should be limited to those which are compatible to the primary agricultural and watershed purposes of the area (farming, ranching, poultry raising, animal breeding, aviaries, apiaries, horticulture, floriculture and similar agricultural uses and structures) and consistent with the multiple use philosophy enumerated by this plan.

Subject to specific project review and the policies listed within this plan, the following uses are generally consistent with the planned agricultural areas:

(a) Public and private outdoor recreational facilities;
(b) Dude ranches, riding academies, stables;
(c) Wind energy conversion systems;
(d) Single family residences on larger lots;
(e) Mineral resources quarrying;
(f) Oil and gas wells;
(g) Pipelines and transmission lines; and
(h) Veterinarian offices and kennels.
(i) Public purpose uses, including those uses described in policy 3-88 below (airport, reservoir)

3-70. Southeastern Contra Costa County contains a range of natural and cultural resources which warrant special recognition in the General Plan. Mineral and meteorological resources exist which have the potential to be developed as additional uses within this essentially agricultural area. Multiple uses of the land which assist in its long-term protection as an agricultural area are to be encouraged.

Policies regarding these specific natural and cultural resources are briefly summarized below. However, a more detailed discussion and additional policies should be referred to in other elements of this General Plan, separated into the following topics:

- wind turbine development or wind energy "farms" (policies are found in the Conservation Element);
- mineral resource areas (policies are found in the Conservation Element);
- archaeological and wildlife resources (policies are also found in the Conservation Element);
- Contra Costa Water District reservoir(s) planned in this area (policies are found in the Public Facilities/Services Element);
- the East Contra Costa County Airport (policies are found in the Transportation and Circulation Element);
- existing and planned recreation uses in the area (policies are found in the Public Facilities/Services Element);
- general circulation uses (policies are found in the Transportation/ Circulation Element); and

- policies and implementation measures regarding the wildlife and archeological resources of the area are included in the Conservation Element.

The southeastern portion of the County is blessed with archaeological and wildlife resources which are unique and worthy of long term protection and preservation. While in certain portions of the planning area multiple uses of the land may conflict with the need for environmental protection and enhancement, there are other areas where multiple uses may reinforce preservation.

As a practical matter, it should be recognized that historically it has been the agriculturalists that have protected the unique environmental resources of the area. Their continued efforts in this regard are critical to the long-range preservation of the area's resources.

3-71. The California Energy Resources Conservation and Development Commission have identified the Altamont Pass area, including the southeastern portion of Contra Costa County, as an area with high wind energy potential.

The "Wind Energy Resources" section of the Open Space/Conservation Element contains a map that depicts the generalized boundaries of the wind energy resource area in Southeast County, based on materials developed for the State Energy Commission. The map identifies those areas that experience average wind speeds of at least 15 mph at an altitude of 70 feet above the ground. The same section includes specific policies that govern new wind turbine development in the County.

Clusters of wind turbines generate a certain amount of noise which could be a nuisance if new subdivisions or residences are allowed immediately adjacent to the existing turbines or on properties already approved for wind turbines. New residential uses should be discouraged within the wind energy areas. If wind farms become obsolete or are removed in the area, these policies should be reviewed through a subsequent General Plan Amendment.

Wind farm uses are to be considered appropriate within the resource area or along the periphery of the wind energy resource area, subject to a careful review of the environmental impacts of specific wind farm proposals.

3-72. Within Southeast Contra Costa County there is a geological deposit of domegine sandstone located just southerly of Camino Diablo and easterly of Vasco Road. This area is further discussed and mapped in the "Mineral Resources" section of the Open Space/Conservation Element.

Limited residential or ranchette development of these mineral properties may be appropriate, but residential use shall be identified as secondary to mineral operations and will not be allowed to preclude the full utilization of identified mineral resources. Any nearby residential use will be permitted conditionally after recognizing the probable expansion of mineral operations and accepting the possible nuisance and inconvenience associated with mineral operations.

3-73. Public agencies are in the process of acquiring substantial portions of the planning area to serve the needs of the growing population of the East Bay. Two major public works projects have been approved that are reflected in this plan the East Contra Costa County Airport and the Las Vaqueros Reservoir. Each is discussed further in the Circulation Element and the Public Facilities/Services Element, respectively.

The general location of the airport is shown on the land use element plan map. As the airport project proceeds, land developments in the area must

take into account safety, noise, aviation easements, and preservation of the area's agricultural and biological resources.

Transportation

3-74. The historic significance of the Byron Hot Springs site is acknowledged, the rehabilitation of buildings of historic value at the Byron Hot Springs site and the re-establishment of the historic use of the buildings as a hotel and spa are supported. The rehabilitation of the historic buildings on the Byron Hot Springs site should occur in a manner that is both consistent with other General Plan policies and compatible with the operation of the nearby Byron Airport, as recommended in the ALUC compatibility Plan. Implementation of this policy should occur through a discretionary permit review process. Any proposal for the development of a larger resort complex on the Byron Hot Springs site, which may include the incidental rehabilitation of historic buildings, should be undertaken in the context of existing General Plan policies.

3-75. This plan further recognizes that if a reservoir or reservoirs are built, that the Contra Costa Water District or other agencies may be required to construct additional secondary construction and access roads on these lands in order to serve their facility.

3-76. The Southern Pacific railroad provides rail service through Brentwood and Byron. No change in status is anticipated in this plan amendment. However, the railroad right of way does provide the potential for a recreational trail route and for construction of future pipelines.

POLICIES FOR THE BAY POINT AREA

Land Use

3-77. The following policies shall guide development in the Bay Point area:

(a) Upgrade community appearance by encouraging development of new uses to replace antiquated developments.

(b) Provide for well-designed projects and limited vehicular access to traffic arterials through the assembly of small parcels of land along Willow Pass Road.

(c) Discourage new areas or expansion of strip commercial development in the community except as provided in this plan by the Willow Pass Mixed Use Corridor.

(d) Achieve and maintain a healthy environment for people and wildlife that minimizes health hazards and disruptions caused by the production, storage, transport and disposal of toxic materials.

(e) A Redevelopment Plan for the Bay Point area was adopted by the Board of Supervisors in December, 1987. All development proposals should be reviewed by, and coordinated with, Redevelopment Agency staff to ensure compatibility with the Redevelopment Plan. Additionally, involvement with the redevelopment process will allow the County to coordinate concurrent development proposals and to possibly facilitate the construction of public improvements that will further the goals of the Redevelopment Plan.

3-78. Many areas designated for multiple family residential uses on the plan map were originally designed and are presently used for less intensive uses. These areas have property characteristics that would interfere with a successful conversion to higher intensity uses. Parcel sizes are small, restricting provision of on-site parking, landscaping and recreation facilities. Existing drainage facilities are

antiquated and inadequate. Modifications to existing road design and access points would be desirable to handle greater traffic loads. Given these parameters, an incremental uncoordinated approach to development would probably fail to safeguard community interests.

Therefore, this plan supports the assembly of land designated for multiple family residential uses in sufficient acreages to make feasible the provision of a quality residential environment and adequate infrastructure to handle drainage and traffic concerns. Those projects that meet these objectives will be eligible for the maximum housing units within the range of the applicable density category.

3-79. The following development standards shall be applied to projects proposed in the Willow Pass Road Mixed Use Corridor (MU4):

(a) access to parcels along Willow Pass Road should be minimized and should be from secondary roads whenever feasible;
(b) development of shared access with uses on abutting properties should be considered at the time of project review;
(c) the assembly and consolidated development of frontage parcels is encouraged by this designation;
(d) control on the placement, design, number, and size of signs should occur during project review and should be adequate to inform the community of the firm's identity without being visually disruptive; and
(e) the County shall consider the adoption of a streetscape plan for Willow Pass Road including, if appropriate, revision to existing precise alignment plans. The Plan review shall explore the merit of a street tree/landscape program, on-street parking, restricted traffic movements and transit facilities.

3-80. A two-story height restriction shall be applied to the properties included in the Tener General Plan Amendments, adopted in 1986. The properties include parcels 097-260-004, 005, 006, 008, 013, and 014.

3-81. Consider how to upgrade the Bay Point water quality including increased regulation of the system, facility improvements or, potentially, public acquisition.

3-82. The Wildes property, which fronts along the east side Mota Drive at Rio Lane, and is the western piece of the plan amendment area, contains sloped areas along the southern portion of the property which should remain undeveloped. The sloped area is generally shown by the Open Space designation this property. Development of this property shall be limited to four parcels. The new lots should avoid development on the sloped areas and to the extent possible, provide access from Rio Lane so as to avoid potential circulation conflicts with traffic at the Mota Drive/Azores Circle intersection.

3-83. The policies set forth below are intended to guide development in the Pittsburg/Bay Point BART Station Area.

(a) Mixed residential, office, retail and entertainment projects shall be encouraged (Specific Plan Policy LU-1)
(b) Shared use of new and existing parking resources shall be encouraged wherever the mix of uses and the physical layout of parking and buildings allow (Specific Plan Policy LU-2).
(c) Automotive-oriented uses such as large destination retail stores are not encouraged south of State Highway 4 within the Specific Plan Area (Specific Plan Policy LU-3).

(d) Fast food restaurants and similar uses with drive-through service windows shall be discouraged within ¼ mile of the BART Station (Specific Plan Policy LU-4).

(e) The status of the Bel Air School as an educational site shall be monitored and provisions made for proper land use planning should its status change (Specific Plan Policy LU-5).

(f) Park and recreational uses to serve residents shall be encouraged throughout the Specific Plan Area (Specific Plan Policy LU-6).

(g) Residential projects shall establish Child Care Programs or participate in an established program (Specific Plan Policy LU-7).

DEVELOPMENT ZONES I AND II

(h) Commercial uses serving local residents and transit users shall be given preference over large commercial uses relying primarily on automobile access (Specific Plan Policy LU-8).

(i) Educational, recreational, an entertainment uses serving the local community, regional residents, and BART commuters shall be encouraged (Specific Plan Policy LU-9).

(j) Commercial uses serving pedestrians and local residents shall be encouraged along the ground floor frontage of West Leland Road (Specific Plan Policy LU-10).

(k) The minimum residential density for projects in Development Zone I shall be 40 units per acre (Specific Plan Policy LU-11).

(l) The minimum residential density for projects between Bailey Road and Ambrose Park shall be 40 units per gross acre. Higher densities are encouraged for this area (Specific Plan Policy LU-12).

(m) Incorporation of Child Care Facilities into new development shall be encouraged (Specific Plan Policy LU-13).

(n) Parking standards established in this plan shall be periodically re-evaluated to insure their applicability to changing conditions. Parking requirements shall be reflective of the transit-orientation of the area (Specific Plan Policy LU-14).

(o) Encouragement shall be given to the exploration of a creative master plan and implementation program involving Ambrose Park and adjacent private parcels. Future development on the site may involve a reconfiguration of Ambrose Park, with development within the site designated as Park and Recreation (Specific Plan Policy LU-15).

DEVELOPMENT ZONES III AND IV

(p) A mix of neighborhood-oriented uses which are consistent with a Neighborhood Commercial District shall be encouraged along Willow Pass Road (Specific Plan Policy LU-16)

(q) The renovation of existing commercial structures and facades along Willow Pass Road shall be encouraged where such structures can contribute to a Neighborhood Commercial District (Specific Plan Policy LU-17).

(r) Uses and buildings along the frontage of the industrial parcels fronting on Willow Pass Road shall be compatible with the Neighborhood

Commercial District uses encouraged along the south side of the street (Specific Plan Policy LU-18).

CIRCULATION POLICIES

(s) Within the Specific Plan area, the widening of Bailey Road, Willow Pass Road and West Leland Road beyond currently planned widths would be discouraged in order to enhance pedestrian/bicycle accessibility (Specific Plan Policy C-1).

(t) Future street improvements in the Specific Plan area should emphasize the provision of adequate pedestrian, bicycle and transit facilities and strive to correct existing deficiencies in these facilities (Specific Plan Policy C-2).

(u) The Pittsburg/Bay Point BART Station should be developed as a full intermodal transportation facility, enabling transfers and interfaces among all travel modes (Specific Plan Policy C-3).

(v) Long distance transit connections to the East County to and from BART should be improved (Specific Plan Policy C-4).

(w) The "Pathfinder signing and information system proposed by BART should be implemented for the Pittsburg/Bay Point Station (Specific Plan Policy C-5).

(x) BART should continue to pursue a line extension east of the Pittsburg/Bay Point Station (Specific Plan Policy C-6).

(y) Local transit services to and from the BART Station and within the Pittsburg/Bay Point community should be improved (Specific Plan Policy C-7).

(z) Transit centers or nodes should be developed in both the north and south portions of the Specific Plan area (Specific Plan Policy C-8).

(aa) The opportunity for an interface with the proposed East County commuter rail service should be explored (Specific Plan Policy C-9).

(ab) The utility of the Delta De Anza Recreational Trail should be enhanced (Specific Plan Policy C-10).

(ac) Pedestrian linkages to and from the BART Station and within the Pittsburg/Bay Point community should be improved (Specific Plan Policy C-11).

(ad) Maximum parking requirements for commercial and residential development to encourage the use of BART should be established (Specific Plan Policy C-12).

(ae) The use of transit/pedestrian-oriented design principles in new development projects should be encouraged (Specific Plan Policy C-13).

(af) The developer of any non-residential use should be required to deal with traffic impacts by implementing a Transportation Demand Management (TDM) program to reduce single-occupant auto use among employees (Specific Plan Policy C-14).

URBAN DESIGN POLICIES

(ag) New Development and the renovation of existing structures shall be designed with interesting facades and an orientation to adjacent streets and pedestrian ways (Specific Plan Policy UD-1).

(ah) Parking for commercial uses should be located at the back or sides of buildings, not between the fronting street and the building (Specific Plan Policy UD-2).

(ai) Signage shall be adequate for its purpose but shall be subservient to the creation of a strong residential and pedestrian environment (Specific Plan Policy UD-3).

(aj) Driveway conflicts with pedestrian movement paths shall be minimized (Specific Plan Policy UD-4).

(ak) All projects shall be expected to provide substantial, high quality landscaping. The use of flowering plants and trees shall be encouraged to reinforce the strongly residential character of the area (Specific Plan Policy UD-5).

(al) The design of individual projects and buildings shall minimize the visual intrusion of parking structures and lots upon the surrounding major street system (Specific Plan Policy UD-6).

(am) The design of a replacement parking structure on the BART Station property or elsewhere in the area shall minimize the visual bulk of the building and shall be related to the architectural character of the area (Specific Plan Policy UD-7).

(an) Emphasis shall be placed upon pedestrian and visual continuity among uses within the area around the BART Station (Specific Plan Policy UD-8).

(ao) Development east of Bailey Road shall assist in enhancing the visibility and usability of Ambrose Park. This may include reconfiguring of the park and development of housing in the area designated as Park and Recreation (Specific Plan Policy UD-9).

(ap) All new development and renovations shall respect the smaller scale of the surrounding residential neighborhoods (Specific Plan Policy UD-10).

(aq) Transit supportive amenities shall be constructed in conjunction with the Neighborhood Commercial District (Specific Plan Policy UD-11).

Transportation

3-84. The number of streets and driveways intersecting or entering Willow Pass Road shall be minimized.

3-85. Well-designed projects and limited vehicular access to traffic arterials shall be encouraged through the assembly of small parcels of land along Willow Pass Road.

POLICIES FOR THE MORGAN TERRITORY AREA

3-86. A separate General Plan/zoning conformity study shall be initiated by the County in the Morgan Territory Road area, south of Marsh Creek Road.

3-87. The restriction on further fragmentation of parcels is crucial to this plan. A rezoning study should be initiated on this planning area to apply new, more stringent zoning categories.

3-88. A scenic route specific plan will be implemented to ensure adequate rights-of-way for the scenic routes along Morgan Territory Road and Marsh Creek Road.

3-89. Development on the Pacini property (Mountain Meadows) east of Morgan Territory Road will be considered in accordance with this land use designation of Single-Family Very Low Density and subject to conditions and terms imposed on approved maps and plans.

POLICIES FOR THE CLYDE AREA

3-90. Although the small town of Clyde is mostly built out, there are vacant properties adjacent to the Contra Costa Canal and near the community park which are being developed. Any future infill within the area must conform to the following policies:

(a) the existing residential neighborhood is designated Single Family Residential-High Density (5.0 to 7.2 units per net acre), but in the Clyde area the density of any infill housing (excluding the area described in (b) below), is not to exceed 6 units per net acre;

(b) vacant land adjacent to the Contra Costa Canal is designated Single Family Residential-Medium Density (3.0 to 4.9 units per new acre). This reduced density reflects larger lots in this steep areas and will help to avoid excessive traffic along narrow Park Street;

(c) new construction should be compatible with the existing architecture to the extent possible. Ultra-modern design in architecture should be discouraged; and

(d) the burden of providing adequate utilities and traffic circulation for new construction shall be borne solely by the developer.

POLICIES FOR THE BUCHANAN FIELD AREA

Land Use

3-91. The General Plan Policies for Buchanan Field Airport are set forth below, and additional policies may be found in the Transportation and Circulation Element (a description and policies regarding airport operations and roadways in the area), and the Noise Element (a description and policies regarding acceptable noise contours).

3-92. Most of the land area comprising the Buchanan Field Airport, has been designated Public/Semi-Public (PS) reflecting its primary function and operation as a publicly owned and operated general aviation commercial service airport. This plan provides for a range of commercial aviation uses and services in support of the aviation functions on the airport lands designated PS, including fixed base operators and auxiliary and executive aviation.

3-93. Airport lands designated PS may be leased to a fixed base operator. A fixed base operator (FBO) means an aviation business providing comprehensive general aviation services in accordance with the "Buchanan Field Airport Policy and Standards for Development", as adopted by the Board of Supervisors, and as may be amended by the Board. As used in the context of this plan, aircraft charter/rental, air taxi or commuter air services, and air

terminal or ground services, are activities and uses commonly associated with a general aviation airport falling under the category of an FBO. Additionally, an FBO may provide pilots, private aircraft owners, other aviation businesses, travelers, and airport visitors with other services, such as: lobby and lounge spaces, weather and flight planning services, temporary aircraft parking and tiedowns, restaurant/catering/vending facilities, restrooms, hotel and automobile rental reservations, automobile and automobile rental reservations, automobile and rental automobile rental parking, meeting space and business center, office space for aviation and aviation-related business, and other items of public convenience and necessity.

3-94. In addition to FBO sites, airport lands designated PS may be leased for auxiliary and executive aviation uses and services, which may include open and/or enclosed storage of private aircraft, private corporate/executive hangar(s) with or without attached office space, pilot center and lounges, unique aviation sales and services (not provided or in competition with an FBO), and other facilities that meet the needs for general aviation. Such proposed auxiliary and executive aviation uses and services must serve the aviation community and give evidence that such development will not compete with FBO operations.

3-95. Two areas adjacent to the Buchanan Field airport, which are County-owned airport lands, are designated for non-aviation commercial uses: 13 acres located at the intersection of John Glenn Drive and Concord Boulevard is designed Commercial (CO), and 3 acres at Marsh Drive and Sally Ride Drive is designated Business Park (BP).

3-96. A range of commercial uses are allowed in both the CO and BP land use designations. The actual uses allowed will be finalized through review of projects and leases for the use of the land.

3-97. For these two non-aviation commercial areas to be developed, transportation improvements are required to be constructed or committed. Such improvements will be tied directly to the County leasing of these areas for development. The extent of improvements are to be determined by the Board of Supervisors as part of the bid package.

3-98. The area designated for Commercial (CO) use at the entrance of John Glenn Drive is limited to development of 220,000 square feet of space; the area designated Business Park (BP) at Marsh Drive and Sally Ride Drive is limited to 18,500 square feet.

3-99. The major privately owned lands within the area are designated for light industrial use and are located along I-680, west of the airport, between the existing mobile home park and the golf course.

3-100. The California Public Utilities Code requires that the intent and purpose of the plans and policies adopted by the County Airport Land Use Commission be incorporated into the County General Plan. The commission has adopted numerous regulations which strictly define what types of land use, and the design of those uses, which will be allowed within the Commission's airport "planning area" and within designated "safety zones" under the airport's flight path. These policies and regulations are detailed in the "Airports and Heliports" section of the Transportation and Circulation Element.

Transportation

3-101. See the policies listed under the "Airports and Heliports" section of the Transportation and Circulation Element (Chapter 5).

POLICIES FOR THE CENTER AVENUE (PACHECO) AREA

3-102. The plan for the area in Pacheco located generally along Center Avenue west of the flood control channel is designated for Multiple Family Residential-Medium and High Density (12.0 to 20.9 units and 21.0 to 29.9 units per net acre, respectively). The Plan endorses efforts to consolidate smaller parcels into logical groupings for the private redevelopment of areas from single family homes to multiple family residential uses. Projects covering smaller existing lots should lead to higher densities and better designed projects.

Additionally, consolidation of lots should lead to fewer access points onto arterial and collector roads such as Center Avenue and Deodar Drive. North of Center Avenue, it is hoped that projects can be grouped into three or four applications, and south of Center Avenue applications should include all of existing blocks or the remnants of existing blocks.

3-103. The Plan recognizes the historical significance of the W.T. Hendrick house (218 Center Avenue) and encourages its continued preservation. Developments that surround the house should be designed in a fashion that compliments the structure and works toward its continued preservation.

POLICIES FOR THE VINE HILL/PACHECO BOULEVARD AREA

Land Use

3-104. The scenic assets and unstable slopes of the Vine Hill Ridge are to be protected for open space/agricultural use.

3-105. The residential neighborhood east of I-680 shall be buffered from the industrial/land fill-related uses.

3-106. Approximately 40 acres of land south of the ATSF tracks, between Morello and Pacheco, is designated "Agricultural Lands," to encourage the continued operation of the Viano family vineyards and winery.

POLICIES FOR THE PLEASANT HILL BART STATION AREA

Land Use

3-107. The area immediately adjacent to the Pleasant Hill BART station is the subject of special development standards outlined in the Pleasant Hill BART Station Specific Plan, adopted in 1983 and as amended through 1988. Most of the residential and commercial development allowed under this specific plan has already been approved by the County, with the exception of development on a large parcel owned by the BART District, much of which has not yet been approved for construction. To assist in the assemblage of development sites and to finance required infrastructure to support the development, the County, in 1984, adopted a Redevelopment Plan for the area. The Redevelopment Plan was amended in 1988 to facilitate the development of affordable rental housing in order to achieve a jobs/housing balance.

3-108. The overall goals for the Pleasant Hill BART station area are to:

(a) increase the concentration of high intensity employment uses and affordable housing in the area to better utilize the regional transit accessibility provided by BART;
(b) integrate housing into the area where environmental constraints (such as noise from I-680) or overall land use considerations do not preclude it;
(c) provide sufficient retail and other commercial services and public open space amenities for station area employees, BART riders, and residents of the station area and nearby residential and commercial uses;
(d) promote a station area appearance which will project a positive image and have high regional and local identity;
(e) achieve cooperative development actions by BART and the private sector which will more fully utilize the station area resources; and
(f) develop areas intensively used by pedestrians at a human scale and with adjoining uses which will visually and functionally enliven the area.

3-109. There are several specific plan policies which shall be applied to development proposed for the BART District property at the Pleasant Hill station. Refer to the Pleasant Hill BART Station Specific Plan for the policies.

Transportation

3-110. In cooperation with Pleasant Hill, Walnut Creek, and transit operators, determine the feasibility of establishing bus service along the SPRR right-of-way between Concord and Rudgear Road.

POLICIES FOR THE OAK ROAD AREA

3-111. The area east of Oak Road between Todd Lane and Walden Road is designated Multiple Family Residential-High Density, with a density range of 12.0 to 29.9 units per acre. However, developments in excess of 22 units per net acre shall only be considered for each of the parcel assembly areas shown in Figure 3-3 after preparation of an Environmental Impact Report. In addition to the normal CEQA concerns, the EIR will need to explore off-site transportation fees and impacts to adjacent single family neighborhoods.

3-112. Projects proposed in the Oak Road area described above shall be granted only through a Planned Unit District zoning process which includes all parcels within one of the specified sub-areas shown on Figure 3-3, i.e., all parcels fronting along Kingston Place or Annette Court. Applications for areas smaller than these sub-areas shall be restricted to residential densities allowed by the R-15 zoning.

Projects in the area shall be designed in such a way as to minimize traffic and drainage impacts in the area. Multiple family projects will be required to participate in off-site traffic improvements such as widening Oak Road to its planned ultimate width across the Contra Costa Canal, signalizing the Oak Road/Walden Road intersection, and area-wide drainage improvements. In addition, any project shall be designed to prevent runoff onto neighboring properties except through specific flood control improvements.

POLICIES FOR THE SARANAP (WALNUT CREEK) AREA

3-113. The undeveloped hillside south of Olympic Boulevard and west of Tice Valley Boulevard is designated for Single Family Residential-Medium Density development along the base of the hill along Olympic, with the remainder of the site designated as Agricultural Lands and Open Space, to reflect the steep, unbuildable slopes.

POLICIES FOR THE ALAMO-DIABLO-BLACKHAWK AREA

3-114. Promote the individuality and unique character of each community based on existing community images.

3-115. The character of the area as one of predominantly single family residences shall be developed, and multiple family residential units shall be provided in suitable densities and locations. A range of densities shall be offered in order to provide for a variety of family sizes, income levels, and age groups.

3-116. Commercial development specifically directed to the needs of the neighborhood and community shall be encouraged. Large-scale commercial uses which rely on drawing business from outside the community are inconsistent with this plan.

3-117. Alamo's commercial district serves primarily the surrounding residential areas. This plan allows for continued commercial growth within the defined commercial area, which is separated from existing residential areas by the railroad on the west the Alamo Orchard mixed use project along Jackson Way and Orchard Court. This plan limits the expansion of these transitional uses to their existing boundaries north and south along Danville Boulevard.

3-118. It is the intent of this plan that the viability and desirability of single family residential uses on Jackson Way, South Jackson and Linden Court be preserved. No land use changes or project characteristics shall be permitted which would diminish these residential areas or induce land use transition.

3-119. The portion of Danville Boulevard north of Del Amigo Road should remain a two lane road; however, minor improvements to provide additional safety and increased capacity are acceptable.

3-120. The lands shown as residential on the Land Use Map adjacent to the portion of Danville Boulevard between Del Amigo Road and Rudgear Road shall be restricted to residential uses. Nonresidential uses under land use permits are inconsistent with this Plan and shall be avoided.

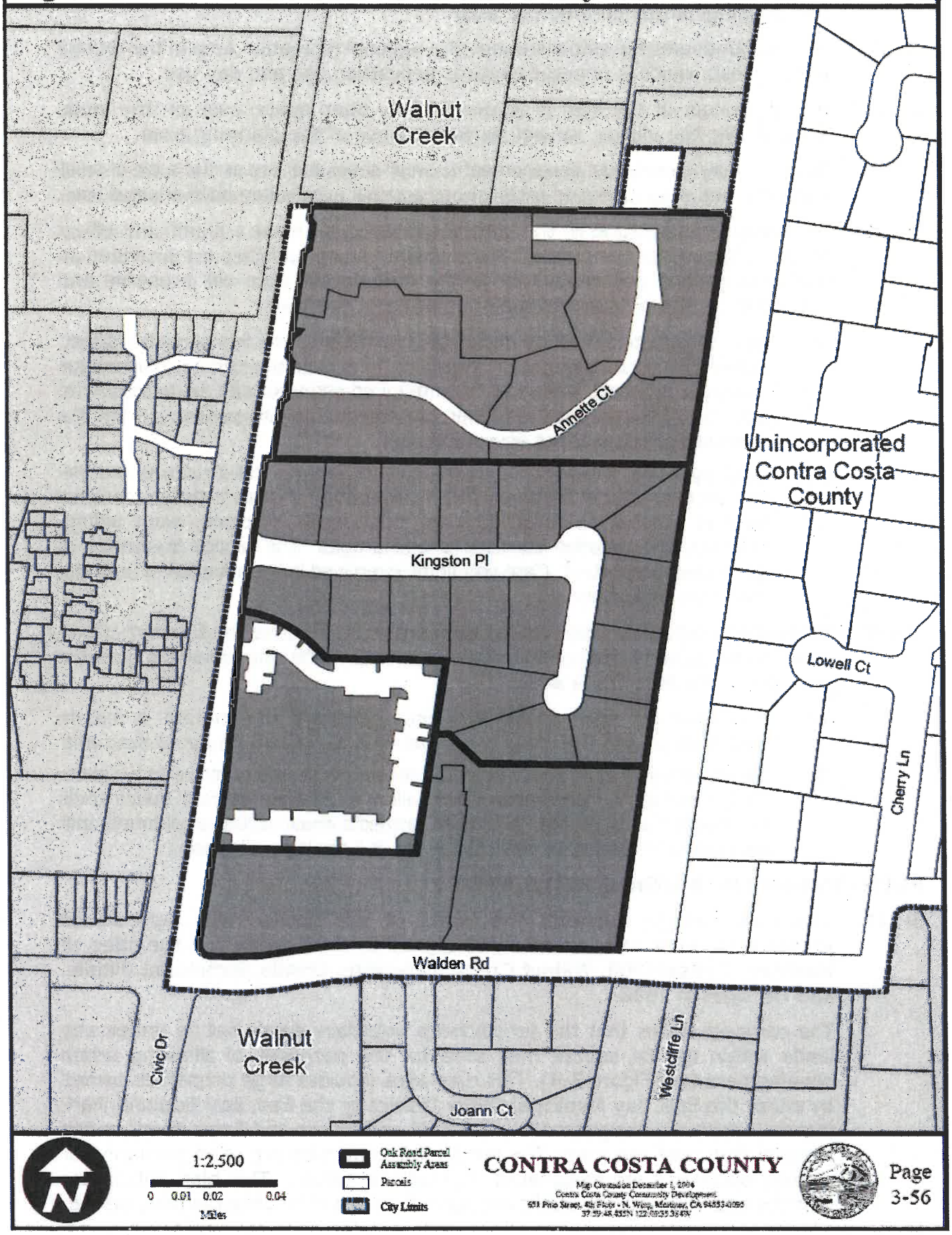
3-121. When rezoning in Alamo, the appropriate single family residential zoning will include R-20, R-40, R-65 and R-100 and P-1. Both Alamo and Diablo have special characteristics which preclude clustering in established areas.

3-122. Encourage commercial development that is related to the needs of the neighborhood and community. Regional scale shopping centers are not considered appropriate.

3-123. Developments shall be reviewed to ensure the continued rural character of the area.

3-124. Located south of Livorna Road and west of Vernal Road, the Laverock Lane general plan amendment is intended to support up to six residential parcels because it will use minimum grading and will not lead to significant disturbance of the existing topography. Creation of new parcels are subject to the provision of road frontage improvements required by the County Public Works Department. New access points along Vernal Drive and Laverock Lane shall be minimized by using shared private driveways where feasible. Additionally, to retain the character of the neighborhood, new structures shall be limited to two stories in height and shall be designed to ensure architectural compatibility with the older homes in the area. Finally, to minimize any visual obtrusions, the use of non-reflective building materials and extensive, drought tolerant landscaping shall be incorporated into any development plans for this area.

Figure 3-3 Oak Road Parcel Assembly Areas



POLICIES FOR THE PORT COSTA AREA

3-125. The Plan for the Port Costa area restricts multiple family dwellings to multiple use buildings in the commercial area.

3-126. The Plan endorses the establishment of a regional recreation area in the vicinity of Port Costa which is oriented towards pedestrian use and day use.

3-127. A key concept of the Plan is to permit only open space uses on the lands surrounding the village, as well as the balance of the planning area.

3-128. The Plan limits commercial development to small shops that are on the scale of small specialty and neighborhood retail shops and that avoid automobile-oriented uses.

3-129. The design of structures in the commercial area can have a significant effect on the character of the district. The following design policies are provided so that construction and renovation in the commercial area will preserve and contribute to the unique and historic nature of the town:

(a) New construction must be placed close to the property line along the street, rather than set back on the lot, to provide for continuous commercial frontage along the sidewalk. Variances from required setbacks may be necessary to accomplish this purpose. However, placement of on-site parking in front of a proposed structure is not acceptable; and

(b) Building design should complement existing commercial structures and the historic character of the town. The incorporation of historic design features such as window moldings, dormers, balustrades, columns, wood siding, brackets and detailed cornices is encouraged. The facade treatment is particularly important. Care should be exercised in the selection of building materials and colors.

3-130. While the Countywide Open Space Element and Conservation Element offers policies for general application, this plan sets forth the following specific policies for the Port Costa area:

(a) Subdivision of open space lands into ranchette size parcels is not in conformance with this plan; twenty acres is the minimum parcel size; and

(b) Development of open space lands for residential uses is contrary to this plan. (In the event the Plan is amended to allow subdivision of open space lands for residential purposes, proposed projects must utilize a planned unit development format, as reflected in the P-1 zoning ordinance.)

POLICIES FOR THE BRIONES HILLS AREA

3-131. This plan strongly supports the intent of the Briones Hills Agricultural Preservation Area compact that was signed by the County and the cities of Martinez, Pleasant Hill, Walnut Creek, Lafayette, Orinda, Richmond, Pinole, and Hercules in 1988.

The compact states that the jurisdictions voluntary agree not to annex any lands within the 64 square mile area for the purposes of allowing urban development (see Figure 3-4). This rural area includes large properties owned by either the East Bay Municipal Utility District or the East Bay Regional Park District, which are designated "Watershed" and "Parks and Recreation" on the General Plan land use map. The remaining properties are used primarily for grazing cattle and are designated "Agricultural Lands." This plan anticipates that the area will remain in public and agricultural use during the planning period.

POLICIES FOR THE CROCKETT AREA

3-132. In cooperation with the Crockett Improvement Association, develop Specific Plans for such purposes as the rehabilitation of commercial areas, land use decisions and growth management, public safety, regional traffic controls and major transportation facilities such as bridge and BART station.

3-133. Discourage industrial traffic that could impact the safety and efficiency of Crockett's non-industrial and emergency vehicle traffic.

3-134. Recognize that Crockett was not designed for use by an abundance of motor vehicles. Narrow streets and a lack of off-street parking have resulted in congestion, particularly parking congestion. Personnel of the Crockett-Carquinez Fire Protection District fear the possibility that fire-fighting equipment may be blocked in an emergency situation. Expanded residential areas should not be served by existing roadways that function as local Roads.

3-135. The goal of the Plan is to protect and enhance the quiet, small town atmosphere of Crockett's residential neighborhoods, and provide for new development that is compatible with this goal.

3-136. Encourage mixed uses in the downtown area, consistent with the present pattern of residential and business uses.

3-137. Emphasize office uses along Loring Avenue in order to broaden the employment base and to minimize parking congestion.

3-138. Provide that homes located in extreme or high fire hazard areas be constructed with fire-resistant materials and the surroundings be irrigated and landscaped with fire-resistant plants.

3-139. The category of Single Family Residential-Low Density occurs selectively within the Planning Area. One area is along Dowrelia Drive along a steep hillside with poor road access. A limitation on additional development is appropriate here without major improvements to road access.

3-140. Projects proposed along scenic routes will be reviewed to determine if there would be adverse visual impacts, and if so, mitigation measures will be applied. The guidelines for determining visual impacts include, but need not be limited to, the following:

(a) long views across Carquinez Straits or the Bay should not be blocked;
(b) if a structure interrupts long views across Carquinez Straits or the Bay, the structure should be designed to enrich the scenic quality as much as possible;
(c) extreme topographic modification, such as cutting off a ridge top, is to be avoided; and
(d) structures highly visible from scenic routes should be designed to blend and harmonize with the natural scenery or background.

3-141. In order to protect the scenic environment of Crockett, it is a policy of this plan that identified scenic ridges and woods should not be obliterated. Any construction that takes place on identified scenic ridges should be designed with respect for the natural scenic qualities of the locality. In areas designated for development of steeply sloping lands, the following principles should be strictly applied:

(a) High quality engineering of slopes is required to avoid soil erosion, downstream flooding, slope failure, loss of vegetative cover, high

maintenance costs, property damages, and damages to visual quality. Particularly vulnerable areas should be avoided. Slopes over 25% are generally not suited for conventional cut and fill pad development;
Where flood control and drainage works are required along natural water courses, special consideration should be given to using innovative means of retaining the natural appearance of the waterway, and preserve the vegetation and wildlife it supports;

(b) High quality engineering of slopes is required to avoid soil erosion, downstream flooding, slope failure, loss of vegetative cover, high maintenance costs, property damages, and damages to visual quality. Particularly vulnerable areas should be avoided. Slopes over 25% are generally not suited for conventional cut and fill pad development;

(c) Where flood control and drainage works are required along natural water courses, special consideration should be given to using innovative means of retaining the natural appearance of the waterway, and preserve the vegetation and wildlife it supports;

(d) Conservation of the scenic beauty of the planning area requires restoration land of natural contours and vegetation after grading and other disturbances, and the design of public and private projects to minimize damages to significant trees and other visual landmarks;

(e) Public facilities for outdoor recreation should remain an important land utilization objective in the community, to promote high visual quality, air quality maintenance, and to enhance outdoor recreation opportunities of all residents; and

(f) Extreme topographic modification, such as filling in canyons or removing hilltops is to be avoided. Clustering and planned unit development approaches to development are encouraged. All future development, whether large or small scale, should be based on locating safe and suitable sites for buildings, roads and driveways. Edwards Canyon is very sensitive to erosion and siltation problems and should be given special protection.

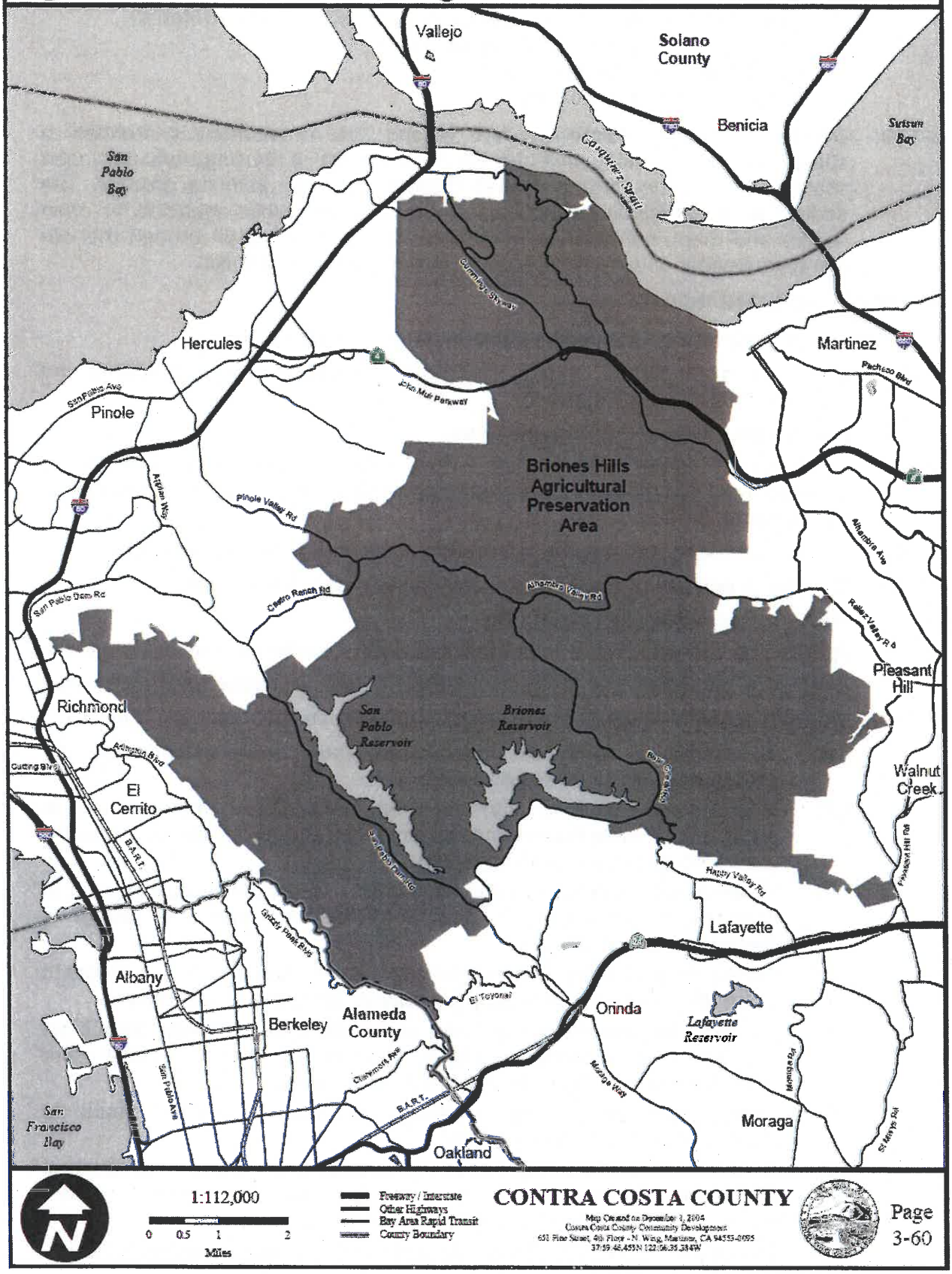
Scenic Waterways are watercourses which receive use by fishing and recreational boat traffic and traverse areas of significant scenic quality. The scenic waterway designation applies to the waterway and its shoreline.

3.147 The shoreline and hills along the Carquinez Strait between Crockett and Martinez constitute one of the few undeveloped coastal areas in the East Bay. The scenic beauty of the area enhances, and is complemented by, the historic town of Port Costa. Preservation of this resource through the establishment of a recreation area is encouraged by this plan.

3.148 Crockett has an abundance of charming Victorian buildings. The special scenic and historic qualities of the town should be reflected in a sensitive approach to rehabilitation of these buildings. The structures listed below have been identified as local historic places, reflecting their historic and cultural importance to the community. It is a policy of this plan that the following places should be protected and their historic qualities should be preserved and enhanced:

(a) the American Legion Hall at Pomona and Alexander Streets;
(b) the Rolph Park Monument at Pomona Street and Rolph Park Drive;

Figure 3-4 Briones Hills Agricultural Preservation Area



(c) the Railroad depot on Loring Avenue;
(d) the Crockett Auditorium on Pomona Avenue;
(e) the Episcopal Church on Pomona Avenue;
(f) the C&H Company House and Guest house in Crolona Heights;
(g) the Crockett Library on Loring Avenue;
(h) the Edwards Homestead; and
(i) the Loring Road Victorians.

3-149. Development of the Pointe Crockett General Plan Amendment is intended to support up to 100 units, while the exact placement of housing units and open space areas will be further defined through the site planning process. The dedication of additional property to the appropriate public agencies for open spaces and road improvement purposes will also be secured through the site planning process of considering the proposed residential project.

POLICIES FOR THE RODEO AREA

3-150. Mitigate the effects of industrial traffic on downtown streets.

3-151. Direct the major portion of new residential development towards infilling and redevelopment of Rodeo proper.

3.152. Encourage reuse of existing buildings.

3.153. Establish the waterfront area as a focal point for the community by the development of a mixture of multiple family parkland, retail and commercial recreational land uses.

3.154. Focus waterfront development around a shoreline park and promenade.

3.155. Develop a portion of the Rodeo Creek channel as a linear park.

3.156. Maximize public access to the bay.

3.157. Provide for a creek setback zone in Franklin Canyon to preserve the natural drainageway.

3.158. Encourage particularly the renovation of Rodeo's notable architectural specimens.

3.159. The policies set forth below are intended to guide the revitalization of Old Rodeo.

(a) A mixture of land uses, residential (particularly townhouse) and commercial, must be established;

(b) A community parking plan must be devised and implemented to provide a sensible framework for development in Old Rodeo, including a parking plan for Lone Tree Point;

(c) When on-site parking is provided it should be established at the rear of commercial properties so that a unified commercial frontage is presented to the sidewalk;

(d) Rezone the Rodeo Waterfront/Downtown Specific Plan area to P-1 in order to efficiently provide for necessary flexibility in development standards;

(e) Landscaped courtyards, atriums and streetside plantings should be included in development plans to provide visual and physical relief from the hard surfaces of the urban landscape;

(f) Sitting places for resting, socializing or people watching should be incorporated into project designs;

(g) Developers are encouraged to preserve and reuse Rodeo's architectural specimens (unless financially infeasible due to seismic retrofit requirements, inadequate original construction, etc.); and

(h) Provide for integration of development in Old Rodeo with the waterfront area.

(i) Develop public facilities in Old Rodeo to serve as a community focal point.

(j) Retain and increase opportunities for live/work space.

(k) Eliminate excessive roadway areas throughout Old Rodeo and introduce landscaping and safety features to remaining road system;

(l) To further implement the County General Plan for Downtown Rodeo, the provisions of the Rodeo Waterfront/Downtown Specific Plan shall apply in addition to the policies contained in this General Plan.

3.160. The waterfront is one of Rodeo's biggest assets. However, at the present time access to the waterfront is limited both visually (by the service commercial type buildings located along San Pablo Avenue) and physically (by the Southern Pacific railroad line). By designating this area Commercial Recreation in the Plan it is anticipated that properties will eventually convert to uses which capitalize upon the proximity of the bay.

The Recreation Element provides for a waterfront promenade between the marina and the sanitary district facility. This linear recreation facility in combination with commercial recreation businesses could provide an exciting focal point for the town.

Large scale development in the Commercial Recreation area must be predicated upon a thorough study of the waterfront. Comprehensive development policies incorporated into a specific plan or waterfront development plan and implementation program must be in place before such development can proceed.

3.161. Retail businesses and services directly or indirectly related to recreational uses of the shore area are compatible with the Commercial Recreation designation, including restaurants, chandlers, hotels or motels, and bait and tackle shops.

3.162. The Light Industry designation is employed in the Franklin Canyon area along the north side of Highway 4, across from the golf course. This is a particularly striking section of a designated scenic route and its visual beauty must be preserved through careful scrutiny of proposed light industrial projects. In particular, project proponents should address height, color and appearance, and landscaping.

3.163. A buffer of Agricultural Lands around the eastern Union Oil property is created in this plan to separate the Viewpoint residential area from future industrial development on the Union property. These open space lands should remain essentially undeveloped.

3.164. Private property shown in this designation such as the Franklin Canyon Golf Course should remain in essentially open space recreation uses. More intensively developed, privately owned recreation property is designated as Commercial Recreation.

3.165. This plan proposes three new recreation sites in Rodeo plus the development of unused land at Hillcrest Elementary School. The Plan designates a linear park and trail along the Rodeo Creek channel from Interstate 80 north-northeast to 4th Street. A waterfront promenade is indicated running between the railroad overpass to the marinas and the Rodeo sewage treatment plant. The promenade is intended to focus upon one of Rodeo's greatest amenities, San Pablo Bay.

3.166. This plan supports the concept of the Carquinez Straits Regional Shoreline Park on the border between the Rodeo and Crockett planning areas, which is planned by the East Bay Regional Park District in their Master Plan. This plan

also affirms the policy in the East Bay Regional Park District's Master Plan that a regional shoreline trail extending from Martinez to Point Pinole shall be implemented.

The trails plan also shows a trail along Rodeo Creek from the southwestern edge of the planning area to the waterfront downtown.

3.167. The majority of open space in this plan is located in the Franklin Canyon area and the adjacent hills. The steep topography and unstable slopes which characterize the hills limit their fitness for development.

Open space designations for this area reinforce the Countywide goal of agricultural preservation for continued agricultural productivity. The existing pattern in the open space area of relatively large parcels under consolidated ownership is necessary to successful range practices and will be maintained under this plan. The scenic value of the Franklin Canyon area has been asserted by the Rodeo community and is reflected in the scenic route designated for Highway 4 in the scenic routes section of the Transportation and Circulation Element. The hills and ridges along this route are the primary source of the corridor's visual quality and every effort should be made to protect its scenic characteristics.

3.168. Because of noise related impacts, both from transportation sources and from industry, acoustical studies will be required for major new developments and multiple family projects in the Planning Area even those extending beyond the 60 CNEL Noise Contours.

POLICIES FOR THE EL SOBRANTE AREA

3.169. El Sobrante is a diverse and beautiful community, which cherishes its unique character, especially its scenic beauty, open spaces, and local charm. The community is dedicated to protecting and enhancing the quality of life while addressing development pressures that are common in the Bay Area, including, the effects of suburbanization and urban sprawl, regional traffic congestion, and demand for public services. The overall goal of the area is to retain and reinforce the semi-rural and suburban character of the community with its strong emphasis on single family residences, the feature which has drawn most of the residents to the area. The following principles are be used in guiding development and land use decision-making process in El Sobrante:

(a) Change should be harmonized to enhance El Sobrante's unique semi-rural/suburban character and to preserve its scenic environment.

(b) Growth and economic development should be targeted in a manner to preserve open space and agricultural land, to meet community needs, to help revitalize the commercial core, and generally to enhance the quality of life of area residents.

(c) El Sobrante is envisioned as a culturally diverse residential community with vibrant local serving businesses, amenities and services for children, families, and the elderly, and parks and recreational facilities to meet community needs.

(d) El Sobrante's built environment should be designed and developed at a human-scale incorporating healthy community concepts that make provisions for walking, bicycling, and other non-motorized transportation, recreation, access to healthy foods, and energy and resource efficient buildings and development.

3.170. In consultation with El Sobrante residents, affected businesses, landowners, and other interested parties, including the City of Richmond, develop a new precise alignment for the segment of San Pablo Dam Road between El Portal and Appian Way. The precise alignment is intended to replace the San Pablo Dam Road bypass couplet concept, which was formerly describe in both the Land Use Element and Transportation/Circulation Element. The new precise alignment should be based on the "Complete Streets" concept, whereby the roadway is designed and operated to accommodate safe access for all users. The aim is to design this segment of San Pablo Dam Road to move motorists, transit vehicles, bicyclists, and pedestrians of all ages and ability to safely along and across this roadway. In addition the new precise alignment should make provision for a new collector street connecting Pitt Way to Hillcrest Road. To the maximum extent practicable and feasible, the "Complete Streets" concept should be incorporated into the alignment plan along with appropriate measures to implement the new alignment. The County will routinely examine the pedestrian and bicycle environment and will make improvements at every opportunity.

3.171. Given San Pablo Dam Road's designation as the I-80 bicycle route, and its critical importance in connecting East and West Contra Costa County, every effort should be made to add a Class II bicycle lane along the roadway or to provide and alternate bicycle path through the corridor.

3.172. The County will pursue mechanism to assist in the beautification of the community, such as tree planting and other landscaping, lighting, and visually pleasing signage. These improvements may be accomplished by establishing a landscape and lighting district, a business improvement district, and/or implementing other such mechanisms.

3.173. In order to reduce the demand for auto trips through the community, the County will work with AC Transit and other local public transit agencies to improve service to the El Sobrante area. Bus stops and bus routes will be improved, so that residents can efficiently travel directly from El Sobrante to Del Norte BART, Richmond BART/Amtrak, and Orinda BART, as well as to other destinations.

3.174. To ensure residents have adequate access to healthy food, grocery stores, farmer's markets, produce markets, and other such establishments should be encouraged, and business selling primarily unhealthy foods and beverages should be discouraged.

3.175. Minimize the number of streets and driveways intersecting or entering San Pablo Dam Road, Appian Way and Valley View Road.

3.176. Provide for well-designed projects and limited vehicular access to traffic arterials through the assembly of the deep, narrow parcels of land along San Pablo Dam Road and Appian Way.

3.177. Discourage new areas of strip commercial development in the community.

3.178. Require development of more public off-street parking in the commercial core area along San Pablo Dam Road, so as to increase traffic bearing capacity of the arterial.

3.179. The El Sobrante community values healthy living and places great value on local opportunities for outdoor recreation. According to the 2001 El Sobrante Valley Parks Study, the community lacks sufficient park and recreation space to adequately serve area residents. The County shall seek to identify acquirable parcels of land that can be developed into parks and open spaces, including public spaces in commercial corridors. New development project will be evaluated in terms of the contribution to public recreation and their support of parks and open space. Developers will be encouraged to collaborate on the development of parks and open spaces in order to optimize recreational opportunities for area residents. Mechanisms to support park and open space maintenance funding through development fees and other sources shall be pursued.

3.180. Development of a full service community center in El Sobrante will be pursued. Currently, the community lacks adequate space for community meetings and events, recreational, cultural, and educational activities. The community center will be operated by a public entity and will provide multiple purpose functions in the community.

3.181. The creeks running through the El Sobrante community (Appian Creek, Wilke Creek, San Pablo Creek, etc.) will continue to flow along their natural path. To the extent possible, efforts will be made to enhance public view of the creek, particularly San Pablo Creeks as it runs along San Pablo Dam Road.

3.182. To improve traffic in the community, the Highway Patrol will be encouraged to patrol the Area in order to encourage drivers to obey posted speed limits and other traffic rules.

3.183. Upgrade the community's drainage system to eliminate problems caused by local inundation, ponding and sheet overflow during storms, and eliminate open drainage ditches along portions of Appian Way and San Pablo Dam Road and throughout the community.

3.184. In view of the existing traffic problems and the limited ability of the circulation system to adequately handle substantial growth in traffic volumes, new development should be approved at the low to mid-range of the respective single-family and multi-family residential land use density designations. The County shall work with neighboring jurisdictions to limit the impact of large development on the El Sobrante community. To improve the provision of urban services, enhance quality of life of area residents, and decrease environmental impacts, the addition of housing units will be focused in the urban core and sprawl development in the surrounding areas, particularly the hillside areas, should be restricted.

3.185. Due to proposed General Plan changes on San Pablo Dam Road and Appian Way, the County will study the traffic impacts on Hilltop Drive, from Highway 80 to Manor Road, including the heavily traveled streets of Pebble Drive, La Paloma, and Manor Road. Proposed development projects will also study these roads in their traffic analyses. The County will mitigate traffic impacts to these streets by implementing traffic calming or other necessary measures in consultation with affected residents and interested parties.

3.186. This plan calls for residential development to be directed primarily to areas where infilling of previously "passed over" property can occur, as well as to a limited number of larger parcels of undeveloped acreage. These larger parcels include the western slope of Sobrante Ridge, and the lower portions of the north face of San Pablo Ridge.

3.187. A major policy of this plan is to eliminate deep, narrow lots through the aggregation of land parcels in areas designated for multiple family use. Every effort should be made to encourage the aggregation of such lots to provide for better designed projects.

3.188. Areas outside the present and committed area of service capability of EBMUD and West Contra Costa Sanitary District are to be retained in the Open Space category.

3.189. In order to retain the ridgelines around El Sobrante in their natural state, it is recommended that a ridgeline preservation ordinance be developed which would prohibit the placement of any structure on or near the crest of a scenic ridge, such as San Pablo Ridge or Sobrante Ridge. All land above the 400' elevation shall not be developed for suburban purposes unless in conformance with the Land Use Plan Map.

3.190. Appian Way is identified as a Route of Regional Significance under the West County Action Plan. The segment of Appian Way from the Pinole city limits to Valley View Road (at the Appian Triangle), which is currently three lanes with one lane in each direction plus a center two-way left turn lane, is planned as a four-lane arterial. There is limited room to secure additional right-of-way along this roadway segment for further widening and there are likely to be significant costs for right-of-way acquisition and construction to widen this segment of Appian Way to the planned four lane configuration. Retention of the current three-lane cross section for this segment of Appian Way as the ultimate or planned roadway may be more economically feasible than widening to four lanes while providing sufficient traffic capacity in the future.

3.191. In conjunction with the cities of Pinole and Richmond and the West Contra Costa Transportation Advisory Committee (WCCTAC), the County will evaluate the feasibility of the planned or ultimate four lane roadway configuration for this segment of Appian Way compared to retention of the current three lane configuration. This feasibility study will determine the footprint of a four lane cross-section for this segment of Appian Way to be used in estimating the right of way and construction costs for the planned roadway configuration, as a four lane arterial roadway. The feasibility study will then compare projected traffic volumes and levels of service for the planned four lane arterial roadway versus the existing three lane cross-section (one lane in each direction plus a center two-way left turn lane) and evaluate any differences between the two in terms of traffic operations and safety. The feasibility study will also identify the usage of this road segment by new development in the cities of Pinole, Richmond and unincorporated El Sobrante. Additionally, consistent with the principles of existing General Plan policies related to "Complete Streets", the feasibility study will examine whether improvements for this roadway segment are needed for pedestrians, bicyclists, and public transit and whether such improvements can be provided within the existing public right-of-way. A criterion for feasibility is whether the cities and the County can agree on a funding plan for: a) improvements to this section of Appian Way; or, b) construction of this four-lane arterial. The feasibility study will commence on or before the start of Fiscal Year 2011-

12 (pending a funding source) and will be completed by January 1, 2013 with the report to be submitted to the Board of Supervisors and WCCTAC. The results of the study will then be used as the basis for the County to determine whether to amend the Transportation/Circulation Element, Roadway Network Map, changing this segment of Appian Way from a planned four lane roadway to retention of the existing three lane cross-section (one lane in each direction plus a center two-way left turn lane) as the planned roadway configuration.

POLICIES FOR THE NORTH RICHMOND AREA

3.192. For all industrial categories, the Plan should accommodate and guide the growth and development of industry. With growth and development there needs to be a recognition of environmental, social and economic values which will work to minimize land use conflicts, to establish a reasonably pleasing setting and to protect natural resources that are irreplaceable. Through appropriate regulatory mechanisms (e.g., zoning ordinance, nuisance ordinance, etc.) provide for the following:

- Require a setback from San Pablo and Wildcat Creeks for new structures. The size of the setback will be developed through site development review in conjunction with responsible agencies (e.g., Department of Fish and Game, Flood Control District). Lands within these setback areas shall reinforce the habitat values and/or trail setting of the adjacent flood control project for these creeks.
- Require setbacks within shoreline areas to protect wetlands designated by State or Federal regulatory agencies and to provide public access as appropriate. The size of the setback or mitigation will be developed in conjunction with all affected agencies.
- Require health risks assessments and, where appropriate, provide necessary buffers for all new applications handling substantial amounts of hazardous materials.
- Achieve an upgrading of the visual appearance and unity of the area through architectural and landscape requirements and utility under-grounding.
- Require special geotechnical studies and construction techniques in areas of potential seismic or geological hazards (e.g., Alquist-Priolo Special Study Zone, high liquefaction, and reclaimed wetland areas).
- Use established standards to limit activities that may endanger human health and can cause damage to the environment.
- Use established standards to limit activities which may be objectionable such as odors, fumes or other emissions so they will be contained within the property boundaries.
- Require projects adjacent to parks or recreational corridors to minimize impacts on the recreational values of those facilities.
- Require a shadow analysis for projects adjacent to commercial nurseries and protect the solar access of affected properties.
- Require archaeology reconnaissance surveys for all projects within an archaeological sensitivity area. When cultural resources are located within a project, measures to deal with the historic resource shall be recommended by a qualified archeologist.
- Require all uses to comply with the regulations of the Bay Area Air Quality Management District, the Regional Water Quality Control Board, the San Francisco Bay Conservation and Development Commission, the State and County health departments, and any other

regulatory agencies which exist or may be established to ensure environmental quality in the San Francisco Bay Region.

- Screen all outside storage/maintenance areas from public streets.

a. LIGHT INDUSTRY

Amend the "Light Industry" land use category of the General Plan Land Use Element for North Richmond to read as follows:

Industrial activities in this category are established in areas where development is carefully controlled to ensure compatibility between the industrial operations and other activities and the character of the district, community and environment in which they are located. The appearance of each site, building or industrial operation, and each industrial district as a whole, should establish a reasonably pleasing and harmonious setting.

Types of uses within this category can range from research, engineering, product development and testing, and sales development to light manufacturing, warehousing, distribution centers, and commercial nurseries. Support retail/service uses may also be found in this category.

In addition to the policies and factors established to guide development in all commercial and industrial areas, the following policies and factors are established to guide the development of Special Industrial areas:

(1) "Apply special zoning designations or planned unit districts to provide use limitations, in cases where uses need to be limited to protect the character of an area, "in all cases where.
(2) Limit activities which may result in noise, glare or vibrations extending beyond the property boundary."

b. HEAVY INDUSTRY

Amend the "Heavy Industry" land use category of the County General Plan Land Use Element for North Richmond to read as follows:

"Industry activities in this category are traditionally larger scale and include very little or no office space. Sufficient visual open space and/or landscaped screening between industrial operations and adjacent residential or recreational activities shall be required as needed."

This category accommodates a wide variety of industrial activities including, but not limited to, oil refining, contractors' storage yards, warehouses, and machine shops. For the North Richmond area, this category also includes commercial nurseries. Support retail/service uses may also be found in this category.

In addition to the policies and factors established to guide development in all commercial and industrial areas, the following policies and factors are established to guide the development of General Industrial areas:

- Encourage commercial nurseries to remain in the area.
- Require projects involving auto-dismantling activities to be enclosed and prohibit outside storage of vehicles.
- Limit activities which may result in noise, glare or vibrations beyond the designated industrial areas.
- Make a finding that new residential uses within this designation are incompatible.

3.193. Implementation

The City of Richmond and the County shall undertake a rezoning study of the area to bring the zoning in conformance with their respective General Plans.

All new permits with conditions of approval shall be monitored by the County or City. Additionally, the City of Richmond and the County shall undertake a more vigorous zoning investigation and enforcement program.

The County and City shall require verification that all appropriate State and Federal or regional permits are granted before building permits are issued for the projects. Project applicants shall provide a site history for uses that have previously been on the property as part of any permit application process. As appropriate, soils analysis for toxic wastes shall be required for permit applications.

3.194. A Redevelopment Plan for the North Richmond area was adopted by the Board of Supervisors in July 1987. All development proposals should be reviewed by, and coordinated with, Redevelopment Agency staff to ensure compatibility with the Redevelopment Plan. Additionally, involvement with the redevelopment process will allow the County to coordinate concurrent development proposals and to possibly facilitate the construction of public improvements that will further the goals of the Redevelopment Plan.

3.195. Lands which were the site of the West Contra Costa Sanitary Landfill ownership and which are designated as Open Space, will continue to allow solid waste facilities on the property as an interim use of the land.

3.196. The West County Integrated Resource Recovery Facility site, circumscribed by Central Street, Brookside Drive, Third Street and the Wildcat Creek, is recognized as a non-disposal facility in the Countywide Integrated Waste Management Plan.

3.197. The Fifth Street and Market Avenue General Plan Amendment is intended to support up to three residential units. Development of new residential units should be visually compatible with the existing residences which are just south and adjacent to this area. A density bonus is to also be considered as part of potential future development for further implementing the North Richmond Redevelopment Plan.

3.198. Urban agriculture is the practice of growing, processing, and distributing fresh food by people living in an urban area. Urban agriculture includes a wide range of activities related to food production, including home gardens, community gardens, demonstration or educational gardens, urban farms, and farmers' markets. This plan acknowledges that urban agriculture can help meet local food needs for residents of North Richmond and the surrounding area while also promoting environmental sustainability, good health and nutrition, and opportunities for economic and community development. It is the intent of this plan to promote and support the development of urban agriculture in North Richmond by permitting the following activities and uses related to agricultural production:

(a) Edible Landscapes: Edible landscapes are to be encouraged and permitted in North Richmond. These are defined as cultivating food-producing plants and trees in the landscaping of both private and public outdoor open spaces within North Richmond, attended by an individual, community organization, or business.

(b) Home Garden: A Home Garden is defined as a home or private food-

producing garden located in the front or backyard, rooftop, courtyard, balcony, fence, or wall window sill of a private single family residence, which is attended by an individual. It is permitted in all residential designated areas of North Richmond when the gardening activity is incidental to a residential use. Home gardens are permitted in all single family residential designated areas and multi-family residential designated areas. Bee keeping and the raising of poultry and animals are not permitted in a Home Garden. The products grown in a Home Garden are intended for personal consumption and are not intended for on-site sale but may be sold off-site.

(c) Community Garden: Community Gardens are permitted in residential commercial, industrial, and public or open space designated areas within North Richmond. A Community Garden is defined as contiguous or non-contiguous plots of land set aside for growing food producing or ornamental plants and trees, which is collectively shared, managed, and attended to by an organized group of people. Oftentimes, a Community Garden is comprised of a series of plots attended to individually by community members. Small-scale bee keeping (no more than 4 bee hives), and the raising of hen chickens for egg production on parcel not less than 20,000 square feet of area, is permitted in a Community Garden. Maintaining more than four bee hives, and raising poultry other than hen chickens and farm animals, are not permitted in a Community Garden. Although products grown in a Community Garden are normally intended for personal consumption, limited on-site sales at a Community Garden may be allowed under the administrative review procedures of the amended North Richmond P-1, Planned Unit District.

(d) Demonstration or Educational Garden: A Demonstration or Educational Garden is defined as a plot of land, either contiguous or non-contiguous, set aside for a small to medium-scale (non-mechanized) food-producing garden on public or private property for growing food producing or ornamental plants and trees, which is attended to by a community organization or public or private educational-based institution. Demonstration or Educational Gardens are permitted in the residential, commercial, industrial, and public or open space designated areas within North Richmond through the administrative review procedures under the amended North Richmond P-1, Planned Unit District. Small-scale bee keeping, meaning no more than 4 bee hives, and raising hen chickens for egg production is permitted, but no other form of poultry or animal raising is permitted. On-site sale of agricultural products for educational, therapeutic, community service, or philanthropic purposes may be allowed under the administrative review procedures of the amended North Richmond P-1, Planned Unit District.

(e) Urban Farm: An Urban Farm describes the production of food-producing or ornamental plants, bees, fish, poultry, or small farm animals located on private property at least one (1) acre in size, and designed and managed for commercial purposes using a variety of horizontal and vertical growing techniques, including in-soil, container, hydroponic and aquaponic growing systems. An Urban Farm may be allowed under the administrative review procedures of the amended

North Richmond P-1, Planned Unit District in those areas designated for industrial use, public, open, and park uses, and, in a commercial designated area subject to a Land Use Permit; but an Urban Farm is not allowed in any residential designated area. The establishment of on-site processing facilities (e.g. commercial kitchen, packing or packaging, etc.) and on-site sale of agricultural products may be allowed under the administrative review procedures of the amended North Richmond P-1, Planned Unit District. Certain forms of on-site processing or on-site sale (e.g. winery) will be subject to a Land Use Permit process.

(f) Urban Agriculture Demonstration Site: Contra Costa County will collaborate with community based organizations, other public agencies, and interested businesses to explore the feasibility of establishing an urban agriculture learning and demonstration site within the non-residential designated area of North Richmond. The purpose is to establish a suitable location to demonstrate and practice a full range of urban agriculture uses and related activities for the benefit of the North Richmond community and surrounding area by providing opportunities for children and adults alike to learn and participate in the growing and production of locally raised food. The Urban Agriculture Demonstration Site may be managed and operated by a community based organization, by a public entity, or by a commercial operator. The Urban Agriculture Demonstration Site may be located on public land, or private property, or co-located with another public use or facility (e.g. park or open space area). One potential location for the Urban Agricultural Demonstration Site is an approximately 4 acre parcel (Assessor Parcel No. 408-201-017) owned by Contra Costa County located at the northeast corner of Fred Jackson Way (formerly 3rd Street) and Brookside Drive.

3.199. Contra Costa County, working through the County Agricultural Commissioner, County Environmental Health Officer, and Department of Conservation and Development, and in collaboration with the University of California Cooperative Extension, Contra Costa Resource Conservation District, urban agriculture practioners, community based organization, and other interested interested parties, will develop and implement a set of best management practices for urban agriculture within the North Richmond area. The best management practices should be directed at promoting environmentally safe and sustainable methods for growing, producing, processing, and transporting agricultural products raised in North Richmond, including disposal of food and agricultural by-products. The best management practices will include the physical and operational standards for the community, demonstration/education garden categories, and the urban farm and urban agriculture demonstration site site categories, as defined above in policies 3-191.b. through 3-191.f., which may in turn be translated into a zoning code text amendment under the North Richmond P-1, Planned Unit District. The overall objective of these best management practices will be to protect public health and safety and to assure sustainable use of the land.

POLICIES FOR THE DOUGHERTY VALLEY

3.200. The Dougherty Valley is planned for development as a residential community supported by retail, office, and community services and provides in large measure open space buffers from adjacent developed areas. Protected creek corridors will be

integrated within the development fabric. New development of up to 11,000 homes within the Dougherty Valley would provide a new residential community of approximately 29,000 people. The land use designations are reflected in the Land Use Element map. A Dougherty Valley Specific Plan has been developed to augment those General Plan designations. The Dougherty Valley has undergone a more comprehensive planning process, consistent with this General Plan, in the Dougherty Valley Specific Plan, which provides more detailed planning and supplemental goals, policies and implementation measure for this area. In. the case of minor conflicts with Countywide non-area specific goals, those of the Specific Plan shall prevail.

POLICIES FOR THE COUNTRYWOOD PROJECT AREA

3.201. The Countrywood seven acre project area between Pleasant Hill and Diablo View Roads shall be developed as Senior Citizen Congregate Care and Open Space. It shall be developed through the Planned Unit Development process. The Senior Citizen Congregate Care area allows for the development of clustered residential units for the location of a senior citizen congregate care housing project. If senior housing is not constructed, the property will be limited to single family homes as allowed by the pre-existing Single Family Residential - Low Density category.

3.202. The Open Space area is heavily vegetated and shall be protected as a natural reserve allowing for only trail facilities or compatible open space uses. Development rights for the entire area shall be deeded to the County as a condition of development approval.

3.203. This plan amendment covers two separate parcels and both parcels are to be for Congregate Care use. Review of development application shall determine the appropriate number of units allowed on the site. The smaller half acre site is too small for congregate uses without combination with the larger parcel and will be limited to single family residential uses.

POLICES FOR DISCOVERY BAY AREA

3.204. As used in the context of Policy 3-264, the term "Discovery Bay West Project", shall mean the land area contained within approved Subdivision 7686, which includes Village I, and approved Subdivision 8023, which includes Villages II, III, and IV. The policy for review of the Discovery Bay West project are as follows:

Conservation and Open Space

(a) The Discovery Bay West project shall provide open space as part of the land use concept to ensure compliance with the County's 65/35 Land Preservation Standard. For this purpose, the project shall include dedication of development rights to the 200± acre Fallman Ranch in the northeast portion of the GPA area. Additionally, it shall provide a minimum of 120 acres of open forms of land use within the project, including but not limited to, lakes, park, utility easement, Fallman Canal, wetland (in southeast portion of project), pocket parks, landscaped areas, and trails.

(b) The development concept of the Discovery Bay West project shall provide improved functional integration between the water element, other parks and recreation facilities and the residential project. Public access to areas east should be explored.

(c) The Discovery Bay West project shall provide a buffer of at least 100 feet in width, between the residential lots and the center line of Bixler Road for the portion of the site north of the East Contra Costa Irrigation District (ECCID) Canal.

(d) Jurisdictional wetland areas planned for open space uses shall have development rights for these areas dedicated to the County prior to construction of any portion of the project that is north of the ECCID Canal.

Land Use

(e) The land use plan map for Discovery Bay West should be interpreted flexibly in terms of the location and configuration of the lakes and marina.

(f) A maximum of 2,000 dwelling units shall be allowed within the Discovery Bay West project area.

(g) A community center shall be provided as part of the Discovery Bay West project. The location of the community center shall be in the Discovery Bay West GPA area of the existing community of Discovery Bay. The Hofmann Company is to dedicate the site, preferably in the existing Discovery Bay Community, and to pay 50 percent of the building construction costs. Site selection shall be determined by the County, Discovery Bay MAC and developer of Discovery Bay West.

(h) The Discovery Bay West project shall be designed as a mixed density residential project which shall include both attached and detached units in differing density to serve a broader range of housing needs. Property generally east of the lakes is to be designated Single Family Residential-Medium Density. The remaining residential lands are to be designated Single Family Residential-High Density. The design shall allow for internal project amenities such as recreational areas, community focal points and the like. Senior housing projects shall be encouraged.

(i) Establishment of a senior housing project in the vicinity of Point of Timber Road shall be encouraged.

Public Services

(j) The Discovery Bay West project shall consider alternative water systems for the provision of domestic water, including preparation of a formal contingency plan for use of surface waters.

(k) The Discovery Bay West project shall include provision for a ground water monitoring program to quantify the effect of additional use of the aquifer (i.e., quality or drawdown). If the monitoring programs show that the performance standards are not being met, no new units may be added.

(l) The developer of Discovery Bay West along with representative of the Byron and Knightsen Elementary School Districts shall meet to resolve issues pertaining to school district boundaries.

Transportation

(m) Discovery Bay west shall remain in the East County Regional Area of Benefit.

(n) Discovery Bay West shall pay the Eastern Contra Costa Sub-regional Transportation Mitigation Fee in effect at the time building permits are issued.

(o) Discovery Bay West shall participate in a flexible implementation program for mitigation measures in the Environmental Impact Report.

(p) After issuance of the 500th building permit for the Discovery Bay project, the Discovery Bay West developer shall fund a traffic study to determine if the trip distribution and road network assumptions in the EIR have substantially changed. If substantial changes have occurred, mitigation and possibly

subsequent environmental documentation will be required. The cost of the additional traffic studies and environmental documentation will be the responsibility of the developer. Additional traffic mitigation will be subject to the requirements of a flexible monitoring program.

(q) The circulationand transportation concept shall provide a road connection to the Discovery Bay community in the southern portion of the GPA area.

(r) The Discovery Bay West project shall be reviewed to consider adequate access and internal circulation to adjacent properties within the plan amendment area.

(s) The Discovery Bay West project shall provide emergency vehicle access near the northwest corner of the Pantages property.

(t) Discovery Bay West GPA projects shall provide an efficient internal circulation system, with adequate on-street parking.

(u) To reduce vehicle trip generation, consideration should be given to establishing a small-scale telecommuting center in the community center. Equipping residential units with telecommunication capabilities should be encouraged.

POLICIES FOR ESTABLISHMENT OF COUNTY HOMELESS SHELTERS

3.205. Background information on homelessness is also discussed in Section 6.6 of Chapter 6, the Housing Element. Beginning on Page 6-61 of the Housing Element of this general plan, and specifically in Table 6-15 on page 6-26, non-county homeless shelters are discussed. The Housing Element discussion does not apply to County homeless shelters.

The purpose of the following policies is to designate where County homeless shelters may be established and under what circumstances. Other policies that address homelessness are contained in the Public Facilities/Services Element.

3.206. County homeless shelters may be established in all general plan land use designations (including residential, commercial and industrial, mixed use areas, and other uses), except for Congregate Care/Senior Housing, Landfill, and all Open Space (including Agricultural Lands, parks and Recreation, Agricultural Core, Delta Recreation and Resources, Water, and Watershed) designations. County homeless shelters may be established within areas that lie in incorporated or unincorporated areas.

3.207. A County homeless shelter may be established as set forth above, provided that the Board of Supervisors is satisfied that the shelter:

(a) has undergone applicable environmental review;

(b) will furnish residents with sleeping quarters, food, and access to bathroom facilities and transportation services if necessary or advisable while they are housed at the shelter;

(c) will include appropriate and adequate security measures and on-site supervision;

(d) will provide a procedure for the receipt and consideration of neighbors' concerns;

(e) will benefit the health, safety and welfare of shelter residents; and

(f) will not prevent the implementation of General Plan land uses in the vicinity.

3.9 POLICIES FOR SPECIAL CONCERN AREAS

Three areas have been designated Special Concern Areas in view of their key locational qualities. These areas are the Appian Way corridor (Figure 3-5), the San Pablo Dam Road commercial area (Figure 3-6), and San Pablo Ridge (Figure 3-7). Each of these areas is discussed below in detail.

POLICIES FOR APPIAN WAY CORRIDOR

3.208. Appian Way Corridor Special Concern Area is to develop into a unified, well-designed neighborhood, which at appropriate locations provides opportunities for mixed use development, rather than an incremental accumulation of unrelated developments. The overall goal is to establish some additional business districts along the corridor with local services, shopping, and restaurants that are easily accessible to residents and are pedestrian and bicycle friendly. Opportunity for the development of secondary "downtown" should be encouraged.

(a) update the adopted Appian Way Precise Plan, which provides for a standard of an 84-foot right-of-way to provide: one travel lane in each direction, opportunities to install a raised landscaped median with a left-turn pocket at appropriate intersection locations, on-street parking bays where existing right-of-way is sufficient, additional lighted pedestrian crossings, improved sidewalks and bus bays, and retain bicycle lanes on both sides of the street;

(b) development of open space and pocket parks should be encouraged in the Area;

(c) where possible, retain existing mature trees located either within or encroaching into the potential right-of-way, and incorporate them into the overall roadway design;

(d) provide appropriate traffic signalization as new development occurs along the corridor, with each development required to pay an appropriate share of the cost;

(e) eliminate the hazardous ditches along Appian Way by installing appropriate storm drains as a part of right-of-way improvements;

(f) project design should reflect the objective of providing well-designed development suited to the building sites, at appropriate densities;

(g) commercial areas should maintain a low profile by limiting building height to 27 feet, but a mixed use project could be allowed to reach a maximum of 35 feet under certain circumstances as described in the mixed use designations and based on findings related to residential density bonus;

(h) emphasis should be on landscaping and architectural continuity along Appian Way, with building masses de-emphasized;

(i) variances to parking standards may be considered for a mixed use project;

(j) design of buildings shall be interesting and innovative, but should have a harmonious relationship with each other;

(k) consolidation of parcels shall be encouraged with emphasis on combined access and parking areas;

(l) variation in building set-back from Appian Way and along side yards should be considered on a block by block basis to create openness along the corridor and also to create a sense of distinct neighborhoods;

(m) provide an attractive streetscape through street tree and frontage planting and encourage the use of drought-resistant plants;

(n) areas designated for commercial uses should be rezoned from Retail Business District (R-B) to Planned Unit District (P-1), as the desired zoning district to implement the mixed use concept which zone reflects the desired commercial character along Appian Way. Multiple family development shall be allowed to be integrated into a commercial development at the locations designated mixed use under the Land Use Element Map;

(o) local, owner-operated businesses should be encouraged; drive through retail operations should not be encouraged;

(p) a landscaped buffer zone, including attractive fences wherever necessary to provide privacy and security shall be provided between new developments and existing residences; however, new development should also consider pedestrian connectivity from one neighborhood to another;

(q) within areas designated for development in the Appian Way Special Concern Area there are those areas which, because of topography, steep slopes or aesthetic qualities, are unsuitable for development and which shall be protected as open space whenever feasible;

(r) each individual multi-family development shall provide recreational facilities for its occupants; efforts will be made to encourage collaboration between developers to establish recreational facilities with broader utility for area residents; an individual developer also may meet this requirement by contributing its fair share to nearby recreational facilities;

(s) following establishment of mixed use designations along Appian Way, the County may develop a mechanism for the transfer of density among parcels designated for mixed use so long as the transfer does not increase the overall maximum number of dwelling units or commercial for such designations within the Appian Way Special Concern Area; and

(t) traffic flow in the Triangle Area will be studied and possible alternatives to improve circulation for automobiles, bicycles, and pedestrians will be examined.

Figure 3-5 Appian Way Corridor Special Concern Area

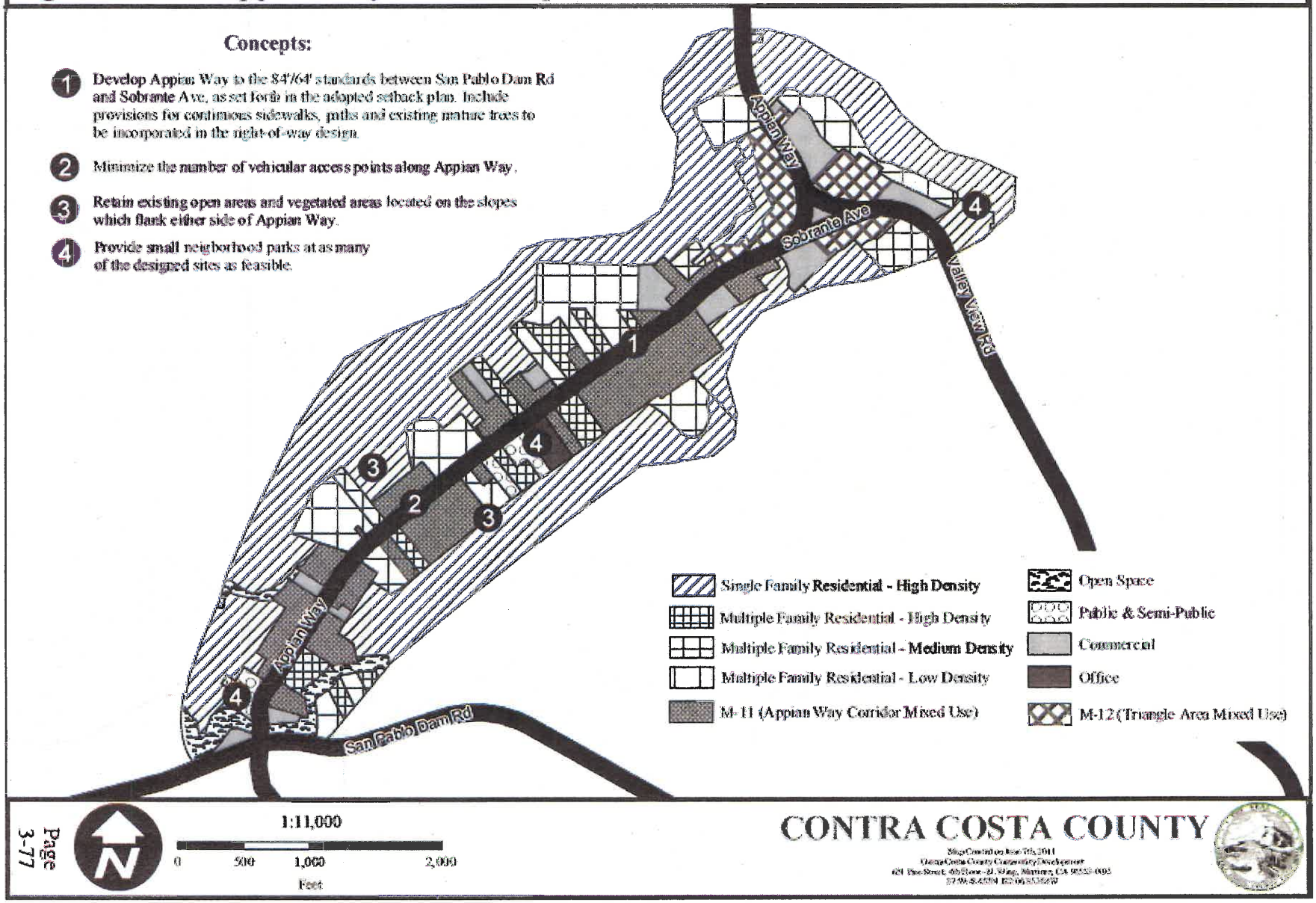


Figure 3-6 San Pablo Dam Road Commercial Special Concern Area

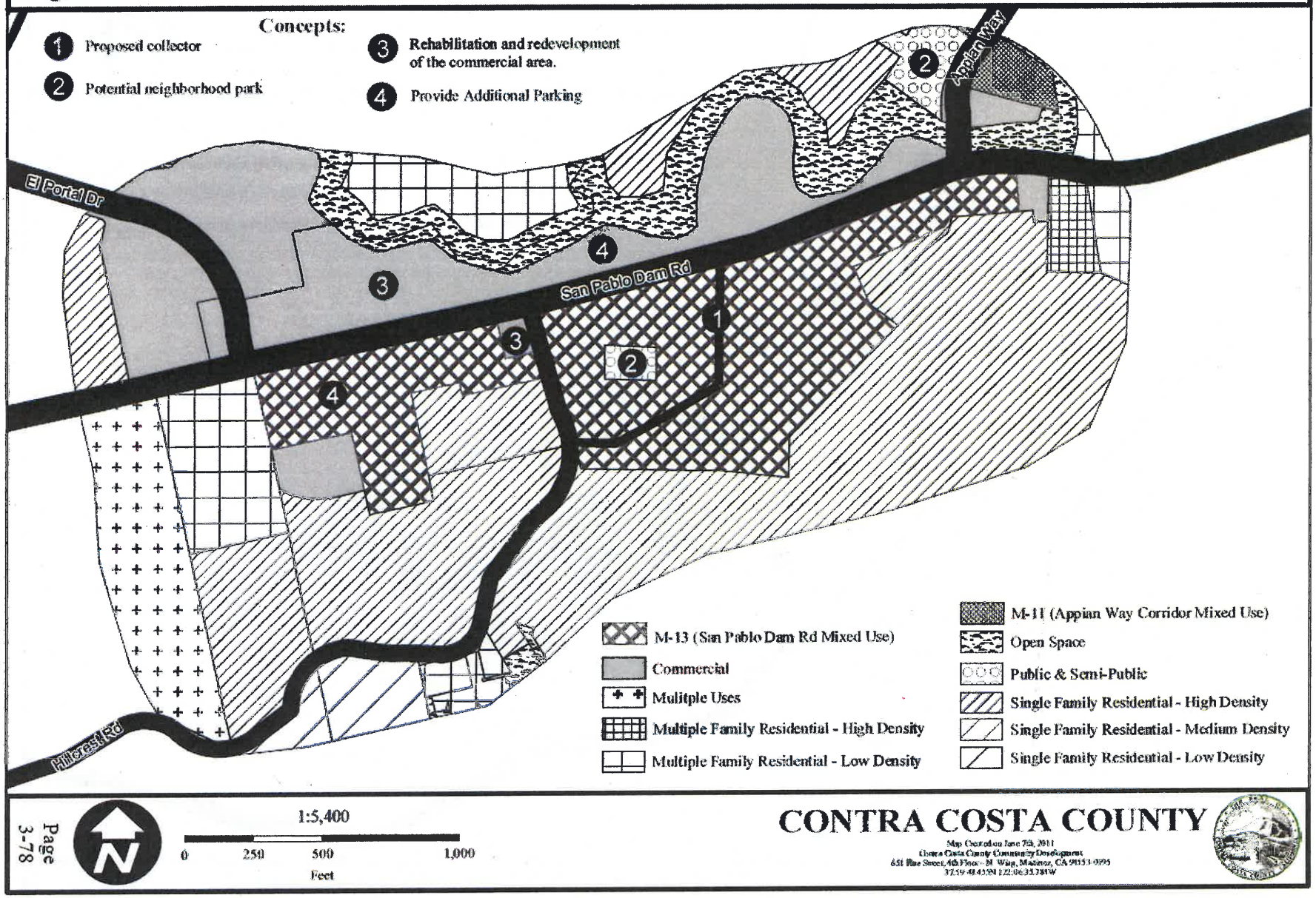
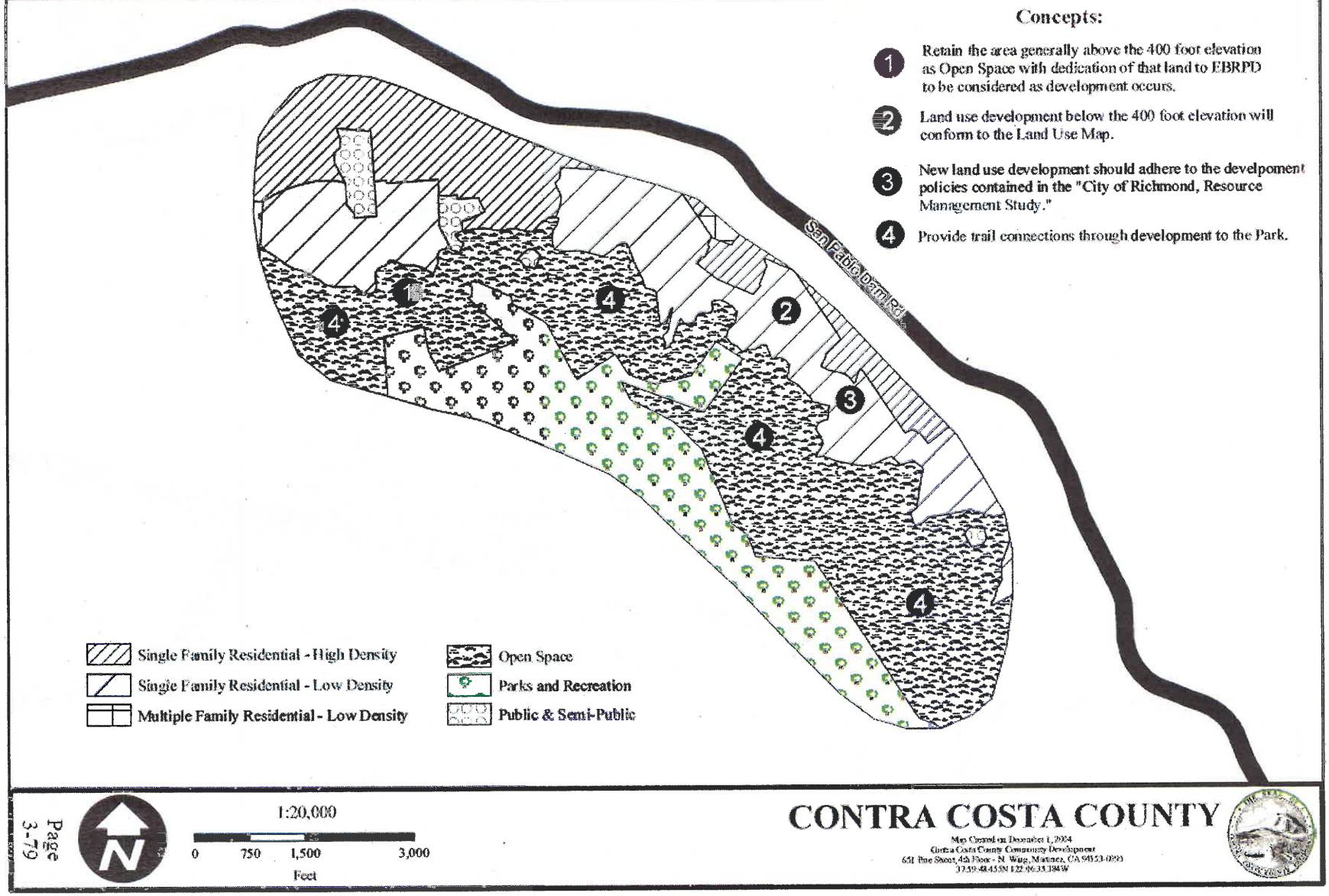


Figure 3-7 San Pablo Ridge Special Concern Area



POLICIES FOR SAN PABLO DAM ROAD

3.209. San Pablo Dam Road Special Concern Area is a primary business district for El Sobrante. The El Sobrante Community desires to retain its identity and individuality in the face of urbanization pressures while at the same time revitalizing the commercial area. The goal of the San Pablo Dam Road Special Concern Area is to ensure the efficient flow of traffic (motorized and non-motorized) while working to create a friendly, attractive, village-like downtown with a town center which includes central open space with surrounding retail services like restaurants, book stores, a movie theater, café, grocery store, weekly farmers market, local art gallery, children services, etc. Two distinct, yet interlocking problems must be addressed: 1) devising a circulation system which allows traffic into, through, and around the business district, and 2) effective land use and design policies for the area.

(a) The commercial area shall be made attractive and convenient to the community with emphasis on the following:

- improved localized traffic circulation;
- development of a town square with an open pedestrian plaza lined with businesses and sufficient new roads to provide circulation, parking and easy pedestrian access;
- addition of bicycle lanes along San Pablo Dam Road or separated bicycle path that offers safe travel for cyclists between Appian Way and El Portal Drive;
- widened sidewalks and improved overall pedestrian circulation throughout the Area;
- adequate parking, particularly off street parking with improved pedestrian access to businesses; and
- manage and balance traffic within the existing roadway right-of- way for this segment of San Pablo Dam Road.

(b) Encourage commercial area rehabilitation and redevelopment, considering development of a unifying motif.

(c) Provide for the ability to integrate multi-family residential, commercial services, financial services, and offices in a single project according to the new mixed use designation established for the commercial area of San Pablo Road as identified in the locations illustrated on the Land Use Element Map.

(d) Improve overall area appearance through appropriate sign regulation. This would eventually result in removal of unsightly signs.

(e) Provide adequate off-street parking, allow for shared parking arrangements, review the existing supply of curb side parking spaces, consider the formation of a Business Improvement District (other public entity) to build and manage public parking lots and secure the right-of-way for a collector roadway that would extend Pitt Way to Hillcrest Road.

(f) Enhance pedestrian traffic across San Pablo Dam Road by well marked and signalized crosswalks.

(g) Establish specific range of uses, development regulations and zoning standards under a new Planned Unit District (P-1) zoning for the commercial area of San Pablo Dam Road.

(h) As more fully described in Policy 3-162 under "Policies for the El Sobrante Area", the County will, in consultation with the El Sobrante community, prepare and adopt a new precise alignment plan for the section of San Pablo Dam Road between El Portal Drive and Appian Way

based on the "Complete Streets" concept, whereby the roadway will be designed and operated to accommodate safe access for users; motorists, transit riders, bicyclists and pedestrians of all ages and abilities. In addition, this new precise alignment plan will include the provision for new collector roadway connecting Pitt Way to Hillcrest Road.

3-210. The San Pablo Dam Road commercial area is envisioned to be an attractive and vibrant, village-like downtown. The desire is to establish a town center or square for El Sobrante within the commercial area, preferably on the block bounded by San Pablo Dam Road, Hillcrest Road, and Pitt Way. Parking to serve the public plaza should be consolidated in a parking lot with easy pedestrian access to the center. Local serving retail and personal service uses are to be encouraged along this segment of San Pablo Dam Road.

The development of a community center, which would provide space for public meetings, cultural events, and other public functions should be considered for the San Pablo commercial area.

3-211. Development projects within the San Pablo Dam Road commercial area should to the extent feasible incorporate open and public spaces that are inviting to the public includes well designed landscape treatments and visually please signage.

3-212. Local, owner operated business should be encourage. Drive through retail operations should not be encouraged.

3-213. The community's desire to develop a creekside boardwalk or linear park along the north side of San Pablo Dam Road is encouraged subject to further community process, review, and study.

(a) Encourage commercial area rehabilitation and redevelopment, considering development of a unifying motif.
(b) Provide for the ability to integrate multi-family residential, commercial services, financial services, and offices in a single project according to the new mixed use designation established for the commercial area of San Pablo Road as identified in the locations illustrated on the Land Use Element Map.
(c) Improve overall area appearance through appropriate sign regulation. This would eventually result in removal of unsightly signs.
(d) Provide adequate off-street parking, allow for shared parking arrangements, review the existing supply of curb side parking spaces, consider the formation of a Business Improvement District (other public entity) to build and manage public parking lots and secure the right-of-way for a collector roadway that would extend Pitt Way to Hillcrest Road.
(e) Enhance pedestrian traffic across San Pablo Dam Road by well marked and signalized crosswalks.
(f) Establish specific range of uses, development regulations and zoning standards under a new Planned Unit District (P-1) zoning for the commercial area of San Pablo Dam Road.
(g) As more fully described in Policy 3-162 under "Policies for the El Sobrante Area", the County will, in consultation with the El Sobrante community, prepare and adopt a new precise alignment plan for the section of San Pablo Dam Road between El Portal Drive and Appian Way based

on the "Complete Streets" concept, whereby the roadway will be designed and operated to accommodate safe access for users – motorists, transit riders, bicyclists, and pedestrians of all ages and abilities. In addition, this new precise alignment plan will include the provision for new collector roadway connecting Pitt Way to Hillcrest Road.

3-214. The San Pablo Dam Road commercial area is envisioned to be an attractive and vibrant, village-like downtown. The desire is to establish a town center or square for El Sobrante within the commercial area, preferably on the block bounded by San Pablo Dam Road, Hillcrest Road, and Pitt Way. Parking to serve the public plaza should be consolidated in a parking lot with easy pedestrian access to the center. Local serving retail and personal service uses are to be encouraged along this segment of San Pablo Dam Road.

The development of a community center, which would provide space for public meetings, cultural events, and other public functions should be considered for the San Pablo commercial area.

3-215. Development projects within the San Pablo Dam Road commercial area should to the extent feasible incorporate open and public spaces that are inviting to the public includes well designed landscape treatments and visually please signage.

3-216. Local, owner operated business should be encourage. Drive through retail operations should not be encouraged.

3-217. The community's desire to develop a creekside boardwalk or linear park along the north side of San Pablo Dam Road is encouraged subject to further community process, review, and study.

POLICIES FOR SAN PABLO RIDGE

3-218. The San Pablo Ridge Special Concern Area consists of approximately 1,000 acres on the southerly borders of the Planning Area. It includes a large portion of San Pablo Ridge, with its heavily vegetated slopes, and an area below of lesser slopes near San Pablo Dam Road. The ridge provides an important visual reference to the El Sobrante Community and is a logical greenbelt border to the Planning Area.

The following policies should be applied to development in this Special Concern Area:

(a) The granting of development rights to the public or the dedication of land to public agencies should be required of developers for all projects proposed on lands at and above the 400 foot elevation level, as conditions of approval.

(b) No buildings should be constructed along scenic ridgelines, including areas where the ridgeline is located below the 400-foot elevation level.

(c) Existing trail head parking and trail access to Wildcat Canyon Park should be kept open for the community. Additional trail access and parking for cars and horse trailers should be added as new developments occur.

(d) The City of Richmond and the County should coordinate their planning efforts to preserve views of San Pablo Ridge from the community.

(e) Existing means of access to Wildcat Canyon Park should be maintained and expanded as development occurs.

(f) All "significant natural features" including, but not limited to, trees and native plants, natural water ways, rock out-croppings and areas of historical and archaeological significance, within the immediate vicinity of the ridgeline shall be preserved.

(g) A landscaped buffer zone, including attractive fences wherever necessary to provide privacy and security, should be provided between new developments and existing residences.

(h) Local civic groups should study the creation of a special assessment district to purchase San Pablo Ridge or develop the appropriate mechanisms in order to retain the ridge as permanent open space.

POLICIES FOR THE KENSINGTON AREA

3-219. Allow for the review of new residential development that provides reasonable protection for existing residences in the Kensington Community with regards to: views, design compatibility (including building bulk, size, and height), adequate parking, privacy, and access to sunlight.

3-220. Preservation of views of scenic natural features (e.g. bay, mountains) and the developed environment (e.g. bridges, city skyline) should be incorporated into the review of development applications.

3-221. Review proposed residential development for design compatibility with nearby development (e.g. building mass, height, mechanical devices) and provisions for adequate parking.

3-222. New residential development will be reviewed against realistic impacts of privacy and sunlight on surrounding neighbors.

3-223. Consideration will be given to review of non-residential development in the Kensington community with policies 3-220 through 3-222 herein.

4. GROWTH MANAGEMENT ELEMENT

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4. GROWTH MANAGEMENT PROGRAM

4.1 INTRODUCTION

The purpose of this Element is to establish policies and standards for traffic levels of service and performance standards for fire, police, parks, sanitary facilities, water and flood control to ensure generally that public facilities consistent with adopted standards are provided. By including this Element in the adoption of the General Plan, the County intends to establish a long range program which will match the demand for public facilities to serve new development with plans, capital improvement programs and development impact mitigation programs. The intent is to ensure that growth takes place in a manner that will ensure protection of the health, safety and welfare of both existing and future residents of Contra Costa County.

The responsible management of growth in the County is key to preserving the quality of life for current and future County residents.

This Growth Management Element is the culmination of a process which was created by the Mayors' Conference and the County Board of Supervisors. The Contra Costa Transportation Partnership Commission was established as a Transportation Authority under State law (PUC Section 180000) to provide a forum for transportation issues in the County and to propose ways to manage traffic congestion. By approving Measure C - 1988, the voters established the Transportation Authority, added one-half cent to the County sales tax for the next 20 years to be used for transportation funding, and gave the Transportation Authority the charge to implement a Growth Management Program. That program requires the County and each city to develop a Growth Management Element as part of its General Plan in order to be eligible to receive local street maintenance and improvement funds generated by Measure C-1988.

This Growth Management Element complies with the model element developed by the Transportation Authority and includes the sections required by Measure C - 1988 to be part of this Growth Management Element. These sections (1) adopt traffic levels of service standards (LOS) keyed to types of land use, and (2) adopt performance standards maintained through capital projects for fire, police, parks, sanitary facilities, water and flood control. The Transportation Authority recognizes that facilities standards, as are discussed in this Element, establish performance standards to be applied in the County's development review process.

In addition to adopting this Growth Management Element as part of the General Plan under Measure C - 1988, the voters of the County, in Measure C - 1990, reaffirmed that growth management should be an integral part of this General Plan.

This Element is also adopted pursuant to the authority granted to local jurisdictions by Section 65303 of the Government Code of the State of California, which states:

"The General Plan may include any other elements or address any other subjects which, in the judgment of the legislative body, relates to the physical development of the county or city."

4.2 RELATIONSHIP TO OTHER GENERAL PLAN ELEMENTS

As indicated in Section 3, Land Use Element, the Growth Management Element works closely in conjunction with the Land Use Element to ensure that development proceeds in a manner which will not negatively affect facility and traffic service standards for existing land uses. In this regard, it should be noted that developments which cannot satisfy the assurances required by these standards should not be approved. By utilizing this Growth Management Element to responsibly manage new development proposals, the County will ensure that new development projects will bear their appropriate share of the adverse burdens and impacts they impose on public facilities and services. As a result, the Growth Management Element must be carefully considered together with Land Use and other elements of this General Plan when assessing General Plan consistency. The timing of the potential physical development contemplated in the Land Use Element will in part be determined by the ability of developers to satisfy the policies and standards described in this Growth Management Element. The Urban Limit Line (ULL) and the 65/35 Land Preservation Standard also work together with the Growth Management Element to ensure that growth occurs in a responsible manner and strikes appropriate balances between many competing values and interests.

In addition, this Growth Management Element contains implementing programs which encourage new development to promote the goals and objectives of the Conservation Element; the Public Facilities and Services Element; and the Housing Element. Moreover, by establishing an interjurisdictional land supply and development monitoring program, the Growth Management Element coordinates the implementation of the County General Plan with those of the 19 cities in the County.

To carry out the goals and objectives of the Land Use and Circulation Elements of the Plan, new development must demonstrate that the level of service standards of the Growth Management Element will be met. Only in this way will the negative effects of such growth be avoided. While it is anticipated that new growth will be able to mitigate its potential impacts through development fees and other exactions, it is possible that the timing of project approvals may be affected by the inability of individual developments to carry its appropriate cost of full service increments needed to allow further growth in a given area of the County. Thus, the improvements needed to implement the Circulation and Public Facilities and Services Elements of the Plan will in part be directly tied to, and dependent upon, the implementation of the Growth Management Element. Similarly, implementation of the Land Use Element will only proceed when it can be demonstrated that the growth management standards can be met by new development.

Policies relating to this "Pay as you Grow" philosophy underpinning the Growth Management Element can be found in the Transportation and Circulation Element, Overall Transportation/Circulation Goals 5-E and 5-F, and in the Overall Transportation/Circulation Policies 5-1 through 5-4. Related Land Use Element Goals 3-F and 3-H and Land Use Policies 3-5 through 3-10 are also part of the policy framework which underlies the Growth Management Element, and are integrally related to it. In a similar fashion, each of the required growth management performance standards included in this Element is also included in the Public Facilities and Services Element under the applicable goals and policies listed for sewers, water, police, fire, parks and flood control.

4.3 TRAFFIC SERVICE STANDARDS AND FACILITIES STANDARDS

The basic unit of measurement of performance of an intersection or roadway segment is called a Level of Service (LOS). LOS is a measure of the ratio of the volume to capacity of a roadway or intersection and is expressed as a letter A through F. In general LOS A describes free flowing conditions, and F describes very congested conditions, with long delays. Routes of Regional Significance are those roadways which carry significant volumes of through traffic, which neither begins nor ends within the affected jurisdiction. They generally include Interstate Freeways and State Highways, as well as local roads which, due to their location between job and housing centers, carry significant volumes of intra-county trips. All other roadways are referred to in the Growth Management Element as Basic Routes. Basic routes, and their signalized intersections, are those to which LOS standards are applied in determining whether proposed projects may be approved. The methodology used in determining if projects exceed allowable LOS standards is the method established by the Contra Costa Transportation Authority in its Technical Procedures.

At present, most Basic Routes in the unincorporated area operate at or better than the LOS Standards specified in the Growth Management Element. Many Routes of Regional Significance are below these standards, however, reflecting the fact that the trips are not dependent upon land uses in unincorporated Contra Costa County, but are cumulative with traffic generated by land uses located outside of the unincorporated areas. Public Protection Facility standards contained in this plan are based upon the 1990 facilities to unincorporated population ratio. In the area of parks, for example, the current unincorporated population to park acreage yields a ratio of less than 1 acre per 1,000 persons. While certain developed areas of the County experience flooding in the event of the 100-year flood, the County Ordinance Code collect-and-convey requirements are applied to all new developments. Water and sewer services are generally adequate for existing development.

For the purposes of establishing a Public Protection Facility standard, several factors must be considered. Firstly, the unincorporated community of Kensington has established a Community Services District which provides the full range of police services in the area, and the Sheriff does not service this area. Secondly, the California Highway Patrol is responsible for enforcement of the Vehicle Code on highways and County roads throughout the unincorporated area. Thirdly, certain economies of scale enable the Sheriff to provide patrol and investigation services in physical facilities substantially smaller than a comparable series of cities would require, due to centralized administrative services, crime lab facilities and other similar functions which numerous cities would duplicate in each location. According to the Department, very little time is spent by deputies in the stations; nearly all is spent in the vehicles on patrol; no clericals are housed in the stations. In addition, the Sheriff also provides coroner services, incarceration and criminalistics services. For these reasons, direct comparisons between County facilities standards and standards that may be adopted by cities in the County are not advised, since such comparisons would be highly misleading.

The computation of a Sheriff facility standard in this General Plan includes only patrol and investigation services, adjusted for a marginal increase in centralized administrative services. As of January, 1991, the County provides approximately 155 square feet of floor area per thousand population in six locations throughout the County. In 1997, it became evident that the Sheriff's Office needed to include support facilities necessary to conduct patrol and investigation, which are now included in the calculation of new square footage.

It should be noted that implementation of the goals of this Plan's various elements depends not only upon the County's administration of the Growth Management Program described below, but upon the interplay of several levels of government. Federal and State funding for improvements to Basic Routes will be required to attain and maintain traffic levels of service at designated levels. Finally, the County, the 19 cities, the Contra Costa Transportation Authority, the Bay Area Rapid Transit District, and the California Department of Transportation will all have to work cooperatively in order to mitigate the negative impacts of growth upon the regional transportation system to achieve the levels of population, housing and jobs anticipated by this Plan.

4.4 GOALS, POLICIES AND IMPLEMENTATION MEASURES

GOALS

4-A. To provide for the levels of growth and development depicted in the Land Use Element, while preserving and extending the quality of life through the provision of public facilities and ensuring traffic levels of services necessary to protect the public health, safety and welfare.

4-B. To establish a cooperative interjurisdictional growth monitoring and decision making process in which each jurisdiction can share in the beneficial aspects of new growth, and avoid its potential negative effects.

POLICIES

4-1. New development shall not be approved in unincorporated areas unless the applicant can provide the infrastructure which meets the traffic level of service and performance standards outlined in Policy 4-3, or a funding mechanism has been established which will provide the infrastructure to meet the standards or as is stated in other portions of this Growth Management Element.

4-2. If it cannot be demonstrated prior to project approval that levels of service will be met per Policy 4-1, development will be temporarily deferred until the standards can be met or assured. Projects which do not, or will not, meet the standards shall be scheduled for hearing before the appropriate hearing body with a staff recommendation for denial, on the grounds that the project is inconsistent with the goals, policies, and objectives of the Growth Management Element of the County General Plan.

4-3. Table 4-1 shows the performance standards which shall apply to development projects. In the event that a signalized intersection on a Basic Route exceeds the applicable level of service standard, the County may approve projects if the County can establish appropriate mitigation measures, or determine that the intersection or portion of roadway is subject to a finding of special circumstances, or is a Route of Regional Significance, consistent with those findings and/or action plans adopted by the Contra Costa Transportation Authority pursuant to Measure C - 1988. Mitigation measures specified in the action plans shall be applied to all projects which would create significant impacts on such regional routes, as defined by the Authority in consultation with local agencies and as permitted by law. For the purpose of reporting to the Contra Costa Transportation Authority in compliance with the Growth Management Program, a list of intersections that will be reported on Basic Routes will be prepared and maintained by the Conservation and Development Department.

4-4. The County shall institute an ongoing growth management program process, as generally depicted in Figure 4-1.

4-5. For the purpose of applying the Traffic Level of Service standards consistent with Measure C - 1988 only, unincorporated areas subject to the growth management standards of this Element shall be characterized as Central Business District, Urban, Suburban, Semi-rural and Rural as depicted in Figure 4-2.

4-6. Conformity with the growth management standards will be analyzed for all development projects such as, subdivision maps, or land use permits. A general plan amendment is a long range planning tool and is not to be considered a development project or a project approval under the growth management program.

Traffic

LOS Standards will be considered to be met if:

- measurement of actual conditions at the intersection indicates that operations are equivalent to or better than those specified in the standard; or
- the County has included projects in its adopted capital improvements program which, when constructed, will result in operations equal to or better than the standard.

TABLE 4-1
GROWTH MANAGEMENT
PERFORMANCE STANDARDS

Traffic Levels of Service Keyed to Land Use Type

Rural Areas:	Peak Hour Level of Service of low C (Volume/Capacity Ratio= .70-.74)
Semi-Rural Areas:	Peak Hour Level of Service of high C (Volume/Capacity Ratio= .74-.79)
Suburban Areas:	Peak Hour Level of Service of low D (Volume/Capacity Ratio= .80-.84)
Urban Areas:	Peak Hour Level of Service of high D (Volume/Capacity Ratio= .85-.89)
Central Business:	Peak Hour Level of Service of low E
Districts (CBD):	(Volume/Capacity Ratio= .90-.94)

Note: These terms are used solely with reference to the Growth Management Element performance standards.

Water

The County, pursuant to its police power and as the proper governmental entity responsible for directly regulating land use density or intensity, property development and the subdivision of property within the unincorporated areas of the County, shall require new development to demonstrate that adequate water quantity and quality can be provided. At the project approval stage, (subdivision map, land use permit, etc.), the County may consult with the appropriate water agency. The County, based on information furnished or available to it from consultations with the appropriate water agency, the applicant or other sources, should determine whether (1) capacity exists within the water system if a development project is built within a set period of time, or (2) capacity will be provided by a funded program or other mechanism. Project approvals conditioned on (1) or (2) above, will lapse according to their terms if not satisfied by verification that capacity exists to serve the specific project ("will serve letters"), actual hook-ups or comparable evidence of adequate water quantity and quality availability.

Figure 4.1 Flow Chart of Growth Management Process

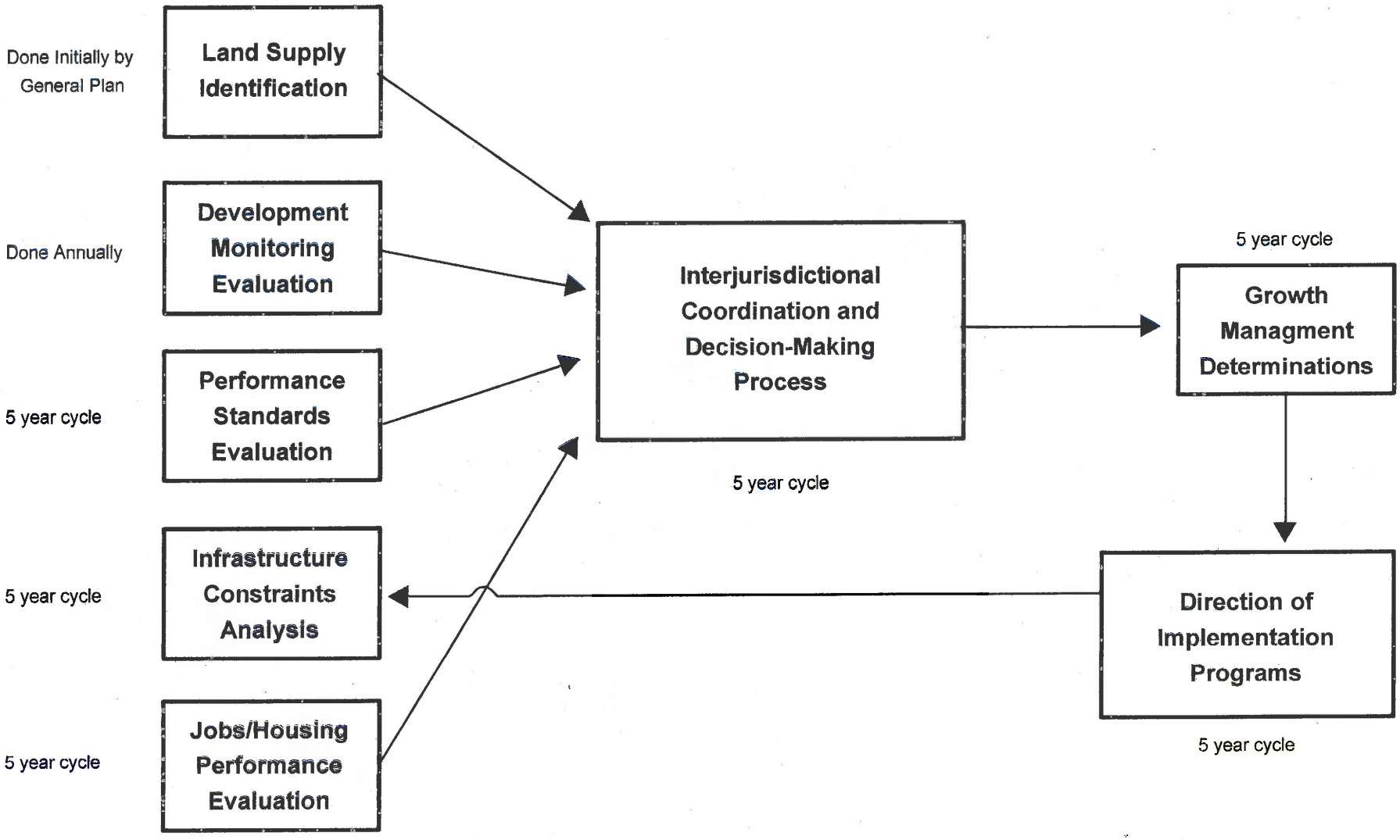
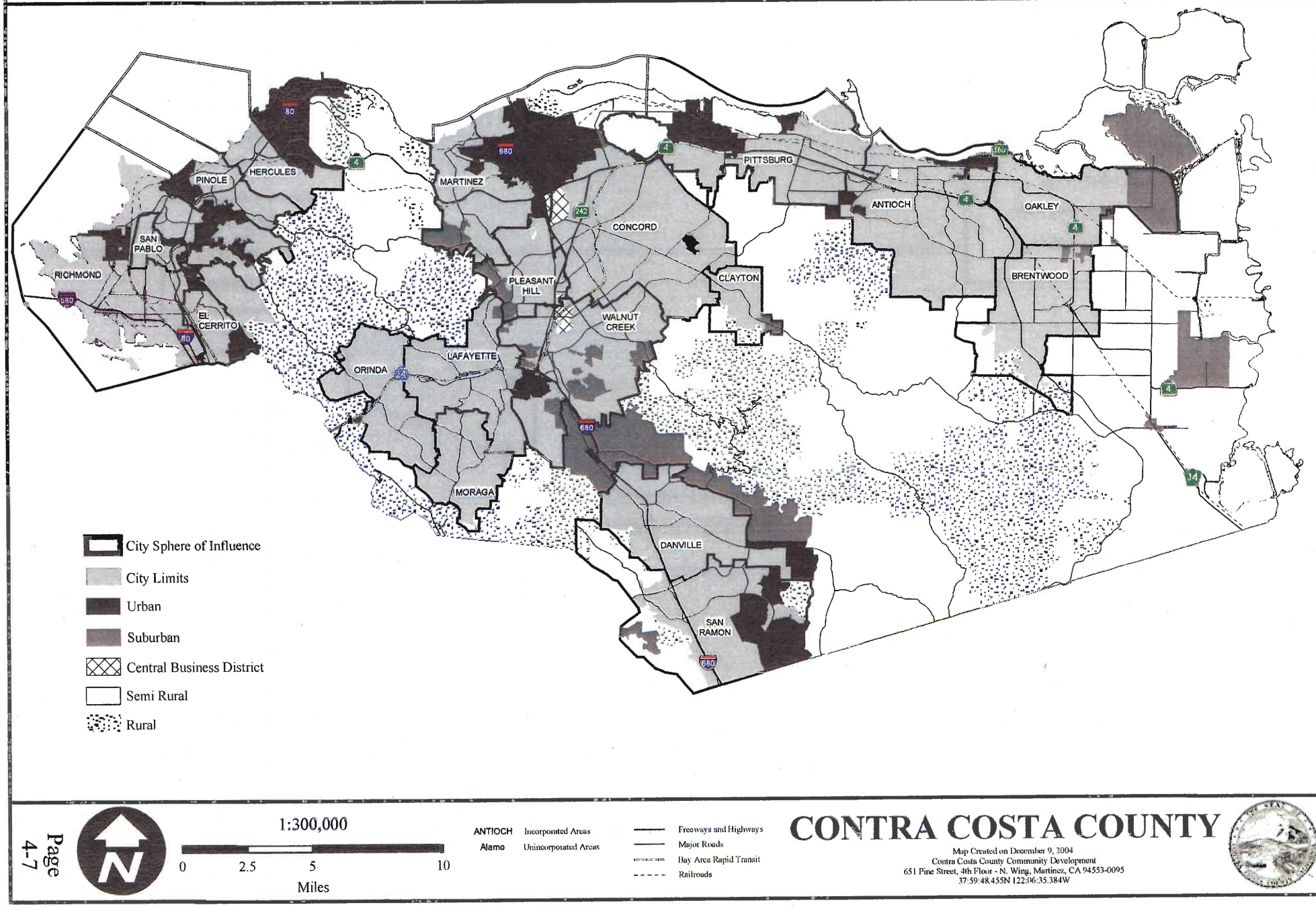


Figure 4-2 Level of Service Designations for Unincorporated Areas



Sanitary Sewer

The County, pursuant to its police power and as the proper governmental entity responsible for directly regulating land use density or intensity, property development and the subdivision of property within the unincorporated areas of the County, shall require new development to demonstrate that adequate sanitary sewer quantity and quality can be provided. At the project approval stage, (subdivision map, land use permit, etc.), the County may consult with the appropriate sewer agency. The County, based on information furnished or available to it from consultations with the appropriate sewer agency, the applicant or other sources, should determine whether (1) capacity exists within the sewer system if the development project is built within a set period of time, or (2) capacity will be provided by a funded program or other mechanism. Project approvals conditioned on (1) or (2) above, will lapse according to their terms if not satisfied by verification that capacity exists to serve the specific project ("will serve letters"), actual hook-ups or comparable evidence of adequate sewage collection and wastewater treatment capacity availability.

Fire Protection

Fire stations shall be located within one and one-half miles of developments in urban, suburban and central business district areas. Automatic fire sprinkler systems may be used to satisfy this standard.

Public Protection

A Sheriff facility standard of 155 square feet of station area and support facilities per 1,000 population shall be maintained within the unincorporated area of the County.

Parks and Recreation

Neighborhood parks: 3 acres required per 1,000 population.

Flood Control and Drainage

Require major new development to finance the full costs of drainage improvements necessary to accommodate peak flows due to the project. Limit development within the 100 year flood plain until a flood management plan has been adopted and implementation is assured. For mainland areas along rivers and bays, it must be demonstrated that adequate protection exists through levee protection or change of elevation prior to development. Development shall not be allowed in flood prone areas designated by the Federal Emergency Management Agency until a risk assessment and other technical studies have been performed.

IMPLEMENTATION MEASURES

4-a Incorporate the performance standards outlined in Policy 4-3 into the review of development projects.

4-b Work cooperatively with the 19 cities and the Contra Costa Transportation Authority through each of the Regional Transportation Planning Committees to define action plans for mitigating the impacts of development on Routes of Regional Significance.

4-c Require traffic impact analysis for any project which is estimated to generate 100 or more AM or PM peak-hour trips based upon the trip generation rates as presented in the Institute of Traffic Engineers (ITE) Trip Generation, 6th edition, 1997, or the most current published edition.

4-d Require that during the review of development proposals, the traffic impact analysis shall determine whether a project could cause a signalized intersection or freeway ramp to exceed the applicable standard and shall identify mitigations/fees such that the intersection or ramp will operate in conformance with applicable standards. Development proposals shall be required to comply with conditions of approval detailing identified mitigation measures and/or fees. In no event shall Local Road Improvement and Maintenance Funds replace development mitigation fee requirements, pursuant to Measure C-88.

4-e Establish through application to the Contra Costa Transportation Authority, and in conjunction with the regional committees, a list of Routes of Regional Significance and Intersections proposed for Findings of Special Circumstances. Proposed projects affecting these routes and/or intersections will require alternate mitigation as specified in Action Plans to be adopted by the Transportation Authority, but in this respect only, shall not be subject to LOS Performance Standards. Map 4-3 shows the Routes of Regional Significance as adopted by the Transportation Authority in 2004. The County will assist in developing or updating Action Plans for these routes (and for other roads if the Transportation Authority revises the Routes of Regional Significance in the future.)

4-f In the event that any Basic Route does not meet adopted standards the County shall consider amendments to either its General Plan Land Use Element, Zoning, Capital Improvement program or other relevant plans or policies in order to attain the standards. If this is not feasible for the reasons specified in the Transportation Authority's "Implementation Guide: Traffic Level of Service Standards and Programs for Routes of Regional Significance" application for findings of special circumstances shall be made to the Transportation Authority. Such application shall include alternative proposed standards and mitigation measures.

4-g Capital projects sponsored by the County and necessary to maintain and improve traffic operations will be specified in a five year Capital Improvement Program (CIP). Funding sources for such projects, as well as intended project phasing, if any, shall be generally identified in the CIP.

4-h The County will participate in the Contra Costa Transportation Authority Conflict Resolution Process as needed to resolve disputes related to the development and implementation of Action Plans and other programs described in the Transportation Authority's Model Growth Management Element.

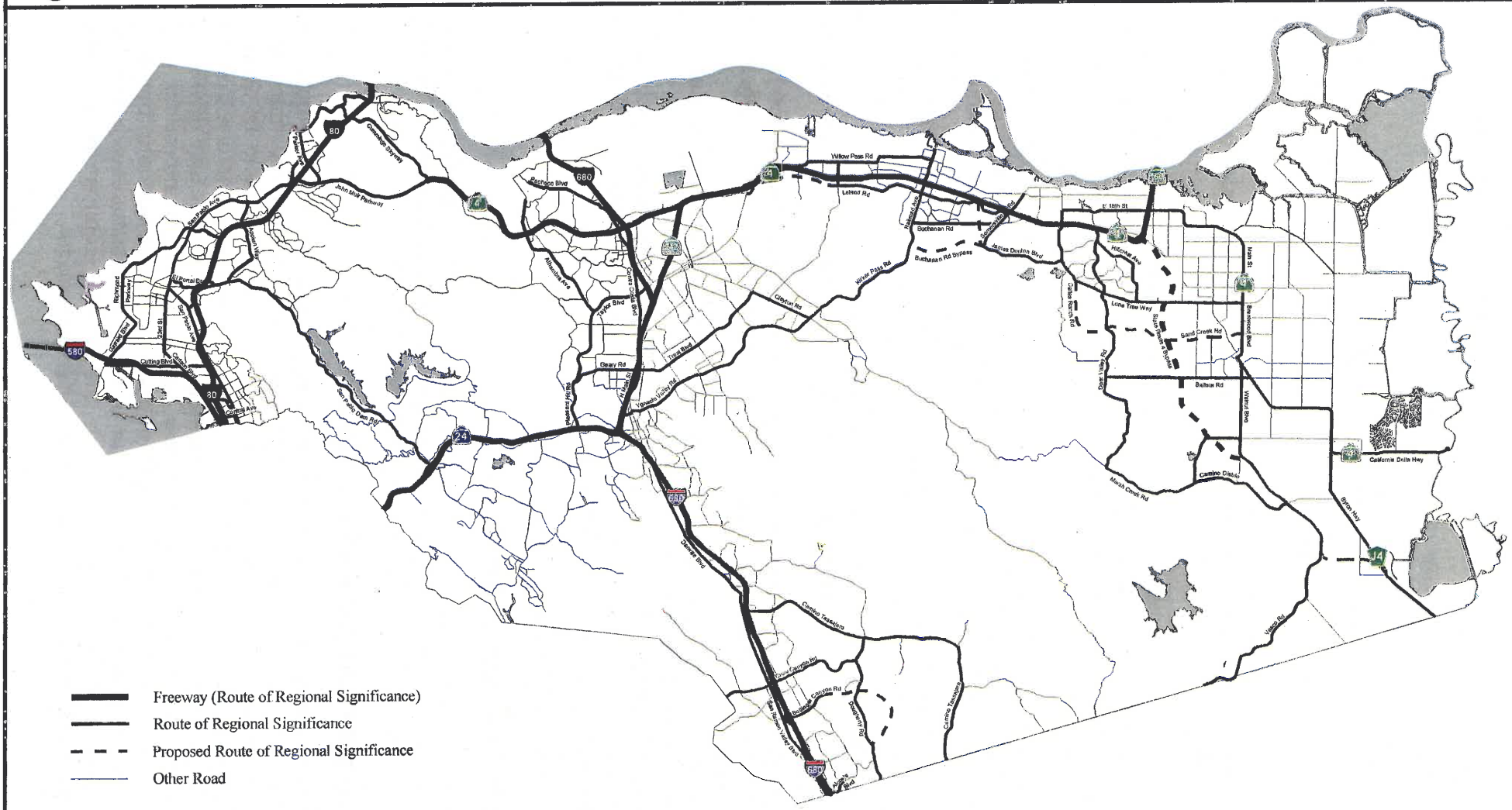
4-i The County will implement specified local actions in a timely manner, consistent with adopted action plans.

4-j As part of its program to attain Traffic Service levels, the County shall continue to implement its Transportation Demand Management Ordinance.

4-k No development project (subdivision map, land use permit, etc.) shall be approved unless findings of consistency have been made with respect to Policy 4-3.

4-l The County will adopt a development mitigation program to ensure that new development pays its fair share of the cost of providing police, fire, parks, water, sewer and flood control facilities.

Figure 4-3 Routes of Regional Significance



4-m The County will only approve projects after finding that one or more of the following conditions are met:

(a) Assuming participation in adopted mitigation programs, performance standards will be maintained following project occupancy;
(b) Because of the characteristics of the development project, specific mitigation measures are needed to ensure the maintenance of standards, and these will be required as conditions of project approval; or,
(c) Capital improvements planned by the service provider will assure maintenance of standards.

4-n Capital Projects sponsored by the County and necessary to maintain levels of performance shall be identified in the five year Capital Improvement Plan (CIP). Funding sources for the complete cost of the improvements, and phasing, if any, shall also be identified.

4-o All new development shall contribute to, or participate in, the improvement of the parks, fire, police, sewer, water and flood control systems in reasonable proportion to the demand impacts and burdens generated by project occupants and users.

4-p The County shall develop and carry out a growth management/monitoring program as generally indicated in Figure 4-1, as follows:

(a) a land supply and development monitoring process;
(b) periodic review of performance standards and monitoring of infrastructure constraints;
(c) interagency coordination and decision-making to provide information for the first two tasks and successfully implement the overall growth management program;
(d) a jobs/housing performance evaluation to determine their relative balance within each sub-region of the County; and
(e) growth management determinations, a process which identifies growth areas capable and incapable of meeting performance standards, and directs resources to overcoming any constraints.

These components are described in detail below.

Adoption of Performance Standards

The first step in the growth management program process is completed upon the adoption of performance standards for public facilities and services in this Growth Management Element. Figure 4-1 shows the flow chart of the growth management process.

Land Supply/Development Monitoring Analysis

The second step in the growth management process, an analysis of land supply and development monitoring, will commence at the beginning of each calendar year. Annual status reports on the implementation of the General Plan and its Growth Management Element will be submitted to the Board of Supervisors and City Councils in June. This status report will fulfill the requirements of Government Code 65400 (b) in the State planning and zoning laws, which requires that every city and county must prepare an annual report to the City Council or Board of Supervisors and the State which summarizes the status of the General Plan and the progress that has been made in its implementation. The subsequent steps in the process, commencing with the performance standards evaluation, will occur on a five-year cycle.

The land supply and development monitoring process is a two-part component designed as the basis for the periodic re-examination of lands available in the County for urban development. The availability of developable lands is then contrasted against the actual rate of growth which has been measured over the most recent period. In essence, this component is a land supply and demand tracking process. This process is designed to work in tandem with the other four components (performance standards/infrastructure constraints analysis, interjurisdictional coordination, jobs/housing balance analysis, and growth management determinations) in order to obtain an updated, working perspective of the current capacity of the County to accommodate growth.

The land supply and development monitoring process is prepared in an objective fashion by staff, using a set methodology defined and agreed to by the jurisdictions involved (the County, the 19 cities, the Local Agency Formation Commission (LAFCO) and the individual service providers). The re-examination of the land supply (initially set by the General Plan Review Program) will occur on an annual basis, in concert with the State Population Certification program which is already conducted by the County and each city planning department.

Using a standard format and methodology should provide a high degree of confidence in the process and the established annual schedule should alert the development interests, city agencies, and special districts as to when their contribution will be critical. At the beginning of each annual cycle, formal notification will be given to each of the cities informing them that the land supply and development monitoring process is being initiated and requesting their active participation and cooperation.

The Land Use Information System (LUIS), developed in 1987, and the more recent Geographic Information System, provides the foundation for tracking overall land supply, land absorption, and changing land uses in the County. The specific questions that must be answered during this process with the use of the updated LUIS data system are:

- how many acres of vacant land in the County, specified by land use type, are identified as available for development?
- what changes have occurred in these numbers since the previous evaluation?
- how many acres of underutilized or previously developed land are available for redevelopment?
- how many acres of land County-wide have been identified as unavailable for development based upon environmental, health and safety, public resource, or other conditions? The County Conservation and Development Department staff will prepare a report which examines the absorption rate (i.e. approved development projects) and the General Plan Amendment requests that have been received. The report on the status of development areas will rely upon residential and commercial/industrial building permit and other project approval information from the cities. This permit approval and General Plan Amendment application information will then be compared to the expected rate of residential and job growth projected for the jurisdiction over the planning period by the respective General Plans. The annual report will be forwarded to decision-making bodies for use in reviewing further General Plan Amendments which would alter the land supply component.

Performance Standards Evaluation and Infrastructure Constraints Analysis

While the second component of the growth management program (land supply and development monitoring) will be prepared on an annual basis, the final four components will generally be performed only once every five years. Although these final four

components of the Growth Management Program will be comprehensively and formally evaluated every five years, circumstances may necessitate evaluating and modifying the standards during the annual review of the land supply and development component of this Growth Management Program. If circumstances so necessitate, the Board of Supervisors should consider all information before it, including the Land Supply/Development Monitoring Analysis, fiscal constraints, and other information obtained through consultation with the Contra Costa Transportation Authority, before modifying the standards. The data and analysis generated in the annual land supply and development monitoring reports will be aggregated for use in the tasks outlined in the following processes.

The intent of this third component of the growth management program, performance standards and infrastructure capacity evaluation, is to re-examine minimum allowable performance standards for development projects set in the General Plan, and to determine the remaining available capacities of certain infrastructure facilities.

The growth management program for the Contra Costa County General Plan mandates the establishment of infrastructure performance standards for several different services or facilities, including circulation (traffic), sanitary sewage, flood control and drainage, water supply, police and fire protection and emergency services, and parks and recreation. These standards and policies attempt to define a quality of life by setting benchmark indicators of the minimum levels of service required for specific urban services.

Every five years the performance standards would be reviewed by staff and the service providers by examining prior experience and ability to serve. In addition, service districts may be provided an opportunity to explain why certain standards are not being met and to explore measures to be taken to alleviate the situation. This information would then be used to evaluate whether the standards for the current review period were appropriate.

The second major task to be completed during this phase of the growth management program is an evaluation of the remaining infrastructure capacity in various areas of the County. Part of this evaluation will determine where and why certain existing urbanized areas are not being adequately served. The assumption is that adequate infrastructure capacities can be engineered and built to serve virtually any amount and location of urban growth within the ULL, but that opportunities exist to plan for cost-effective and efficient growth in areas particularly within the ULL, where underutilized infrastructure capacities already exist or where the extension of services is relatively unconstrained compared to other areas.

The basic data requirements of this portion of the process include:

- a determination of the remaining capacity for each facility or service provider based upon the defined performance standards, and identification of the geographic areas that could be served by the capacity;
- an itemization of funded infrastructure improvement projects, their location and expected date of completion, and the service area or population they are designed to serve;
- identification of urbanized areas with inadequate service, as defined by the adopted performance standards;
- an itemization of the major capital improvements not now funded but needed to bring existing areas into compliance with the performance standards;
- itemization of major capital improvements necessary to serve anticipated future development at the adopted service level, and the cost of these improvements;
- identification of major physical, economic and/or environmental constraints to the provision of service or facilities in a given area; and

- identification of possible sources of funding for the improvements.

The object of the data gathering is to illustrate where future growth can and cannot occur without major investment in new or improved infrastructure systems, and to identify the level and source of financing required. Additionally, the exercise will allow the preparation of estimates of future required capacity based upon the performance standards. One outcome of this process will be to provide up-to-date information concerning where future growth is expected to occur, thus assisting in capital facilities planning efforts.

To ensure that high density "leapfrog" growth does not occur, as a matter of policy, this growth management program mandates that new urban and central business district levels of development shall not be approved unless the development is within the ULL and near existing or committed urban or central business district levels of development.

Jobs/Housing Performance Evaluation

The purpose of this step is to provide a basis for assessing the jobs/housing balance within each section of the County for the current five year review cycle, to assist the jurisdictions in the sub-regions in determining preferred locations for residential and employment growth, and to assist in focusing the direction of implementation programs.

The jobs/housing balance evaluation is based upon the County's Land Use Information System data base, augmented by the information provided in the development monitoring evaluation. The evaluation considers growth in housing units and employment and housing and employment availability, relative affordability and commute patterns, and to the extent that the data are available, price of the units and wage levels of the jobs added.

The jobs/housing performance evaluation will be used to identify areas where jobs or housing should be stimulated and encouraged. It would also be used to provide information about areas in which infrastructure deficiencies need to be corrected in order to facilitate a better jobs/housing balance.

Interjurisdictional Coordination and Decision-Making

The growth management program outlined here will not succeed without the cooperation and active participation of the County, the Local Agency Formation Commission, the 19 cities, and the service providers. These agencies and cities may view cooperation with the County's growth management program as a threat to their local authority over land use or other growth issues. The County's efforts to achieve cooperation must be aimed at persuading the cities and agencies that the growth management program will ultimately enhance their ability to meet their own General Plan goals. In addition, the County will participate in the cooperative planning process established by the Transportation Authority for the purpose of reducing the cumulative regional traffic impacts of development.

Interjurisdictional cooperation would not require all of the cities and agencies to adopt the same goals, policies and implementation measures as will be included in the County's General Plan and growth management program. However, it would be desirable for the County to request that the cities and agencies adopt resolutions that specifically recognize and accept the growth management program and its premise.

A key commitment by the jurisdictions involves the dedication of a relatively small, but adequate, level of staff time to assist the County in gathering the required data for the necessary planning studies. Additional commitments must be made on the part of policy makers and staff to review the annual land supply and development monitoring reports, consider them when making important planning decisions, and to actively participate in the growth management determination process every five years.

Growth Management Determinations

Building upon the preceding components of the growth management program, the final aspect of the process involves using the reports that have been generated to make the important decisions about where future growth in the County should be encouraged in order to minimize infrastructure costs and to enhance the overall level of "quality of life." The process for making these determinations is as important as the determinations themselves. The process can help to achieve consensus among cities and the County (in consultation with service providers) as to appropriate amounts and locations of new residential, commercial and industrial growth in the County. The growth management determination process should include the following steps, several of which are based upon information developed in the previous components of the program:

- indicate on a County General Plan map the current city boundary lines, Spheres of Influence, the Urban Limit Line and current service areas for all of the major utilities/facilities;
- add to the base map information regarding improvements or extensions to service systems that have been completed since the last review period or improvements itemized in capital improvement programs, as well as constructed and approved development projects and adopted General Plan Amendments;
- identify lands that have been determined to be undevelopable;
- identify on the map the geographic areas with infrastructure constraints and the locations of development projects that have been unable to meet performance standards;
- review the annual land supply and development monitoring reports in conjunction with the performance standards and infrastructure constraints analysis reports to determine whether an adequate supply of vacant land is designated for urban use in the County and city General Plans, on both a Countywide and subregional basis, to allow the anticipated amount of urban development during the remainder of the twenty year period. This urban development must be subject to the 65/35 Land Preservation Standard. (See Section 3, Land Use Element.)
- Determine whether adjustment to the urban limit line is needed in order to provide sufficient land to accommodate anticipated needs.

Growth management determinations shall be made in consultation with the Transportation Authority. In addition, it is anticipated that these growth management determinations will be made in a series of joint meetings conducted on a subregional basis with representatives of the cities. The Local Agency Formation Commission (LAFCO) and the service districts should also be consulted. Staff will present the base map and accompanying reports to the County and City Planning Commissions, LAFCO and service district boards, with a request that the agencies review the recommendations and make formal comments. After this review period is complete and appropriate changes, if needed, have been made, the map and reports will be recirculated to all of the jurisdictions in the County. The final action will be to request that the cities, LAFCO

and service providers adopt resolutions in support of the recommendations and to initiate any General Plan Amendment hearings which may result from the review process.

Definitions of Terms

The following definitions apply to the geographic terms used with respect to the Growth Management Element only. The level of service designations for unincorporated County areas are shown in Figure 4-2.

Rural. Rural areas are defined as generally those parts of the County that are designated in the General Plan for agricultural, open space or very low density residential uses, and which are characterized by medium to very large parcel sizes (10 acres to several thousand acres). These areas have very low population densities, usually no more than 1 person per acre or 500 people per square mile.

Suburban. Suburban areas are defined as generally those parts of the County that are designated in the General Plan for low and medium density single family homes; low density multiple family residences; low density neighborhood- and community-oriented commercial/industrial uses; and other accompanying uses. Individual structures in suburban areas are generally less than 3 stories in height and residential lots vary from about one fifth of an acre (8,000 or 9,000 square feet) up to 2 or 3 acres. Population densities in suburban areas fall within a wide range, from about 1,000 to 7,500 persons per square mile (1.5 to 12.0 people per acre).

Urban. Urban areas are defined as generally those parts of the County that are designated in the General Plan primarily for multiple family housing, with smaller areas designated for high density single family homes; low to moderate density commercial/industrial uses; and many other accompanying uses. Urban areas usually include clusters of residential buildings (apartments and condominiums) up to three or four stories in height and single family homes on relatively small lots. Many commercial strips along major arterial road are considered urban areas.

Examples of urban areas in Contra Costa County are the older neighborhoods in Richmond, El Cerrito, Pittsburg, and Antioch and the downtown commercial districts in smaller cities such as Martinez, Danville, and Lafayette. Population densities in urban areas are usually at least 7,500 persons per square mile (12.0 people per acre). Employment densities in commercial areas may range up to about 15 jobs per acre.

Central Business District/Major Commercial Center. Central business districts or major commercial centers are defined as those areas designated in the General Plan for high density commercial and residential uses. They consist of either the downtown area of a major city in Contra Costa County (Concord, Walnut Creek, and Richmond) or a large business/office complex (such as Bishop Ranch or the Pleasant Hill BART station area). These areas are characterized by large concentrations of jobs and consist of clusters of buildings four stories or more in height. CBD's or major commercial centers generally have employment densities.

Measure J

CONTRA COSTA'S TRANSPORTATION SALES TAX EXPENDITURE PLAN








CONTRA COSTA
transportation
authority

Adopted November 2, 2004, as amended

through November 7, 2011

ATTACHMENT 5

PREFACE

On November 2, 2004, Contra Costa voters approved Measure J, which extended the half-percent cent local transportation sales tax first established by Measure C in 1988 for another 25 years. As with Measure C, the new measure included an expenditure plan that outlined how the expected revenues from the sales tax would be spent.

The following update of the Measure J Expenditure Plan incorporates changes made to it since its adoption in 2004. These changes were made through the adoption of three ordinances:

- **Ordinance 06-04**, adopted November 15, 2006, which revised and clarified the requirement in the Growth Management Program for compliance with a voter-approved Urban Limit Line. This ordinance modified paragraph 5, "Adopt an Urban Limit Line (ULL)", of the components of the Growth Management Program (see page 27) and Attachment A, "Principles of Agreement for Establishing the Urban Limit Line" (see pages 29 and 30)

- **Ordinance 09-01**, adopted June 17, 2009, which revised and clarified how Regional Transportation Planning Committees may develop guidelines and allocate funds for Additional Bus Service Enhancements and Additional Transportation Services for Seniors and People with Disabilities programs. This ordinance modified the description of Subregional Projects and Programs (see page 19) as well as the descriptions of Project 19a, "Additional Bus Service Enhancements", and Project 20a, "Additional Transportation Services for Seniors and People with Disabilities", for Central County (TRANSPAC) (see pages 19–20) and Project 19b, "Additional Bus Service Enhancements", and Project 20b, "Additional Transportation Services for Seniors and People with Disabilities", for West County (WCCTAC) (see page 21)

- **Ordinance 09-03**, adopted July 15, 2009, which expanded the limits of the State Route 4 East widening project by shifting the western terminus of the project from Somersville Road to Loveridge Road (see page 11)

- **Ordinance 11-01**, adopted September 19, 2011, which modified the changes made by Ordinance 09-01 to Project 19b, "Additional Bus Service Enhancements", and Project 20b, "Additional Transportation Services for Seniors and People with Disabilities", for West County (WCCTAC) (see page 21)

The estimated revenues and percentage shares allocated to each project and program in the Expenditure Plan are in 2004 dollars. The changes in economic conditions that have occurred since 2004, however, have resulted in significant reductions in revenues. While the percent allocations remain unchanged, the actual allocation of funding will be different. Please see the most recent Measure J Strategic Plan for up-to-date allocations.

A line on the outside of a paragraph indicates where changes from the original 2004 Expenditure Plan have been made. A version of the document showing detailed changes is also available.

EXECUTIVE SUMMARY

At the November 8, 1988 general election, the voters of Contra Costa approved a half-cent local transportation sales tax that would be in place for 20 years. The major capital projects envisioned by the voters are largely complete. The funds that go to the cities, towns and the County to maintain local streets and roads, help fund transportation services for the elderly and persons with disabilities, and provide bus transit services will continue until the current measure sunsets in 2009.

Recognizing that Contra Costa's population is expected to increase from 1 million to 1.25 million over the next 25 years, and the broad support for continued investment in Contra Costa's transportation systems, the Contra Costa Transportation Authority considered what transportation projects and programs would be possible if the transportation sales tax were extended. The Authority, together with the 19 cities of Contra Costa, and the Contra Costa County Board of Supervisors invested two years to assemble a Transportation Expenditure Plan for consideration by the voters. The Plan that follows is a result of those efforts. It reflects the competing interests and priorities inherent in the diverse communities of Contra Costa. It includes highways, arterials, transit facilities and services, bicycle and pedestrian facilities, and transportation projects that support all alternative modes of travel and reflects projects and programs of countywide, sub-regional, and local interest.

A summary of the projects and programs is shown below. A more detailed description of these projects and programs is contained in the balance of this booklet.

Summary of Projects and Programs

Capital & Maintenance Investments

Caldecott Tunnel Fourth Bore
BART – East Contra Costa Rail Extension
State Route 4 East Widening
Capitol Corridor Improvements Including Rail Stations at Hercules and Martinez
East County Corridors: Vasco Rd, SR4 Bypass, Byron Hwy, Non Freeway SR4
Interchange Improvements on I-680 & State Route 242
I-80 Carpool Lane Extension and Interchange Improvements
I-680 Carpool Lane Gap Closure/Transit Corridor Improvements
Richmond Parkway
BART Parking, Access and Other Improvements
Local Streets Maintenance & Improvements
Transportation for Livable Communities Project Grants
Pedestrian, Bicycle and Trail Facilities
Major Streets: Traffic Flow, Safety and Capacity Improvements

Programs

Bus Services
Transportation for Seniors & People with Disabilities
Express Bus
Commute Alternatives
Congestion Management, Transportation Planning, Facilities & Services
Safe Transportation for Children
Ferry Service in West County
Subregional Transportation Needs
Growth Management Program

THE CONTRA COSTA TRANSPORTATION SALES TAX EXPENDITURE PLAN

The projects and programs that follow constitute the Transportation Expenditure Plan for the extension of the transportation sales tax initially authorized by the passage of Contra Costa Measure C in November 1988. As required under the Local Transportation Authority and Improvement Act (SB 142, Chapter 786, Statutes of 1987: Sections 180000 *et seq.* of the Public Utilities Code), the expenditures are "for the construction and improvement of state highways, the construction, maintenance, improvement, and operation of local streets, roads, and highways, and the construction, improvement, and operation of public transit systems", including paratransit services (California Public Utilities Code §180205), and for specific efforts supporting such investments.

All of the following projects are necessary to address current and future transportation needs in Contra Costa, and the proposed projects and programs constitute a "fair share" distribution of funding allocations to each subregion. However, through the course of the Measure, if any of the projects prove to be infeasible or cannot be implemented, the affected subregion may recommend to the Authority that funds be reassigned to another project in the same subregion so that the "fair share" allocation is maintained.

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Table of Expenditure Plan Allocations

		$ millions	%	Distribution of Funding By Subregion			
				Central (a)	West (b)	Southwest (c)	East (d)
CAPITAL IMPROVEMENT PROJECTS [1]							
1	Caldecott Tunnel Fourth Bore	125	6.3%	62.5		62.5	
2	BART - East Contra Costa Rail Extension	150	7.5%				150.0
3	State Route 4 East Widening	125	6.3%				125.0
4	Capitol Corridor Improvements Including Rail Stations at Hercules and Martinez	15	0.8%	7.5	7.5		
5	East County Corridors: Vasco Rd, SR4 Bypass, Byron Hwy, Non Freeway SR4	94.5	4.7%				94.5
6	Interchange Improvements on I-680 & State Route 242	36	1.8%	36.0			
7	I-80 Carpool Lane Extension and Interchange Improvements	30	1.5%		30.0		
8	I-680 Carpool Lane Gap Closure/ Transit Corridor Improvements	100	5.0%	75.0		25.0	
9	Richmond Parkway	16	0.8%		16.0		
	SUBTOTAL	691.5	34.6%	181.0	53.5	87.5	369.5
COUNTYWIDE CAPITAL AND MAINTENANCE PROGRAMS							
10	BART Parking, Access and Other Improvements	41	2.1%	12.0	15.0	3.0	11.0
11	Local Streets Maintenance & Improvements [2]	360	18.0%	108.0	82.8	79.2	90.0
12	Transportation for Livable Communities Project Grants [2]	100	5.0%	29.0	24.0	18.0	29.0
13	Pedestrian, Bicycle and Trail Facilities [3]	30	1.5%	2.5	2.5	2.5	2.5
	SUBTOTAL	531	26.6%	151.5	124.3	102.7	132.5
OTHER COUNTYWIDE PROGRAMS							
14	Bus Services [4]	100	5.0%	24.0	52.0	15.0	9.0
15	Transportation for Seniors & People with Disabilities [4]	100	5.0%	25.0	35.0	17.0	23.0
16	Express Bus [4]	86	4.3%	20.0	40.0	20.0	6.0
17	Commute Alternatives	20	1.0%	5.8	4.8	3.6	5.8
18	Congestion Management, Transportation Planning, Facilities & Services	60	3.0%				
	SUBTOTAL	366	18.3%	74.8	131.8	55.6	43.8
SUBREGIONAL PROJECTS AND PROGRAMS							
19	Additional Bus Transit Enhancements [4]	68.5	3.4%	24.0	44.5		
20	Additional Transportation for Seniors and People with Disabilities [4]	23	1.2%	10.0	13.0		

		$ millions	%	Distribution of Funding By Subregion: Central (a)	West (b)	Southwest (c)	East (d)
21	Safe Transportation for Children [4] (Lamorinda and San Ramon Valley School Bus Programs, West County Low Income Student Bus Pass Program, Central County School Access Programs, Pedestrian and Bicycle Improvements, etc.)	90.9	4.5%	10.0	14.5	66.4	
22	Ferry Service in West County [4]	45	2.3%		45.0		
23	Additional Local Streets and Roads Maintenance & Improvements	41.8	2.1%	20.0	11.0	10.8	
24	Major Streets: Traffic Flow, Safety and Capacity Improvements	80.4	4.0%	48.0		14.4	18.0
25	Additional Transportation for Livable Communities Project Grants [5]	8	0.4%		8.0		
26	Additional Pedestrian, Bicycle and Trail Facilities	0.8	0.0%		0.8		
27	Capitol Corridor Rail Station Improvements at Martinez	2.5	0.1%	2.5			
28	Subregional Transportation Needs	30.6	1.5%	16.2	6.0	4.7	3.7
	SUBTOTAL	391.5	19.6%	130.7	142.8	96.3	21.7
OTHER							
29	Administration	20	1.0%				
	TOTAL	2,000	100.0%				

		Central	West	Southwest	East
Specific Projects and Programs (Total) [6]	1,900	538.0	452.4	342.1	567.5
Population Share (2020 Estimate) of Total		29.0%	24.0%	18.0%	29.0%
% allocated to Projects and Programs in subregion		28.3%	23.8%	18.0%	29.9%
% of "Fair Share" of Projects and Programs		97.6%	99.2%	100.0%	103.0%

1: Funding is for both capital improvements and costs incurred to accelerate delivery into the early years of the program (2009–10 through 2015–16)

2: Actual funding levels will be determined by formula: For 18% Local Street Maintenance and Improvements funds, annually; for TLC, every three to five years.

3: Pedestrian and bicycle facilities improvements are also eligible to be funded from the Transportation for Livable Communities Project Grants, Local Streets and Roads Maintenance & Improvements, and Major Streets: Traffic Flow, Safety, and Capacity Improvements categories. $20 million out of the $30 million to be made available countywide. Remainder ($10 million) to be divided by sub-region.

4: Transit Operators are required to set aside up to 3% of their annual allocation as a reserve to offset potential future revenue downturns.

5: A summary of the Transportation for Livable Communities (TLC) program is included in Part IV.

6: "Total" excludes $20 million for Pedestrian, Bicycle and Trail facilities, $60 million for Congestion Management, Transportation Planning, Facilities & Services, and $20 million for Administration

SUMMARY OF PROJECTS AND PROGRAMS

Capital Improvement Projects

1 *Caldecott Tunnel Fourth Bore* ..... *$125 million*
Construct a two-lane fourth bore to match the through-lane capacity on both sides of the tunnel to reduce delays and improve the predictability of travel in the non-peak direction.

2 *BART – East Contra Costa Rail Extension* ..... *$150 million*
Extend rail or other high-speed transit service from the Pittsburg/Bay Point BART station eastward to the cities of Antioch, Oakley, Brentwood and the community of Byron.

3 *State Route 4 East Widening* ..... *$125 million*
Complete the widening of State Route 4 in East Contra Costa to provide a total of four lanes (including bus/carpool and auxiliary lanes) in each direction to State Route 160.

4 *Capitol Corridor Improvements Including Rail Stations at Hercules and Martinez* ..... *$15 million*
$7.5 million is available to construct a new station at Hercules and may be used for Capitol Corridor operations. $7.5 million is available to construct parking and pedestrian facilities at the Martinez Rail Station.

5 *East County Corridors (Vasco Rd, SR4 Bypass, Byron Hwy, and Non-Freeway SR 4)* ..... *$94.5 million*
Construct capacity and safety enhancements to Vasco Road, the State Route 4 Bypass, Byron Highway and the existing Route 4 through Brentwood and Oakley.

6 *Interchange Improvements on Interstate 680 and State Route 242* ..... *$36 million*
Construct improvements at the following interchanges: I-680/SR4, SR 242/Clayton Rd, I-680/Marina Vista, and/or SR 4/Willow Pass Road.

7 *Interstate 80 Carpool Lane Extension and Interchange Improvements* ..... *$30 million*
Construct improvements at the I-80/San Pablo Dam Road and I-80/Central Avenue interchanges; complete the bus/carpool lane to the Carquinez Bridge.

8 *Interstate 680 Carpool Lane Gap Closure / Transit Corridor Improvements* ..... *$100 million*
Extend existing bus/carpool lanes on southbound I-680 from North Main Street to Livorna Road and northbound from North Main Street to north of SR 242. Construct bus/carpool on- and off-ramps at Norris Canyon Rd and/or Sycamore Valley Road, and other transit corridor improvements.

9 *Richmond Parkway* ..... *$16 million*
Upgrade the Richmond Parkway by constructing intersection and interchange improvements, and/or provide funds to maintain the roadway.

Countywide Capital and Maintenance Programs

10 *BART Parking, Access, and Other Improvements* ..... *$41 million*
Construct improvements to the BART system such as additional parking, station access, capacity, safety and operational improvements.

11 *Local Streets Maintenance & Improvements* ..... *$360 million*
Eighteen percent of annual revenues are allocated to local jurisdictions on a formula basis for transportation projects to be determined locally, including street and road maintenance, subject to compliance with the Growth Management Program (GMP).

12 *Transportation for Livable Communities Project Grants (CC-TLC)* ..... *$100 million*
Five percent of sales tax revenues are to be used to implement specific transportation projects that encourage the use of alternatives to the single occupant vehicle such as: pedestrian, bicycle and streetscape facilities, traffic calming and transit access improvements. Allocations are subject to compliance with the GMP, as outlined in the CC-TLC Summary included as Part IV of this Expenditure Plan.

13 *Pedestrian, Bicycle and Trail Facilities* ..... *$30 million*
One and a half percent of revenues are for construction of pedestrian and bicycle facilities including regional trails throughout Contra Costa.

Other Countywide Programs

14 *Bus Services* ..... *$100 million*
Five percent of annual revenues are for bus service provided by all Contra Costa bus transit operators to alleviate traffic congestion and improve regional or local mobility for Contra Costa.

15 *Transportation for Seniors & People with Disabilities* ..... *$100 million*
Five percent of revenues are for Transportation Services for Seniors & People with Disabilities.

16 *Express Bus* ..... *$86 million*
Provide express bus service to transport commuters to and from residential areas, park & ride lots, BART stations/transit centers and key employment centers.

17 *Commute Alternatives* ..... *$20 million*
Provide and promote alternatives to commuting in single-occupant vehicles, including carpools, vanpools and transit.

18 *Congestion Management, Transportation Planning, Facilities & Services* ..... *$60 million*
Implement the countywide GMP, prepare the countywide transportation plan, and support the programming and monitoring of projects that are to be funded with federal and state funds, as well as the Authority's Congestion Management Agency functions.

Subregional Projects and Programs

There are four subregions within Contra Costa: Central, West, Southwest and East County. The objective of the subregional Projects & Programs category is to recognize the diversity of each subregion by including projects/programs that are critical to addressing local transportation needs. Central County (TRANSPAC subregion) includes Clayton, Concord, Martinez, Pleasant Hill, Walnut Creek and the unincorporated portions of Central County. West County (WCCTAC subregion) includes El Cerrito, Hercules, Pinole, Richmond, San Pablo and the unincorporated portions of West County. Southwest County (SWAT subregion) includes Danville, Lafayette, Moraga, Orinda, San Ramon and the unincorporated portions of Southwest County. East County (TRANSPLAN subregion) includes Antioch, Brentwood, Oakley, Pittsburg and the unincorporated portions of East County.

19 *Additional Bus Transit Enhancements* ..... *$68.5 million*
In addition to the $100 million for bus transit improvements countywide, additional funding is allocated for bus transit improvements in two subregions: Central County ($24 million) and West County ($44.5 million).

20 *Additional Transportation for Seniors & People with Disabilities* ..... *$23 million*
In addition to the $100 million for transportation services for seniors and people with disabilities under the countywide program, additional funding is allocated

for transportation for seniors and people with disabilities in two subregions: Central County ($10 million) and West County ($13 million).

21 *Safe Transportation for Children* ..... *$90.9 million*

In Central County, $10 million is for projects to provide transportation to schools such as transit incentive programs, and pedestrian and bicycle facilities. In West County, $14.5 million is for a low-income student transit fare subsidy program. In Southwest County $26.4 million is for the Lamorinda School Bus Program, and $40 million is for a San Ramon Valley School Bus Program and school-related access.

22 *Ferry Service in West County* ..... *$45 million*

Funds for ferry service in West County from Richmond, and Hercules or Rodeo to San Francisco.

23 *Additional Local Streets Maintenance & Improvements* ..... *$41.8 million*

In addition to the 18% of annual revenues that are allocated to all jurisdictions ($360 million) for transportation projects to be determined locally, additional funding is allocated to jurisdictions in three subregions: Central County ($20 million), West County ($11 million), and Southwest County ($10.8 million).

24 *Major Streets: Traffic Flow, Safety and Capacity Improvements* ..... *$80.4 million*

Improvements to major thoroughfares such as traffic signals, widening, traffic calming and pedestrian safety improvements, shoulders, installation of bike facilities, sidewalks, bus turnouts, curbs and gutters. The funds are allocated as follows: Central County ($48 million), Southwest County ($14.4 million) and East County ($18 million).

25 *Additional Transportation for Livable Communities Project Grants* ..... *$8 million*

In addition to the $100 million available on a countywide basis, $8 million is available for projects specific to West County.

26 *Additional Pedestrian, Bicycle, and Trail Facilities* ..... *$ 0.8 million*

In addition to the $30 million available countywide, $0.8 million is available for projects specific to West County.

27 *Capitol Corridor Rail Station Improvements at Martinez* ..... *$2.5 million*

In addition to funds provided under the Capitol Corridor Improvement Project, an additional $2.5 million is to be allocated specifically to Martinez Rail Station improvements.

28 *Subregional Transportation Needs* ..... *$ 30.6 million*

Each subregion will identify projects and/or programs to address its current and future needs. The funds are allocated as follows: Central County ($16.2 million), West County ($6.0 million), Southwest County ($4.7 million) and East County ($3.7 million).

DETAILED PROJECT AND PROGRAM DESCRIPTIONS

All of the following projects are necessary to address current and future transportation needs in Contra Costa, and the proposed projects and programs constitute a "fair share" distribution of funding allocations to each subregion. However, through the course of the Measure, if any of the projects prove to be infeasible or cannot be implemented, the affected subregion may recommend to the Authority that funds be reassigned to another project in the same subregion so that the "fair share" allocation is maintained.

Capital Improvement Projects

1 *Caldecott Tunnel Fourth Bore* ..... *$125 million*

Construct a fourth bore with two traffic lanes to match the through-lane capacity on both sides of the tunnel, and thereby significantly reduce delays and improve the predictability of travel in the non-peak direction. Final project will be subject to compliance with the California Environmental Quality Act (CEQA).

2 *BART - East Contra Costa Rail Extension (e-BART)* ..... *$150 million*

Extend rail or other high-speed transit service from the Pittsburg/Bay Point BART station eastward to the cities of Antioch, Oakley, Brentwood and the community of Byron. Subject to environmental review and assessment of alternatives, the likely preferred alignment will occupy the State Route 4 median up to the Loveridge Road interchange and utilize existing rail right-of-way thereafter to Byron. BART, diesel multiple-unit trains and other guideway transit modes may be evaluated in determining the most appropriate near-term and long-term investments.

3 *State Route 4 East Widening* ..... *$125 million*

Widen State Route 4 in East Contra Costa to provide four lanes (including a bus/carpool lane) in each direction from Loveridge Road to State Route 160, including auxiliary lanes between interchanges. Project components will be staged to provide congestion relief as quickly as possible with available funding.

4 *Capitol Corridor Improvements Including Rail Stations at Hercules and Martinez* ..... *$15 million*

$7.5 million is available to construct 425 parking spaces at the Martinez Rail Station including pedestrian, vehicular and potentially landside ferry access im-

provements as well as track improvements/equipment in the vicinity of the station and Ozol Yard. $7.5 million is available to construct the Hercules Rail Station improvements (including relocating railroad tracks, constructing station platforms and plaza, and a parking structure) and may be used for Capitol Corridor track improvements, rolling stock, or for rail operations on the Capitol Corridor line in Contra Costa County.

5 *East County Corridors (Vasco Rd, SR4 Bypass, Byron Hwy, Non-Freeway SR4)* ..... *$94.5 million*

This project will provide funds to assist in the completion of capacity and safety enhancements to Vasco Road, the SR 4 Bypass, Byron Highway, and the existing Route 4 through Brentwood, Oakley and unincorporated areas.

For corridors lying outside of the 2004 boundary of the Contra Costa County ULL, in effect as of May 26, 2004 (the ULL), local sales tax funds may be allocated by the Authority only to fund environmental reviews, route adoption studies, right of way protection and safety improvements. For such investments, allocations may be made by the Authority upon a determination that the project Sponsor has agreed to include the following in the scope of the relevant studies or projects:

- Assessment as to their potential for inducing additional development and identification of measures to minimize or prevent such inducement;
- Identification of appropriate project-related mitigations, including consideration of the purchase of abutters' rights of access, preservation of critical habitat and/or open space acquisition; and
- Investments affecting facilities in Alameda County will be done in partnership with Alameda County jurisdictions.

Subject to the above conditions, potential improvements include:

5.1 Vasco Road from the SR 4 Bypass to Interstate 580 in Alameda County. Funds shall not be allocated for the construction of capacity enhancing projects outside of the ULL. Funds may be used to fund safety and operational improvements, and potentially consider realignment where warranted.

5.2 Widening and safety improvements (including safety-related capacity improvements) to the non-freeway portion of SR 4 from Main Street in Oakley to the eastern edge of Discovery Bay. This project also includes alignment and safety improvements to the two-lane levee road between Discovery Bay and the Contra Costa-San Joaquin Bridge.

5.3 Completion of the SR4 Bypass project. The project includes the upgrade of Marsh Creek Road and interchanges at the following locations: SR4/SR4 By-

pass/ SR160; Laurel Road; Lone Tree Way; Sand Creek Road; Balfour Road; Marsh Creek Road; and Vasco Road at Walnut Boulevard.

5.4 Improvements to Byron Highway between Delta Road northeast of the City of Brentwood, and the Contra Costa-Alameda County line.

6 *Interchange Improvements on Interstate 680 and State Route 242* ..... *$36 million*

Construct improvements to reduce congestion and improve safety at (1) I-680/ SR 4 interchange, (2) SR 242/Clayton Road Interchange northbound on-ramp and southbound off-ramp, (3) I-680/Marina Vista Interchange, and/or (4) SR 4/Willow Pass Road ramps.

7 *Interstate 80 Carpool Lane Extension and Interchange Improvements* ..... *$30 million*

Projects eligible for funding in this category include (with priority given to the San Pablo Dam Road and Central Avenue interchanges):

7.1 If supplemental funding beyond the Regional Measure 2 commitment is needed, help construct an eastbound carpool lane extension along I-80 from State Route 4 to the Carquinez Bridge approach.

7.2 Project development and construction of the I-80/San Pablo Dam Road interchange to improve traffic operations and safety and accommodate both pedestrians and bicyclists.

7.3 Project development and construction of the I-80/Central Avenue interchange to reduce traffic backups on Central Avenue.

7.4 Project development and/or preliminary engineering towards the construction of the SR 4/I-80 interchange and approaches.

7.5 Other interchange improvements may be considered for funding subject to WCCTAC concurrence.

8 *Interstate 680 Carpool Lane Gap Closure/Transit Corridor Improvements* ..... *$100 million*

Projects eligible for funding in this category include:

- Extend existing bus/carpool lanes along I-680 in the southbound direction from North Main Street to Livorna Road, and in the northbound direction from North Main Street to north of SR 242.
- Construct bus/carpool on- and off-ramps at Norris Canyon Rd and/or Sycamore Valley Road.

- Transit corridor improvements that address congestion and/or increase people throughput along the I-680 corridor.

9 *Richmond Parkway* ..... *$16 million*

Upgrade the Richmond Parkway to facilitate transfer of ownership to the California Department of Transportation, including potential intersection and interchange upgrades, and/or provide funds to maintain the roadway. The Richmond Parkway is the priority project for this funding; however, funds not expended for this project may be reprogrammed at the City of Richmond's request for Richmond ferry service.

Countywide Capital and Maintenance Programs

10 *BART Parking, Access, and Other Improvements* ..... *$41 million*

Construct improvements to BART such as additional parking, station access, capacity, safety and operational improvements. Projects funded by this category are subject to the review and approval of the applicable subregional committee, prior to funding allocation by the Authority.

11 *Local Streets Maintenance & Improvements* ..... *18% ($360 million)*

Funds may be used for any transportation purpose eligible under the Act and to comply with the GMP requirements. This existing program will continue distributing 18 percent of the annual sales tax revenues to all local jurisdictions with a base allocation of $100,000 for each, the balance to be distributed based 50 percent on relative population and 50 percent on road miles for each jurisdiction, subject to compliance with the Authority's revised GMP. Population figures used shall be the most current available from the State Department of Finance. Road mileage shall be from the most current State Controller's Annual Report of Financial Transactions for Streets and Roads. Pedestrian and bicycle facilities are an important part of the regional transportation system. Moreover, as appropriate, components for routine accommodation of bicycle and pedestrian travel shall be incorporated as part of construction projects.

12 *Transportation for Livable Communities Project Grants* ..... *5% ($100 million)*

The CC-TLC Program is intended to support local efforts to achieve more compact, mixed-use development, and development that is pedestrian-friendly or linked into the overall transit system. The program will fund specific transportation projects that: (a) facilitate, support and/or catalyze developments, especially affordable housing, transit-oriented or mixed-use development, or (b) encourage the use of alternatives to the single occupant vehicle and promote walking,

bicycling and/or transit usage. Typical investments include pedestrian, bicycle, and streetscape facilities, traffic calming and transit access improvements. Both planning grants and specific transportation capital projects may receive funding under this program.

Jurisdictions will be eligible for projects that meet the eligibility criteria only if they are in compliance with the GMP at the time a grant is approved for funding allocation by the Authority. Eligible projects will be recommended to the Authority by each subregion based on a three- or five-year funding cycle, at the option of the RTPCs. Subregional programming targets will be based on the relative population share of each in 2009, and adjusted every five years thereafter. Criteria are to include flexibility so that urban, suburban and rural communities can be eligible.

A summary of the Transportation for Livable Communities program is included in Part IV.

13 *Pedestrian, Bicycle and Trail Facilities* ..... *1.5% ($30 million)*

Pedestrian, bicycle, and trail facilities, including regional trails are an important component of the regional transportation system. Two-thirds of the funds are to complete projects in the Countywide Bicycle and Pedestrian Plan. Consistent with the Bicycle Plan and the importance of bicycle and pedestrian facilities, other potential funding categories in this Plan for pedestrian/bicycle/trail facilities include: (a) Major Streets: Traffic Flow, Safety, and Capacity Improvements; (b) Safe Transportation for Children; (c) Local Streets and Road Maintenance; and (d) the Transportation for Livable Communities project grants. Moreover, where it is appropriate, routine accommodation for pedestrians and bicyclists should be incorporated in construction projects funded from these other categories.

One third of the funds are to be allocated to the East Bay Regional Park District (EBRPD) for the development and rehabilitation of paved regional trails. EBRPD is to spend its allocation equally in each subregion, subject to the review and approval of the applicable subregional committee, prior to funding allocation by the Authority. The Authority in conjunction with EBRPD will develop a maintenance-of-effort requirement for funds under this category.

Other Countywide Programs

The following programs will be available to fund countywide operational programs, based on a specific percentage of annual revenues received. With respect to transit operations (bus, transportation for seniors and people with disabilities, and express bus), the Authority will allocate funds on an annual basis and will establish guidelines (in cooperation with transit operators through the Bus Transit Coordinating Coun-

cil) so that the additional revenues will fund additional service in Contra Costa. The guidelines may require provisions such as maintenance of effort; operational efficiencies including greater coordination; promoting and developing a seamless service; a specified minimum allowable farebox return on sales tax extension funded services; and reserves for capital replacement.

For the transit operating programs (Bus Services, Transportation for Seniors & People with Disabilities, and Express Bus) for years in which sales tax revenues increase at or above the change in the Consumer Price Index, the Authority will require that each recipient/operator retain up to 3 percent of its annual allocation to accumulate in a reserve. The reserve would be available as a contingency for application when one or more periods of decline in sales tax revenues, in inflation-adjusted dollars, requires application of the funds to "smooth out" the flow of revenues. The reserves would be available to sustain operations in the event of such economic downturns.

14 Bus Services ..... 5% ($100 million)

This program provides funding for bus service provided by Contra Costa transit operators to alleviate traffic congestion and improve regional or local mobility for Contra Costa. Funds can be used to purchase transit vehicles, service operations, maintenance and capital programs to assist operators in the implementation of adopted plans.

The percentage of program funding now allocated to the bus transit operators will continue. Reflecting the current distribution among the four parts of the county, the percentage of annual sales tax revenues will be distributed as follows, provided that the bus transit operators jointly consult and collectively report to the Authority each year on any proposed changes to the services that are currently funded from Measure C revenues, and the Authority concurs with the change:

- AC Transit, 2% ($40 million);
- County Connection, 2% ($40 million);
- Tri-Delta Transit, 0.4% ($8 million);
- WestCAT, 0.6% ($12 million);
- Golden Gate Transit Service from Richmond to Marin shall be funded at the discretion of WCCTAC and West County operators from the West Contra Costa transit funds.

Under the subregional programs category, additional increments of 2.2% and 1.2% of annual sales tax revenues are available for West and Central County, respectively.

15 Transportation for Seniors & People With Disabilities..... 5% ($100 million)

Transportation for Seniors & People With Disabilities or "Paratransit" services can be broadly divided into two categories: (1) services required to be provided by transit operators under the Americans with Disabilities Act (ADA) to people with disabilities; and (2) services not required by law but desired by community interests, either for those with disabilities beyond the requirements of the ADA (for example, extra hours of service or greater geographic coverage), or for non-ADA seniors.

All current recipients of Measure C funds will continue to receive their FY 2008–09 share of the "base" Measure C allocation to continue existing programs if desired, subject to Authority confirmation that services are consistent with the relevant policies and procedures adopted by the Authority. Revenue growth above the base allocations will be utilized to expand paratransit services and providers eligible to receive these funds.

Paratransit funding will be increased from the current 2.97% to 3.5% of annual sales tax revenues for the first year of the new program, FY 2009–10. Thereafter, the percentage of annual sales tax revenues will increase by 0.10 % each year, to 5.9% in 2034 (based on a 25-year program). In 2003 dollars, this averages to 4.7% over the life of the program, which has been rounded to 5% to provide some flexibility and an opportunity to maintain a small reserve to offset the potential impact of economic cycles. The distribution of funding will be as follows:

- West County paratransit program allocations will start at 1.225% of annual sales tax revenues in FY 2009–10, and grow by 0.035% of annual revenues each year thereafter to 2.065% of annual revenues in FY 2033–34. (An additional increment of 0.65% of annual revenues is available for West County under its subregional program category.) In addition to the current providers, paratransit service provided by AC Transit and BART (East Bay Paratransit Consortium) in West County is an eligible recipient of program funds.

- Central County paratransit program allocations will start at 0.875% of annual sales tax revenues in FY 2009–10 and grow by 0.025% of annual revenues each year thereafter to 1.475% of annual revenues in FY 2033–34. (An additional increment of 0.5% of annual revenues is available for Central County under its subregional program category.)

- Southwest County paratransit program allocations will start at 0.595% of annual sales tax revenues in FY 2009–10 and grow by 0.017% of annual revenues each year thereafter to 1.003% of annual revenues in FY 2033–34.

- East County paratransit program allocations will start at 0.805% of annual sales tax revenues, and increase by 0.023% of annual revenues thereafter to 1.357% of annual revenues in FY 2033–34.

Transportation for Seniors & People with Disabilities funds shall be available for (a) managing the program, (b) retention of a mobility manager, (c) coordination with non-profit services, (d) establishment and/or maintenance of a comprehensive paratransit technology implementation plan, and (e) facilitation of countywide travel and integration with fixed route and BART specifically, as deemed feasilble.

Additional funding to address non-ADA services, or increased demand beyond that anticipated, can be drawn from the "Subregional Transportation Needs Funds" category, based on the recommendations of individual subregions and a demonstration of the financial viability and stability of the programs proposed by prospective operator(s).

16 *Express Bus* ..... *4.3% ($86 million)*

Provide express bus service and Bus Rapid Transit (BRT) service to transport commuters to and from residential areas, park & ride lots, BART stations/transit centers and key employment centers. Funds may be used for bus purchases, service operations and/or construction/management/operation of park & ride lots and other bus transit facilities. Reserves shall be accumulated for periodic replacement of vehicles consistent with standard replacement policies.

17 *Commute Alternatives* ..... *1% ($20 million)*

This program will provide and promote alternatives to commuting in single occupant vehicles, including carpools, vanpools and transit.

Eligible types of projects may include but are not limited to: parking facilities, carpooling, vanpooling, transit, bicycle and pedestrian facilities (including sidewalks, lockers, racks, etc.), Guaranteed Ride Home, congestion mitigation programs, SchoolPool, and clean fuel vehicle projects. Program and project recommendations shall be made by each subregion for consideration and funding by the Authority.

18 *Congestion Management, Transportation Planning, Facilities and Services* ..... *3% ($60 million)*

Implementation of the Authority's GMP and countywide transportation planning program; the estimated incremental costs of performing the Congestion Management Agency (CMA) function currently billed to local jurisdictions; costs for programming federal and state funds; project monitoring; and the facilities and services needed to support the Authority and CMA functions.

Subregional Projects and Programs

The objective of the Subregional Projects and Programs category is to recognize the diversity of the county by allowing each subregion to propose projects and programs critical to addressing its local transportation needs. There are four subregions within Contra Costa: Central, West, Southwest and East County, each represented by a Regional Transportation Planning Committee (RTPC). Central County (the TRANSPAC subregion) includes Clayton, Concord, Martinez, Pleasant Hill, Walnut Creek and the unincorporated portions of Central County. West County (the WCCTAC subregion) includes El Cerrito, Hercules, Pinole, Richmond, San Pablo and the unincorporated portions of West County. Southwest County (the SWAT subregion) includes Danville, Lafayette, Moraga, Orinda, San Ramon and the unincorporated portions of Southwest County. East County (the TRANSPLAN subregion) includes Antioch, Brentwood, Oakley, Pittsburg and the unincorporated portions of East County.

Each subregion has identified specific projects and programs which include: school bus programs, safe routes to school activities, pedestrian and bicycle facilities, incremental transit services over the base program, incremental transportation services for seniors and people with disabilities over the base program, incremental local street and roads maintenance using the population and road-miles formula, major streets traffic flow, safety, and capacity improvements, and ferry services.

With respect to the Additional Bus Service Enhancements and Additional Transportation Services for Seniors and People with Disabilities Programs, the Authority will allocate funds on an annual basis. The relevant RTPC, in cooperation with the Authority, will establish subregional guidelines so that the additional revenues will fund additional service in Contra Costa. The guidelines may require reporting requirements and provisions such as maintenance of effort, operational efficiencies including greater coordination promoting and developing a seamless service, a specified minimum allowable farebox return on sales tax extension funded services, and reserves for capital replacement, etc. The relevant RTPC will determine if the operators meet the guidelines for allocation of the funds.

For an allocation to be made by the Authority for a subregional project and program, it must be included in the Authority's Strategic Plan.

CENTRAL COUNTY (TRANSPAC)

19a Additional Bus Service Enhancements ..... 1.2% ($24 million)

Funds will be used to enhance bus service in Central County, with services to be jointly identified by TRANSPAC and County Connection.

In years when revenues have declined from the previous year, funds may be used for enhanced, existing, additional and/or modified bus service; in years when funding allows for growth in service levels, these funds would be used

for bus service enhancements; and if County Connection's funding levels are restored to 2008 levels, these funds shall be used to enhance bus service. TRANSPAC will determine if the use of funds by County Connection or other operators meets these guidelines for the allocation of these funds.

20a Additional Transportation Services for Seniors and People & Disabilities ..... 0.5% ($10 million)

Funds will be used to supplement the services provided by the countywide transportation program for seniors & people with disabilities and may include provision of transit services to programs and activities. Funds shall be allocated annually as a percentage of total sales tax revenues, and are in addition to funds provided under the base program as described above.

In years when revenues have declined from the previous year, funds may be used for supplemental, existing, additional or modified service for seniors and people with disabilities; in years where funding allows for growth in service levels, these funds would be used for service enhancements for seniors and people with disabilities; and if funding levels are restored to 2008 levels, these funds shall be used to enhance services for seniors and people with disabilities. TRANSPAC will determine if the use of funds proposed by operators meets these guidelines for the allocation of these funds.

21a Safe Transportation for Children ..... 0.5% ($10 million)

TRANSPAC will identify specific projects which may include the SchoolPool and Transit Incentive Programs, pedestrian and bicycle facilities, sidewalk construction and signage, and other projects and activities to provide transportation to schools.

23a Additional Local Streets Maintenance and Improvements ..... 1% ($20 million)

These funds will be used to supplement the annual allocation of the 18% "Local Streets Maintenance & Improvements" program funds for jurisdictions in Central County. Allocations will be made to jurisdictions in TRANSPAC on an annual basis in June of each fiscal year for that ending fiscal year, without regard to compliance with the GMP. Each Jurisdiction shall receive an allocation using a formula of 50% based on population and 50% based on road miles.

24a Major Streets: Traffic Flow, Safety and Capacity Improvements ..... 2.4% ($48 million)

Improvements to major thoroughfares including but not limited to installation of bike facilities, traffic signals, widening, traffic calming and pedestrian safety improvements, shoulders, sidewalks, curbs and gutters, bus transit facility enhancements such as bus turnouts and passenger amenities, etc.

27a Capitol Corridor Rail Station Improvements at Martinez ..... 0.1% ($2.5 million)

Additional funding to supplement the $7.5 million identified for the project under Capitol Corridor Rail Station Improvements for the Martinez Intermodal Station and ferry landside improvements.

28a Subregional Transportation Needs ..... 0.81% ($16.2 million)

TRANSPAC will propose programming funds for any project or program identified in the Expenditure Plan, and to meet other future transportation needs of Central County eligible under the provisions of the Act.

WEST COUNTY (WCCTAC)

19b Additional Bus Service Enhancements ..... 2.2% ($44.5 million)

Funds will be used to enhance local bus service in West County, as determined by WCCTAC and the west county bus operators. Funds will be used to operate new service, including new bus lines, expanded service hours, improved frequency, expanded days of the week, etc. At least $4 million of the $44.5 million total would go to WestCAT.

As determined by WCCTAC, certain conditions beyond the control of the operators may warrant the use of the additional funds to maintain services that are eligible for funding under Program 14. Such circumstances could include, but not be limited to declines in sales tax revenues, revenues used for transit operations or other supplemental revenues, or increases in insurance and fuel costs.

20b Additional Transportation for Seniors and People with Disabilities ..... 0.65% ($13 million)

As determined by WCCTAC, funds will be used to supplement the services provided by the countywide transportation program for seniors and people with disabilities and may include, but are not limited to, provision of dedicated shuttles to specific programs and activities, as well as sedan/taxi service, supplemental service provided by the cities, the County or transit agencies, expanded subsidies for fares, etc. ADA and non-ADA service will qualify. Funds shall be allocated annually as a percentage of total sales tax revenues, and in addition to funds provided under the base program as described above.

As determined by WCCTAC, certain conditions beyond the control of the operators may warrant the use of the additional fundzs to maintain services that are eligible for funding under Program 15. Such circumstances could include, but not be limited to declines in sales tax revenues, revenues used for transit operations or other supplemental revenues, increases in demand beyond that assumed in Program 15, or increases in insurance and fuel costs.

21b Safe Transportation for Children: Low Income Student Bus Pass Program ..... 0.7% ($14.5 million)

Establishment and operation of a program to expand the subsidy for bus transit fares for low-income students.

22b Ferry Service in West County ..... 2.3% ($45 million)

Funds for ferry service in West County from Richmond, and Hercules or Rodeo to San Francisco (with potential stops in-between). The funds may be used for capital improvements (landside improvements, parking, lighting, etc.), operating the service, transit feeder service, way-finder signs, and/or other components of ferry service to be determined by WCCTAC and the San Francisco Bay Area Water Transit Authority (WTA), the agency authorized by the State to provide a comprehensive water transit system for the Bay Area. If the WTA is not able to use these funds, WCCTAC and the Authority will designate alternative recipient(s). Funding priority should be given to routes that demonstrate long-term sustainability.

23b Additional Local Streets Maintenance and Improvements ..... 0.5% ($11 million)

These funds will be used to supplement the annual allocation of the 18% "Local Streets Maintenance & Improvements" program funds for local jurisdictions in West County. Allocations will be made to jurisdictions in WCCTAC on an annual basis in June of each fiscal year for that ending fiscal year, subject to compliance with the GMP. Each Jurisdiction shall receive an allocation using a formula of 50% based on population and 50% based on road miles.

25b Additional Funding for Livable Communities (CC-TLC) ..... 0.4% ($8 million)

This program will provide additional funding for West County to supplement the overall Transportation for Livable Communities Program, with specific projects to be identified by WCCTAC. WCCTAC will propose programming specific projects through the Authority's Strategic Plan. Grants will be provided subject to compliance with the Authority's GMP.

26b Additional Pedestrian, Bicycle andTrail Facilities ..... 0.04% ($0.8 million)

WCCTAC will propose programming these funds for additional trail/pedestrian/bicycle capital projects, and/or facility maintenance in West County.

28b Subregional Transportation Needs ..... 0.3% ($6 million)

WCCTAC will propose programming these funds to any project or program eligible under the provisions of the Act. Such projects may include: (1) planning work or environmental studies for a project; (2) implementation of recommended transportation projects in a regional study or plan (including, but not limited to, the El Sobrante Transportation and Land Use Plan, the Richmond-

Area Community-Based Transportation Plan, the El Portal Gateway Plan, the Montalvin Manor Community Plan, the Safe Communities Program, etc.); (3) bus and/or BART improvements; (4) neighborhood traffic calming improvements; (5) transportation/transit information in languages other than English; and/or (6) other eligible transportation investments. WCCTAC will coordinate with the appropriate local jurisdictions/agencies to plan and implement the projects in this category.

SOUTHWEST COUNTY (SWAT)

21c Safe Transportation for Children: School Bus Program ..... 3.3% ($66.4 million)

Eligible projects include the continued operation of the Lamorinda School Bus Program ($26.4 million), and the inauguration of a San Ramon Valley School Bus Program or other projects in the San Ramon Valley that reduce school related congestion, or improve the safety of children traveling to and from schools ($40 million). These programs, which provide congestion relief where capacity improvements are not feasible, also collect user fees from parents as well as other grant funding to cover operational expenses. In consultation with the affected jurisdictions the Authority may establish criteria for the services including but not limited to farebox return/parental contribution.

23c Additional Local Streets Maintenance and Improvements ..... 0.5% ($10.8 million)

These funds will be used to supplement the annual allocation of the 18% "Local Streets Maintenance & Improvements" program funds for jurisdictions in Southwest County. Allocations will be made to jurisdictions in SWAT on an annual basis in June of each fiscal year for that ending fiscal year, without regard to compliance with the GMP. Each Jurisdiction shall receive an allocation using a formula of 50% based on population and 50% based on road miles.

24c Major Streets: Traffic Flow, Safety and Capacity Improvements ..... 0.7% ($14.4 million)

Improvements to major thoroughfares including but not limited to installation of bike lanes, traffic signals, widening, traffic calming and pedestrian safety improvements, shoulders, curb and gutter, and bus transit facility enhancements such as bus turnouts and passenger amenities.

28c Subregional Transportation Needs ..... 0.24% ($4.7 million)

SWAT will propose programming these funds to any project or program identified in the Expenditure Plan or eligible under the provisions of the Act.

EAST COUNTY (TRANSPLAN)

24d Major Streets: Traffic Flow, Safety and Capacity Improvements ..... 0.9% ($18.0 million)

Improvements to major thoroughfares including, but not limited to, installation of bike lanes, traffic signals, widening, traffic calming and pedestrian safety improvements, shoulders, curb and gutter, and bus transit facility enhancements such as bus turnouts and passenger amenities.

28d Subregional Transportation Needs ..... 0.19% ($3.7 million)

TRANSPLAN will propose programming these funds to any project or program identified in the Expenditure Plan or eligible under the provisions of the Act.

Other

29 Administration ..... 1% ($20 million)

This category funds the salary and benefits costs of administrating the Measure C extension, consistent with program requirements.

Program and Project Management

The Transportation Expenditure Plan envisions building on the Authority's practice of charging the costs of program and project management to the various plan categories, rather than identifying a separate category for such charges. Costs that will be covered include, but are not limited to, program management, consulting, financial advisory services, bond counsel, project management staff, and similar costs associated with managing the overall program, periodically preparing and adopting the Strategic Plan, and reviewing and processing invoices.

THE GROWTH MANAGEMENT PROGRAM

Goals and Objectives

The overall goal of the Growth Management Program is to preserve and enhance the quality of life and promote a healthy, strong economy to benefit the people and areas of Contra Costa through a cooperative, multi-jurisdictional process for managing growth, while maintaining local authority over land use decisions. [1]

The objectives of the Growth Management Program are to:

- Assure that new residential, business and commercial growth pays for the facilities required to meet the demands resulting from that growth.
- Require cooperative transportation and land use planning among Contra Costa County, cities, towns, and transportation agencies.
- Support land use patterns within Contra Costa that make more efficient use of the transportation system, consistent with the General Plans of local jurisdictions.
- Support infill and redevelopment in existing urban and brownfield areas.

[1] The Authority will, to the extent possible, attempt to harmonize the Growth Management and the State-mandated Congestion Management Programs. To the extent they conflict, Congestion Management Program activities shall take precedence over Growth Management Program activities.

Components

To receive its share of Local Transportation Maintenance and Improvement funds and to be eligible for Contra Costa Transportation for Livable Communities funds, each jurisdiction must:

1. ADOPT A GROWTH MANAGEMENT ELEMENT

Each jurisdiction must adopt, or maintain in place, a Growth Management Element as part of its General Plan that outlines the jurisdiction's goals and policies for managing growth and requirements for achieving those goals. The Growth Management Element must show how the jurisdiction will comply with sections 2–7 below. The Authority will refine its model Growth Management Element and administrative procedures in consultation with the Regional Transportation Planning Committees to reflect the revised Growth Management Program.

Each jurisdiction is encouraged to incorporate other standards and procedures into its Growth Management Element to support the objectives and required components of this Growth Management Program.

2. ADOPT A DEVELOPMENT MITIGATION PROGRAM

Each jurisdiction must adopt, or maintain in place, a development mitigation program to ensure that new growth is paying its share of the costs associated with that growth. This program shall consist of both a local program to mitigate impacts on local streets and

other facilities and a regional program to fund regional and subregional transportation projects, consistent with the Countywide Comprehensive Transportation Plan.

The jurisdiction's local development mitigation program shall ensure that revenue provided from this measure shall not be used to replace private developer funding that has or would have been committed to any project.

The regional development mitigation program shall establish fees, exactions, assessments or other mitigation measures to fund regional or subregional transportation improvements needed to mitigate the impacts of planned or forecast development. Regional mitigation programs may adjust such fees, exactions, assessments or other mitigation measures when developments are within walking distance of frequent transit service or are part of a mixed-use development of sufficient density and with necessary facilities to support greater levels of walking and bicycling. Each Regional Transportation Planning Committee shall develop the regional development mitigation program for its region, taking account of planned and forecast growth and the Multimodal Transportation Service Objectives and actions to achieve them established in the Action Plans for Routes of Regional Significance. Regional Transportation Planning Committees may use existing regional mitigation programs, if consistent with this section, to comply with the Growth Management Program.

3. ADDRESS HOUSING OPTIONS

Each jurisdiction shall demonstrate reasonable progress in providing housing opportunities for all income levels as part of a report on the implementation of the actions outlined in its adopted Housing Element. The report will demonstrate progress by:

1. Comparing the number of housing units approved, constructed or occupied within the jurisdiction over the preceding five years with the number of units needed on average each year to meet the housing objectives established in the jurisdiction's Housing Element; or
2. Illustrating how the jurisdiction has adequately planned to meet the existing and projected housing needs through the adoption of land use plans and regulatory systems which provide opportunities for, and do not unduly constrain, housing development; or
3. Illustrating how a jurisdiction's General Plan and zoning regulations facilitate the improvement and development of sufficient housing to meet those objectives.

In addition, each jurisdiction shall consider the impacts that its land use and development policies have on the local, regional and countywide transportation system, including the level of transportation capacity that can reasonably be provided, and shall incorporate policies and standards into its development approval process that support transit, bicycle and pedestrian access in new developments.

4. PARTICIPATE IN AN ONGOING COOPERATIVE, MULTI-JURISDICTIONAL PLANNING PROCESS

Each jurisdiction shall participate in an ongoing process with other jurisdictions and agencies, the Regional Transportation Planning Committees and the Authority to create a balanced, safe and efficient transportation system and to manage the impacts of growth. Jurisdictions shall work with the Regional Transportation Planning Committees to:

A. Identify Routes of Regional Significance, and establish Multimodal Transportation Service Objectives for those routes and actions for achieving those objectives.

B. Apply the Authority's travel demand model and technical procedures to the analysis of General Plan Amendments (GPAs) and developments exceeding specified thresholds for their effect on the regional transportation system, including on Action Plan objectives.

C. Create the development mitigation programs outlined in section 2 above.

D. Help develop other plans, programs and studies to address other transportation and growth management issues.

In consultation with the Regional Transportation Planning Committees, each jurisdiction will use the travel demand model to evaluate changes to local General Plans and the impacts of major development projects for their effects on the local and regional transportation system and the ability to achieve the Multimodal Transportation Service Objectives established in the Action Plans.

Jurisdictions shall also participate in the Authority's ongoing countywide comprehensive transportation planning process. As part of this process, the Authority shall support countywide and subregional planning efforts, including the Action Plans for Routes of Regional Significance, and shall maintain a travel demand model. Jurisdictions shall help maintain the Authority's travel demand modeling system by providing information on proposed improvements to the transportation system and planned and approved development within the jurisdiction.

5. ADOPT AN URBAN LIMIT LINE (ULL)

Beginning on April 1, 2009, each jurisdiction must continuously comply with an applicable, voter approved ULL ("applicable ULL") defined as one of the following:

(i) A new mutually-agreed upon countywide ULL (MAC-ULL) approved by the voters countywide; or

(ii) A Contra Costa County, voter approved ULL ("County ULL") that has also been approved by a majority of the voters voting on the measure in the local jurisdiction seeking to rely upon the line as the growth boundary for local development, provided that the local jurisdiction's legislative body has adopted the County ULL before or after the election at which the "County ULL" was approved; or

(iii) A measure placed on the ballot and approved by a majority of the voters within a local jurisdiction fixing a local voter approved ULL ("LV-ULL") or equivalent urban growth boundary for the jurisdiction. A jurisdiction may establish or revise its LV-ULL with local voter approval at any time prior to or during the term of Measure J. The LV-ULL will be used as of its effective date to meet the Measure J GMP ULL requirement.

Each of the above options is more fully defined in the Principles of Agreement, which are attached and incorporated by reference as Attachment "A".

Submittal of an annexation request by a local jurisdiction to LAFCO outside the applicable ULL will constitute non-compliance with the Measure J Growth Management Program.

6. DEVELOP A FIVE-YEAR CAPITAL IMPROVEMENT PROGRAM

Each jurisdiction shall prepare and maintain a capital improvement program that outlines the capital projects needed to implement the goals and policies of the jurisdiction's General Plan for at least the following five-year period. The Capital Improvement Program shall include approved projects and an analysis of the costs of the proposed projects as well as a financial

plan for providing the improvements. The jurisdiction shall forward the transportation component of its capital improvement program to the Authority for incorporation into the Authority's database of transportation projects.

7. ADOPT A TRANSPORTATION SYSTEMS MANAGEMENT (TSM) ORDINANCE OR RESOLUTION

To promote carpools, vanpools and park and ride lots, each jurisdiction shall adopt a local ordinance or resolution that conforms to the model Transportation Systems Management Ordinance that the Transportation Authority has drafted and adopted. Upon approval of the Authority, cities with a small employment base may adopt alternative mitigation measures in lieu of a TSM ordinance or resolution.

Allocation of Funds

Portions of the monies received from the retail transaction and use tax will be returned to the local jurisdictions (the cities and the county) for use on local, subregional and/or regional transportation improvements and maintenance projects. Receipt of all such funds requires compliance with the Growth Management Program described below. The funds are to be distributed on a formula based on population and road miles.

Each jurisdiction shall demonstrate its compliance with all of the components of the Growth Management Program in a completed compliance checklist. The jurisdiction shall submit, and the Authority shall review and make findings regarding the jurisdiction's compliance with the requirements of the Growth Management Program, consistent with the Authority's adopted policies and procedures.

If the Authority determines that the jurisdiction complies with the requirements of the Growth Management Program, it shall allocate to the jurisdiction its share of local street maintenance and improvement funding. Jurisdictions may use funds allocated under this provision to comply with these administrative requirements.

If the Authority determines that the jurisdiction does not comply with the requirements of the Growth Management Program, the Authority shall withhold those funds and also make a finding that the jurisdiction shall not be eligible to receive Contra Costa Transportation for Livable Communities until the Authority determines the jurisdiction has achieved compliance. The Authority's findings of noncompliance may set deadlines and conditions for achieving compliance.

Withholding of funds, reinstatement of compliance, reallocation of funds and treatment of unallocated funds shall be as established in adopted Authority's policies and procedures.

ATTACHMENT A
PRINCIPLES OF AGREEMENT FOR ESTABLISHING THE URBAN LIMIT LINE

An applicable ULL shall be defined as an urban limit line, urban growth boundary, or other equivalent physical boundary judged by the Authority to clearly identify the physical limits of the local jurisdiction's area, including future urban development.

Initial Action

1. The Board of Supervisors shall have, with the concurrence of each affected city, adjusted the existing County ULL on or before September 30, 2004, or as expeditiously as possible given the requirements of CEQA, to make the existing County ULL coterminous with city boundaries where it previously intruded inside those incorporated boundaries.

Establishing a Mutually Agreed-Upon Countywide Urban Limit Line ("MAC-ULL")

2. The process to develop a MAC ULL shall have begun by July 1, 2004 with meetings in each sub region between one elected representative of each city and the county. The subregional meeting(s) will be followed by meetings between all of the cities and the county, each being represented by one elected representative. The discussion will include both the suggested ULL as well as criteria for establishing the line and future modifications to the ULL.

3. On or before December 31, 2004, the County and the cities will cooperate in the development of a new MAC-ULL and criteria for future modifications. To be considered a final proposal, the plan must be approved by 4 members of the Board of Supervisors and ¾ of the cities representing ¾ of the incorporated population.

4. The County will be the lead agency in connection with any required environmental review and clearance on the proposed MAC-ULL.

5. After completion of the environmental review process, the proposal shall be submitted to the voters for ratification by November 2006.

6. The MAC-ULL will include provisions for periodic review (5 years) as well as provisions for minor (less than 30 acres) nonconsecutive adjustments.

7. If there is a MAC-ULL, and a Town or City disagrees with that MAC-ULL, it may develop and submit a "LV- ULL" (see 8.b, below), or rely upon an existing voter approved ULL.

Alternatives If There Is No Voter Approved MAC-ULL or If a Local Jurisdiction Chooses Not to Concur with a Voter-Approved MAC-ULL

8. If no MAC-ULL is established by March 31, 2009, only local jurisdictions with one of the following applicable voter approved ULLs will be eligible to receive the 18% return to source funds or the 5% TLC funds.

    a. County ULL. A ULL placed on the ballot by the Contra Costa County Board of Supervisors, adopted at a countywide election and in effect through the applicable GMP compliance period, as its boundaries apply to the local jurisdiction, if: :

(i) That ULL was approved by a majority of the local jurisdiction's voters, either through a separate ballot measure or as part of the countywide election at which the measure was approved;

(ii) The legislative body of the City or Town has accepted and approved, for purposes of compliance with the Measure J GMP, the County ULL boundaries for urban development as its applicable, voter approved ULL;

(iii) Revisions to a City or Town's adopted County ULL boundary requires fulfillment of provisions (8.a.i) and (8.a.ii) above in their entirety; and

(iv) A City of Town may adopt conditions for revising its adopted County ULL boundary by action of the City or Town's legislative body, provided that the conditions limit the revisions of the physical boundary to adjustments of 30 or fewer acres, and/or to address issues of unconstitutional takings, or conformance to state and federal law. Such conditions may be adopted at the time of adoption of the County ULL, or subsequently through amendment to the City or Town's Growth Management Element to its General Plan.

b. *Local Voter ULL (LV-ULL).* A local ULL or equivalent measure placed on the local jurisdiction ballot, approved by the jurisdiction's voters, and recognized by action of the local jurisdiction's legislative body as its applicable, voter approved ULL. A jurisdiction may revise or establish a new LV-ULL at any time using the procedure defined in this paragraph.

c. Adjustments of 30 Acres or Less. A local jurisdiction can undertake adjustments of 30 acres or less to its adopted ULL, consistent with these Principles, without voter approval. However, any adjustment greater than 30 acres requires voter approval and completion of the full County ULL or LV-ULL procedure as outlined above.

Conditions of Compliance

9. Submittal of an annexation request by a local jurisdiction to LAFCO outside of an applicable voter approved ULL will constitute non-compliance with the new Measure J Growth Management Plan.

10. For each jurisdiction, an applicable ULL shall be in place through each Measure J Growth Management Program compliance period in order for the local jurisdiction to be eligible to receive the 18% return to source and the TLC funds for that period.

SUMMARY OF THE CONTRA COSTA TRANSPORTATION FOR LIVABLE COMMUNITIES PROGRAM

The Contra Costa Transportation for Livable Communities (CC-TLC) Program would fund transportation enhancement projects in urban, suburban and rural communities, would support a balanced transportation system, would foster the creation of affordable housing, and would help make Contra Costa's communities more pedestrian-, bicycle-, and transit-friendly.

The CC-TLC program is intended to support local efforts to achieve more compact, mixed-use development, and development that is pedestrian-friendly or integrated into transit networks. This type of development provides residents with a broad range of housing choices, easy access to public facilities, and alternatives to the use of the automobile for commuting, shopping or recreation. Finally, the CC-TLC program can strengthen existing communities through infill development and discourage the loss of open space and agricultural land on the urban fringe. These principles can be applied throughout Contra Costa, not only in existing urban areas but also in suburban and rural parts of the county.

CC-TLC Goals

The goals of the CC-TLC Program are to support transportation enhancement projects and planning that will:

- Help create walkable, pedestrian-friendly neighborhoods and business districts;
- Promote innovative solutions, including compact building design and context-sensitive site planning that is integrated with the transportation system;
- Help create walkable, pedestrian-friendly access linking housing and job centers to transit;
- Help create affordable housing;
- Encourage a mixture of land uses and support a community's development or redevelopment activities; and
- Provide for a variety of transportation choices to enhance a community's mobility, identity, and quality of life.

The CC-TLC Incentive Program can aid proponents of affordable or workforce housing projects that may need specific transportation improvements as a condition of project approval and would be expected to be a catalyst that might assist communities with infill and transit-oriented development.

To ensure that all jurisdictions can compete for the funds, project definitions include projects for urban, suburban, and rural land use types.

What Will the CC-TLC Incentive Program Fund?

The CC-TLC Incentive Program would fund both planning and capital grants. Planning grants would support development of community-oriented plans that link transportation investments with land-use decisions. Capital grants would fund transportation-related improvements, such as streetscapes, plazas and squares, transit access, parking and bicycle facilities, traffic calming programs and related infrastructure improvements. More specifically, incentive funds would be available for the planning and construction of the following types of transportation-related

infrastructure improvements to catalyze, facilitate or support projects that meet the CC-TLC program's goals: [1]

- Local transit facilities
- Intersection improvements and pedestrian facilies
- Pedestrian plazas, walkways and other streetscape improvements that encourage walking
- Traffic calming measures
- Bicycle facilities

While sales tax funds cannot be used to directly fund housing, office, or commercial developments, as noted above, the program could fund the infrastructure necessary to support affordable housing and other development desired by local communities.

Program Funding

Funding would be allocated to the subregions and then distributed to individual, qualifying projects after Authority approval. It would not be allocated to local jurisdictions on an "as-of-right" formula basis. Funds available to the subregion for programming would be based upon the population of each subregion at the beginning of each five-year funding cycle.

Working with the RTPCs, the Authority would prepare guidelines and establish overall criteria for the program. The RTPCs would review project proposals and make funding recommendations to the Authority. The Authority review the recommendations of the RTPCs, and authorize expenditures through the Authority's Strategic Plan.

Preference would be given to projects that maximize transportation benefits linked to providing affordable housing near transit or in downtown areas. Details would be worked out by the RTPCs. The application process would be on a three- or five-year cycle, at the option of the RTPCs. Applications would only be accepted by the RTPCs from local jurisdictions or transit operators, and the RTPCs would forward recommended programs to the Authority. Nonprofit corporations and other entities could also be eligible for transportation funding but would need a public sponsor.

Eligibility of Sponsors for Funds

Jurisdictions are eligible for CC-TLC funds if the Authority has found them in compliance with the GMP at the time of grant approval.

1 The program is expected to emphasize investments that support program goals; however, where appropriate, a limited portion of the grants may be used for project-related betterments, such as undergrounding utilities.

CONTRA COSTA
transportation
authority

Commissioners

Amy Worth, Chair	Southwest Contra Costa, City of Orinda
Janet Abelson, Vice-Chair	West Contra Costa, City of El Cerrito
Charlie Abrams	Central Contra Costa, City of Walnut Creek
Maria Alegria	Conference of Mayors, City of Pinole
Donald P. Freitas	East Contra Costa, City of Antioch
John Gioia	Board of Supervisors
Federal Glover	Board of Supervisors
Brad Nix	East Contra Costa, City of Oakley
Julie Pierce	Central Contra Costa, City of Clayton
Karen Stepper	Southwest Contra Costa, Town of Danville
Kris Valstad	West Contra Costa, City of Hercules

Ex-Officio Members

Irma Anderson	Metropolitan Transportation Commission, Conference of Mayors, City of Richmond
Joel Keller	Bay Area Rapid Transit District
Arne Simonson	Bus Transit Operators, Tri Delta Transit, City of Antioch

Authority Staff

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David Murray	Chief Financial Officer
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TO: BOARD OF SUPERVISORS

FROM: DENNIS M. BARRY, AICP
COMMUNITY DEVELOPMENT DIRECTOR

Contra Costa County

D.2

DATE: JULY 12, 2005

SUBJECT: REPORT ON BALLOT MEASURE FOR EXTENSION OF THE URBAN LIMIT LINE

SPECIFIC REQUEST(S) OR RECOMMENDATION(S) & BACKGROUND AND JUSTIFICATION

RECOMMENDATIONS

1. ACCEPT report from the Community Development Director on a proposed ballot measure to extend the term of the County's Urban Limit Line.

2. ACKNOWLEDGE that the ballot measure for a proposal to extend the term of the Urban Limit Line will generally take the form of "Plan C Compromise - Mutually Agreeable Urban Limit Line", including four of the Worth Amendments, as identified in the Board of Supervisors May 10, 2005 motion.

CONTINUED ON ATTACHMENT: X **YES** **SIGNATURE** Dennis M. Barry

____ **RECOMMENDATION OF COUNTY ADMINISTRATOR** ____ **RECOMMENDATION OF BOARD COMMITTEE**
____ **APPROVE** ____ **OTHER**

SIGNATURE(S):

ACTION OF BOARD ON 07/12/2005 **APPROVED AS RECOMMENDED** X **OTHER** X

ADDENDUM ATTACHED

VOTE OF SUPERVISORS
X **UNANIMOUS (ABSENT** NONE**)**
AYES:_____ **NOES:**_____
ABSENT:_____ **ABSTAIN:**_____

I HEREBY CERTIFY THAT THIS IS A TRUE AND CORRECT COPY OF AN ACTION TAKEN AND ENTERED ON THE MINUTES OF THE BOARD OF SUPERVISORS ON THE DATE SHOWN

Contact: P. Roche, CDD-Adv. Pln. (Ph #925-335-1242)

cc: CAO
Clerk of the Board
County Counsel
19 Cities
Chair, CCTA

ATTESTED 07/12/2005
JOHN SWEETEN, CLERK OF THE BOARD OF SUPERVISORS AND COUNTY ADMINISTRATOR

BY _____ **DEPUTY**

ATTACHMENT 6

RECOMMENDATIONS –continued

3. AUTHORIZE staff from the Community Development and County Counsel to begin drafting a ballot measure and initiate the California Environmental Quality Act (CEQA) review process.

4. AUTHORIZE the Chair, Board of Supervisors to sign letter in response to the June 10, 2005 letter from the Mayor, City of Concord.

FISCAL IMPACT

Should the Board authorize drafting of a ballot measure and initiation of the CEQA review to extend the term of the County's Urban Limit Line substantially based on "Plan C- Mutually Agreeable Urban Limit Line", including four of the Worth Amendments, this would be an unfunded mandate and costs would be incurred for staff time to undertake this effort.

BACKGROUND / REASONS FOR RECOMMENDATION

On June 14, 2005 the Board of Supervisors considered and discussed the results of the June 8, 2005 Special Meeting of the Contra Costa Transportation Authority, whereby Option #2 was approved which allows a city/town and the County to individually – or in groups – pursue a specific Urban Limit Line ballot measure and initiate the environmental review process on their own. Should a city or the County pursue a local ballot measure to establish their own Urban Limit Line, this would satisfy the jurisdiction's compliance with the Measure J – Urban Limit Lines Principles. At the June 14th meeting, the Board requested Community Development staff to return with a report on how to proceed with a ballot measure for the unincorporated area and initiate the CEQA review process, and to draft a response to the June 10, 2004 letter from the Mayor, City of Concord received by the Board regarding the tideland portion of the Concord Naval Weapons Station.

The Board adopted a motion on May 10, 2005 which outlined support for an Urban Limit Line under the Measure J –Mutually Agreeable Urban Limit Line proposal based on the Plan C-Compromise, as presented on 1/24/2005 by the Contra Costa Council, Home Builders Association, Save Mount Diablo, Greenbelt Alliance, and California Alliance For Jobs; plus incorporating 4 of the amendments to Plan C authored by Councilwoman Amy Worth (Orinda), specifically amendments 1, 2, 4 and 6; and, included within the proposal an exemption with respect to the tideland portion of the Concord Naval Weapon Station allowing the automatic commencement of the Urban Limit Line review process for this area when the United States Department of Defense determines to dispose of the property.

Board members will recall that a key feature of the Plan C-Compromise was to leave the Urban Limit Line in its present location, coterminous with City Limits, there would be no changes to the Urban Limit Line for a minimum of ten years and then changes would be allowed only if it is shown that there not a 20-year housing supply in Contra Costa County per certain criteria. The Plan C-Compromise also provided for a periodic review of the Urban Limit Line based on a 5-year cycle beginning after voter adoption of the line.

BACKGROUND / REASONS FOR RECOMMENDATION -continued

Another key feature under the Plan C-Compromise was the requirement that 10 years after the adoption of the line there should be a sub-regional review of the remaining capacity of the land within the Urban Limit Line to determine if the housing and job needs over the next 20 years could be met within the line. This land availability review would then recommend specific changes in land use designations within the Urban Limit Line and/or recommend the inclusion of additional land within the Urban Limit Line to meet the 20-year housing and jobs needs. A copy of the Plan C-Compromise and the Worth Amendments are provided for Board reference under Attachment "A".

Based on the concepts under the Plan C-Compromise along with the Worth Amendments previously supported by the Board, the following outlines staff's understanding of what the ballot measure would ask the voters to approve:

1. Amend and update the 65/35 Land Preservation Plan Ordinance, including:

    a) Extend the term for the Urban Limit for another twenty years (2026);

    b) Incorporate the procedure to review the Urban Limit Line based on a 5- year cycle, beginning after voter adoption, and mandate that after 10 years from adoption a sub-regional review of whether there is sufficient remaining capacity within the Urban Limit Line to meet the 20-year housing and jobs needs for Contra Costa County;

    c) Mandate voter approval to expand Urban Limit Line boundary by more than 30 acres following the 5-year schedule of periodic review of the Urban Limit Line and 10-year sub-regional land availability review;

    d) Provide for the automatic commencement of a review of the Urban Limit Line in the vicinity of the tideland portion of the Concord Naval Weapons Station at such time as the United States Department of Defense determines to dispose (surplus) this land area (this could occur outside the 5-year and 10-year cycles of review) ;

    d) Retain procedure for changes to the Urban Limit Line under 30 acres based on 4/5 vote of Board after holding public hearing and making certain findings;

    e) Retain the concept of a standard for land preservation, whereby a certain percentage of the overall County land area will be retained for non-urban uses over the twenty year period;

    f) Retain the concept of protections for the County's prime agricultural land (e.g. Agricultural Core) by maintaining a 40-acre minimum parcel size and limiting uses to agricultural production or uses incidental to agricultural production;

BACKGROUND / REASONS FOR RECOMMENDATION -continued

g) Incorporate the voter approved ordinance into the General Plan document.

h) Adopt a new Urban Limit Line Map, reflecting the following (see items 1, 2, 4, and 6 from the Worth Amendments):

i. Incorporate San Ramon's voter approved General Plan Land Use and Urban Growth Boundary map;

ii. Locate the 27 acres for a public playfield as part of the Gateway development in Orinda on the inside of the Urban Limit Line;

iii. Locate the 38 acres of the Pine Creek Detention Basin parcels owned by the Contra Costa County Water Conservation and Flood Control District in the North Gate area on the outside of the Urban Limit Line;

iv. Locate the approved Alhambra Valley Ranch residential subdivision (Sub # 6443) on the inside of the Urban Limit Line, and make corresponding adjustments placing waterfront area in the Martinez area outside the Urban Limit Line, as recommended by the Martinez City Council.

2. Amend the Contra Costa County General Plan (2005-2020), Land Use and Conservation elements to incorporate the voters' approval of an updated Urban Limit Line.

At the June 14th meeting, the Board also requested staff to identify the probable timeline with key milestones for placing an Urban Limit Line ballot measure before the voters under three different scenarios:

- November 8, 2005 Special Statewide Election Ballot
- June 6, 2006 Statewide Primary Election Ballot
- November 14, Statewide General Election Ballot

A detailed timeline with key milestones for each of these scenarios is provided under Attachment "B" to this report. Staff notes that due to the County Election Official's need to prepare a Countywide Election ballot for the November 8, 2005 Special Election Ballot it would appear to be nearly impossible to submit an Urban Limit Line ballot measure to them on time without severely truncating the 30-day review and comment period of draft ballot measure language by cities and the public and without compressing time needed by staff to prepare both the ballot measure language and complete the CEQA review.

BACKGROUND / REASONS FOR RECOMMENDATION -continued

As a final matter, the Board requested staff to prepare a response to the June 10, 2005 letter from the Mayor, City of Concord. Attached for the Board's consideration under Attachment "C", is a draft letter for the Chair of the Board's signature responding to the concerns raised in the Concord letter.

Attachments (3)

1. Attachment "A" : Plan C-Compromise and the Worth Amendments
2. Attachment "B": 3 Scenarios for placing ULL Ballot Measure before the voters
3. Attachment "C": *draft* response letter to Mayor, City of Concord

Attachment "A": Plan C – Compromise and the Worth Amendments

Contra Costa Council
Home Builders Association
Save Mount Diablo
Greenbelt Alliance
California Alliance for Jobs

PLAN C – Compromise

January 24, 2005

TO: ALL ULL SUB REGIONAL TASK FORCE COMMITTEE MEMBERS

FROM: Linda Best – Contra Costa Council
Guy Bjerke – Home Builder's Association
Ron Brown – Save Mount Diablo
David Reid – Greenbelt Alliance
Tomi Van de Brooke – California Alliance for Jobs

SUBJECT: ALTERNATIVE "PLAN C" FOR CONSIDERATION

We have been meeting since the CCTA passed the Measure J language in August 2004. Our goal has been to work together to find a ULL approach that the environmental and business communities could agree on thereby avoiding the ensuing litigation and campaign battles that often follow land-use decisions.

We have found common ground on the attached "Plan C". While we recognize that the recently proposed "Plan B" was an attempt to incorporate our approach, the end result left us far from the compromise position we had achieved.

The crux of the compromise found by the environmental and business community was to leave the line in place for now and provide for a rational process that allowed the line to be moved in the future if the county does not have a 20 year housing supply. We agreed that the Shaping our Future came to the reasonable conclusion that, **"If certain land-use planning measures were successfully implemented"**, then the county has a twenty year housing supply as required by law and, further, there would be no need to move the "recently adjusted ULL".

This consensus group has stuck together though some very difficult decisions and both sides have given up a great deal to meet our goal. The process we developed links back to the Shaping our Future conclusion by providing for an assessment of how the county is doing in implementing the land-use planning measures assumed in Shaping our Future's conclusion that the county has a 20 year housing supply.

While we appreciate those who believe that they must get all of their changes in now, we don't believe that approach will garner the support needed not only for the cities and the county to accept it but for success with the voters who will have a voice in November 2006.

It is with this realistic perspective in mind that we bring forth Plan C.

PLAN C

WITH RESPECT TO URBAN LIMIT LINE PLACEMENT TO BE PRESENTED TO THE VOTERS IN 2006, there will be no changes the recently adjusted ULL for a minimum of ten years and then, changes would be allowed only if it is shown that there is not a 20 year housing supply available in the County as per criteria set forth below.

THE CONTRA COSTA COUNTY URBAN LIMIT LINE: PERIODIC REVIEW AND CRITERIA FOR LAND INCLUSION

As part of the reauthorization of Contra Costa's ½-cent transportation sales tax measure (Measure J), the Contra Costa Transportation Authority adopted a Growth Management Program that requires the establishment of a voter approved Urban Limit Line (ULL) by November 2006.

The purposes of the ULL are: (1) to ensure preservation and protection of identified non-urban land, including agricultural, open space, parkland, and other areas, by establishing a line beyond which urban uses generally cannot be designated; (2) to link land use decisions with the transportation investments in Measure J by channeling future growth to locations more suitable for urban development; (3) to ensure that land use policies within the ULL effectively promote appropriate development that accommodates the area's projected housing and job needs over a 20-year period.

The ULL would apply to Contra Costa County and all cities/towns within Contra Costa County. Alternately, cities and the County have the option of establishing their own voter approved ULL or Urban Growth Boundaries.

Contra Costa County and all cities/towns within Contra Costa County agree that there shall be periodic review of the ULL (Periodic Review) and criteria governing amendments to the ULL (Amendment Criteria). These policies will be placed before Contra Costa County voters in November 2006.

PERIODIC REVIEW OF ULL: DEVELOPMENT REVIEW AND LAND AVAILABILITY REVIEW

5 years after adoption of the ULL, and every 5 years thereafter, the City-County Relations Committee shall oversee the completion of a review of residential and

Non-residential development during the preceding 5-year period (Development Review). If the Development Review determines that there has not been substantial progress toward meeting the area's 20-year projections, the Development Review shall recommend specific changes in land use designations, policies, and programs within the ULL that will demonstrably increase the likelihood that appropriate development will occur within the ULL. Expanding the ULL will not be considered as an initial response to the results of a Development Review. Development Reviews shall occur in 2011, 2016, 2021, 2026, and 2031.

10 years after the ULL is adopted, and every 10 years thereafter, the City-County Relations Committee shall oversee the completion of a sub-regional review of the remaining capacity of the land within the ULL (Sub-regional Land Availability Review). If the sub-regional Land Availability Review determines that there is no longer sufficient land planned and zoned in a sub-region to accommodate the projected housing and job needs over the next 20 year period, the Land Availability Review shall recommend specific changes in land use designations within ULL and/or recommend the inclusion of additional land such that the 20-year needs can be met within the revised ULL. Changes to the ULL will be subject to voter approval. Land Availability Reviews shall occur in 2016 and 2026.

LAND INCLUSION CRITERIA

Maximum efficiency of land uses within and on the fringe of the existing urban area—whether, in comparison with other land that might be added to the ULL, addition of the subject land will better achieve the land use, residential and employment targets, and transportation objectives of the Shaping Our Future Vision Plan.

Orderly and economic provision of public facilities and services—whether adding the subject land to the ULL, as compared with other land that might be added, will result in a more logical extension of public facilities and services.

Environmental, energy, economic and social consequences—whether the consequences of adding the subject land to the ULL would be, on the whole, more positive than not including the land, and more positive than including other land.

Compatibility of urban uses with nearby agricultural activities—whether urban development on the subject land would likely cause a change in farm practices, or an increase in the cost of farm practices, on farms in areas designated for agriculture.

Proposed Amendments to Plan C
Councilwoman Amy Worth Amendments, presented at the 2/26/2005 ULL Summit

1. As provided in the Measure J Expenditure Plan, accept minor (less than 30 acres) non-consecutive adjustments to the ULL.

2. Accept City and County requests for tightening of the ULL.

3. Accept adjustments to bring inside the line split parcels in Clayton where city services are needed and where the change will not result in new development beyond that which is currently allowed in the March Creek Specific Plan, including preserving the undeveloped land currently protected by County scenic easements.

4. Bring inside the ULL those areas in the City of Martinez's Sphere of Influence that are already developed and concurrently place outside the ULL an equal number of acres in the waterfront area that are not already developed.

5. If the Federal Government releases the Concord Naval Weapons Station (CNWS) for civilian use, the following shall occur: the ULL will be changed to include up to 1,500 acres of the tidal portion for non-residential development if, concurrently, an amount of land equal to 125% of newly included acreage is placed outside the line from the inland portion of the CNWS.

6. Consistent with the city of San Ramon's voter approved ULL; approve two areas for addition on the west side of town. These were voted upon as part of San Ramon's voter approved General Plan. Approve the automatic line adjustment to include Camp Parks, should it be released from Federal control.

Attachment "B": 3 Scenarios for placing ULL Ballot Measure before the voters

TIMELINE AND KEY MILESTONES
NOVEMBER 8, 2005 SPECIAL STATEWIDE ELECTION BALLOT

BOARD-INITIATED URBAN LIMIT LINE MEASURE

DATE	MILESTONE	BOARD ACTION	CEQA PROCESS
June 13, 2005	Deadline for Governor to call for Special Statewide Election for Nov. 8, 2005	--	--
June 14, 2005 Board of Supervisors meeting	Initiate process for ULL Ballot Measure on Nov. '05 Special Election.	Board authorizes staff to prepare ULL Ballot Measure for Nov. '05 Special Election and determines the main elements of the measure.	Staff finalizes Initial Study under CEQA following Board authorization. (1)
June 21, 2005 Board of Supervisors meeting	Approve ***draft*** language for Ballot Measure for public comment	Approve ***draft*** ULL Ballot Measure language for public comment and circulate to cities and stakeholders.	Circulate Initial Study and Notice of Intent for a Negative Declaration (20 days, closing on July 12, 2005). Post and file with County Clerk.
July 19, 2005 Board of Supervisors meeting (2) OR August 9, 2005 Board of Supervisors meeting (3)	Adopt Resolution on Special Measure Election	Accept report on comments received on draft ULL Ballot Measure. Make CEQA determination. Adopt Resolution calling for a Special Measure Election to place ULL Measure on the ballot for the Nov.8, 2005 Special Statewide Election.	Post and file Notice of Determination (NOD) for Negative with County Clerk.

Notes:

(1) An EIR would need to be prepared, if substantial evidence is identified or presented to support a fair argument that the project would result in physical changes to the environment, and the proposed action was not evaluated in a previous environmental review. An EIR could not be completed prior to the latest date for Board consideration to approve final Ballot Measure language, see notes 2 & 3. A Negative Declaration is anticipated should the Board-initiated ULL Ballot Measure not propose any substantial changes to the existing ULL boundary since it would not induce growth.

(2) The Contra Costa County Election Official requests that resolution calling the election be filed with Registrar of Voters not less than 106 days prior to the date of the election, in order to provide sufficient time for arguments, preparation of materials for the printer (including translation, proofing, etc.) prior to issuing absentee ballots.

(3) 88 days prior to the election is the latest that a resolution can be filed with the County Election Official.

TIMELINE AND KEY MILESTONES
JUNE 6, 2006 PRIMARY ELECTION BALLOT

BOARD-INITIATED URBAN LIMIT LINE BALLOT MEASURE

BOARD MEETING DATE	MILESTONE	BOARD ACTION	CEQA PROCESS
Earliest start: Board Meeting Sept. 13, 2005 Latest start: Board Meeting Nov. 1, 2005	Determine the key elements of the ballot measure based on report from Community Development and County Counsel. Initiate process for drafting an ULL Ballot Measure to be schedule for the June '06 Primary Election.	Board authorizes staff to formally prepare ULL Ballot Measure for June 6, 2006 Primary Election	Begin CEQA review process (1).
Earliest: Board Meeting Nov. 15, 2005 Latest: Board Meeting Jan. 17, 2006	Approve ***draft*** language for Ballot Measure for public comment	Approve ***draft*** ULL Ballot Measure language for public comment and circulate to cities and stakeholders for 30 days.	Circulate Initial Study and Notice of Intent for a Negative Declaration (30 days, closing on Dec.15, 2006, or Feb. 17, 2006). Post and file with County Clerk.
Earliest Board Meeting Feb. 21, 2006 (2) OR Latest: Board Meeting March 7, 2006 (3)	Adopt Resolution on Special Measure Election	Accept report on comments received on draft ULL Ballot Measure. Make CEQA determination. Adopt Resolution calling for a Special Measure Election to place ULL Measure on the ballot for the June 6, 2006 Primary Election. (2)	Post and file Notice of Determination (NOD) for Negative Declaration County Clerk.

Notes:

(1) An EIR would need to be prepared, if substantial evidence is identified or presented to support a fair argument that the project would result in physical changes to the environment, and the proposed action was not evaluated in a previous environmental review. It is doubtful that an EIR could be completed prior to the latest date for Board consideration to approve final Ballot Measure language, see notes 2 & 3. A Negative Declaration is anticipated should the Board-initiated ULL Ballot Measure not propose any substantial changes to the existing ULL boundary since it would not induce growth.

(2) The Contra Costa County Election Official requests that resolution calling the election be filed with Registrar of Voters not less than 106 days prior to the date of the election, in order to provide sufficient time for arguments, preparation of materials for the printer (including translation, proofing, etc.) prior to issuing absentee ballots.

(3) 88 days prior to the election is the latest that a resolution can be filed with the County Election Official.

TIMELINE AND KEY MILESTONES
NOVEMBER 14, 2006 GENERAL ELECTION BALLOT

BOARD-INITIATED URBAN LIMIT LINE BALLOT MEASURE

BOARD MEETING DATE	MILESTONE	BOARD ACTION	CEQA PROCESS
Earliest: Board Meeting Sept. 13, 2005 Latest: Board Meeting April 11, 2006	Determine the elements of the ballot measure based on report from Community Development and County Counsel. Initiate process for drafting an ULL Ballot Measure to be schedule for the Nov. '06 General Election.	Board authorizes staff to formally prepare ULL Ballot Measure for the Nov. '06 General Election	Begin CEQA review process (1).
Earliest: Board Meeting Nov. 15, 2005 Latest: Board Meeting June 13, 2006	Approve ***draft*** language for Ballot Measure for public comment.	Approve ***draft*** ULL Ballot Measure language for public comment and circulate to cities and stakeholders for 30 days.	Circulate Initial Study and Notice of Intent for a Negative Declaration (30 days, closing on Dec.15, 2006, or Feb. 17, 2006). Post and file with County Clerk.
Earliest: Board Meeting Feb. 21, 2006 OR Latest: Board Meeting July 18, 2006 (2) or August 8, 2006 (3)	Adopt Resolution on Special Measure Election	Accept report on comments received on draft ULL Ballot Measure. Make CEQA determination. Adopt Resolution calling for a Special Measure Election to place ULL Measure on the ballot for the June 6, 2006 Primary Election. (2)	Post and file Notice of Determination (NOD) for Negative Declaration County Clerk.

Notes:

(1) An EIR would need to be prepared, if substantial evidence is identified or presented to support a fair argument that the project would result in physical changes to the environment, and the proposed action was not evaluated in a previous environmental review. It is doubtful that an EIR could be completed prior to the latest date for Board consideration to approve final Ballot Measure language, see notes 2 & 3. A Negative Declaration is anticipated should the Board-initiated ULL Ballot Measure not propose any substantial changes to the existing ULL boundary since it would not induce growth

(2) The Contra Costa County Election Official requests that resolution calling the election be filed with Registrar of Voters not less than 106 days prior to the date of the election, in order to provide sufficient time for arguments, preparation of materials for the printer (including translation, proofing, etc.) prior to issuing absentee ballots.

(3) 88 days prior to the election is the latest that a resolution can be filed with the County Election Official.

Attachment "C": *draft* response letter to Mayor, City of Concord

The Board of Supervisors

County Administration Building
651 Pine Street, Room 106
Martinez, California 94553-4068

John Gioia, District I
Gayle B. Uilkema, District II
Mary Piepho, District III
Mark DeSaulnier, District IV
Federal D. Glover, District V

Contra Costa County

John Sweeten
Clerk of the Board
and
County Administrator
(925) 335-1900

July 12, 2005

Honorable Laura M. Hoffmeister
Mayor, City of Concord
City of Concord
1950 Parkside Drive, MS/01
Concord, CA 94519-2578

Subject: *2006 Ballot Measure for Extension of the County's Urban Limit Line*

Dear Mayor Hoffmeister:

Thank you for your letter of June 10, 2005 to the Board of Supervisor on behalf of the Concord City Council explaining your city's position on the May 10, 2005 Board motion which outlined our support for an Urban Limit Line under the Measure J- Mutually Agreeable Urban Limit Line process based on the Plan C-Compromise, as presented on January 24, 2005 by the Contra Costa Council, Home Builders Association, Save Mount Diablo, Greenbelt Alliance, and California Alliance for Jobs.

On June 8, 2005 the Contra Costa Transportation Authority approved Option #2 which allows a city/town and the County on their own – or in groups – to pursue the establishment of an Urban Limit Line through a ballot measure. Based on this action, the Board of Supervisors has determined to proceed with a ballot measure for the unincorporated area substantially following the Plan C-Compromise proposal along with certain of the amendments authored by Councilwoman Amy Worth.

With respect to the 1500 acre tideland portion of the Concord Naval Weapons Station, the ballot measure would include a provision to automatically commence the review of the Urban Limit Line boundary for this portion of the base at such time as the United States Department of Defense determines to dispose (surplus) this land area. It should be noted that this provision means that the review could occur outside the regular cycle of the Urban Limit Line review, as defined under the Plan C-Compromise. Any change to the Urban Limit Line boundary for the tideland portion of the Concord Naval Weapons Station exceeding 30 acres would still require voter approval.

We have directed our staff to begin the process of drafting the ballot measure language and to initiate the review process under the California Environmental Quality Act (CEQA). It is our expectation that this ballot measure will be placed before the voters in 2006. It is our intention to circulate the draft ballot measure language to each of the 19 cities and the various stakeholder groups for a 30-day comment period prior to the Board's formal adoption of a resolution on a special measure election and forwarding of the ballot measure to the County Elections Official.

We look forward to the City of Concord's continued interest in this matter.

Sincerely,

Gayle B. Uilkema,
Chair, Board of Supervisors

ADDENDUM TO ITEM D.2
July 12, 2005

On this day, the Board of Supervisors considered accepting a report from the Community Development Director on a work program and schedule for the County-initiated Urban Limit Line (ULL) ballot measure.

Dennis Barry, Community Development Director, presented staff's report, noting that a proposed timeline was attached to the Board Order for this item.

Chair Uilkema asked in what way the cities ballot measures and/or privately led initiatives appearing on the ballot would affect what the County does.

Supervisor Glover noted that several East Bay cities are planning to place ULL measures on the November 8th ballot.

Chair Uilkema asked what will happen if the County cannot make it onto that November 8th ballot with its own measure.

Mr. Barry responded that the Board could direct staff to incorporate the outcome of those ballot measures, should they affect a change in the line, into the County's proposed line.

Supervisor DeSaulnier noted that Concord and Clayton may join with the County, bringing the County's line closer to achieving the Measure J requirement for mutual agreement by 3/4 of the cities and 4/5 of the Supervisors. Supervisor DeSaulnier then raised a question about the acceptability of city residents voting on a line that is outside of city boundaries.

Mr. Barry responded that there is a difference between a General Plan Amendment and a line that will be honored to quality for Measure J Return to Source funds.

Chair Uilkema asked if the Board's acceptance of this item sets a date for the County's measure to go to the ballot.

Mr. Barry said Board acceptance begins the process, but that staff will be returning to the Board as part of that process. He said the earliest date, and that date for which staff will aim, would be the June 2006 election.

The public was invited to speak. No public testimony was provided.

Chair Uilkema made a motion, seconded by Supervisor Gioia, and by a unanimous vote with no Supervisors absent the Board:

ACCEPTED the report fro the Community Development Director on a proposed ballot measure to extend the term of the County's Urban Limit Line; ACKNOWLEDGED that he ballot measure for a proposal to extend the term of the Urban Limit Line will generally take the form of "Plan C Compromise – Mutually Agreeable Urban Limit Line", including four of the Worth Amendments, as identified in the Board of Supervisors May 10, 2005 motion; AUTHORIZED staff from the Community Development Department and County Counsel to begin drafting a ballot measure and initiate the California Environmental Quality Act (CEQA) review process; and AUTHORIZED the Chair, Board of Supervisors, to sign a letter in response to the June 10, 2005 letter from the Mayor, City of Concord.

# # #

VOTER INFORMATION PAMPHLET

Containing

MEASURES L & M

CONTRA COSTA COUNTY

TUESDAY, NOVEMBER 7, 2006

Arguments in favor of or against the proposed measures are the opinions of the authors.

If you would like to receive this information in Spanish please call (925) 646-4166; if you have already requested voting information in Spanish, the information will be mailed to you automatically.

Si desea recibir esta información en español, por favor llame al (925) 646-4166, si ya solicitó información para votar en español, ésta será enviada automáticamente por correo.

Measure L..... Pages 1 - 14
Measure M..... Pages 15 - 19

ATTACHMENT 7

MEASURE L
CONTRA COSTA COUNTY URBAN LIMIT LINE

Shall the voters amend the Contra Costa County General Plan (2005-2020) and the County's 65/35 Land Preservation Plan Ordinance (County Ordinance Code, Chapter 82-1) to: (i) extend the term of the County's Urban Limit Line to the Year 2026; (ii) require voter approval to expand the line by more than 30 acres; (iii) adopt a new Urban Limit Line Map; and (iv) establish new review procedures?

COUNTY COUNSEL'S IMPARTIAL ANALYSIS OF MEASURE L

In 1990, voters in Contra Costa County approved Measure C-1990, the 65/35 Contra Costa County Land Preservation Plan Ordinance ("65/35 Ordinance"), which expires in 2010. Measure C-1990 limited urban development to no more than 35 percent of the land in the County and required that at least 65 percent be preserved for agriculture, open space, wetlands, parks, and other non-urban uses. Measure C-1990 also established the County's Urban Limit Line ("ULL"), a line beyond which no urban land use can be designated.

In 1988, County voters approved Measure C-1988, which imposed a sales tax for local transportation purposes. In 2004, voters approved Measure J, which extended that sales tax 25 years. The County must have a ULL, developed and maintained in accord with the "Principles of Agreement for Establishing the Urban Limit Line" ("Principles"), which was part of Measure J, to receive the sales tax proceeds. To comply with the Principles, the ULL must be extended beyond 2010.

To continue to be eligible to receive the sales tax proceeds, the Principles require the County, by March 31, 2009, to either establish a ULL based on the mutual agreement of the County and cities or obtain voter approval of a County ULL. The County and cities were unable to agree upon a ULL. The County therefore seeks voter approval of the extension of the County's ULL to continue to be eligible to receive the sales tax proceeds.

In July 2005, the County took steps to initiate a new, voter-approved ULL, including carrying out an environmental review and preparing a ballot measure. The environmental review resulted in a conclusion that the proposed ballot measure will not result in any significant impacts on the environment.

If this ballot measure is approved by the voters, the measure would amend the County's General Plan (2005-2020) and the 65/35 Ordinance to accomplish the following: (1) extend the term of the 65/35 Ordinance from December 31, 2010, to December 31, 2026; (2) require four-fifths vote of the County Board of Supervisors and voter approval to expand the ULL by more than 30 acres (but voter approval is not required if four-fifths of the Board finds after a public hearing that there is substantial evidence in the record that the ULL expansion is necessary to avoid an unconstitutional taking of private property or is necessary to comply with state or federal law); (3) provide for periodic reviews of the ULL by the Board of Supervisors and a required review in 2016 involving an evaluation of housing and job needs; (4) adopt a new ULL map; and (5) retain the 65/35 land preservation standard and protections for the County's prime agricultural land.

This measure will become effective immediately if approved by a majority of the voters voting on the measure.

ARGUMENT IN FAVOR OF MEASURE L

Protecting Contra Costa County's remaining open space and agricultural lands, discouraging urban sprawl, and preventing traffic congestion from getting any worse, are concerns that matter to all County residents. These concerns are not new. In 1990 the voters enacted the County's Urban Limit Line, approved under Measure C: The Contra Costa County 65/35 Land Preservation Plan Ordinance, which established a line beyond which no urban land uses could be approved during the term of the County's General Plan. The Measure C-1990 ordinance runs for 20 years and is due to expire in 2010.

Over the past 16 years, the Urban Limit Line has protected thousands of acres of open space and agricultural lands and has succeeded in channeling growth into areas of the County most appropriate for urban development. Through Measure L, the Board of Supervisors asks the voters to extend the term of the County's Urban Limit Line to the year 2026.

What does a "yes" vote on Measure L mean? A "yes" vote will extend the term of the Urban Limit Line for another 20 years insuring the continued protection and preservation of the County's open space and agricultural lands. A "yes" vote will require voter approval for future expansion of the Urban Limit Line by more than 30 acres, meaning that through 2026 the voters will decide whether the unincorporated, rural areas of Contra Costa County should be urbanized. A "yes" vote will

provide certainty in the County's land use planning process, promoting orderly development in the unincorporated communities of the County with adequate public services to accommodate future growth (roads, water, sewer, etc.). A "yes" vote will maintain eligibility for local funds under the ½ cent transportation sales tax program approved by voters in 2004.

We strongly urge voters to approve Measure L.

John Gioia, Supervisor, District I

Gayle B. Uilkema, Supervisor, District II

Mary Nejedly Piepho, Supervisor District III

Mark DeSaulnier, Supervisor, District IV

Federal D. Glover, Supervisor, District V

ARGUMENT AGAINST
MEASURE L

None filed.

FULL TEXT OF
MEASURE L

2006 VOTER-APPROVED
CONTRA COSTA COUNTY
URBAN LIMIT LINE

The People of the County of Contra Costa County hereby ordain as follows:

SECTION 1. TITLE

This measure shall be entitled the **2006 Voter-Approved Contra Costa County Urban Limit Line.**

SECTION 2. SUMMARY

This measure amends the Land Use Element of the Contra Costa County General Plan (2005-2020) and the 65/35 Contra Costa Land Preservation Ordinance in the following ways: (1) It extends the term of

the 65/35 Land Preservation Plan Ordinance from December 31, 2010 to December 31, 2026. (2) It provides that, through December 31, 2026, the General Plan cannot be amended to expand the Urban Limit Line by more than 30 acres without a four-fifths vote of the Board of Supervisors and approval of the voters. (3) It provides for periodic reviews of the Urban Limit Line, including a mandatory mid-point review in Year 2016 involving an evaluation of land supply to satisfy 20-year housing and job needs in Contra Costa County. (4) It incorporates a new and revised Urban Limit Line Map that reflects the approvals of city Urban Limit Lines or Urban Growth Boundary maps by voters in the cities of Antioch, Pittsburg, and San Ramon and also reflects other non-substantive boundary changes at various locations. (5) Finally, the measure retains the 65/35 land preservation standard and protections for the County's prime agricultural land.

SECTION 3. STATEMENT OF PURPOSE AND FINDINGS

The voters approve this measure based on the following facts and considerations:

A. In November 1990 the voters approved Measure C-1990, the 65/35 Contra Costa County Land Preservation Plan Ordinance (Chapter 82-1 of the County Ordinance Code), which limited urban development in Contra Costa County to no more than thirty-five (35) percent of the land in the County and required that at least 65 percent of all land in the County would be preserved for agriculture, open space, wetlands, parks, and other non-urban uses. Measure C-1990 also established a countywide Urban Limit Line identifying non-urban agricultural, open space, and other areas beyond which no urban land use could be designated during the term of the General Plan.

B. County Ordinance Code Section 82-1.028 currently provides that the Urban Limit Line will remain in effect until December 31, 2010. This measure would extend the duration of the 65/35 Land Preservation Plan (which includes the Urban Limit Line) to December 31, 2026, thus extending the protection to the County's non-urban and open space areas for an additional 16 years. Because the factors contributing to the need to adopt the 65/35 Land Preservation Plan still exist, it is appropriate to extend these protections through the year 2026.

C. The procedure by which the Urban Limit Line may be changed, either by the Board of Supervisors or by action of the voters, is described at page 3-9, Land Use Element, Contra Costa County

General Plan, and in Contra Costa County Ordinance Code Section 82-1.018. To provide additional protection to the County's non-urban and open space areas, this measure would require that, through December 31, 2026, the General Plan cannot be amended to expand the Urban Limit Line by more than 30 acres without a four-fifths vote of the Board of Supervisors and approval of the voters.

D. This measure would establish a procedure to allow the Board of Supervisors to review the Urban Limit Line on a 5-year cycle, commencing in 2011, to consider whether changes should be made to reflect changing times. This measure would also require a 10-year comprehensive review of the Urban Limit Line in 2016 to determine whether there is sufficient land available to satisfy housing and jobs needs for Contra Costa County for the following 20 years. Because housing and job needs, as well as social and environmental factors, may change over the years, it is appropriate to provide for this review procedure in 2016, which is the mid-point of the extended term, to determine whether expansion of the Urban Limit Line should be considered to meet the changing needs of the County.

SECTION 4. IMPLEMENTATION

To implement this measure, the Contra Costa County General Plan (2005-2020) and Chapter 82-1, 65/35 Land Preservation Plan Ordinance, Contra Costa County Ordinance Code, are amended as follows:

A. GENERAL PLAN AMENDMENTS

1. CHANGE TO GENERAL PLAN MAP DIAGRAM

At page 3-10, Land Use Element, Contra Costa County General Plan (2005-2020), Figure 3-1, Urban Limit Line Map (black and white version sized 8"x 11"), and a color version of Urban Limit Line Map (11" x 17" insert to the General Plan) are hereby amended, as shown on Figure One: Contra Costa County Urban Limit Line Map, which is attached to this measure. Each will be titled: "Contra Costa County Urban Limit Line Map" and adopted to show the boundary of the Urban Limit Line, as approved by this measure.

2. CHANGE TO GENERAL PLAN TEXT

The General Plan is hereby amended to revise the text of "CHANGES TO THE URBAN LIMIT LINE", at page 3-9 of the Land Use Element of the Contra Costa County General Plan, as follows. New text shown in bold italics and underline **[*example*]** is added to the existing text while text in strikeout font [~~example~~] is deleted from the existing text. Text in ordinary font is unchanged by this measure.

CHANGES TO THE URBAN LIMIT LINE

There shall be no change to the ULL that would violate the 65/35 Land Preservation Standard. ~~The ULL will only be changed by a 4/5 vote of the Board of Supervisors after holding a public hearing and making one or more of the following findings based on substantial evidence in the record:~~ ***There will be no change to the ULL except in the manner specified herein. There will be no change to the ULL unless the Board of Supervisors first holds a public hearing at which it approves the change or changes, by a four-fifths vote, after making one or more of the following findings based on substantial evidence in the record:***

(a) a natural or man-made disaster or public emergency has occurred which warrants the provision of housing and/or other community needs within land located outside the ULL;

(b) an objective study has determined that the ULL is preventing the County from providing its fair share of affordable housing or regional housing as required by State law, and the Board of Supervisors finds that a change to the ULL is necessary and the only feasible means to enable the County to meet these requirements of State law;

(c) a majority of the cities that are party to a preservation agreement and the County have approved a change to the ULL affecting all or any

portion of the land covered by the preservation agreement;

(d) a minor change to the ULL will more accurately reflect topographical characteristics or legal boundaries;

(e) an objective study has determined that a change to the ULL is necessary or desirable to further the economic viability of the east Contra Costa County Airport, and either (i) mitigate adverse aviation related to environmental or community impacts attributable to Buchanan Field, or (ii) further the County's aviation related needs;

(f) a change is required to conform to applicable California or federal law.

(g) a five (5) year ~~periodic~~ ***cyclical*** review of the ULL has determined, based on criteria and factors for establishing the ULL set forth above, that new information is available (from city or County growth management studies or otherwise) or circumstance have changed, warranting a change to the ULL.

Any General Plan amendment that would expand the ULL by more than 30 acres shall require voter approval of the proposed General Plan amendment, following the public hearing and the four-fifths vote of the Board of Supervisors approving the General Plan amendment and making one or more of the findings set forth in subsections (a) through (g) above. Notwithstanding the foregoing, a proposed General Plan amendment to expand the ULL by more than 30 acres does not require voter approval if, after a public hearing, the Board of Supervisors by a four-fifths vote approves the General Plan amendment and makes either of the following findings based on substantial evidence in the record: (i) the expansion of the ULL is necessary to avoid an unconstitutional taking of private property; or (ii) the expansion of the ULL is necessary to comply with state or federal law. Expansions of the

ULL totaling 30 acres or less do not require voter approval.

[ADD THE FOLLOWING NEW PARAGRAPHS UNDER THE HEADING "CHANGES TO THE URBAN LIMIT LINE", at page 3-9 of the Land Use Element of the General Plan as follows]

The Board of Supervisors may conduct a cyclical review of the ULL every five years.

The Board of Supervisors will review the boundary of the ULL in the year 2016. The purpose of the year 2016 review is to determine whether a change to the boundary of the County's Urban Limit Line Map is warranted, based on facts and circumstances resulting from the County's participation with the cities in a comprehensive review of the availability of land in Contra Costa County sufficient to satisfy housing and jobs needs for 20 years thereafter. This review of the ULL is in addition to any other reviews of the ULL the Board of Supervisors may conduct.

Any change to the ULL proposed as a result of any review authorized by this section must be adopted pursuant to the procedures set forth in this section. These provisions are effective until December 31, 2026.

B. ORDINANCE CODE CHANGES

1. To be consistent with the amendments to the General Plan that change the boundary of the Urban Limit Line, the People of the County of Contra Costa hereby enact Ordinance No. 2006-06 as follows:

TEXT OF PROPOSED ORDINANCE
Ordinance No. 2006-06

Section 1. Title. This ordinance shall be entitled the "2006 Voter-Approved Contra Costa County Urban Limit Line."

Section 2. Summary. This ordinance amends Chapter 82-1 of the County Ordinance Code to extend the term of the County's Urban Limit Line to the year 2026, to establish new procedures to review the boundaries of the Urban Limit Line and to prohibit expansion of the line by more than 30 acres without voter approval.

Section 3. Ordinance Code Section 82-1.010 is amended to read as follows (new text to be inserted is shown in bold italics and underline [***example***], text in strikeout font [~~example~~] is deleted from the existing text and text in ordinary font is unchanged by this measure):

> 82-1.010 Urban limit line. To ensure the enforcement of the 65/35 standard set forth in Section 82-1.006, an urban limit line shall be established, in approximately the location depicted on the ~~illustrative 65/35 Contra Costa County Land Preservation Plan Map attached as Exhibit A to Ordinance No. 90-66~~ ***"Contra Costa County Urban Limit Line Map" adopted by the voters on November 7, 2006***. The urban limit line ~~shall be~~ ***is*** incorporated into the county's open space conservation plan. The urban limit line ~~shall limit~~ ***limits*** potential urban development in the county to thirty-five percent of the land in the county and ~~shall prohibit~~ ***prohibits*** the county from designating any land located outside the urban limit line for an urban land use. The criteria and factors for determining whether land should be considered for location outside the urban limit line should include (a) land which qualifies for rating as Class I and Class II in the Soil Conservation Service Land Use Capability Classification, (b) open space, parks and other recreation areas, (c) lands with slopes in excess of twenty-six percent, (d) wetlands, and (e) other areas not appropriate for urban growth because of physical unsuitability for development, unstable geological conditions, inadequate water availability, the lack of appropriate infrastructure, distance from existing development, likelihood of substantial environmental damage or substantial injury to fish or wildlife or their habitat, and other similar factors. (Ords. ***2006-06 §3,*** 91-1 § 2, 90-66 § 4).

Section 4. Ordinance Code Section 82-1.018 is amended to read as follows (new text to be inserted is shown in bold italics and underline [***example***], text in strikeout font [~~example~~] is deleted from the existing text and text in ordinary font is unchanged by this measure):

82-1.018 Changes to the urban limit line.

(a) There shall be no change to the urban limit line that violates the 65/35 standard set forth in Section 82-1.006. ~~After adoption of the new general plan, as~~ **Except as otherwise provided in this Section, as** long as there is no violation of the 65/35 standard, the urban limit line can be changed by a four-fifths vote of the board of supervisors after holding a public hearing and making one or more of the following findings based on substantial evidence in the record:

(1) A natural or manmade disaster or public emergency has occurred which warrants the provision of housing and/or other community needs within land located outside the urban limit line;

(2) An objective study has determined that the urban limit line is preventing the county from providing its fair share of affordable housing, or regional housing, as required by state law, and the board of supervisors finds that a change to the urban limit line is necessary and the only feasible means to enable the county to meet these requirements of state law;

(3) A majority of the cities that are party to a preservation agreement and the county have approved a change to the urban limit line affecting all or any portion of the land covered by the preservation agreement;

(4) A minor change to the urban limit line will more accurately reflect topographical characteristics or legal boundaries;

(5) A five-year ~~periodic~~ ***cyclical*** review of the urban limit line has determined, based on the criteria and factors for establishing the urban limit line set forth in Section 82-1.010 above, that new information is available (from city or county growth management studies or otherwise) or circumstances have changed, warranting a change to the urban limit line;

(6) An objective study has determined that a change to the urban limit line is necessary or desirable to further the economic viability of the East Contra Costa County Airport, and either (i) mitigate adverse aviation-related environmental or community impacts attributable to Buchanan Field, or (ii) further the county's aviation related needs; or

(7) A change is required to conform to applicable California or federal law.

~~(b) Any such change shall be subject to referendum as provided by law. Changes to the urban limit line under any other circumstances, shall require a vote of the people.~~

(b) Except as otherwise provided in this subsection, any proposed general plan amendment that would expand the urban limit line by more than 30 acres will require voter approval of the proposed general plan amendment in addition to and following a four-fifths vote of the board of supervisors approving the general plan amendment and making one or more of the findings required by subsection (a) above. Notwithstanding the foregoing, a proposed general plan amendment to expand the urban limit line by more than 30 acres does not require voter approval if, after a public hearing, the board of supervisors by a four-fifths vote makes either of the following findings based on substantial evidence in the record: (i) the expansion of the urban limit line is necessary to avoid an unconstitutional taking of private property; or

(ii) the expansion of the urban limit line is necessary to comply with state or federal law. Proposed expansions of 30 acres or less do not require voter approval.

(c) The board of supervisors may conduct a cyclical review of the urban limit line every five years.

(d) The board of supervisors will review the boundary of the urban limit line in the year 2016. The purpose of the year 2016 review is to determine whether a change to the boundary of the county's urban limit line map is warranted, based on facts and circumstances resulting from the county's participation with the cities in a comprehensive review of the availability of land in Contra Costa County sufficient to meet housing and jobs needs for 20 years. This review of the urban limit line is in addition to any other reviews of the urban limit line the board of supervisors may conduct.

(e) Any change to the urban limit line proposed as a result of any review authorized by this section will not be effective unless it is approved pursuant to the procedures set forth in this section. *(Ords.* ***2006-06 §4,*** 91-1 §2, 90-66 §4.)

Section 5. Ordinance Code Section 82-1.028 is amended to read as follows (new text to be inserted is shown in bold italics and underline [***example***] while text in strikeout font [~~example~~] is deleted from the existing text and text in ordinary font is unchanged by this measure):

82-1.028 Duration.
The provisions of this chapter shall be in effect until ~~December 31, 2010~~ ***December 31, 2026,*** to the extent permitted by law. (Ords. ***2006-06 §5,*** 91-1 § 2, 90-66 § 4).

SECTION 5. EFFECTIVE DATE

This measure shall become effective immediately upon approval by the voters. Upon the effective date, Section 4.A) 1. CHANGE TO GENERAL PLAN MAP DIAGRAM and Section 4.A) 2. CHANGE TO GENERAL PLAN TEXT of this measure are hereby inserted into the Contra Costa County General Plan (2005-2020), as one of the four consolidated general plan amendments for calendar year 2006 allowed under state law. Upon the effective date, Ordinance No. 2006-06 is hereby enacted as a County ordinance, amending the County Ordinance Code.

SECTION 6. SEVERABILITY

If any portion of this ordinance is hereafter determined to be invalid by a court of competent jurisdiction, all remaining portions of this ordinance shall remain in full force and effect. Each section, subsection, sentence, phrase, part or portion of this ordinance would have been adopted and passed regardless of whether any one or more section, subsections, sentences, phrases, parts or portions was declared invalid or unconstitutional.

SECTION 7. AMENDMENT OR REPEAL

Except as otherwise provided herein, this measure may be amended or repealed only by the voters of Contra Costa County at a countywide election.

2006 Voter-Approved
Contra Costa County Urban Limit Line Map

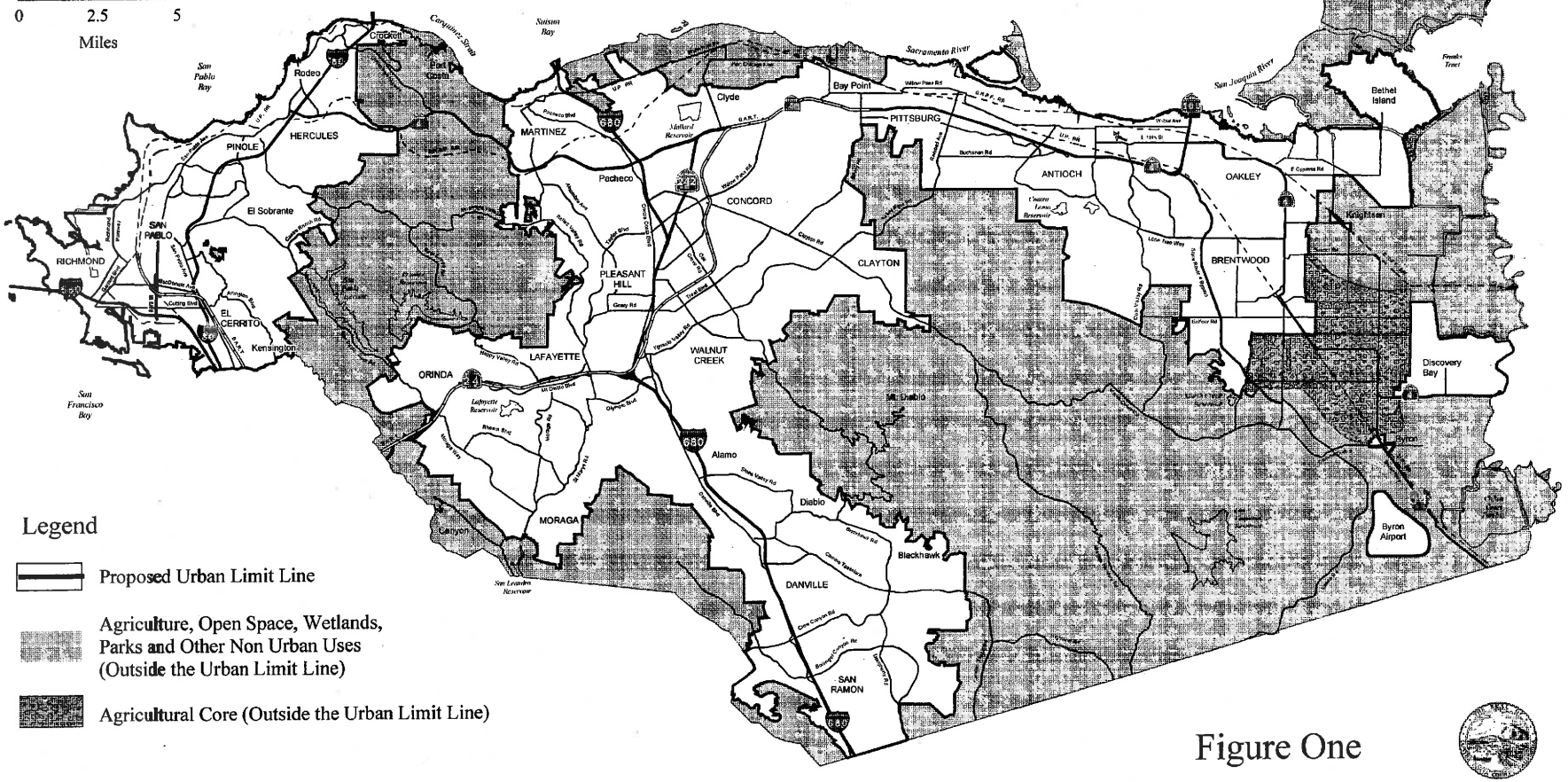

Figure One

CONTRA COSTA COUNTY

Prepared by Contra Costa County Community Development Dept.

Contra Costa County

To: Board of Supervisors

From: Catherine Kutsuris, Conservation & Development Director

Date: November 3, 2009

Subject: Board Hearing on Bay Point Waterfront General Plan Amendment and Development Plan Modification to Bay Point P-1 Map Diagram, Bay Point Area

RECOMMENDATION(S):

1. OPEN the public hearing and accept testimony on the proposed Bay Point General Plan Amendment affecting the Land Use Element and Transportation/Circulation Element (County File: GP#03-0009) and the Development Plan Modification to the Bay Point Planned-Unit Zoning District Map (County File: DP#00-3003) to reflect map diagram changes consistent with the Bay Point Waterfront General Plan Amendment .

2. CLOSE the public hearing.

3. ACCEPT the recommendation of County Zoning Administrator, as contained in Resolution No.12-2009 that the Environmental Impact Report (SCH# 2004092004) is adequate and complete, was prepared in compliance with the California Environmental Quality Act (CEQA), and that it reflects the County's independent judgment and analysis.

4. FIND the Environmental Impact Report (SCH#2004092004) prepared for this project is adequate for the purposes of compliance with CEQA, and CERTIFY and ADOPT the Bay Point Waterfront Strategic Plan Environmental Impact Report (SCH#2004092004) and the

☑ APPROVE ☐ OTHER

☑ RECOMMENDATION OF CNTY ADMINISTRATOR ☐ RECOMMENDATION OF BOARD COMMITTEE

Action of Board On: **11/03/2009** ☑ APPROVED AS RECOMMENDED ☐ OTHER

Clerks Notes: Speakers: Matt Trost, McAvoy Harbor; David Custodio, resident Bay Point; Tom Guarino, PG&E.

VOTE OF SUPERVISORS

AYE: John Gioia, District I Supervisor
Gayle B. Uilkema, District II Supervisor
Mary N. Piepho, District III Supervisor
Susan A. Bonilla, District IV Supervisor
Federal D. Glover, District V Supervisor

I hereby certify that this is a true and correct copy of an action taken and entered on the minutes of the Board of Supervisors on the date shown.

ATTESTED: November 3, 2009

David J. Twa, County Administrator and Clerk of the Board of Supervisors

By: June McHuen, Deputy

Contact: Patrick Roche, DCD, (925) 335-1242

cc: Chris Howard, DCD, GIS

ATTACHMENT 8

Mitigation Monitoring and Reporting Program (MMRP) contained therein.

RECOMMENDATION(S): (CONT'D)

5. ACCEPT the recommendations of the County Planning Commission on the proposed Bay Point Waterfront General Plan Amendment (County File: GP#03-0009) and Development Plan Modification to the Bay Point Planned-Unit Zoning District Map (County File: DP#00-3003), as contained in their Resolution No. 21-2009.

6. ADOPT the Bay Point General Plan Amendment (County File: GP#03-0009) , as recommended under County Planning Commission Resolution No. 21-2009, as the Third Consolidated General Plan Amendment for calendar year 2009 to the Contra Costa County General Plan (2005-2020), as permitted under State Planning Law.

7. APPROVE the Development Plan Modification to the Bay Point Planned-Unit Zoning District Map (County File: DP#00-3003), as recommended under County Planning Commission Resolution No. 21-2009.

8. ADOPT Resolution No. 2009/512 as the basis for the Board's decision, including all the necessary findings, under a required four-fifths vote (4/5) to effectuate a change to the Urban Limit Line involving less than thirty (30) acres pursuant to County Ordinance Code, Chapter 82-1, 65/35 Land Preservation Plan Ordinance.

9. DIRECT staff from the Department of Conservation and Development to post the Notice of Determination for this project with the County Clerk.

FISCAL IMPACT:

The preparation of the Bay Point Waterfront Strategic Plan, General Plan Amendment, Development Plan Modification and supporting Environmental Impact Report were funded through the Redevelopment Agency using budgeted funds from the Bay Point Redevelopment Project.

BACKGROUND:

The Bay Point waterfront area comprises approximately 290 (+/-) acres of land which is partially within the Bay Point Redevelopment Project Area, and is located north of the Union Pacific Railroad tracks, at the terminus of McAvoy Road. The Bay Point community has considered their waterfront to be an underutilized asset with unrealized potential to provide greater recreational amenities and the waterfront could be a catalyst for the economic revitalization of the overall Bay Point community. At the urging of the community, the Redevelopment Agency in August 2003 completed a strategic planning process for the Bay Point waterfront. The purpose of strategic plan effort was to consider a new and improved future for the waterfront. The strategic plan included an extensive analysis of site conditions, market feasibility, infrastructure needs, and alternative development scenarios. Following a series of public workshops, the strategic plan concluded with a community consensus on a concept plan for a 190-acre area of the waterfront that recommended reconfiguring marina area (which includes McAvoy Harbor and Harris Yacht Harbor) to provide approximately 568 berths within new full-scale

marina, open spaces, recreational playfields and trails, and the provision for multi-family residential development adjoining the new, reconfigured marina for up to 450 units (within the medium density range for multi-family under the County General Plan).

Subsequent to the completion of the Bay Point Waterfront Strategic Plan, the Board of Supervisors on December 16, 2003 authorized a General Plan Amendment study for the Bay Point Waterfront, as requested by the Redevelopment Agency on behalf or the Bay Point Redevelopment Project Area Committee, to consider an adjustment to the boundary of the Urban Limit Line, changes in land use designations, and roadway access improvements all in support for implementation of a new, reconfigure marina, and adjoining residential development as conceived in the Bay Point Waterfront Strategic Plan.

Proposed General Plan Amendment

The proposed Bay Point Waterfront General Plan Amendment (County File: GP#03-0009) involves changes or additions to the Land Use and Transportation/Circulation Elements, as follows:

1) Land Use Element, amendment: (a) adjust the Urban Limit Line (ULL) to shift the location of the ULL to move approximately 22 acres of regional parkland outside the ULL and move approximately 21 acres of undeveloped open space and commercial recreation lands inside the ULL [note: this change to the ULL involves less than 30 acres of land and does not require voter approval pursuant to County Ordinance Code section 82-1.018.(b)]; (b) change the Land Use Element Map for lands in the waterfront area, including approximately 17 acres of Open Space (OS) to be re-designated to Multiple-Family Residential–Medium Density (MM), approximately .50 acres of Open Space (OS) to be re-designated Commercial Recreation (CR), and approximately 30 acres of Open Space (OS) to be re-designated to Park and Recreation (PR); and, (c) add clarifying language to the Land Use Element text under existing Policy # 3-77, "Policies for the Bay Point Area", to incorporate and reference the provisions of the Bay Point Waterfront Strategic Plan as providing additional guidance for the development of the waterfront area, including support for the development of the California Delta Trail within the waterfront area.

2) Transportation/Circulation Element, amendment: (a) add the extension of two roads, Pacifica Avenue Extension and Alves Lane Extension to the Roadway Network Map; and, (b) update the Bicycle Facilities Map to reflect new, proposed bicycle facilities to serve the waterfront area.

The proposed changes or additions under the Bay Point Water General Plan Amendment are more fully depicted or described in Exhibits #'s I, II, III, IV, and V to the proposed Board Resolution. The changes to the Contra Costa County General Plan (2005-2020) would allow for the reconfiguration of the marina area in Bay Point, enable the development of marina-related residential neighborhood and new park, trail, and

recreation uses, and provide consistency between the General Plan and the Bay Point Waterfront Strategic Plan.

Development Plan Modification to Bay Point Planned-Unit Zoning District Map

This involves a modification to the General Plan-Land Use Map for the Bay Point Planned-Unit Zoning District Program to reflect map diagram changes consistent with the Land Use Element Map changes to the waterfront area under the proposed Bay Point Waterfront General Plan Amendment.

County Planning Commission Hearing and Recommendation

The County Planning Commission opened a noticed public hearing on the Bay Point Waterfront General Plan Amendment and Development Plan Modification to the Bay Point Planned-Unit Zoning District Map on June 23, 2009 (continued from their June 9, 2009). Upon the staff's recommendation the Commission continued the hearing to address concerns raised by the East Bay Regional Park District about the provision for the California Delta Trail through the Bay Point waterfront area, and to review an alternative configuration of the marina and residential areas, as recommended by Commissioner Marvin Terrell. The Commission also asked that written comments on the proposed General Plan Amendment submitted at the June 23rd public hearing also be provided to all Commissioners.

At the continued hearing on August 11, 2009, the Commission was presented with an alternative land use plan for the waterfront based on the suggestions from Commissioner Terrell, which involved consolidation of the boat and trailer storage, and boat docking and boat launch into one common area closer to the turning basin for the marina without bisecting it with residential uses. The alternative land use plan also included an alignment for the California Delta Trail, which was developed following consultation with East Bay Regional Park District staff.

Also, during the period between the June 23rd and August 11th hearings, staff had meet with representatives from the Pacific Gas and Electric Company (PG&E) to discuss the proposed changes to the waterfront since PG&E has significant property holdings within the area that would be affected by the changes. The purpose of the meeting was to gauge PG&E's level interest and support for changes involving the reconfiguration of the marina area, new residential development, and provisions for the future California Delta Trail. At that meeting PG&E representatives indicated their concurrence with the alternative land use plan (known as the Terrell alternative) and the proposed alignment of the California Delta Trail.

At the August 11th hearing, the Commission heard testimony from the owner and operator of the McAvoy Harbor and several tenants within this property concerning the operation of that facility during the interim period prior to the marina improvements as envisioned under the Bay Point Waterfront Strategic Plan. The owner of McAvoy Harbor

was concerned about land use and other building regulations during the interim period that might inhibit their ability to make improvements to their property, and the tenants were concerned with potential displacement of their boats and difficulty in relocation to another marina.

The Commission after accepting this public testimony, closed the public hearing on August 11, 2009 but continued the matter to their August 25, 2009 meeting. The Commission requested staff return with a response to the concerns raised during the August 11th public testimony.

At their August 25th meeting, the Commission accepted a staff report in response to the testimony received at the August 11, 2009 hearing. The Commission concluded their deliberations on the General Plan Amendment and Development Plan Modification by adopting Resolution No. 21-2009, which recommends to the Board of Supervisors adoption of the Bay Point Waterfront General Plan Amendment (County File: GP#03-0009) and the Development Plan Modification (County File: DP#00-3003). Attached with this Board Order is a copy of County Planning Commission Resolution No. 21-2009, staff reports to the County Planning Commission, and written comments received at the County Planning Commission's public hearing.

Determinations under the California Environmental Quality Act

The proposed General Plan Amendment and Development Plan Modification are subject to the California Environmental Quality Act (CEQA). An Environmental Impact Report (EIR), entitled "Bay Point Waterfront Strategic Plan Environmental Impact Report", was prepared for this project in accordance with the requirement of State and County CEQA Guidelines. The Notice of Preparation for an EIR was issued by the County on August 24, 2004, the State Clearinghouse assigned it SCH#2004092009, the Draft EIR was prepared and circulated for review and comment between March 30, 2007 and May 17, 2007. Following the close of comment on the Draft EIR, written responses to comments were prepared and on December 31, 2008 the County issued the Final EIR. Enclosed with this Board Order are copies of the Draft EIR and Final EIR along with the Mitigation Monitoring and Reporting Program (MMRP). The Board is asked to find that the EIR prepared for this project is in accordance with CEQA, and is adequate for the purposes of compliance with CEQA, and both certify and adopt the Bay Point Waterfront Strategic Plan Environmental Impact Report (SCH#2004092004) and the Mitigation Monitoring and Reporting Program (MMRP) contained therein.

County Planning Commission Resolution No. 21-2009 and Zoning Administrator Resolution No. 12-2009, which each recommend certification of the EIR and adoption of the MMRP, are provided with this Board Order for the Board of Supervisors consideration in making the CEQA determinations for this project.

ATTACHMENTS

Resolution No. 2009/512
Exhibit I to Board Resolution No. 2009/512
Exhibit II to Board Resolution No. 2009/512
Exhibit III to Board Resolution No. 2009/512
Exhibit IV to Board Resolution No. 2009/512
Exhibit V to Board Resolution No. 2009/512
County Planning Commission Resolution No. 21-2009
June 9, 2009 Report to County Planning Commission
August 11, 2009 Supplemental Staff Report to County Planning Commission
August 25, 2009 Supplemental Staff Report to County Planning Commission
Written Comments Submitted at County Planning Commission Public Hearing
Draft EIR Bay Point Waterfront Strategic Plan (SCH#2004092009)
Final EIR Bay Point Waterfront Strategic Plan (SCH#2004092009)
Zoning Administrator Resolution No. 12-2009

THE BOARD OF SUPERVISORS OF CONTRA COSTA COUNTY, CALIFORNIA

and for Special Districts, Agencies and Authorities Governed by the Board

Adopted this Resolution on 11/03/2009 by the following vote:

AYES:	5
NOES:	
ABSENT:	
ABSTAIN:	
RECUSE:	

Resolution No. 2009/512

BAY POINT WATERFRONT GENERAL PLAN AMENDMENT, COUNTY FILE: GP#03-0009 AND DEVELOPMENT PLAN MODIFICATION TO THE BAY POINT PLANNED-UNIT ZONING DISTRICT MAP, COUNTY FILE: DP#00-3003

WHEREAS, there is filed with the Board of Supervisors and its Clerk a copy of Resolution No. 21-2009 adopted by the Contra Costa County Planning Commission on August 25, 2009, which discusses and recommends to the Board of Supervisors the approval of the Bay Point Waterfront General Plan Amendment, County File: GP#03-0009. ("General Plan Amendment") and the Development Plan Modification to the Bay Point Planned-Unit Zoning District Map, County File: DP#00-3003. ("Development Plan Modification")

WHEREAS, the Board of Supervisors opened the public hearing on Tuesday, November 3, 2009, on said General Plan Amendment, as described in Contra Costa County Planning Commission Resolution No. 21-2009. Notice of said hearing was duly given in the manner required by law, and after receiving testimony, the public hearing was closed.

WHEREAS, the Board of Supervisors has fully considered the proposed General Plan Amendment and Development Plan Modification as described in the October 22, 2009 report from the Director, Department of Conservation and Development, discussed in Contra Costa County Planning Commission Resolution No. 21-2009, the analysis and recommendations included in the Staff Report and Recommendations to the County Planning Commission, dated June 11, 2009, the Supplemental Staff Reports to the County Planning Commission, dated August 11, 2009 and August 25, 2009, respectively, the Bay Point Waterfront Strategic Plan Environmental Impact Report (SCH#2004092009), and the public testimony and written comments received at or submitted prior to the Board's public hearing on November 3, 2009.

I hereby certify that this is a true and correct copy of an action taken and entered on the minutes of the Board of Supervisors on the date shown.

ATTESTED: November 3, 2009

David J. Twa, County Administrator and Clerk of the Board of Supervisors

By: , Deputy

Contact: Patrick Roche, DCD, (925) 335-1242

cc: Chris Howard, DCD, GIS

WHEREAS, the Board of Supervisors finds that the proposed General Plan Amendment, as presented in the report from the Director, Department of Conservation and Development, and as recommended in Contra Costa County Planning Commission Resolution No. 21-2009, will further the longstanding goals of both the Contra Costa County General Plan (2005-2020) and the Bay Point Redevelopment Plan.

That the Board of Supervisors ("this Board") takes the following actions: 1. In accordance with the California Environmental Quality Act, the State CEQA Guidelines (14 Cal. Code Regs. §15000 et seq.), and the County's own CEQA Guidelines (together, "CEQA"), this Board FINDS that the Bay Point Waterfront Strategic Plan Environmental Impact Report, SCH# 2004092009 ("EIR"), and the accompanying Mitigation Monitoring and Reporting Program ("MMRP"), is adequate for the purposes of compliance with CEQA and ADOPTS the MMRP for the Project. In support of these actions and conclusions, this Board ADOPTS the CEQA Findings. This Board CERTIFIES that it has been presented with the EIR and MMRP, and that it has reviewed and considered the information contained in the EIR and MMRP and the other information in the record prior to making the following certifications and findings. This Board further CERTIFIES that the EIR reflects the lead agency's independent judgment and analysis, and that the EIR has been completed in compliance with the CEQA Regulations.

2. ADOPTS the proposed Bay Point Waterfront General Plan Amendment (County File: GP#03-0009), including:

(a) Land Use Element – An amendment to the Land Use Element, as presented and recommended in County Planning Commission Resolution No. 21-2009, including: the minor modification to the Urban Limit Line map in the Land Use Element as more fully shown under Exhibit I to this resolution, to change the Land Use Element map for the Bay Point waterfront area as shown under Exhibit II to this resolution, which also incorporates a concept trail alignment for the California Delta Trail, and to amend the Land Use Element text under "Policies for the Bay Point Area", Policy #3-77, including the addition of a new policy supporting the planning and development of the California Delta Trail, as more fully described in Exhibit III to this resolution; and,

(b) Transportation/Circulation Element – An amendment to the Transportation/Circulation Element, as presented and recommended County Planning Commission Resolution No. 21-2009, including: the extension of Alves Lane and Pacifica Avenue as shown on the proposed changes to the Roadway Network Map listed as Exhibit IV to this resolution, and update of the Bicycle Facilities Network Map to reflect new, proposed bicycle trail facilities to serve the waterfront as shown in the report listed as Exhibit V to this resolution.

This Board ADOPTS the findings contained herein supporting this action; and, INCLUDES this General Plan Amendment adoption as the 3rd Consolidated General Plan Amendment of 2009 as permitted by State law.

3. APPROVES the Development Plan Modification to the Bay Point Planned-Unit Zoning District Map (County File: DP#00-3003), as recommended under County Planning Commission Resolution No. 21-2009.

4. DIRECTS the Department of Conservation and Development to make necessary modifications to General Plan maps, including the Urban Limit Line Map and Land Use Element Map, and text changes to the Land Use Element under "Policies for the Bay Point Area", Policy #3-77, consistent with the adopted Bay Point Waterfront General Plan Amendment (County File: GP#03-0009); and to make necessary modifications to the Bay Point Planned-Unit Zoning District Map consistent with the approval of the Development Plan Modification for the Bay Point Planned-Unit Zoning District (County File: DP#00-3003).

BE IT FURTHER RESOLVED that the reasons for the Board actions are as follows: FINDINGS

I. Growth Management Performance Standards

A. Traffic: The Project will generate an estimated additional 208 AM and 461 PM peak hour trips. Because the project would generate more than 100 peak period trips, a traffic report was prepared pursuant to the Measure C-1988 requirements, including use of the Contra Costa Transportation Authority's Decennial Traffic Forecasting Model, which forecasted the traffic impacts on both Local Routes and Routes of Regional Significance and mitigation measures were subsequently identified (source: Section 4.6, Transportation, Bay Point Waterfront Strategic Plan, Draft EIR, March 2007).

B. Drainage and Flood Control: A storm drainage master plan shall be developed for the Project area prior to new development and future new development within the Project will be conditioned to collect and convey all storm waters entering or originating within the project to an adequate natural or manmade water course. In addition, development within Project area will be conditioned to annex to a County Maintenance Benefit Assessment District (MBAD) for maintenance of drainage facilities, and if a MBAD does not exist, development within the Project area will assist in the formation of an MBAD (source: Section 4.10, Hydrology and Water Quality, Bay Point Waterfront Strategic Plan, Draft EIR, March 2007, and Final EIR, December 2008).

C. Water and Wastewater Disposal: For water, the Project would be served by the Golden State Water Company, which obtains water from the Contra Costa Water District, and according to the water supply and assessment prepared by Golden State Water Company, projected water demand would not exceed available water supply, and except for the possible extension of water lines, existing water distribution facilities should be sufficient for the Project (source: Section 4.4, Utilities, Bay Point Waterfront Strategic Plan, Draft EIR, March 2007). For wastewater or sanitary sewer service, part of the Project is within the Delta Diablo Sanitation District (DDSD). The portion of the Project area outside the DDSD service boundary will need to be annexed to the

DDS's service area. The Project would increase sewer generation to the DDSD conveyance pipelines, pump stations, and wastewater treatment plant and new development within the Project would conditioned to construct onsite wastewater collection lines, and could be required to construct offsite conveyance pipelines (source: Section 4.4, Utilities, Bay Point Waterfront Strategic Plan, Final EIR, December 2008 and Final EIR, December 2008).

D. Fire Protection: The Contra Costa County Fire Protection District provides fire protection and suppression services to Bay Point. The nearest fire station to the Project site is Station #86 located at 3000 Willow Pass Road, Bay Point, CA. The Project site is within 1 mile of this station. However, as the Project is located adjacent to four railroad tracks, the new residential development will be conditioned to install automatic sprinklers, smoke detectors, fire alarm systems, and fire resistant building materials, and the new residential development will not proceed until the grade-separated Alves Lane extension is completed to provide a second access point for emergency service vehicles (source: Section 4.3, Public Service and Recreation, Bay Point Waterfront Strategic Plan, Draft EIR, March 2007 and Final EIR, December 2008).

E. Public Protection: The Growth Management Element Standard is 155 square feet of Sheriff Facility station per 1,000 population. The potential population increase associated with the residential development project is 1,611 persons which is above the standard. Prior to implementation of the Project the Redevelopment Agency and residential developer shall coordinate with the Contra Costa County Sheriff's Office to determine what additional staffing and facilities would be needed to serve the waterfront area (source: Section 4.3, Public Service and Recreation, Bay Point Waterfront Strategic Plan, Draft EIR, March 2007).

F. Parks & Recreation: The residential development component to the Project will result in an increase in the demand for park and recreation facilities; however, the Project itself provides an extensive recreational component that includes park playfield area, trails, open space, and a public boat launch as part of the reconfigured marina, which will be more than sufficient to meet the recreational needs of future new residents (source: Section 4.3, Public Service and Recreation, Bay Point Waterfront Strategic Plan, Draft EIR, March 2007). II. Measure C-1988 and Related Resolutions A. This Board has considered the Project's compliance with the traffic service objectives of Measure C-1988, the Contra Costa Transportation Improvement and Growth Management Program and related Contra Costa Transportation Authority (CCTA) resolutions. B. Measure C-1988 established a Growth Management Program, "to assure that future residential, business and commercial growth pays for the facilities required to meet the demands resulting from that growth." The Program requires the County to adopt Traffic Level of Service (LOS) Standards keyed to types of land use, and to comply with the adopted standards; to "adopt a development mitigation program to ensure that new growth is paying its share of the costs associated with that growth;" to participate in the forum established by the Authority to cooperate in easing cumulative traffic impacts, using the CCTA computer model.

C. The County has complied with all these requirements. Most important, the County is achieving Measure C-1988's overarching goal that development pay its own way. The County has identified Project mitigations to ensure that the future development will defray the cost of those improvements that are proportionately attributable to the development.

III. General Plan Consistency

A. The Project is consistent with the General Plan as it is proposed for amendment under the General Plan Amendment, County File: GP#03-0009, wherein the affected portion of the waterfront area that would be re-designated from Open Space (OS) to Multiple Family Residential – Medium Density (MM) under the Land Use Element Map. The Project entails residential development component of up to 450 units over approximately 20 acres resulting in a residential density that is compatible with a density range of 12 to 21.9 units under the Multiple Family Residential – Medium Density (MM) designation. The General Plan Amendment approved for this Project will not cause the General Plan to become internally inconsistent. The General Plan Amendment and the remainder of the General Plan comprise an integrated, internally consistent and compatible statement of policies for the County. The various land uses authorized for the Project, and each of its components, are compatible with the objectives, policies, general land uses, and programs specified in the General Plan, and the Project conforms to the objectives, policies, general land uses and programs specified in the General Plan. The Project will further the objectives and policies of the General Plan and not obstruct their attainment. The Project is compatible with, and does not frustrate General Plan goals and policies. The Project is in harmony with the policies of the General Plan.

B. This Board has considered the effects of the Project on the housing needs of the region and balanced those needs against the public service needs of County residents and available fiscal and environmental resources. The Project helps to achieve a desirable balance.

C. The General Plan comprises many objectives, policies, principles, programs, standards, proposals and action plans (collectively "policies"), as well as performance standards. At times the policies necessarily compete with each other. Examples of the tensions between General Plan policies are found between those policies that promote managed growth, and those that provide for protection of resources that exist because land is undeveloped (such as open space, visual resources and agricultural land). As part of approving the Project, all applicable General Plan policies and the extent to which the Project conforms to each of those policies have been considered.

D. This Board has fully evaluated the extent to which the Project achieves each policy, including those pertaining to compatibility of land uses, compliance with principles of the Urban Limit Line and the 65/35 Land Preservation Standard under Measure C-1990, protection of open space, standards regarding geology, soils and earthquake risks, hazardous materials, flood hazards and

drainage, protection of water quality, protection of biological resources, transportation standards and goals, regional and local housing needs, jobs/housing balance, noise, protection of air quality, protection of visual resources, standards for public services and utilities, and protection of archeological and historical resources. This Board has also fully considered the Project's compliance with all performance standards in the General Plan, including the Growth Management Element policies and standards (including those for traffic levels of service), and performance standards for public services and facilities.

E. This Board finds that through the potential development of 450 multi-family residential units, and the provision for 15% of the units to be affordable, the Project will help implement housing-related goals of the General Plan.

IV. County Ordinance Code Chapter 82-1,65/35 Land Preservation Plan Ordinance, including the 65/35 Land Preservation Standard and Changes to the Urban Limit Line

A. This Board has evaluated the General Plan Amendment in the context of the 65/35 Land Preservation Standard as more fully described in the Land Use Element to the General Plan and determined that the adoption of this General Plan Amendment to re-designate a portion of the waterfront area to multi-family residential, which is defined as an urban use designation, will not have any negative consequences in maintaining the 65/35 land preservation standard as it would result in the conversion of approximately 20 acres of non-urban uses to urban uses.

B. This Board has determined that the proposed change to the Urban Limit Line, which is a shift in the boundary line location in the Bay Point waterfront to move marina-related and open space area inside the Urban Limit Line (approximately 21 acres) is a near equal exchange with the regional parkland area (approximately 22 acres) to be moved outside the Urban Limit Line, and can be classified as a minor change that will more accurately reflect topographical characteristics or legal boundaries pursuant to section 82-1.018 (a)(4), "Changes to the Urban Limit Line", and, the proposed change to the Urban Limit Line involves approximately 20 acres which is less than thirty (30) acres and may be approved by the Board of Supervisors by a four-fifths vote after holding a public hearing and making necessary findings pursuant to section 82-1.018 (b), "Changes to the Urban Limit Line".

C. This Board, having fully considered this matter, has approved the minor modification to the Urban Limit Line as described in the General Plan Amendment pursuant to County Ordinance Code Chapter 82-1, section 82-1.018 (a)(4), "Changes to the Urban Limit Line", by the required four-fifths (4/5) vote; and this approval is based on substantial evidence in the record, including the recommendations contained in County Planning Commission Resolution No. 21-2009, the reports on this General Plan Amendment to both the County Planning Commission and the Board from the Department of Conservation and Development, the EIR, and the testimony and written comments received at the public hearing.

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Appendix B:
Attachments A through E of the Danville Recirculated Draft EIR Comment Letter

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July 18, 2016

John Oborne, Senior Planner
Contra Costa County
Department of Conservation & Development
39 Muir Road
Martinez, CA 94553
Email: john.oborne@dcd.cccounty.us

RE: Town of Danville's comments on the Draft EIR for the Tassajara Parks Project
County File Numbers GP07-0009, RZ09-3212, SD10-9280, DP10-3008

Dear Mr. Oborne:

On behalf of the Town of Danville, we submit these comments regarding the County's Draft Environmental Impact Report (EIR) for the Tassajara Parks Project. The Town has carefully reviewed the Draft EIR, as have the Town's outside counsel, Remy Moose Manley, LLP. The Town is concerned about the Project's environmental impacts, especially transportation and traffic impacts, because of the proximity of the project's residential development portion to the Town. We provide the following comments to alert the County to:

(1) the ways in which the proposal to extend the Urban Limit Line is inconsistent with the County's own policies, the requirements in County Code Section 82-1.018, and the express will of the voters;

(2) the Draft EIR's numerous violations of the California Environmental Quality Act (Public Resources Code, § 21000 et seq.) (CEQA);

(3) how the Project violates the Planning and Zoning Law (Gov. Code, § 65000 et seq.) because the proposed single-family, high-density residential land uses in the Northern Site are incompatible with the General Plan; and

(4) why the Project's inconsistency with the County's General Plan violates the Subdivision Map Act (Gov. Code, § 66410 et seq.).

ATTACHMENT A

We have also included several attachments to support our comments. Although the Town appreciates the information and analysis that is included in the Draft EIR, the Town asks the County to make revisions that address the defects identified in this letter.

The efforts to characterize the project as development that can properly evade the voters' scrutiny of the proposed change to the County's Urban Limit Line (ULL) subverts the intent behind relevant policies in the County's General Plan and adopted ordinances. First, contrary to the intent behind the adoption of the ULL, the project does not meet inclusionary housing requirements, opting to pay in-lieu fees instead of providing affordable housing on the Project site. Second, the Draft EIR appears to improperly rely on a yet-to-be-created preservation agreement that is designed to provide the Board with a flimsy justification for approving the extension of the ULL for urban development under County Code Section 82-1.018(a)(3). Third, the Draft EIR draws an arbitrary distinction between the project's urban and non-urban land uses, claiming that the portions of the project area that are required for: (i) road dedication to widen Camino Tassajara (limited to that portion of dedication in direct proximity to the proposed development zone); (ii) frontage buffer landscape improvements directly behind this proposed new right-of-way boundary; (iii) the project's detention basin and pumping station; (iv) the proposed debris bench at the base of the proposed engineered slopes that would protect the proposed residential project; and (v) slide repair area are somehow "non-urban" land uses despite their express purpose of serving the project's 125 single-family residences.

These contortions also result in a legally insufficient Draft EIR. As explained in more detail below, the Draft EIR contains: (i) an unstable and incomplete project description; (ii) an inaccurate and misleading description of the project baseline and setting; (iii) inadequate analysis and mitigation of project-specific environmental impacts, including significant and unavoidable greenhouse gas emissions and traffic impacts; (iv) an erroneous understanding of the legal requirements related to analysis of cumulative impacts; (v) a refusal to analyze an alternative in an offsite location; (vi) a failure to sufficiently consider and discuss growth-inducing impacts that result from the project's two potential water sources; and (vii) an improperly cursory analysis of energy conservation impacts.

I. The Tassajara Parks project is inconsistent with the intent of the Urban Limit Line because it would extend urbanization into agricultural lands without providing any onsite affordable housing.

A. The voter-approved intent behind the establishment of the Urban Limit Line

In 1990, the Contra Costa County voters approved Measure C, which enacted the 65/35 Contra Costa County Land Preservation Plan Ordinance ("65/35 Ordinance"). The purpose of the measure was to preserve agriculture and open space land, parks, wetlands, and other nonurban uses and manage growth to protect the quality of life, while also providing for the County's fair share of safe and affordable housing. Measure C accomplished this, in part, by establishing the County's Urban Limit Line, a line beyond which no urban land use can be designated. Measure C also limited urban development to no more than 35 percent of the land in the County and required that at least 65 percent be preserved for agriculture, open space, wetlands, parks, and other non-urban uses.

In California, a general plan serves as the "constitution" to which all future development must carefully adhere.[1] During the process of preparing a comprehensive update to the County's General Plan, the voters expressed concern over the growing "urbanization of the County" and the threat that further development poses to "the long term viability of agricultural and open space land, parks, wetlands, hillsides and ridgelines."[2] At the same time, voters recognized "a critical need to make decent, safe and affordable housing available to all . . . economic segments of the County."[3] Measure C was specifically designed to address both of these concerns. Thus, the voters' approval of Measure C signified their broad support for a general plan with strict preservation principles that could only be sidestepped in order to ensure the adequate development of affordable housing.

B. The intent behind the provision for "minor" or less than 30-acre adjustments to the Urban Limit Line

The County's concerned residents did not stop with Measure C, which was set to expire in 2010. In 2004, voters approved Measure J, which withheld sales tax proceeds for local transportation purposes unless the County and cities mutually agreed to reestablish the

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[1] / *Lesher Communications, Inc. v. City of Walnut Creek* (1990) 52 Cal.3d 531, 540.
[2] / Attachment 4, p. 1-26 [Contra Costa General Plan, Chapter 1, Section 1.11, Measure C-1990, Section 3(B)(1)].
[3] / Attachment 4, p. 1-26 [Measure C, Section 3(B)(3)].

ULL. Measure J also required that the renewal of the ULL include new provisions for periodic review and for "minor (less than 30 acres) nonconsecutive adjustments."[4]

In July 2005, the County Board of Supervisors approved a version of the Urban Limit Line ballot measure that represented a compromise between the environmental and business communities. The staff report detailing this compromise makes clear that future adjustments to the ULL should only be allowed if there is evidence that the proposed project is necessary to meet the area's projected housing or job needs and is placed in a location that can take advantage of planned transportation improvements:

> **WITH RESPECT TO URBAN LIMIT LINE PLACEMENT TO BE PRESENTED TO THE VOTERS IN 2006, there will be no changes [to] the recently adjusted ULL for a minimum of ten years and then, changes would be allowed *only if it is shown that there is not a 20 year housing supply available in the County as per criteria set forth below.***
>
> . . .
>
> The purposes of the ULL are: (l) to ensure *preservation and protection* of identified nonurban land, including agricultural, open space, parkland, and other areas, by establishing a line beyond which urban uses generally cannot be designated; (2) to *link land use decisions with the transportation investments in Measure J* by channeling future growth to locations more suitable for urban development; (3) to ensure that land use policies within the ULL effectively *promote appropriate development that accommodates the area's projected housing and job needs* over a 20-year period.[5]

The principles expressed in this compromise were ratified in 2006 when the voters overwhelmingly approved Measure L, which extended the 65/35 Ordinance until 2026. In compliance with the mandate in Measure J, Measure L added to the ordinance a provision requiring that any change to the ULL greater than 30 acres obtain both a 4/5 vote of the County Board of Supervisors and voter approval. If, however, a project is

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[4] / Attachment 5, p. 29[CCTA's Measure J, Contra Costa's Transportation Sales Tax Expenditure Plan, Attachment A- "Principles of Agreement for Establishing the Urban Limit Line"].)

[5] / Attachment 6, p. 8 [July 12, 2015 staff report on ballot measure for extension of the Urban Limit Line], italics added.)

less than 30 acres, it must still be approved by 4/5 of the Board of Supervisors subject to certain findings. Thus, under the existing version of the 63/35 Ordinance, any change to the ULL, whether less than or greater than 30 acres, must be approved by a 4/5 vote of the Board of Supervisors after making one of seven findings[6]; but only changes greater than 30 acres require voter approval.[7]

Measure L also required a comprehensive review of the Urban Limit Line in 2016 to determine whether there is sufficient land available to satisfy housing and jobs needs for Contra Costa County for the following 20 years.[8] This requirement for a comprehensive review, which now appears in County Ordinance 82-1.018(d), is necessary to "determine whether a change to the boundary . . . is warranted, based on facts and circumstances resulting from . . . a comprehensive review of the *availability of land* in Contra Costa County sufficient *to meet housing and job needs for twenty years.*"[9]

C. An example of the appropriate use of the 30-acre exception to voter approval: the Bay Point Waterfront Project

The relevant requirements related to changes to the ULL are now enshrined in County Ordinance Section 82-1.018. It is instructive to briefly review the one project that has been approved using the 30-acre exception to the requirement for voter approval of changes to the ULL.

In 2009, the Board of Supervisors approved the Bay Point Waterfront project, which consisted of a new full-scale marina, open spaces, recreational playfields, trails, and up to 450 multi-family residential units.[10] The Bay Point Waterfront Project moved approximately 21 acres of undeveloped open space and commercial recreation lands *inside* the ULL in exchange for moving 22 acres of regional parkland outside the ULL. The change to the ULL was possible because the Board adopted the finding in Section

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[6] / Compare Attachment 4, pp. 1-27 to 1-28 [Measure C, Section 4(B)(7)] to County Ordinance 82-1.018.

[7] / The only way to circumvent voter approval, when required, is if 4/5 of the Board finds it is necessary to avoid an unconstitutional taking of private property or to comply with state or federal law.

[8] / Attachment 7, p. 12 [Measure L Voter Pamphlet].)

[9] / County Ordinance 82-1.032(d), italics added; see Attachment 3.

[10] / Attachment 8, p. 4 [November 3, 2009 staff report on Bay Point Waterfront General Plan Amendment and Development Plan Modification].)

82-1.018(a)(4): that the change would more accurately reflect topographical characteristics or legal boundaries.[11]

The residential component of the project involved placing 450 multi-family residential units on 17 acres of land that was previously designated Open Space. Importantly, as commended in the Board's Findings, the Bay Point Waterfront Project provided for 15% of the 450 residential units to be affordable housing. In contrast, as discussed in more detail below, the Tassajara Parks project will provide no onsite affordable housing and effectively converts more than 30 acres of agricultural lands to residential land uses.

D. The Tassajara Parks project's inappropriate proposal to change the Urban Limit Line

Voters have repeatedly shown their commitment to preserving agriculture and open space by approving the creation and extension of the ULL and, most recently, by *strengthening* the previous ULL provisions to require voter approval for projects outside the ULL that are over 30 acres. The Tassajara Parks project's proposal to change the Urban Limit Line violates the intent behind the adoption of the ULL in three important ways: (1) the project extends urbanization into agricultural lands without evidence showing that there is not currently a 20-year housing supply in the County; (2) it improperly attempts to take advantage of the 30-acre exception to voter approval by characterizing as "non-urban" land uses that only have the purpose of serving the project's urban, residential development; and (3) it does not provide any onsite affordable housing.

First, the Tassajara Parks project proposes to permanently convert agricultural lands to residential, urban uses. But the Draft EIR does not point to any evidence that the County currently lacks a 20-year housing supply, or that such necessary development could not be accommodated through more appropriate development *within* the existing Urban Limit Line. Thus, the project conflicts with the intent of the voter-approved 2006 Measure L. At the very least, the Board should delay its consideration of the project until after the comprehensive 2016 review of the ULL boundary is completed and the County possesses more information about the "availability of land . . . sufficient to meet housing and job needs for twenty years."[12]

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[11] / Attachment 8, p. 11.

[12] / County Ordinance 82-1.032(d).

Second, the project is not eligible for the 30-acre exception to voter approval because the true extent of the project's urban development is approximately 50 acres, not 30 acres. In other words, the project proposes to use approximately 50 acres to house or directly support 125 single-family residential units. Although the Draft EIR claims that only 30-acres will be used for "urban" development, the Town challenges the Draft EIR's characterization of the "Non-Urban Development Area." (DEIR, pp. 2-25 to 2-29.) The area needed to widen Camino Tassajara and to provide corresponding buffer landscape improvements, detention basin, sewer pump station, and necessary grading operations all serve and support the project's 125 residential units.[13] These project elements are not rural residential or agricultural structures, and, thus, cannot be characterized as "nonurban uses."[14] They should instead be counted toward the total acreage of urban development because their only purpose is to serve the proposed residential units. Frankly, the Draft EIR's insistence that these uses can be excluded from the total acreage proposed for inclusion in the ULL is disingenuous.

Third, the project completely fails to provide any onsite affordable housing. Without any discussion, the Draft EIR states that "the Project would pay in-lieu fees in place of providing inclusionary housing units as part of the project."[15] The Draft EIR provides no explanation for why a certain percentage of the proposed residential units couldn't be offered as affordable housing. Recently constructed residential developments in the vicinity of the project, whether within the Town limits or in the unincorporated area east of the Town boundary, have provided, at a minimum, 15% of the residential units as housing affordable to moderate income households. When the County approved the

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[13] / See Draft EIR, p. 2-28 [explaining grading operations and landslide grading operations], pp. 2-49 & 3.13-35 [describing pump station as necessary for and owned and operated by residential development's Homeowners Association], pp. 3.8-10 & 3.13-37 [explaining how the 7.6-acre detention basin is necessary to attenuate the stormwater flows in the residential area]. The Draft EIR is misleading when it states that the Residential Development Area encompasses all of the "Project's urban development" because the 30 acres only covers lots and interior project roadways, not all related urban improvements. (Draft EIR, p. 2-25.)

[14] / County Ordinance 82-1.032(b) states: "the term "nonurban uses" shall mean rural residential and agricultural structures allowed by applicable zoning and facilities for public purposes, whether privately or publicly funded or operated, which are necessary or desirable for the public health, safety or welfare or by state or federal law."

[15] / Draft EIR, p. 3.9-33.

Bay Point Waterfront project, it found that the provision for 15% of the 450 units to be affordable would help to implement the housing-related goals in the General Plan.

Without a similar provision here, the project fails to support or implement relevant housing policies in the County General Plan and would be inconsistent with the stated purpose and intent of the County's Inclusionary Housing Ordinance, which reads:

> 822-4.204 Purpose and Intent. The purpose of this chapter is to facilitate the development and availability of housing affordable to a broad range of households with varying income levels within the County. It is intended in part to implement State policy declaring that local governments have a responsibility to exercise their powers to facilitate the development of housing necessary to adequately provide for the housing needs of all economic segment of the community. The goal of this chapter is to ensure that affordable housing units are added to the County's housing stock in proportion to the increase in new housing units in the County, in accordance with Goal 3 of the Housing Element of the County General Plan.

It appears that the in-lieu fee option laid out in the County's Inclusionary Housing Ordinance (see Section 822-4.404 In-Lieu Fee) is meant to have the developer burden of providing the requisite affordable units be the same whether the units are supplied in the project or through the payment of an in-lieu fee. The regulations direct that the fee amount for for-sale units is to be equivalent to the cost differential between the affordable sales price for a targeted household and the median price, as determined by the County, of all single-family home sales in the County within the previous 12 months. It is unclear what the process has been that lead to a determination that the project would pay in-lieu fees rather than provide affordable housing as part of the project.

E. Reliance upon the finding in Section 82-1.018(a)(3) would be improper.

Even if the project could overcome the defects identified above, any reliance upon the finding in Section 82-1.018(a)(3) would be improper and unsupported by substantial evidence.

The Draft EIR ambiguously states that the "Project would include a 30-acre change to the ULL, as allowed by Chapter 82-1.018(a)(3) of the Contra Costa County Ordinance

Code."[16] Section 82-1.018(a)(3) provides that the County may approve a change to the Urban Limit Line if it can make a finding "based on substantial evidence in the record" that a "majority of the cities that are party to a preservation agreement and the county have approved a change to the urban limit line affecting all or any portion of the land covered by the preservation agreement." While the Town is aware that the County and the project applicant have been drafting a potential preservation agreement, the Draft EIR does not provide any details about any relevant existing preservation agreements or any soon-to-be-executed agreements.

The entire purpose of a preservation agreement is to prevent cities from annexing unincorporated portions of the County so that agricultural lands, open space, wetlands, or parks may be preserved.[17] The Project's Northern Site is geographically related to the Town of Danville, and is located within the Town of Danville's planning area as described in the Danville 2030 General Plan. Therefore the Town of Danville would be one of the cities that would be expected to be a party to a preservation agreement. At the present time, the Town of Danville is not a party to an existing preservation agreement that covers the Project's Northern Site, the entire project site, or lands beyond the project site, and it would be unfair and illogical for the County and another city to enter into a preservation agreement that covers lands within the Town's planning area, absent the Town being a party to such agreement.

Any future preservation agreement should cover all of the lands that currently comprise the entire project site. If the preservation agreement does not cover the Northern Site, then the Board cannot rely upon the finding in subdivision (a)(3) because the proposed change to the ULL must affect "all or any portion of the land covered by the preservation agreement."

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[16] / Draft EIR, p. 3.9-32.

[17] / The Land Use Element of the General Plan includes Policy 3-u, which states that the County should pursue preservation agreements that are "designed to preserve land for agriculture, open space, wetlands or parks." (Attachment 4, p. 3-39 [Contra Costa General Plan, Chapter 3- Land Use Element].) Elsewhere, the Land Use Element explains that the purpose of non-urban preservation agreements is "to prevent annexation by cities of certain appropriate properties." (*Id.* at p. 3-9.)

II. The Draft EIR does not comply with CEQA.

A. The Draft EIR fails to provide an adequate project description.

Under CEQA, an "accurate and stable and finite project description is the *sine qua non* of an informative and legally sufficient EIR." (*County of Inyo v. City of Los Angeles* (1977) 71 Cal.App.3d 185, 193.) An adequate description of all parts of a project are necessary if an EIR is to serve its informational purpose. If important elements are omitted, then "some important ramifications of the proposed project" may remain "hidden from view at the time the project [is] being discussed and approved." (*Santiago County Water Dist. v. County of Orange* (1981) 118 Cal.App.3d 818, 830.)

Here, the Draft EIR's informational purpose is undermined by the many uncertain project elements. First, the Draft EIR provides a misleading description of the residential development area in the Northern Site. According to the Draft EIR, all of the project's "urban development" would occur within the 30-acre Residential Development Area. (DEIR, p. 2-25.) As noted above, this characterization is incorrect and solely designed to allow the project to evade the requirement to obtain voter approval. Table 2-2 (Summary of Ground Disturbance Areas) separates the 30 acres of the Residential Development Area from the 23.71 acres of "Non-Urban Development Area" on the theory that the listed uses are "nonurban uses" as defined by County Ordinance 82-1.032. (DEIR, p. 2- 27.) But the detention basin, sewer pump station, project grading areas, and landslide grading areas are not "rural residential and agricultural structures" that would qualify as nonurban uses. (DEIR, pp. 2-27 to 2-28.) Rather, all of these project elements exist solely to serve the Project's 125 residential units.

The Town asks that the Project Description be revised to clearly explain that all of the following components would be included in the project's Residential Development Area:

Sub Area	Acreage	Source for Area Calculation
"Footprint" of the proposed 125 Residential Lots	22.5	Estimated from Exhibit 2-6 – Residential Site Plan
"Footprint" of the proposed Internal Project Roadways	7.5	Estimated from Exhibit 2-6 – Residential Site Plan
Area to be offered in dedication to the County and to receive frontage improvements, road widening and landscape improvements for Camino Tassajara	3.0	Parcel "F" on Exhibit 2-7 - Development Plan
Project Detention Basin	3.0	Parcels "A" and "H" on Exhibit 2-7 - Development Plan
Disturbed Area - Grading Improvements	7.0	Exhibit 2-13 - Grading Impact Areas
Disturbed Area - Remedial Grading	16.0	Exhibit 2-13 - Grading Impact Areas
Offsite parking lot improvements for Tassajara Hills Elementary School	0.7	Exhibit 2-13 - Grading Impact Areas
Totals	59.7 /30 acres	*NOTE: Total acreage is approximately 200% larger than the cited 30 acre "Residential Development Area"*

Additionally, the following parcels (and assumed parcels) appear to have been left out of the tabulation of the subdivision/vesting tentative map application requests:

Parcel or Anticipated Parcel	Size (Acres)	Purpose of Lot or Parcel
Parcel "A"	0.02	Assumed to relate to utility improvements associated with project
Parcel "D"	0.09	Provides project connection from "D" Street to abutting debris bench and "Disturbed Area – Remedial Grading"
Parcel "K"	0.19	Provides project connection from "D" Street to abutting debris bench and "Disturbed Area (Grading/Improvements)"

Second, as noted above, the Draft EIR fails to provide any details about the preservation agreement that the County intends to rely upon to make a finding under Section 82-1.018(a)(3). (See DEIR, p. 3.9-32.) The Draft EIR does not explain if there is an existing preservation agreement, does not identify which cities are or will be party to the preservation agreement, and does not include an exhibit of the land to be covered by the preservation agreement. The preservation agreement must be part of the project because it is one of the "approvals" that will be necessary for the project to proceed. The preservation agreement should have been listed along with the other discretionary approvals in the Draft EIR's project description. (See DEIR, pp. 2-1 to 2-2.) The vague reference to the County Code does not tell the public anything about that discretionary action or the factors and parties involved in considering it.

Third, the Draft EIR is unclear about the following items:

1. The total area of ground disturbance: It appears that certain project elements, including the Future Equestrian Staging Area, are still in flux. Consequently, the Draft EIR makes unsupported assumptions and fails to accurately identify the total acreage that will be disturbed under the project. (See DEIR, pp. 2-25, 2-36.)

2. The method for conveyance of preservation areas: The Draft EIR states that the "applicant proposes to convey almost all of the Southern Site . . . to the East Bay Regional Park District (EBRPD) by fee simple transfer and/or other appropriate legal mechanism, subject to a conservation easement on a portion of the Southern Preservation Area that would also need to be acceptable to the applicable resource agencies." (DEIR, p. 2-26 [similar statement with regards to the Pedestrian Staging Area and the Future Equestrian Staging Area].) There are too many uncertainties in this statement. Has EBRPD agreed to this proposal? What kind of legal mechanism will be used? What are the terms of the conservation easement? Have the applicable resource agencies approved these terms? Would EBRPD agree to take on the responsibilities imposed by mitigation measures in the EIR, such as MM BIO-3 (DEIR, p. 3.4-75). Given past experience, it is doubtful that the EBRPD would be willing to assume the risk of slope failure occurring and damaging surrounding properties. (See DEIR, p. 3.1-17.)

3. Annexation of the Northern Site into Wendt Ranch Geologic Hazard Assessment District (GHAD): The Draft EIR states that the "applicant proposes that the entire Northern Site be annexed into an existing . . . (GHAD) . . . for the purpose

of appropriately addressing geological hazards as permitted under GHAD law." (DEIR, p. 2-26.) The Draft EIR assumes that the GHAD would "assume specified responsibilities" and provide for "funding of monitoring and maintenance of biotic resources, as required and consistent with the Plan of Control." (DEIR, pp. 2-41 to 2-42.) It is unclear what biological resources the Draft EIR assumes a GHAD, which is designed to address geologic hazards, would be responsible for monitoring. (DEIR, pp. 3.9-10 to 3.9-11.)

4. Future uses on the potential future fire district parcel: The Draft EIR admits that "while the Project applicant has contingently offered to convey the Potential Future Fire District Parcel, it is not known whether [the San Ramon Valley Fire Protection District (SRVFPD)] will accept such offer of dedication, nor is it known what or when (if at all) any such potential future use(s) may be pursued." (DEIR, p. 2-42.) The Draft EIR mentions a Contingent Offer of Land Dedication, but it does not include a copy of this offer or any other written evidence that clarifies this potential arrangement. (DEIR, p. 2-27.)

5. LAFCO approval of annexation of Residential Development Area and Pedestrian Staging Area into service area of East Bay Municipal Water District (EBMUD): The Draft EIR explains that the "applicant is expected to request annexation of the Residential Development Area (as well as the adjacent Pedestrian Staging Area) into the service area of EBMUD." (DEIR, p. 2-44.) Such annexation requires approval from both EBMUD and LAFCO. The Draft EIR also states that the Pedestrian Staging Area could only include approximately 21 parking spaces and a restroom facility and water fountain if "LAFCO approval of the inclusion of this portion of the Project Site into the annexation proposal" is obtained. (DEIR, p. 2-36.) The Draft EIR does not explain when EBMUD and LAFCO approval would be obtained. It does not adequately explain what factors will be used by LAFCO to determine if the inclusion is appropriate. (DEIR, p. 3.9-34.)

Fourth, the Draft EIR presents two different potential sources of water supply for the project: (a) "a long-term agreement to purchase water from the Calaveras Public Utility District," or (b) "the augmenting of EBMUD's potable water availability by expanding recycled water use in lieu of existing potable water use within EBMUD's service area by an amount sufficient to offset the Project's water demand." (DEIR, p. 2-49.) According to the Draft EIR, the applicant "would request that EBMUD play a role (subject to the EBMUD Board's discretion) in implementing this flexible water strategy." (DEIR, p. 2-

44.) While the Town can understand the appeal of pursuing a flexible water strategy, the Draft EIR's reliance on two such different water supply options is problematic. The Draft EIR does not explain what factors will be considered to make a final decision between these two choices, one of which would involve the construction of 1.8 miles of pipeline within the right-of-way of San Ramon Valley Boulevard from Alcosta Boulevard to Montevideo Avenue. (DEIR, p. 2-49.) In addition, while Appendix J, Exhibit 1 to the DEIR refers to a "Term Sheet between CPUD and Project Proponent," that exhibit is not included.

B. The Draft EIR's description of the project baseline and setting is misleading and incomplete.

CEQA requires an EIR to "delineate environmental conditions prevailing absent the project, defining a 'baseline' against which predicted effects can be described and quantified." (*Neighbors for Smart Rail v. Exposition Metro Line Construction Authority* (2013) 57 Cal.4th 439, 447.) An EIR "must include a description of the physical environmental conditions in the vicinity of the project, as they exist at the time the notice of preparation is published . . . from both a local and regional perspective." (CEQA Guidelines, § 15125, subd. (a).)[18] "If the description of the environmental setting of the project site and surrounding area is inaccurate, incomplete, or misleading, the EIR does not comply with CEQA." (*Cadiz Land Co. v. Rail Cycle* (2000) 83 Cal.App.4th 74, 87.) In this instance, the Draft EIR's "description and consideration" of the project baseline and setting is so incomplete and misleading that it fails to meet the standard set forth in Section 15125.

First, the Draft EIR claims that the project site is "semi-flat" (p. 2-25). This is misleading. Based on Exhibit 2-6, it appears that between 2.5 and 5 acres of the 30-acre Residential Development Area to be occupied by lots and roadways have existing slopes in the 15-30 percent horizontal-to-vertical slope gradient. (DEIR, p. 2-19.) Another five to 7.5 acres is estimated to have existing slopes in the 30-40 percent horizontal-to-vertical slope gradient. It is typical to include a slope gradient map as a project exhibit to show existing slope gradients, both for the area to be occupied by roads and lots and for the area of anticipated corrective soils and geotechnical work. (See General Plan Policies 9-14, 9-22, 9-24.) General Plan Policy 10-24 states, in part, "Development on very steep open hillsides and significant ridgelines throughout the County shall be restricted, and

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[18] / CEQA Guidelines, Cal. Code Regs., tit. 14, § 15000 et seq.

hillsides with a grade of 26 percent or greater shall be protected through implementing zoning measures and other appropriate actions." To correctly evaluate the project's conformance to general plan policies, the Draft EIR should indicate how much of the site, inclusive of area described on Exhibit 2-13 as "Disturbed Area (Grading/Improvements), has an existing slope gradient of 26 percent or greater.

Figure 2 (Site Plan) from Appendix E should be included in the Draft EIR's Project Description section text. Figure 2 indicates that half a dozen earth flows are in direct contact with, or overlap with, the proposed residential lots in the project. One of these earthflows is identified as a deep-seated earth slump/flow. That deep-seated slide occupies more than six acres, with its "footprint" overlapping all or portions of proposed Lots 34-39 and Lots 51-59. More than half of the horizontal footprint of the slide has an existing slope gradient in excess of 20 percent. The topmost reaches of the slide, as well as the area extending up to the top of the ridge above the mapped location of the slide, has an existing slope gradient of over 40 percent. The hinge point at the point the slide transitions from the lower, flatter area of the slide to the upper portion of the slide; and the area above the mapped top of the slide scales to a vertical rise of approximately 80 feet across a horizontal distance of approximately 200 feet. Recently completed Google Earth oblique aerial mapping appears to readily indicate the presence of a related slide that is not indicated on Figure 2—a slide that is located above and slightly east of the centerline of the deep-seated slide and that appears to extend to the ridge. It may be that this omitted slide occurred after the 2005 site-specific landslide evaluation that was part of the ENGEO geotechnical feasibility study. Please see the Town's more complete comments on Geotechnical and Grading Concerns in Attachment 2. The fact that the project site has several "explored landslides . . . found to be at least 30 to 40 feet thick" should not be buried in Appendix E of the DEIR. (See Draft EIR, Appendix E- ENGEO Preliminary Geotechnical Report, p. 3.)

Second, the Draft EIR provides a misleading description of the mature California black walnut trees that will be removed as part of the project despite being identified as protected trees under the County Code. (DEIR, p. 3.4-43.) Apart from indicating that they are "greater than 6.5 inches in diameter," the Project Description section provides very little information about the 10 mature walnut trees in the southwest corner of the Northern Site. (DEIR, pp. 2-34 to 2-35.) Elsewhere, the Draft EIR discloses that these walnut trees are remnants of a historic orchard dating back to the 1950s. (DEIR, pp. 3.2-4 [part of orchard dating back to 1958-1968], 3.5-11 [orchard present in archival photos from 1946].) Appendix C of the Draft EIR explains that the average diameter of the single-trunked walnut trees is 32 inches and that several of the trees have multiple

trunks. (Appendix C, pp. 137, 150-151 ["Tree Assessment" table].) And Appendix C indicates that nine of the walnut trees are in "fair" condition, which means that they are trees "with moderate vigor . . . [and] moderate structural defects that might be mitigated with regular care." (Appendix C, pp. 136-137.) Yet, the Draft EIR dismisses these walnut trees as not being "in good condition" because of the "decay" present. (DEIR, p. 3.4-43.) This characterization is directly contradicted by Appendix C, which reports that at least two of the California black walnuts to be removed are moderately suited for preservation. (Appendix C, pp. 143, 150-151 [trees # 28 and 29 marked for removal and having "moderate" suitability for preservation].) Please revise the Project Description to include a fuller and more accurate discussion of the California black walnut trees to be removed during grading for the residential units.

C. The Draft EIR improperly relies upon project design elements that should be included as enforceable mitigation measures.

In *Lotus v. Department of Transportation* (2014) 223 Cal.App.4th 645, 658, the court held that the EIR in that case failed to comply with CEQA in its evaluation of the project's impact on old growth redwood roots adjacent to the roadway. Caltrans had incorporated mitigation measures into its project description and concluded that any potential impacts would be less than significant. "By compressing the analysis of impacts and mitigation measures into a single issue," the court stated, "the EIR disregards the requirements of CEQA."

Here, the Draft EIR improperly relies upon project design elements instead of including these measures as enforceable mitigation measures. For example, the Draft EIR explains that the "landslide grading area" incorporates "recommended measures into the Project design to address geotechnical issues as recommended by the geotechnical engineer." (DEIR, p. 2-28.) Appendix E provides eight pages of recommendations that ENGEO indicated "should be incorporated in the design and construction of the project." (Appendix E, pp. 11-19.) It is unclear if the project design incorporates all of these recommendations. And there are no mitigation measures in the Geology, Soils, and Seismicity section that specifically include or reference these eight pages of recommendations. (DEIR, pp. 3.6-12 to 3.6-17 [MM GEO-1 simply requires applicant to submit a design-level geotechnical investigation to the County for review and approval].)

Similarly, the Draft EIR improperly assumes that a GHAD will be formed and that a Plan of Control will be implemented to address geologic hazards related to the location

of the project on "an unstable geologic unit or soil." (DEIR, pp. 3.6-15 to 3.6-17.) The Draft EIR states that with "the implementation of MM GEO-1 *and the GHAD*, impacts related to potentially unstable geologic conditions would be reduced to less than significant." (DEIR, p. 3.6-17, italics added.) In other words, the Draft EIR based its conclusion that Impact GEO-3 is less than significant partly on the assumed future establishment of a GHAD. But this assumption is not supported by substantial evidence because the formation of a GHAD is not required by an enforceable mitigation measure. Although the Project applicant might earnestly "anticipate establishing a GHAD," the applicant's anticipation cannot be equated with an enforceable mitigation measure. (DEIR, p. 3.6-16.)

These are just two examples. Please review the entire Draft EIR and consider if there are other elements of the project design or other unsupported assumptions that properly should be transformed into enforceable mitigation measures.

D. The Draft EIR fails to adequately analyze and mitigate the project's potentially significant environmental impacts.

CEQA requires an EIR to provide "a sufficient degree of analysis" about a proposed project's adverse environmental impacts to inform the public and allow decisionmakers to make intelligent judgments. (CEQA Guidelines, § 15151.) An EIR must demonstrate a good faith effort at full disclosure. As explained below, additional analysis and mitigation are necessary for the Draft EIR here to comply with CEQA.

1) Transportation and Traffic:

The Draft EIR concludes that the project will result in four different significant and unavoidable transportation and traffic impacts:

- Impact TRANS-1 ("unacceptable traffic operations under Existing Plus Project conditions") (pp. 3.12-34 to 3.12-44);
- Impact TRANS-2 ("unacceptable traffic operations under Near-Term Plus Project conditions") (pp. 3.12-44 to 3.12-57);
- Impact TRANS-3 ("unacceptable traffic operations under Cumulative Plus Project conditions") (pp. 3.12-57 to 3.12-68) ; and
- Impact TRANS-5 ("conflict with an applicable congestion management program's level of service standards established by the County congestion management agency for designated roads or highways") (pp. 3.12-76 to 3.12-81).

CEQA requires the County to consider all feasible mitigation measures and alternatives that may help avoid or lessen these significant and unavoidable impacts. But the Draft EIR fails to do this.

The California Supreme Court has "explained that [an agency's] duty to mitigate extend[s] beyond the boundaries of the [project]." (*City of San Diego v. Board of Trustees of California State University* (2015) 61 Cal.4th 945, 957.) This is because "CEQA requires a public agency to mitigate or avoid its projects' significant effects not just on the agency's own property but '*on the environment*' (Pub. Resources Code, § 21002.1, subd. (b), italics added), with 'environment' defined for these purposes as 'the physical conditions which exist *within the area which will be affected by a proposed project.*' (*id.*, § 21060.5, italics added)." (*City of Marina v. Board of Trustees of the California State University* (2006) 39 Cal.4th 341, 360.) Here, the area that will be affected by the project includes the Town of Danville.

Please review and respond to the attached technical comments from the Town's expert traffic consultant. (Attachment 1 [Peer Review of Tassajara Parks Traffic Impact Study].) Among other concerns, the traffic peer review concludes that: (a) the Draft EIR's Traffic Impact Study uses parameters that do not match the Town of Danville's signal timing plans at many intersections; (b) multimodal LOS analysis was not but should be conducted at least at intersections with high pedestrian/bike volumes; (c) school PM peak analysis was not but should be conducted at intersections next to schools; (d) several mitigation measures related to signal timing improvements overestimate the benefits of signal timing and should be revisited; (e) there is insufficient information about the nearest transit stop on Route 35; (f) select link analylsis using more accurate assumptions about the project and surrounding land uses run by the Town's consultant shows significantly different trip generation patterns than those used in the Draft EIR's study; and (g) traffic circulation analysis for the schools within the project study area were not but should be analyzed.

Additionally, the Town notes that the design of the landscape buffer between road widening improvements for Camino Tassajara and project lots is inadequate when compared to the depth of perimeter landscape buffers provided directly south of the project site or west of the project site, which typically ranged from 40 to 50 feet in width. The buffered setback should match the depth of the widest buffer provided in proximate projects - not be the narrowest.

2) **Air Quality/ GHG Emissions:**

The Draft EIR concludes that Impact AIR-6 ("generate direct and indirect greenhouse gas emissions that would result in a significant impact on the environment") is significant and unavoidable. (DEIR, p. 3.3-65.) With regard to the remaining Air Quality/ Greenhouse Gas Emissions (GHG) impacts, two are less than significant and would not require mitigation, while four are less than significant with mitigation. (DEIR, pp. ES-7 to ES-9.) There are numerous defects in the Draft EIR's analysis of these impacts.

First, the Draft EIR's reliance upon the Bay Area Air Quality Management District's (BAAQMD's) adopted thresholds of significance is problematic. (DEIR, pp. 3.3-36 to 3.3-37, 3.3-61 to 3.3-65.) Table 3.3-5 and Table 3.3-27 both indicate that the BAAQMD threshold for operational GHG emission impacts is 4.6 $MTCO_2e$ per service population per year (SP/yr). But the Draft EIR does not explain if this threshold is tied to 2020 goals in Assembly Bill (AB) 32, the 2006 Global Warming Solutions Act. Since the project's lifespan is assumed to be 30 years (DEIR, p. 3.3-64) and construction wouldn't be complete until 2020 (DEIR, p. 2-50), the Draft EIR must use significance thresholds for operational GHG emission impacts that are tied to relevant 2050 goals. For example, Executive Order S-3-05 calls for the reduction of GHG emissions to 80 percent below 1990 levels by 2050. This 2050 goal represents the level scientists believe is necessary to reach climate-stabilizing levels. And Executive Order B-30-15 establishes a mid-term GHG reduction target for California of 40 percent below 1990 levels by 2030. If the BAAQMD's recommended operation threshold of 4.6 $MTCO_2e$/SP/yr does not take into account the more recent 2030 and 2050 goals, then the Draft EIR needs to consider using a different or additional significance threshold.

Second, the analysis of Impact AIR-6 suffers from other deficiencies. Noting that BAAQMD does not have a construction-related GHG generation threshold, the Draft EIR provides a calculation of the total construction emissions (1,281 $MTCO_2e$) without any additional analysis to help the public and decisionmakers to determine if this amount of emissions is significant. (DEIR, pp. 3.3-62 to 3.3.-63.) Additionally, MM AIR-6 is weak. Why is on-site generation of renewable energy, such as solar, only required to meet 10 percent of the Project's total energy demand? Why not 25 percent or 40 percent or 100 percent? Why doesn't the Draft EIR discuss and require the purchase of carbon credits or other potentially feasible mitigation measures? The Draft EIR cannot hide behind a significant and unavoidable impact conclusion to avoid considering all potentially feasible mitigation.

Third, the analysis of Impact AIR-1 ("conflict or obstruct implementation of the applicable air quality plan") is inaccurate. (DEIR, pp. 3.3-38 to 3.3- 40.) The Draft EIR concludes that the project is consistent with applicable criterion in BAAQMD's 2010 Clean Air Plan. But the project is inconsistent with Criterion 1 ("support the primary goals") because the significant and unavoidable GHG emissions impact (Impact AIR-6) cannot reasonably be interpreted as supporting the air quality plan's primary goal of reducing GHG emissions and protecting the environment. (DEIR, p. 3.3-38.) The Project is also inconsistent with Criterion 2 ("include applicable control measures"). (DEIR, pp. 3.3-38 to 3.3-39.) One of the 2010 Clean Air Plan's control measures is "ECM 2-Renewable Energy," which consists of two components: "1) promote incorporation of renewable energy sources into new developments and redevelopment projects, and 2) foster innovative renewable energy projects through provision of incentives." (See BAAQMD's Clean Air Plan, Vol. II, p. E-6, available at http://www.baaqmd.gov/~/media/Files/Planning%20and%20Research/Plans/2010%20Clean%20Air%20Plan/CAP%20Volume%20II_Sections%20A-F.ashx (last visited June 30, 2016).) The 2010 Clean Air Plan explains that one of the primary approaches to increasing renewable energy is to "replace grid-tied electricity with 100% renewable electricity produced through distributed generation such as solar panels, micro wind turbines, or onsite cogeneration." (*Ibid.*) The Draft EIR points to the project's provision of 10 percent on-site renewable energy generation and the fact that PG&E's power mix comes from 19 percent renewable sources as evidence that the project is consistent with this control measure. But this is unconvincing evidence. The project would need to require a much higher percentage of onsite renewable energy in order to honor measure ECM-2.

Fourth, the analysis of operational "CO hotspot" impacts associated with traffic congestion under Impact AIR-2 is incorrect. (DEIR, pp. 3.3-41 to 3.3-42.) The Draft EIR indicates that the project must be "consistent with an applicable congestion management program" among other criteria. The Draft EIR concludes that the project is consistent with the Contra Costa Transportation Agency's (CCTA's) Congestion Management Plan (CMP). But the Draft EIR reveals that three freeway segments would "operate below standards under Cumulative Conditions," and the addition of the project would result in LOS F. In spite of this, the Draft EIR claims that the project is consistent with the CMP because the Traffic Impact Study "identified mitigation measures to reduce Project impacts on these CMP routes." (DEIR, p. 3.3-42.) What the analysis of Impact AIR-2 fails to consider is that for Impact TRANS-3 the Draft EIR concluded that "the project would result in significant unavoidable impacts to freeway segments even after the implementation of mitigation" under the Cumulative Plus

Project conditions. (DEIR, p. 3.12-67.) It is unclear how significant and unavoidable impacts resulting in traffic congestion that contributes to a CO hotspot on these freeway segments can be found to be consistent with the CMP.

Fifth, the Draft EIR improperly relies on MM AIR-3 to support a less than significant conclusion for Impact AIR-3 ("potential to result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is in nonattainment"). (DEIR, pp. 3.3-43 to 3.3-54.) MM AIR-3 states: "Off-road diesel-powered construction equipment greater than 50 horsepower shall meet United States Environmental Protection Agency Tier 4 off-road emissions standards *to the extent feasible.*" (DEIR, p. 3.3-54, italics added.) Without further explanation, the use of the phrase "to the extent feasible" here renders the entire mitigation measure vague and unenforceable. Who gets to decide if it is feasible? What are the criteria for deciding feasibility? The Draft EIR needs to explain if the calculations in Tables 3.3-11 through 3.3-15 (mitigated construction emissions) assume that 100 percent of the off-road diesel-powered construction equipment greater than 50 horsepower would meet Tier 4 standards. Such an assumption would not be supported by substantial evidence because compliance with MM AIR-3 and its "to the extent feasible" clause could result in much less than 100 percent of the equipment meeting Tier 4 standards.

Sixth, the analysis of Impact AIR-4 ("potential to expose sensitive receptors to substantial pollutant concentrations") is deficient. The project's residential area is located just 133 feet away from Tassajara Hills Elementary School and just 175 feet away from residences on Kingswood Drive. The Draft EIR downplays the potential impacts from use of heavy diesel equipment by stating that the preparation phase "would only occur over a brief duration (estimated to require approximately 173 working days)." One hundred and seventy-three working days this close to an elementary school and residences does not appear to be a "brief" duration. Please also explain if the calculations in Table 3.3-23 (Construction Health Risk Assessment Summary with Mitigation) assume that 100 percent of the off-road diesel-powered construction equipment greater than 50 horsepower would meet Tier 4 standards. (DEIR, p. 3.3-57 [relying on the implementation of MM AIR-3]; see also DEIR, Appendix B, p. 75 [Appendix C –Health Risk Assessment Screening].) And please consider evaluating the potential risk of Valley Fever, which may affect sensitive receptors even if MM AIR-2 is able to lessen impacts from construction fugitive dust.

Finally, the analysis of Impact AIR-7 ("conflict with any applicable plan, policy or regulation of an agency adopted to reduce the emissions of greenhouse gases") is

incorrect. (DEIR, pp. 3.3-65 to 3.3-70.) The Draft EIR concludes that the project is consistent with the Contra Costa County Climate Action Plan's applicable measures. (DEIR, pp. 3.3-66 to 3.3-67.) Measure LUT 4 states: "New residential and nonresidential development will be located within one half-mile of a BART or Amtrak station, or within one quarter-mile of a bus station." (DEIR, p. 3.3-67.) The Draft EIR admits that the project is "not currently served by transit," meaning that the residential development area is not located within one-half-mile of a BART or Amtrak station, or within one-quarter-mile of a bus station. Yet, the Draft EIR assumes that the project is consistent with the Climate Action Plan because it "increases development density in the area, increasing the feasibility of providing service on Tassajara Road in the future." This conclusion is unsupported by the substantial evidence and must be revised.

3) Land Use, Population, and Housing:

The Draft EIR's discussion of the Urban Limit Line is misleading and incomplete. (DEIR, p. 3.9-4.) Please see comments above regarding the voters' intent behind the establishment of the ULL and the intent behind the 30-acre exception to voter approval. The Draft EIR should be revised to present a more complete picture of the ULL issue, including acknowledging the importance of providing affordable housing. As noted above, please provide more details about the intended use of the preservation agreement finding in Section 82-1.018(a)(3). (DEIR, p. 3.9-32.)

The Town also notes that the project would not qualify for the finding under Section 82-1.018(a)(4) for a "minor change to reflect topographical characteristics or legal boundaries." The existing ULL boundary (which was described at the time as representing the "Watershed and Ridge Line boundary") accurately represents the topographical characteristics in that portion of the Northern Site so a finding under subsection (a)(4) would not be justified.)

The Draft EIR concludes that Impact LU-1 ("would not conflict with any applicable provisions of the Contra Costa County General Plan adopted for the purposes of avoiding or mitigating an environmental effect") is less than significant. But this conclusion is not supported by substantial evidence. The project is inconsistent with Policy 3-7 because the project will result in significant unavoidable traffic impacts; it is inconsistent with Policy 3-9 because the project prematurely extends development into undeveloped areas outside the ULL before utilizing vacant and under-utilized sites within urban areas; it is inconsistent with Policy 3-10 because the project extends growth-inducing infrastructure into agricultural areas outside the ULL; and it is

inconsistent with Policy 3-11 because the project conflicts with existing agricultural uses. (DEIR, pp. 3.9-28 to 3.9-29.) Also, the project's small average lot size is not consistent with the development to the west of the project and is not aligned with the County's policy directive to go to lower density development at the outer edges of development.

The Draft EIR concludes that Impact LU-2 ("would not conflict with any applicable provision of the Contra Costa County Ordinance Code adopted for the purpose of avoiding or mitigating an environmental effect") is less than significant, in part, because the "Project would pay in-lieu fees in place of providing inclusionary housing units as part of the Project." (DEIR, pp. 3.9-30 to 3.9-33.) As noted above, the Draft EIR improperly dismisses the provision of onsite affordable housing without any discussion or analysis. The strategy of paying in-lieu fees is inconsistent with the purpose behind the 30-acre exception to voter approval of changes to the ULL.

In the analysis of Impact LU-3 ("would not conflict with any applicable Local Agency Formation Commission policies adopted for the purposes of avoiding or mitigating an environmental effect"), the Draft EIR assumes that the Contra Costa LAFCO will approve the extension of EBMUD utility service to the Residential Development Area. (DEIR, pp. 3.9-34 to 3.9-35.) Please provide more information about the process and criteria that would be used by the Contra Costa LAFCO. Why is it reasonable to assume that approval will be granted?

In the analysis of Impact LU-4 ("may conflict with any applicable East Bay Municipal Utility District annexation policies adopted for the purposes of avoiding or mitigating an environmental effect"), the Draft EIR concludes that the project is consistent with all applicable policies. (DEIR, pp. 3.9-35 to 3.9-39.) But the project is not consistent with Policy 3.01 because it is outside the Ultimate Service Boundary (USB). And Table 3.9-7's explanations of the project's consistency with exceptions to Policy 3.01 are unconvincing: (i) 30 acres is not a small boundary adjustment; (ii) the project's residential area is not the smaller part of a larger project located primarily within the USB; and (iii) there is no support for the conclusion that EBMUD is the logical provider of water service. (DEIR, pp. 3.9-36 to 3.9-37.)

4) Aesthetics, Light, and Glare:

The Draft EIR's conclusion that Impact AES-2 ("would not substantially degrade the existing visual character or quality of the site and its surroundings") is less than

significant is unsupported. (See DEIR, p. 3.1-18 to 3.1-23.) The project involves changing more than 30 acres of agricultural/ open space lands outside the ULL to residential uses. Additionally, the project will result in the installation of a 250-foot-long and 4-foot-tall wall along Camino Tassajara. (DEIR, p. 3.1-18.) But the Draft EIR improperly reasons that these changes "would not substantially degrade the visual quality of the Project Site" because they are so small when compared to the great number of acres that will be preserved by the Project. (DEIR, p. 3.1-23.) The visual simulation of the Project in Exhibit 3.1-2 demonstrates clearly that the construction of 125 new residential units will result in a significant change to the existing visual character of the project site. In addition, the visual simulation provided does not account for the likelihood that the slide corrective work above proposed lots 32-40 will result in steep engineered slopes with drainage benches extending up to the ridgeline above these lots - scarring the existing topographic conditions that will likely be visible above the perimeter architectural wall and the proposed residences that would back up to Camino Tassajara. The aesthetic impact of the new residential development is not somehow canceled out or negated just because the project also proposes to preserve other portions of the project site at a location some distance away from the residential development. And, contrary to what the Draft EIR implies, the aesthetic impact of new residential development is not automatically reduced to less than significant levels because there are existing residences nearby.

The project is inconsistent with the following General Plan Goals that are related to aesthetics: LU3.8-3-A ("protection of agriculture and open space"), 9-B ("conserve the open space and natural resources of the County through control of the direction, extent and timing of urban growth"), 9-9 ("preserve open space lands located outside the Urban Limit Line"; "County shall not designate any open space land located outside the ULL for an urban use"), and 9-15 ("projects shall be designed to minimize damages to significant trees and other visual landmarks"). (DEIR, pp. 3.1-3 to 3.1-4.) The project will convert agriculture and open space outside the ULL to residential uses, and it will remove several mature California black walnut trees that are protected by the County's tree ordinance. Please consider these inconsistencies when reevaluating the project's aesthetic impacts.

5) Agricultural Resources:

The Draft EIR discloses that the project would change 30 acres of Farmland of Local Importance to residential use, rezoning from Agricultural Land to P-1, Planned Unit

District. (DEIR, p. 3.2-11.) Yet the Draft EIR concludes that Impact AG-2 ("would not conflict with existing zoning for agricultural use, or a Williamson Act contract") is less than significant. (DEIR, pp. 3.2-12 to 3.2-13.) This conclusion appears to be based on circular reasoning: the project will be consistent once approved because the project requires approval of rezoning. Please revise to correct this deficiency.

6) Biological Resources:

As noted above, the Draft EIR provides a misleading description of the Northern California black walnut trees that will be removed by the project. The Draft EIR explains that there are only three extant native populations and only one viable native occurrence of the California black walnut as of 2003. (DEIR, p. 3.4-14.) And the Draft EIR goes on to explain that planted or naturalized California black walnut, such as the ones on the project site, threaten native stands and "have no special status." (DEIR, p. 3.4-19.) This is confusing because even the native black walnut trees do not have federal or state status. (DEIR, p. 3.4-14.) Why is the Draft EIR trying to disparage planted or naturalized California black walnut? The Draft EIR should acknowledge in this discussion that the black walnut trees on the project site are locally important and protected by the County tree ordinance.

Mitigation measure BIO-3 states that the "applicant is proposing to compensate for Impacts to waters of the U.S. and State by creating wetlands on the Southern Site," but that the applicant "may also choose to purchase mitigation credits" in lieu of creating the wetlands. (DEIR, p. 3.4-75.) Please explain who would monitor the created wetlands. And how many mitigation credits would be bought? Will the mitigation credits be required to meet the 2:1 (creation to impact) ratio indicated in subsection (b)?

The Draft EIR concludes that Impact BIO-5 ("would not conflict with local policies or ordinances protecting biological resources") is less than significant. But the project is consistent with Policy 3-4 because it will convert agricultural lands to urban uses; it is inconsistent with Policy 8-6 because significant and mature California black walnut trees will be removed and will not be preserved; it is inconsistent with Policy 8-9 because the project site contains endangered species and the project will not maintain all areas in their natural state; and it is inconsistent with Policy 8-27 because the project will impact wetlands instead of protecting them.

Finally, as noted above, the Draft EIR assumes that the project will be annexed into an existing GHAD, which would "assume specified responsibilities" and provide for

"funding of monitoring and maintenance of biotic resources, as required and consistent with the Plan of Control." (DEIR, pp. 2-41 to 2-42.) Please explain why it is reasonable to assume that a GHAD, which is designed to address geologic hazards, would have the interest in and expertise to manage biological resources. (DEIR, pp. 3.9-10 to 3.9-11.)

7) Cultural Resources:

Based on CEQA Guidelines section 15064.5 and Appendix G of the CEQA Guidelines, a project would have significant adverse impacts to cultural resources if the project would:

- Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5;
- Cause a substantial adverse change in the significance of a unique archaeological resource pursuant to Section 15064.5;
- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature; or
- Disturb any human remains, including those interred outside of formal cemeteries.

Any one of the above-cited impacts to a historical resource, as defined by Public Resources Code sections 21084.1 and 5020.1, constitutes a substantial adverse change pursuant to CEQA. A substantial adverse change to a historical resource is considered a significant impact on the environment.

CEQA requires that, for projects financed by, or requiring the discretionary approval of public agencies in California, the effects that a project has on historical and unique archaeological resources must be considered. (Pub. Resources Code, § 21083.2, subd. (a); CEQA Guidelines, § 15064.5.) For purposes of CEQA, a historical resource is "a resource listed in, or determined to be eligible for listing in, the California Register of Historical Resources [CRHR]"; and any "substantial adverse change in the significance of an historical resource" is considered a significant effect on the environment. (Pub. Resources Code, § 21084.1.) Historical resources can be "any object, building, structure, site, area, place, record, or manuscript which is historically or archaeologically significant, or is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California." (Pub. Resources Code, § 5020.1, subd. (j).) "Substantial adverse change in the significance of an historical resource means physical demolition, destruction, relocation,

or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired." (CEQA Guidelines, § 15064.5, subd. (b)(1).)

The Draft EIR states that the California black walnut trees on the project site are remnants of a historic orchard dating back to the 1950s. (DEIR, pp. 3.2-4 [part of orchard dating back to 1958-1968], 3.5-11 [orchard present in archival photos from 1946].). Has the County determined whether the remnants of the walnut orchard are a historic resource? If the County finds the walnut orchard to be a historic resource, the removal of these trees would be a substantial adverse change and would thus be a significant cultural resources impact. (CEQA Guidelines, § 15064.5, subd. (b)(1).)

Mitigation measure CUL-1 provides that, in the event of the inadvertent discovery of potentially significant cultural resources during construction, the "archaeologist shall make recommendations concerning appropriate measures, including but not limited to excavation and evaluation of the finds." (DEIR, pp. 3.5-13 to 3.5-14.) This mitigation is insufficient to ensure that impacts will be less than significant because it does not ensure no substantial adverse change in the significance of the historical resource. CEQA Guidelines section 15064.5 provides that relocation or alteration of the resource of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired is a substantial adverse change. (CEQA Guidelines, § 15064.5, subd. (b)(1).)

Mitigation measure CUL-3 requires that, in the event a significant paleontological resource is inadvertently discovered during construction, "the paleontologist shall design and carry out a data recovery plan consistent with the Society of Vertebrate Paleontology standards." (DEIR, p. 3.5-15.) What are the standards referenced here? Again, this mitigation is insufficient to ensure that impacts will be less than significant because it does not ensure that there would be no substantial adverse change in the significance of the historical resource.

8) Geology, Soils, and Seismicity:

Please review and respond to the attached technical comments from the Town's staff. (Attachment 2 [Geotechnical and Grading Concerns].)

Appendix E, the Preliminary Geotechnical Report, includes recommended measures that should be referenced in the Geology, Soils, and Seismicity section. (See, e.g., DEIR,

Appendix E, pp. 8["Landslide mitigation measures should be incorporated where improvements are planned adjacent to open-space areas that will remain in a natural condition."], 12 ["The Geotechnical Engineer or qualified representative should be present during all phases of grading operations to observe demolition, site preparation, grading operations, and subdrain placement"],16 ["2:1 slopes should be provided with erosion control protection such as Rhino Snot Soil Stabilizer or other equivalent soil stabilization product"; "subsurface water flow and spring activity should be controlled in development areas through the use of subdrains"], 19 ["we recommend that landsliding at the site be further characterized in order to assess the potential impact to the site grading and proposed development"].)

If implementation of a GHAD is necessary to reduce impacts to less than significant levels, this requirement should be identified as a mitigation measure.

Please also explain how the project is consistent with General Plan Policies 10-22, 10-24, 10-26, 10-28, and 10-29 (see Attachment 2). The slides, steepness of the slopes in and above the slides, and the highly visible scar that likely would be left after slide mitigation (e.g., exposed bedrock from the ridgeline down 80-100 vertical feet of the repair area and/or use of geogrid reinforcing) all fly in the face of the intent of General Plan Safety Element Policies.

9) Hazards and Hazardous Materials:

In its discussion of Impact HAZ-5 ("would not expose people or structures to a significant risk of loss, injury or death involving wildland fires"), the Draft EIR states that "consistent with the SRVFPD Exterior Hazard Abatement Program, open space areas adjacent to the Residential Development Area would be required to provide a 15-foot disked or bladed fuel break along the perimeter of the property." (DEIR, p. 3.7-16.) Please explain more about the SRVFPD Exterior Hazard Abatement Program. Who ensures compliance with this program and how? If these measures are not codified, why doesn't the Draft EIR include these requirements as mitigation measures?

10) Noise:

The Draft EIR concludes that Impact NOI-1 ("exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance") is less than significant with mitigation. (DEIR, pp. 3.10-18 to 3.10-30.) In particular, the Draft EIR concludes that pipeline construction noise impacts would be

less than significant with mitigation. (DEIR, p. 3.10-24.) But the analysis for this impact is inaccurate. If the worst case scenario of noise is 85 dBA L_{max} at a distance of 50 feet from the active construction area, and the six-to-eight-foot-high soundwall provides 6 dBA to 10dBA reduction to residences along the west side of San Ramon Valley Boulevard, then wouldn't the residences experience up to 79 dBA L_{max}? Yet the DEIR reports that it will be 69 dBA L_{max}.

Mitigation Measure NOI-1a provides for an "onsite complaint and enforcement manager" to respond to and track complaints. Please explain how noise complaints be handled. Will relocation be offered? Or will activities be stopped? (DEIR, p. 3.10-29.) The mitigation measure should be revised to specify the potential avenues for redressing complaints.

Mitigation Measure NOI-1b requires all proposed residential units located within 216 feet of the centerline of Camino Tassajara to include air conditioning or some form of ventilation system to ensure that windows can remain closed for a prolonged period of time. (DEIR, pp. 3.10-26, 3.10-30.) This mitigation measure appears inadequate. Were other mitigation measures considered? How does this requirement compare to requirements imposed on other projects that the County has conditionally approved because the ambient noise levels are between 60-70 dBA L_{dn}? (DEIR, p. 3.10-12.)

Please explain how the Project is consistent with the following General Plan policies: Policy 11-2 ("standard for outdoor noise levels in residential areas is a DNL of 60 dB"), and Policy 11-4 ("require new single-family housing projects to provide for an interior DNL of 45 dB or less"). (DEIR, p. 3.10-12.)

Please also explain why long-term noise measurements were only conducted on the Southern Site and not the Northern Site? (DEIR, p. 3.10-6.)

11) Public Services and Recreation:

In the discussion of Impact PSR-1 ("would not result in substantial adverse physical impacts associated with the provision of new or physically altered fire facilities"), the Draft EIR states that "comments and requirements provided by SRVFPD in its review" of the planning application for the Project "would be included as conditions of approval to ensure appropriate access and compliance with all applicable codes and standards." (DEIR, pp. 3.11-11 to -12) But what are these conditions and requirements? Why arethey

not included in the Draft EIR as mitigation measures? Please revise this discussion to ensure there is no improper deferral of mitigation.

The Draft EIR concludes that Impact PSR-2 ("would not result in substantial adverse physical impacts associated with the provision of new or physically altered law enforcement facilities") is less than significant. But there is no substantial evidence to support this conclusion. Police response times are not meeting General Plan Policy 7-59 goals of 5 minutes for 90 percent of all priority 1 and 2 call's emergency response times in urban and suburban areas (DEIR, pp. 3.11-3, 3.11- 8). Actual response times are 11 minutes, 24 seconds to 16 minutes, 46 seconds. And the project's response time could be as high as 17 minutes. Yet, DEIR simply relies upon a vague reference to a "response" from the Sheriff's Office that "did not indicate that the Project would result in the need for new or expanded Sheriff facilities in order to maintain acceptable service ratios, response times, or other performance objectives." (DEIR, p. 3.11-12.) Please provide a copy of any written response from or a more complete summary of any conversations with the Sheriff's Office.

In addition, the DEIR does not address potential impacts on the Town of Danville's Police Department. Because the Town's police department facility and officers in the field are physically closer to this unincorporated area of the County, the Town's officers are frequently first responders to Priority 1 calls under mutual aid. Any addition of units, as well as increased response times due to additional traffic, should be addressed.

12) Utilities and Service Systems:

In the discussion of Impact USS-2 ("would not require or result in the construction of wastewater treatment facilities or expansion of off-site existing facilities") and Impact USS-3 ("would not result in a need for new or expanded off-site storm drainage facilities"), the Draft EIR focuses only on "off-site" facilities. (DEIR, pp. 3.13-35 to 3.13-36.) Yet the corresponding significance thresholds for these impacts does not include the term "off-site" and instead broadly applies to any new facilities. (DEIR, p. 3.13-21.) Please explain this discrepancy.

E. The Draft EIR's analysis of cumulative effects is inadequate and violates CEQA.

An EIR must analyze cumulative impacts because "the full environmental impact of a proposed project cannot be gauged in a vacuum." (*Communities for a Better Environment*

v. Cal. Resources Agency (2002) 103 Cal.App.4th 98, 114.) The CEQA Guidelines define cumulative impacts to be "the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects." (Guidelines, § 15355, subd. (b).) Thus, impacts that are "individually minor" may be "collectively significant." (*Ibid.*)

In assessing a proposed project's contribution to cumulative effects, CEQA requires a lead agency to undertake a two-step analysis. First, the agency must consider whether the combined effects from the proposed project and other projects would be cumulatively significant. And second, if the answer is yes, the agency must then consider whether the "proposed project's incremental effects are cumulatively considerable." (*CBE v. Resources Agency, supra*, 103 Cal.App.4th at p. 120; Pub. Resources Code, § 21083, subd. (b)(2); Guidelines, §§ 15355, subd. (b), 15064, subd. (h)(1).)

Here, the Draft EIR's Cumulative Effects section appears to disregard the fact that impacts that are individually minor may be collectively significant. Only those impacts with significant and unavoidable project-level impacts are found to be cumulatively considerable. (DEIR, pp. 4-5 [greenhouse gas emissions impacts], 4-13 [transportation impacts].) For all the other impacts, the Draft EIR concludes the cumulative impacts are less than cumulatively considerable based on two assumptions: (i) that the Project's project-specific mitigation measures would reduce the project's contribution to cumulative impacts to less than cumulatively considerable levels; and (ii) that other cumulative projects would be similarly required to implement adequate mitigation. These assumptions are not supported by substantial evidence.

For example, in discussing the cumulative Biological Resources impacts, the Draft EIR states that the "required mitigation would reduce the Project's contribution to any significant cumulative impact on special-status wildlife species to less than cumulatively considerable." (DEIR, p. 4-6.) There is no further discussion of why this conclusion is reasonable and accurate. Instead, this conclusory statement is followed by another in the same vein: "Some of the other projects listed in Table 4-1 are located on sites with similar biological attributes and, therefore, would be required to mitigate for impacts on special-status plant and wildlife species in a manner similar to the project." There is no true analysis or evidence offered, much less substantial evidence.

Similarly, in discussing cumulative Agricultural Resources impacts, the Draft EIR states that, "due to the increase in urbanization . . . since the 1940s," there is an "existing cumulatively significant impact related to loss of farmland." (DEIR, p. 4-4.) And the

Draft EIR admits that the project could result in the conversion of lands from Farmland of Local Importance to non-agricultural uses. But there is no explanation for why the project's incremental effects are not cumulatively considerable. (DEIR, p. 4-4.)

F. The Draft EIR lacks a reasonable range of alternatives and improperly dismisses alternative locations or offsite alternatives.

CEQA requires an EIR to "describe a range of reasonable alternatives to the project . . . which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects . . . and evaluate the comparative merits of the alternatives." (Guidelines, §§ 15126.6, subd. (a), 15002, subd. (a)(3).) The evaluation of alternatives must "contain analysis sufficient to allow informed decision making." (*Laurel Heights I, supra*, 47 Cal.3d at pp. 404, 406 [requiring "meaningful detail"]; *Kings County, supra*, 221 Cal.App.3d at p. 735 [finding EIR lacked "quantitative, comparative analysis" of alternatives].) An "EIR is nonetheless defective under CEQA" when it fails to explain a lead agency's "analytic route." (*Laurel Heights I*, at p. 404; *Kings County*, at p. 731 ["[a]n inadequate discussion of alternatives constitutes an abuse of discretion"].)

The Draft EIR here only analyzes two alternatives: the No Project Alternative and the Reduced Intensity Alternative. (DEIR, p. 5-2.) Since the No Project Alternative is required by CEQA and contemplates, as required, the consequences of approving nothing, the Reduced Intensity Alternative is the only true "project" alternative analyzed. And, although the Reduced Intensity Alternative would avoid the project's significant unavoidable greenhouse gas emissions impacts, significant and unavoidable transportation impacts would still occur. (DEIR, pp. 5-5, 5-7.) The Draft EIR should be revised to add one or more additional alternatives, and those new alternatives should be aimed at reducing the project's transportation impacts to less than significant levels.

Offsite alternatives should be considered because they are more likely than the Reduced Intensity Alternative to reduce the project's significant and unavoidable transportation impacts. But the Draft EIR improperly dismissed several such alternatives from further consideration, apparently out of concern that those alternatives might look so much better than the proposed project that it would not be fair to the project. The Draft EIR states that "only sites located within or directly adjacent to the ULL in the San Ramon, Danville, Blackhawk area that are currently designated for agricultural uses were considered, *in order to facilitate an equitable comparison of the Project to an alternative project*

location." (DEIR, p. 5-10, italics added.) This rationale is inconsistent with CEQA's mandate to evaluate an adequate range of alternatives that can avoid or substantially lessen the project's significant impacts. The "'applicant's feeling about an alternative cannot substitute for the required facts and independent reasoning" showing the agency's independent "analytical route.'" (*Save Round Valley Alliance v. County of Inyo* (2007) 157 Cal.App.4th 1437, 1458.)

The Draft EIR goes on to reject two specific alternative sites for weak and unsupportable reasons. The Norris Canyon Alternative Site, which would not require adjustment of the ULL, is rejected in part because a project in that location "would likely utilize the Bolinger Canyon Road and Norris Canyon Road intersection, which is currently a four-way, stop-controlled intersection and may need to be signalized to accommodate increased traffic." (DEIR, p. 5-11.) It is unclear why the need for signalization of one intersection is an insurmountable traffic hurdle or why it isn't preferable to the project's creation of significant and unavoidable traffic impacts. An "agency may not simply accept at face value the project proponent's assertion's regarding feasibility" of an alternative. (*Save Round Valley Alliance, supra,* 157 Cal.App.4th at p. 1458.) Another reason offered for rejecting this alternative is that "development on this parcel could potentially be implemented at a greater intensity because approximately 90 acres of the site is within the ULL." This is pure speculation and circular logic. Furthermore, the Norris Canyon Alternative Site consists of two parcels; the parcel closest to existing residential development (i.e., APN 211-210-029) is 31.5+/- acres in size. This fact further erodes the logic that the Norris Canyon Alternative Site can't be considered as a comparable site for the development area of the Tassajara Parks Project because of the anticipated development intensity. The 31.5+/- portion of the Norris Canyon Alternative Site has existing single family residential development directly to the east. Looking at the most proximate 31.5+/- acre portion of abutting residential development indicates the presence of 48 lots with an average lot size in excess of 17,750 square feet (i.e., an average lot size in excess of 225% of the average lot size proposed in the Tassajara Parks Project). The existing residential development on this 31.5+/- acres would serve as a good representation of the reasonable development yield for a 30+/- acre area with gentle to moderate slopes in close proximity of the ULL (i.e., the Tassajara Parks Project Site). The analysis that should have occurred looking at the Norris Canyon Alternative Site arguably could have also served to provide direction for an "Environmentally Superior Alternative Plan" for the Tassajara Parks Project. The Draft EIR can easily define an alternative at the Norris Canyon site that includes the same number of residential units as the proposed project. Since the Draft EIR rejected this alternative from further

consideration, there is no analysis of whether or not this alternative would be able to avoid or lessen the project's significant and unavoidable transportation impacts.

The reasons for rejecting Chapparal Court Alternative Site are equally unconvincing. CEQA does not restrict an agency's authority to consider an adequate range of alternatives to only those that perfectly match a proposed project. The Draft EIR states that "residential development on this site would likely create significant traffic impacts requiring mitigation, particularly on San Ramon Valley Boulevard." (DEIR, p. 5-12.) Again, it is unclear why the need for mitigation should be used to reject an alternative without further analysis. The Draft EIR also repeats the same reason noted above that "development on this parcel could potentially be implemented at a greater intensity because the majority of the site is within the ULL." One of the two parcels constituting the Chapparal Court Alternative Site is also close in size to the proposed development area in the Tassajara Parks Project (i.e., APN 211-010-042, at 20+/- acres in size). As with the Norris Canyon Alternative Site, there is existing residential development directly east of the Chapparal Alternative Site. The abutting 30+/- acres of the most proximate residential development to the east of the Chapparal Court Alternative Site contains 72 lots with an average lot size measurably larger than is proposed by the Tassajara Parks Project (i.e., 10,500+/- square feet versus 7,850+/- square feet in the Tassajara Parks Project - giving an average lot size that is 133% larger than the average lot size proposed in the Tassajara Parks Project). It is noteworthy that an application for single family residential development over the 20+/- acre Chapparal Court parcel and a 10-acre portion of the larger parcel making up the Alternative Site could be processed.

Finally, the Town recommends that the Reduced Intensity Alternative be modified to have the 30-acre development envelope include a maximum of 65 total units, including ten below market rate units to meet the project's 15% inclusionary housing requirement. This modified Reduced Intensity Alternative should include withinin the 30-acre Residential Development Area: (1) all proposed residential lots and project roadways; (2) the requisite area for roadway dedication along Camino Tassajara; (3) a 35-to-40-foot-wide buffer landscape area along the project frontage on Camino Tassajara; (4) the detention basin/ storm water treatment facility; (5) the area necessary for debris benches at the interface of project lots or roadways and natural or engineered slopes; and (6) the area necessary to correct landslides to provide for the project's development. This layout should avoid the slopes containing or abutting the deep seated landslide. This plan should limit the corrective work for the large landslide at the middle rear section of the current project layout to construction of keyways at the toe of the slide to lessen the probability of a subsequent major failure of the slide.

G. The Draft EIR's cursory discussion of growth-inducing impacts ignores the potential impacts that would result from the removal of a major obstacle to population growth: adequate water supply.

It is "settled that [an] EIR must discuss growth-inducing impacts even though those impacts are not themselves a part of the project under consideration, and even though the extent of the growth is difficult to calculate." (*Napa Citizens for Honest Government v. Napa County Bd. of Supervisors* (2001) 91 Cal.App.4th 342, 368.) Thus, EIRs 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, subd. (d).) This mandate applies especially where, as here, a project "would remove obstacles to population growth." (*Ibid.*)

The Draft EIR only provides a cursory analysis of the project's growth-inducing impacts, populated with conclusory statements unsupported by substantial evidence. (DEIR, pp. 6-1 to 6-2.) In a single paragraph of analysis, the Draft EIR explains that the "nominal 0.07 percent" increase in the County's population "is considered negligible, and, therefore, direct population growth would be less than significant." (DEIR, p. 6-2.) The Draft EIR goes on to state that "urban infrastructure would be extended only to the 30-acre Residential Development Area, [and] adjacent areas would remain outside of the Contra Costa Urban Limit Line, thereby prohibiting further expansion." (DEIR, p. 6-2.) This analysis is insufficient. The Draft EIR needs to consider and analyze the potential growth-inducing impacts of securing more water than the project is expected to need. In the Utilities and Service Systems section, the Draft EIR discloses that the Long-term Water Purchase Agreement Term Sheet provides for the purchase of up to 200 acre feet per year (AFY) of Calaveras Public Utility District Water. Since the project's maximum demand is only 47 AFY, the Draft EIR goes on to explain that the "final" purchase agreement is likely to be 100 AFY, with 50 AFY of water "for an ample margin of safety." (DEIR, p. 3.313-26.) If the project proceeds under this water supply option, the Project would have secured twice the amount of water needed to serve the project. This is the very definition of removing an obstacle of future growth.

Similarly, if the project proceeds with recycled water as its water source, then the project would result in the construction of a 1.8-mile recycled water pipeline along San Ramon Valley Boulevard from Acosta Boulevard to Montevideo Avenue. (DEIR, p.

3.13-31.) This length of pipeline is "not currently included in future recycled water projects." (DEIR, p. 3.13-31.) Thus, the project would again be removing an obstacle to growth by providing infrastructure that was not previously planned.

H. Energy Conservation Analysis.

CEQA Guidelines, Appendix F states: "If appropriate, the energy intensiveness of materials may be discussed. [¶] 2. The effects of the project on local and regional energy supplies and on requirements for additional capacity. [¶] 3. The effects of the project on peak and base period demands for electricity and other forms of energy. [¶] 4. The degree to which the project complies with existing energy standards. [¶] 5. The effects of the project on energy resources. [¶] 6. The project's projected transportation energy use requirements and its overall use of efficient transportation alternatives." Appendix F also lists mitigation measures that may be included in the EIR: "1. Potential measures to reduce wasteful, inefficient and unnecessary consumption of energy during construction, operation, maintenance and/or removal. The discussion should explain why certain measures were incorporated in the project and why other measures were dismissed. [¶] 2. The potential of siting, orientation, and design to minimize energy consumption, including transportation energy, increase water conservation and reduce solid-waste. [¶] 3. The potential for reducing peak energy demand. 4. Alternate fuels (particularly renewable ones) or energy systems. [¶] 5. Energy conservation which could result from recycling efforts."

The Draft EIR's discussion of Energy Conservation is inadequate. (DEIR, pp. 6-3 to 6-7.) Specifically, Draft EIR improperly relies solely upon compliance with the building code to mitigate operational and construction energy impacts, without further discussion of the Appendix F criteria. This strategy was disapproved in *California Clean Energy Committee v. City of Woodland* (2014) 225 Cal.App.4th 173, 211. Additionally, the Draft EIR's provision of transportation fuel consumption estimates in Table 6-2 is not sufficient assessment of the transportation energy impacts. How does 595 gallons per day compare to other projects? Why couldn't mitigation measures be required to reduce this? The Draft EIR should explicitly consider the feasibility of the mitigation measures suggested in Appendix F, including the use of more onsite renewable energy.

III. The Project's inconsistency with the General Plan violates both the Planning and Zoning Law and the Subdivision Map Act.

The general plan has been described as the "constitution for all future development" and thus all local land use decisions must be consistent with it.[19] The Planning and Zoning Law provides "[c]ounty or city ordinances shall be consistent with the general plan."[20] The Subdivision Map Act similarly provides that "[n]o local agency shall approve a tentative map, or a parcel map for which a tentative map was not required, unless the legislative body finds that the proposed subdivision, together with the provisions for its design and improvement, is consistent with the general plan."[21] The local agency must deny the tentative map if it is not consistent with the general plan.[22]

A project is "inconsistent with a general plan 'if it conflicts with a general plan policy that is fundamental, mandatory, and clear.'"[23] In the recent *Spring Valley Lake Association v. City of Victorville* case, the Court of Appeal disapproved of the city's general plan consistency finding because the project failed to comply with a "specific, mandatory, and fundamental" requirement.[24] The city's general plan included an implementation measure requiring "all new commercial or industrial development to generate electricity on-site to the maximum extent possible."[25] The city's project approvals for the commercial retail development did not require on-site electricity generation, effectively finding it infeasible.[26] But the court concluded that the city failed to "provide facts, reasonable assumptions, or expert opinion amounting to substantial evidence to

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[19] / *O'Loane v. O'Rourke* (1965) 231 Cal.App.2d 774, 782.
[20] / Gov. Code, § 65860, subd. (a).
[21] / Gov. Code § 66473.5.
[22] / See Gov. Code § 66474, subds. (a) & (b). Other findings that must result in denial of a tentative map include that the site is not physically suitable for the development, the design is likely to cause substantial environmental damage or serious public health problems, and that the design would conflict with a public easement. (Gov. Code § 66474, subds. (c)-(g).)
[23] / *Spring Valley Lake Assn. v. City of Victorville* (May 25, 2016, D069442) __ Cal.Rptr.3d__ [2016 WL 3361554 at p. 4] (*Spring Valley*) [citing *Endangered Habitats League, Inc. v. County of Orange* (2005) 131 Cal.App.4th 777, 782].
[24] / *Id.* at p. 5.
[25] / *Id.* at p. 3.
[26] / *Id.* at p.4.

support a conclusion solar power generation or other alternatives for on-site electricity generation [were] completely infeasible."[27]

Despite the deference afforded to an agency's fact-finding and the deference that courts must pay to agencies interpreting their own plans and policies, it is not uncommon for courts to overturn project approval when projects are inconsistent with general plan policies that are *fundamental, mandatory, and clear*. For example, in *Families Unafraid to Uphold Rural El Dorado County v. Board of Supervisors* (1998) 62 Cal.App.4th 1332, 1340-1342, the court found that a residential subdivision was inconsistent with a general plan land use element policy that restricted low density residential (LDR) designations to land contiguous to community regions or rural centers. The court noted that the project's use of the LDR designation was at odds with undisputed evidence showing that the project site was not contiguous to community regions or rural centers. Concluding that the policy at issue was fundamental and mandatory, the appellate court agreed with plaintiffs that the project was inconsistent with the land use element and reversed the trial court's ruling in favor of the county.

Similarly, in *Endangered Habitats League, Inc. v. County of Orange* (2005) 131 Cal.App.4th 777, 783-784, the court held that the project was inconsistent with the general plan's traffic service level policy. The county's general plan included a policy requiring projects to achieve LOS C or better under a specific method of analysis. The EIR explained that it used a different method of analysis to achieve LOS C because the project would result in LOS D or E under the general plan's preferred method of analysis. The court disapproved of this attempt to skirt the requirements in the general plan policy, deemed the project inconsistent, and set aside the approval.

Here, as explained above, the Tassajara Parks project is inconsistent with several General Plan policies and goals, many of which are arguably "fundamental, mandatory, and clear." The Project includes a General Plan amendment, rezoning of both the Northern and Southern Sites, and a subdivision/ vesting tentative map.[28] Therefore, the County must make required findings about the Project's consistency with the General Plan under Government Code sections 65860, 66473.5, and 66474.

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[27] / *Ibid.*

[28] / Draft EIR, p. 2-2.

In addition to responses to the arguments above relating to General Plan inconsistencies, the Town requests that the County specifically explain how the Project is consistent with the following policies and goals:

- General Plan Goal 3-G
- General Plan Goals LU3.8-3-A, 9-B, 9-9, 9-15.
- Policies 3-7, 3-9, 3-10, 3-11
- Policies 7-59, 7-137, 7-142
- Policies 8-4, 8-6, 8-9, 8-27
- Policies 9-14, 9-22, 9-24
- Policies 10-22, 10-24, 10-26, 10-28, 10-29
- Policies 11-2, 11-4

The existing explanations in the Draft EIR for the Project's consistency with these and other policies noted in sections above are insufficient. Please provide additional analysis and information instead of simply repeating what is already stated in the Draft EIR.

IV. Conclusion

The Town appreciates this opportunity to provide comments on the Draft EIR for the Tassajara Parks Project and looks forward to working with the County to address the issues raised in this letter.

Very truly yours,

Joseph A. Calabrigo
Town Manager

cc: Mayor and Town Council
Supervisor Anderson, District 2
Sabrina Teller & L. Elizabeth Sarine, Remy Moose Manley, LLP

Enclosures

Attachment 1:	Stantec's July 15, 2016 Peer Review of Tassajara Parks Traffic Impact Study
Attachment 2:	Town Staff's Geotechnical and Grading Concerns
Attachment 3:	County Code sections related to Urban Limit Line & Measure C
Attachment 4:	Contra Costa General Plan- Chapters 1, 3, & 4
Attachment 5:	Contra Costa Transportation Authority's Measure J Transportation Sales Tax Expenditure Plan
Attachment 6:	Board of Supervisor's July 12, 2005 staff report on Urban Limit Line
Attachment 7:	Measure L Voter Pamphlet (November 2006 election)
Attachment 8:	Board of Supervisor's November 3, 2009 approval of Bay Point Waterfront Project

CONTRA COSTA COUNTY

CLIMATE ACTION PLAN



Los Vaqueros Reservoir, Contra Costa County

ATTACHMENT B

GHG Inventory & Forecast

#3



INTRODUCTION

The greenhouse gas emissions (GHG) inventory identifies the major sources of GHG emissions from activities occurring within unincorporated Contra Costa County. This chapter presents the results of 2005 inventory, which will serve as a baseline against which future progress can be measured, and a 2013 inventory, which will assist with the assessment of measure interim progress toward future GHG reduction targets. The chapter also presents the results of the forecasts of GHG emissions for the years 2020 and 2035. Specifically, this chapter:

- Presents GHG emissions from community-wide activities in the calendar years of 2005 and 2013.
- Identifies GHG emissions from activities which the County can reasonably influence, and excludes all other sources that are primarily regulated by other agencies (e.g., major industrial facilities).
- Summarizes GHG emissions by sector to compare the relative impact between sectors.
- Provides forecasts of how emissions will grow in the community under various scenarios.
- Provides County decision-makers and the community with adequate baseline and forecast information to inform policy decisions.

INVENTORY BACKGROUND

As recommended by the Governor's Office of Planning and Research, many communities in California use the *US Community Protocol for Accounting and Reporting of Greenhouse Gas Emissions* (the US Community Protocol) to identify and assess GHG emissions. This protocol provides guidance on how to measure and report community-wide GHG emissions, including identification of relevant sources or activities and methods used to calculate emissions. The Bay Area Air Quality Management District (BAAQMD) has also issued a GHG Plan Level Quantification Guidance document, which provides guidance for Bay Area communities to develop GHG inventories. The 2005 and 2013 inventories are consistent with the recommended practices in these two documents. In accordance with the US

#3 Climate Action Plan

Community Protocol and BAAQMD guidance, these inventories include emissions from the following sources, or sectors:

- **Residential energy**: Electricity and natural gas used in residential buildings.
- **Nonresidential energy**: Electricity and natural gas used in nonresidential buildings, including offices, retail stores, government facilities, institutional facilities, and some industrial buildings.
- **Solid waste**: Emissions from waste produced in the county for the inventory year.
- **Landfills**: Emissions from the decomposition of waste deposited in landfills from prior years.
- **On-road transportation**: On-road vehicle trips, including cars and trucks.
- **Off-road equipment**: Portable equipment and vehicles not used for transportation on roads, including construction and landscaping equipment.
- **Water and wastewater**: Energy used to pump and treat water and wastewater, and emissions from the processing of wastewater.
- **BART**: Energy used by BART trips beginning or ending in the unincorporated area.
- **Agriculture**: Emissions from fertilizer use, farming equipment, and the digestive processes of livestock.

In addition to the above activities and GHG sources, the County identified GHG emissions from the following sources as informational items:

Stationary Sources

Contra Costa County is home to some of the largest GHG-emitting stationary source facilities in the state of California. Stationary sources are nonmoving sources, fixed-site producers of pollution such as power plants, chemical plants, oil refineries, manufacturing facilities, and other industrial facilities. Emissions from stationary source facilities and from the energy required to power those facilities accounted for the majority of all emissions within the unincorporated county.

Acknowledging that local governments have little influence over energy use at or emissions from stationary sources, the state of California has developed a market-based program created through the Assembly Bill (AB) 32 2006 Scoping Plan, often referred to as the "cap-and-trade" program. In order to identify a GHG reduction target attainable through local action, stationary source emissions and emissions from energy used at stationary source facilities were not included in the baseline inventory used in this CAP.



Stationary sources, such as this refinery near Martinez, are some of the biggest GHG emitters in the county.

- **Stationary Source GHG Emissions**—Direct process emissions and energy used by industrially classified uses including petroleum refineries, power plants, chemical manufacturing plants, and wastewater treatment plants in the unincorporated county.
- **Energy Use by Major Industrial Facilities**—Electricity and natural gas use by refineries, chemical facilities, and major manufacturing plants in the unincorporated county.

GHG Inventory & Forecast

#3

The stationary source totals identified by BAAQMD for facilities in unincorporated Contra Costa County, as well as the electricity and natural gas used by these facilities, have been excluded from the County's GHG inventory as they are existing sources regulated by BAAQMD and the California Air Resources Board (CARB). For a more detailed discussion of how these sources were analyzed and excluded from the baseline inventory, see **Appendix C.**

DATA COLLECTION METHODS AND ANALYSIS

The GHG emissions inventory starts with collecting activity data for each sector listed above, such as the kilowatt-hours (kWh) of electricity used or therms of natural gas used for the residential, commercial, and industrial energy sectors, the vehicle miles traveled (VMT) for the transportation sector, or million gallons of water used by the community in a single calendar year. These activities are converted into GHG emissions using an emissions factor or coefficient. These emissions factors are supplied by the energy provider or emissions modeling software and indicate the GHGs that are emitted for every kWh produced, mile traveled, or ton of waste disposed.

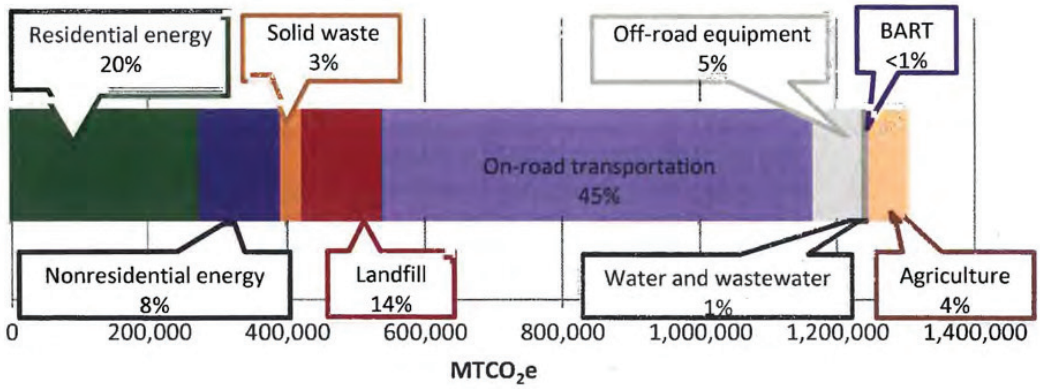
The inventory measures three primary GHG emissions: carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O). These GHGs are then converted to carbon dioxide equivalents (CO_2e), enabling the County to consider different GHGs in comparable terms. The conversion is done by comparing the global warming potential (GWP) of each gas relative to CO_2. For example, a single metric ton (MT) of methane traps 28 times as much heat over a 100-year time frame as a ton of CO_2, meaning that the GWP of methane is 28. As a result, a single MT of methane is equal to 28 $MTCO_2e$. Similarly, nitrous oxide has a GWP of 265, and so a single MT of nitrous oxide is equal to 265 $MTCO_2e$. The values of GWPs change as a result of improved scientific research and understanding. The GWPs used in this inventory are from the Intergovernmental Panel on Climate Change's Fifth Assessment Report (IPCC).

2005 BASELINE INVENTORY RESULTS

This section provides a brief overview of the 2005 baseline GHG emissions for unincorporated Contra Costa County. For a more detailed explanation of how each sector of GHG emissions was calculated, see **Appendix C**. In 2005, activities in the unincorporated county and within the County's jurisdictional land use control generated approximately 1,403,610 metric tons of carbon dioxide equivalents ($MTCO_2e$).

On-road transportation was the largest source of 2005 GHG emissions in Contra Costa County, contributing approximately 628,200 $MTCO_2e$, or 45% of emissions. The next-largest source of emissions, residential energy use, contributed approximately 274,960 $MTCO_2e$, or 20% of emissions. Landfills were the third-largest sector, contributing 193,950 $MTCO_2e$ or 14% of emissions. The nonresidential energy use sector was the fourth-largest emissions source, contributing 118,740 $MTCO_2e$ (8%); off-road emissions were the fifth-largest emissions source (71,880 $MTCO_2e$, or 5%); agriculture was the sixth-largest emissions source (57,320 $MTCO_2e$, or 4%). The solid waste, water and wastewater, and BART sectors represented 3%, 1%, and less than 1% of emissions, respectively. **Figure 3.1** shows 2005 emissions by sector, while **Table 3.1** shows 2005 activity data and emissions by sector and subsector.

Figure 3.1. 2005 GHG Emissions by Sector



Source: Michael Baker International 2015

Table 3.1. 2005 Activity Data and GHG Emissions by Sector and Subsector

Sector	Subsector	Activity Data	Unit	$MTCO_2e$	Total $MTCO_2e$	Percent of Total $MTCO_2e$
Residential energy	Residential electricity	488,236,740	kWh	110,120	274,690	20%
	Residential natural gas	30,919,160	Therms	164,570		
Nonresidential energy	Nonresidential electricity	284,558,070	kWh	64,180	118,740	8%
	Nonresidential natural gas	10,201,300	Therms	54,560		
Solid waste	Waste disposed	170,780	Tons disposed	48,450	48,450	3%
Landfill	Waste in place	34,455,010	Tons in place	193,9500	193,950	14%
On-road transportation	On-road transportation	1,291,819,230	Annual VMT	628,200	628,200	45%
Off-road equipment	Lawn and garden equipment	-	None	3,820	71,880	5%
	Construction equipment	-	None	68,060		
Water and wastewater	Indirect water use	26,443,770	kWh	5,960	8,080	1%
	Indirect wastewater use	6,199,120	kWh	1,400		
	Direct wastewater emissions	-	None	720		
BART	BART trips	38,111,050	Passenger miles	2,300	2,300	<1%
Agriculture	Fertilizer application	200,980	Crop acres	3,920	57,320	4%
	Agriculture equipment	-	None	23,960		
	Livestock	16,500	Heads of livestock	29,440		
TOTAL					**1,403,610**	**100%**

Source: Michael Baker International 2015

GHG Inventory & Forecast

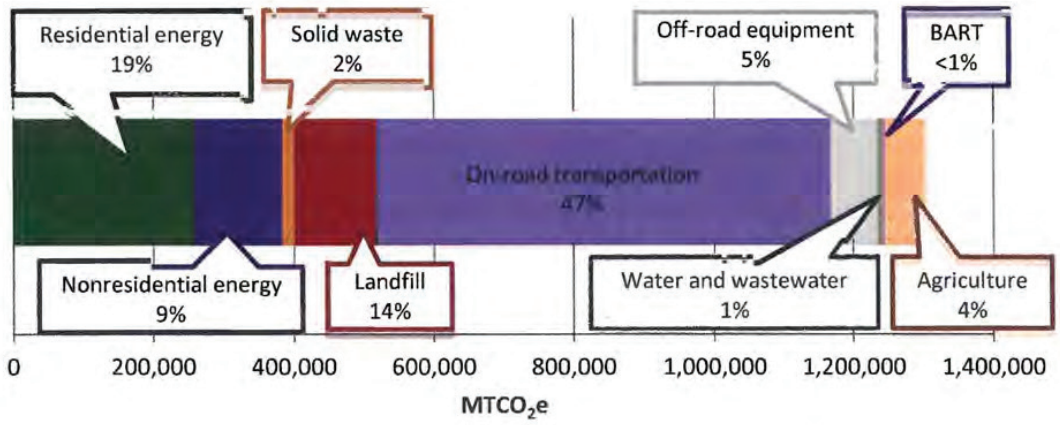
#3

2013 INVENTORY UPDATE

The 2013 inventory provides an interim update toward the 2020 GHG reduction target and identifies how sources of emissions have changed since 2005, which can help direct future GHG reduction policies. In 2013, activities in the unincorporated areas of Contra Costa County within the County's jurisdictional control resulted in 1,392,450 $MTCO_2e$, a 1% decrease from 2005 levels.

The on-road emissions sector was again the largest, contributing 651,130 $MTCO_2e$, or 47% of the county's emissions. Residential energy was the second-largest source of emissions with approximately 258,420 $MTCO_2e$ or 19% of emissions, followed by landfills with approximately 196,500 $MTCO_2e$ or 14% of emissions. Nonresidential energy was the fourth-largest source of emissions with approximately 125,350 $MTCO_2e$ (9%); off-road equipment contributed approximately 66,230 $MTCO_2e$ (5%) and agriculture contributed approximately 58,200 $MTCO_2e$ (4%). The smallest sources of emissions, solid waste, water and wastewater, and BART, were responsible for 2%, 1%, and less than 1% of emissions, respectively. 2013 emissions by sector are shown in **Figure 3.2**, and activity data and emissions by subsector for 2013 are shown in **Table 3.2**. **Table 3.3** shows the difference in emissions by sector between 2005 and 2013.

Figure 3.2. 2013 GHG Emissions by Sector



Source: Michael Baker International 2015

Table 3.2. 2013 Activity Data and GHG Emissions by Sector and Subsector

Sector	Subsector	Activity Data	Unit	$MTCO_2e$	Total $MTCO_2e$	Percent of Total $MTCO_2e$
Residential energy	Residential electricity	478,219,710	kWh	93,380	258,420	19%
	Residential natural gas	31,007,110	Therms	165,040		
Nonresidential energy	Nonresidential electricity	266,216,660	kWh	51,980	125,350	9%
	Nonresidential natural gas	13,784,410	Therms	73,370		
Solid waste	Waste disposed	92,780	Tons disposed	26,540	26,540	2%
Landfill	Waste in place	41,785,650	Tons in place	196,500	196,500	14%
On-road transportation	On-road transportation	1,349,279,980	Annual VMT	651,130	651,130	47%
Off-road equipment	Lawn and garden equipment	-	None	3,180	66,230	5%
	Construction equipment	-	None	63,050		
Water and wastewater	Indirect water use	28,004,290	kWh	5,470	7,400	1%
	Indirect wastewater use	6,198,590	kWh	1,210		
	Direct wastewater emissions	-	None	720		
BART	BART trips	44,417,320	Passenger miles	2,680	2,680	<1%
Agriculture	Fertilizer application	204,030	Crop acres	4,280	58,200	4%
	Agriculture equipment	-	None	18,910		
	Livestock	19,110	Heads of livestock	35,010		
TOTAL					**1,392,450**	**100%**

Source: Michael Baker International 2015

Table 3.3. Comparison of 2005 and 2013 GHG Emissions by Sector

Sector	2005 $MTCO_2e$	2013 $MTCO_2e$	Percent Change, 2005–2013
Residential energy	274,690	258,420	-6%
Nonresidential energy	118,740	125,350	6%
Solid waste	48,450	26,540	-45%
Landfill	193,950	196,500	1%
On-road transportation	628,200	651,130	4%
Off-road equipment	71,880	66,230	-8%
Water and wastewater	8,080	7,400	-8%
BART	2,300	2,680	17%
Agriculture	57,320	58,200	2%
Total	**1,403,610**	**1,392,450**	**-1%**

GHG Inventory & Forecast

#3

GHG EMISSIONS FORECAST

A GHG emissions forecast is an estimate of how emissions will change in the future based on anticipated population and jobs growth in the unincorporated areas of Contra Costa County, absent of any actions taken at the federal, state, regional, or local level to reduce emissions. This forecast is often referred to as a business-as-usual forecast. A GHG emissions forecast allows elected officials, County staff, and community members to determine the volume of reductions needed to meet GHG reduction goals.

Consistent with state and regional guidance, as well as widely accepted forecasting methods including the Association of Environmental Professionals white paper on GHG forecasts, the GHG emissions forecast for Contra Costa County assumes that per capita activity data remains constant at 2005 baseline levels. Association of Bay Area Governments (ABAG) demographic growth projections is the primary data source used to forecast GHG emissions. These growth projections are given in **Table 3.4**.

Table 3.4. ABAG Projections for Unincorporated Contra Costa County, 2005–2035

	2005	2013	2020	2035	2005–2035 Change
Population	159,650	162,230	166,100	173,500	6%
Households	57,980	58,550	59,720	61,740	9%
Jobs	41,270	43,210	47,670	50,330	22%
Service Population	200,920	205,440	213,770	223,830	11%

Source: Association of Bay Area Governments 2009, 2013

The anticipated growth scenario identified by ABAG for unincorporated Contra Costa County provides the basis for the County's GHG emissions forecast for the years 2020 and 2035. Emissions in 2020 are forecasted to increase to 1,483,720 $MTCO_2e$, a 6% increase from 2005 levels. Emissions in 2035 are projected to rise to 1,545,980 $MTCO_2e$, a 10% increase from 2005 levels. **Table 3.5** shows emissions by sector for the 2005 baseline inventory and the two forecasted years.

Table 3.5. GHG Emissions by Sector, 2005–2035

Sector	2005 $MTCO_2e$	2013 $MTCO_2e$	2020 $MTCO_2e$	2035 $MTCO_2e$	Percent Change, 2005–2035
Residential energy	274,690	258,420	282,930	292,500	6%
Nonresidential energy	118,740	125,350	137,150	144,810	22%
Solid waste	48,450	26,540	51,550	53,970	11%
Landfill	193,950	196,500	204,560	218,560	13%
On-road transportation	628,200	651,130	662,820	687,370	9%
Off-road equipment	71,880	66,230	76,340	79,890	11%
Water and wastewater	8,080	7,400	8,600	9,000	11%
BART	2,300	2,680	2,450	2,560	11%
Agriculture	57,320	58,200	57,320	57,320	0%
TOTAL	**1,403,610**	**1,392,450**	**1,483,720**	**1,545,980**	**10%**
Percent Change from 2005	-	**-1%**	**6%**	**10%**	-

Source: Michael Baker International 2015

Emissions associated with energy, water, wastewater, BART, solid waste, and off-road equipment are anticipated to grow linearly with household, employment, and service population growth. Emissions from the landfill subsector were forecasted using the landfill modeling software developed by CARB to estimate net fugitive methane emissions in 2020 and 2035, based on the total amount of waste disposed in the landfills located in the unincorporated county. On-road VMT in the GHG forecast were modeled using the Contra Costa Transportation Authority's Travel Demand Forecasting Model and include regional transportation improvements identified in the Comprehensive Transportation Project List.

EXISTING STATE GHG REDUCTION PROGRAMS

The state of California has been proactive in reducing GHG emissions. Several regulations and efforts at the state level will lessen Contra Costa County's future GHG emissions, including vehicle standards, building standards, and the renewable energy content of electricity. As a result, an initial step in the assessment of GHG reductions in the unincorporated county is to apply the potential effects of these activities on Contra Costa County's forecasted emissions. The state programs analyzed are limited to those programs that have been formally adopted the state legislature and governor and implemented by state agencies, except as noted. These results are detailed in **Table 3.6**. The state programs evaluated in the forecast are briefly discussed below, and explained in more detail in **Appendix C**.

California's Renewables Portfolio Standard (RPS)

Governor Jerry Brown established a goal to increase the RPS, which is the percentage of electricity delivered in California generated by renewable sources like solar, wind, and geothermal, to 50% by 2030. On September 11, 2015, the California legislature passed Senate Bill 350 to codify the governor's executive order. The forecast in this Plan assumes the RPS goal of 50% by 2030.

AB 1493 Clean Car Standards and the Low Carbon Fuel Standard

California's Clean Car Standards were established by AB 1493 in 2002, requiring new passenger vehicles to reduce tailpipe GHG emissions from 2009 to 2020. These standards are also often referred to as the Pavley standards, after State Senator Fran Pavley, who authored AB 1493 when she was a member of the state assembly. A related program, the Low Carbon Fuel Standard (LCFS), establishes a goal of a 10% reduction in carbon intensity in transportation fuels. Reductions from the Clean Car Standards and the LCFS were calculated using the EMFAC2011 modeling software created by CARB.

Title 24, Energy Efficiency Standards

California's Title 24 (CalGreen) energy standards are updated every few years (the most recent update went into effect on July 1, 2014). These are statewide standards applied at the local level by city and county agencies through project review. The California Energy Commission (CEC) provides information on the energy efficiency of each new set of Title 24 standards relative to the previous standards. The calculation of CalGreen energy reductions assumes that all development occurring after 2005 will comply with the version of the Title 24 standards which apply at the time of construction. It also assumes that all growth in natural gas and electricity sectors is from new construction.

Table 3.6. Expected GHG Reductions from State Policies, 2020 and 2035

Renewables Portfolio Standard	-41,620	-78,030
Clean Car Standard and LCFS	-173,480	-236,270
Title 24 Standards	-2,840	-7,970
TOTAL	**-217,940**	**-322,270**

Source: Michael Baker International 2015

The regulations implemented by the state will have a profound impact on Contra Costa's GHG emissions. As shown in **Table 3.7**, reductions from state activities are expected to reduce emissions below baseline levels by 2020, and to continue to decrease emissions by 2035 despite population growth.

Table 3.7. GHG Emissions with State Reduction Actions, 2005–2035

Sector	2005 ($MTCO_2e$)	2013 ($MTCO_2e$)	2020 ($MTCO_2e$)	2035 ($MTCO_2e$)	Percent Change, 2005–2035
Residential energy	274,690	258,420	257,310	242,280	-12%
Nonresidential energy	118,740	125,350	119,980	112,170	-6%
Solid waste	48,450	26,540	51,550	53,970	11%
Landfill	193,950	196,500	204,560	218,560	13%
On-road transportation	628,200	651,130	489,340	451,100	-28%
Off-road equipment	71,880	66,230	76,340	79,890	11%
Water and wastewater	8,080	7,400	6,930	5,860	-27%
BART	2,300	2,680	2,450	2,560	11%
Agriculture	57,320	58,200	57,320	57,320	0%
TOTAL	**1,403,610**	**1,392,450**	**1,265,620**	**1,223,170**	**-13%**
Percent Change from 2005	-	**-1%**	**-10%**	**-13%**	-

Source: Michael Baker International 2015

GHG Inventory & Forecast

#3

GHG REDUCTION TARGETS

The California Environmental Quality Act (CEQA) Guidelines require that a Qualified GHG Reduction Strategy contain a goal for substantive GHG reductions. The CEQA Guidelines do not identify GHG reduction targets or reduction target years; the State's GHG reduction targets and target years are established through executive order and statute and codified in state codes, regulations, and implementation programs. The key targets and target years are noted in Assembly Bill (AB) 32, Executive Order (EO) 1-03-05, and EO B-30-15.

- EO S-03-05, signed by former Governor Schwarzenegger in 2005, establishes a statewide GHG reduction goal of 80% below 1990 levels by 2050.
- The California Global Warming Solutions Act (AB 32) established a statewide GHG reduction goal of returning to 1990 levels by 2020. The AB 32 Scoping Plan provides the State's strategy to achieve the AB 32 reduction goal and documents progress toward the goal through updates. The first Scoping Plan, released in 2008 and approved in 2011, recommends a greenhouse gas emissions target for local government municipal and community-wide emissions of a 15% reduction from current levels by 2020 to parallel the State's target. Best practice for local climate action planning has interpreted "current" year to be a baseline year of 2005, 2006, or 2007, with 2005 being the most commonly used year.
- EO-B-30-15, signed by Governor Brown in 2015, establishes a statewide GHG reduction goal of 40% below 1990 levels by 2030.

This Plan presents a 2020 GHG reduction target consistent with AB 32 and the AB 32 Scoping Plan, which is to reduce community-wide emissions 15% below 2005 levels by 2020. The Plan also provides a set of GHG reduction measures to achieve the 2020 reduction target.

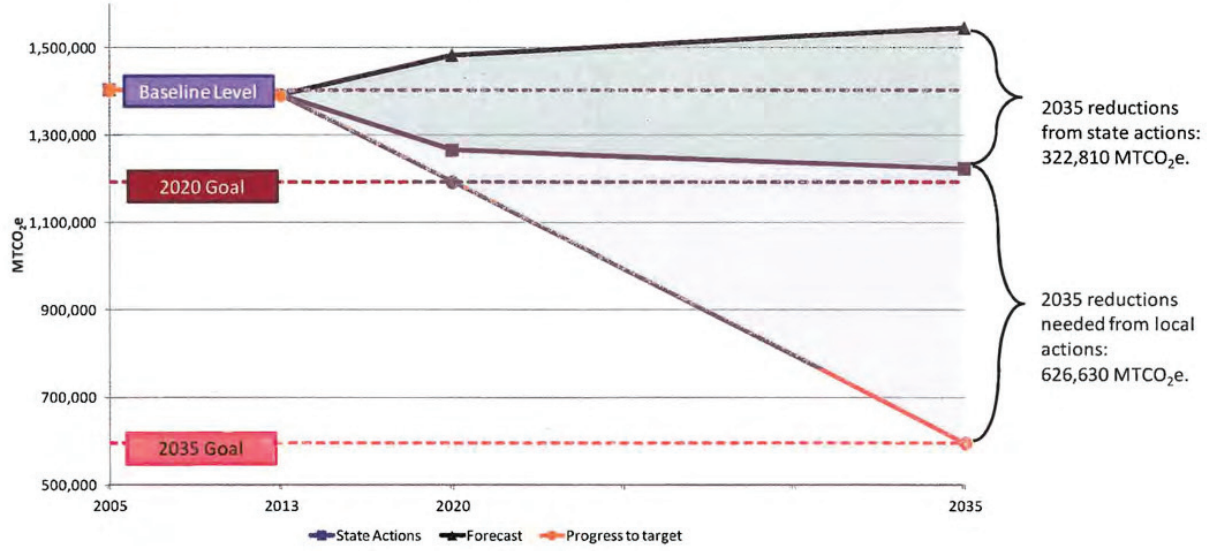
In addition, the CAP forecasts the potential GHG emissions and estimated GHG reductions from proposed measures through 2035. A potential option for the County's 2035 goal is one that reduces emissions to the level specified in EO B-30-15 by 2030 and then continues to reduce on a trajectory that would meet the 2050 target. For 2035, such a goal is equal to 50% below 1990 levels, or approximately 57% below baseline levels. **Table 3.8** and **Figure 3.3** show the difference between the baseline, forecast, and forecast with state reductions relative to the recommended goals, along with the volume of GHG reductions needed from local activities. **Chapter 4** provides a GHG reduction strategy to achieve the goals identified in this chapter.

Table 3.8. Baseline GHG Emissions, Forecasts, and Reduction Goals

	2020 $MTCO_2e$	2035 $MTCO_2e$
2005 Baseline Emissions	1,403,610	1,403,610
Forecasted Emissions	1,483,720	1,545,980
Forecasted Emissions Minus Estimated Statewide Reductions	1,265,620	1,223,170
Reduction Target	1,193,070	596,540
Local Reductions Needed	**-72,550**	**-626,630**

Source: Michael Baker International 2015

Figure 3.3. Baseline GHG Emissions, Forecasts, and Reduction Goals



Appendix C: Inventory & Forecast Report

C



The greenhouse gas emissions (GHG) inventory identifies the major sources of GHG emissions from activities occurring within the unincorporated areas of Contra Costa County in 2005 and 2013, and provides a baseline against which future progress can be measured. Specifically, the inventory:

- Presents GHG emissions from community-wide activities in the calendar years of 2005 and 2013.
- Identifies GHG emissions from activities which the County can reasonably influence, and excludes all other sources that are primarily regulated by other agencies (e.g., major industrial facilities).
- Summarizes GHG emissions by sector to compare the relative impact between sectors.
- Provides forecasts of how emissions will grow in the community under various scenarios.
- Provides County decision-makers and the community with adequate baseline and forecast information to inform policy decisions.

INVENTORY BACKGROUND

In California, and as recommended by the Governor's Office of Planning and Research, many communities use the *US Community Protocol for Accounting and Reporting of Greenhouse Gas Emissions* (the US Community Protocol) to identify and assess GHG emissions. This protocol provides guidance on how to measure and report community-wide GHG emissions, including identification of relevant sources or activities and methods used to calculate emissions. The Bay Area Air Quality Management District (BAAQMD) has issued a GHG Plan Level Quantification Guidance document, which also provides recommendations for Bay Area communities to develop GHG inventories. The 2005 and 2013 inventories are consistent with the recommended practices in these two documents. The 2005 and 2013 inventories also assist in allowing this Climate Action Plan (CAP) to function as a Qualified GHG Reduction Strategy for Contra Costa County, allowing for the streamlining of the environmental review process for projects located in the

GHG EMISSIONS FORECAST

A GHG emissions forecast is an estimate of how emissions will change in the future based on anticipated population and jobs growth in the unincorporated areas of Contra Costa County, absent of any actions taken at the federal, state, regional, or local level to reduce emissions. This forecast is often referred to as a business-as-usual forecast. A GHG emissions forecast allows elected officials, County staff, and community members to determine the volume of reductions needed to meet GHG reduction goals.

Consistent with state and regional guidance, as well as widely accepted forecasting methods including the Association of Environmental Professionals white paper on GHG forecasts, the GHG emissions forecast for Contra Costa County assumes that per capita activity data remains constant at 2005 baseline levels. Association of Bay Area Governments (ABAG) demographic growth projections is the primary data source used to forecast GHG emissions. These growth projections are given in **Table C.17.**

Table C.17. ABAG Projections for Unincorporated Contra Costa County, 2005–2035

	2005	2013	2020	2035	2005–2035 Change
Population	159,650	162,230	166,100	173,500	6%
Households	57,980	58,550	59,720	61,740	9%
Jobs	41,270	43,210	47,670	50,330	22%
Service Population	200,920	205,440	213,770	223,830	11%

Source: Association of Bay Area Governments 2009, 2013

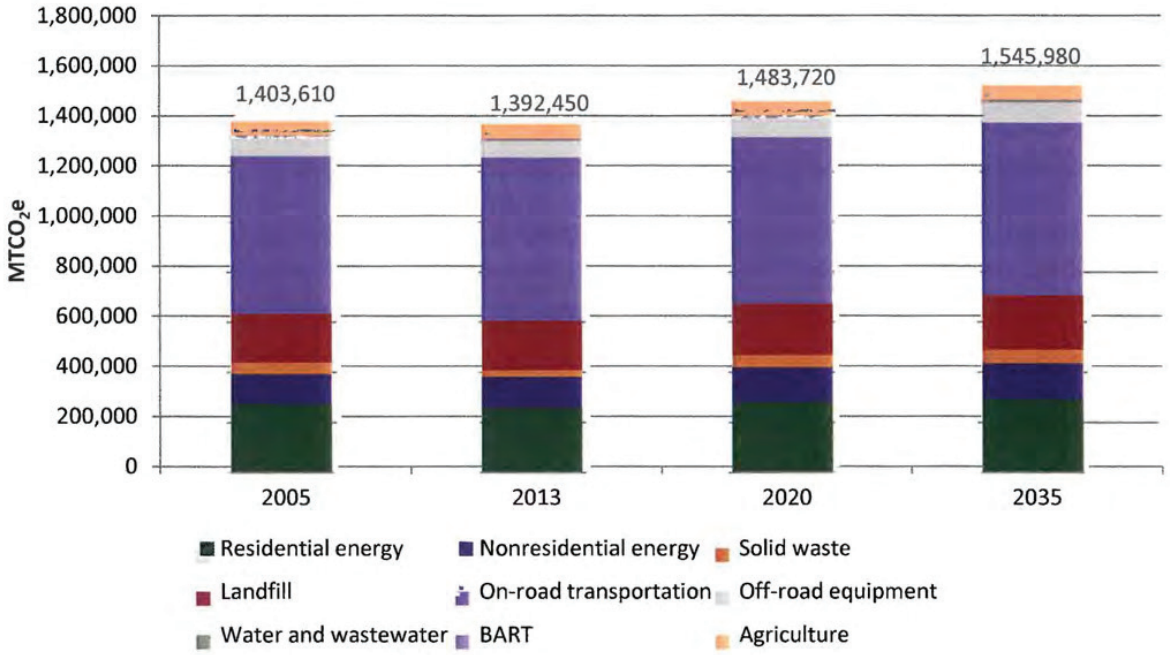
Under the growth projections identified by ABAG, emissions in the unincorporated area are forecasted to increase to 1,483,720 $MTCO_2e$ by 2020, a 6% increase from 2005 levels. Emissions in 2035 are projected to rise to 1,545,980 $MTCO_2e$, a 10% increase from 2005 levels. **Table C.18** and **Figure C.3** show emissions by sector for the 2005 baseline inventory and the two forecasted years.

Table C.18. GHG Emissions by Sector, 2005–2035

Sector	2005 $MTCO_2e$	2013 $MTCO_2e$	2020 $MTCO_2e$	2035 $MTCO_2e$	Percent Change, 2005–2035
Residential energy	274,690	258,420	282,930	292,500	6%
Nonresidential energy	118,740	125,350	137,150	144,810	22%
Solid waste	48,450	26,540	51,550	53,970	11%
Landfill	193,950	196,500	204,560	218,560	13%
On-road transportation	628,200	651,130	662,820	687,370	9%
Off-road equipment	71,880	66,230	76,340	79,890	11%
Water and wastewater	8,080	7,400	8,600	9,000	11%
BART	2,300	2,680	2,450	2,560	11%
Agriculture	57,320	58,200	57,320	57,320	0%
TOTAL	**1,403,610**	**1,392,450**	**1,483,720**	**1,545,980**	**10%**
Percent Change from 2005	-	**-1%**	**6%**	**10%**	-

Source: Michael Baker International 2015

Figure C.3. GHG Emissions by Sector, 2005–2035



Source: Michael Baker International 2015

Emissions associated with energy, water, wastewater, BART, solid waste, and off-road equipment are anticipated to grow linearly with household, employment, and service population growth. Emissions from the landfill subsector were forecasted using the landfill modeling software developed by CARB to estimate net fugitive methane emissions in 2020 and 2035, based on the total amount of waste disposed in the landfills located in the unincorporated county. On-road VMT in the GHG forecast were modeled using the Contra Costa Transportation Authority's Travel Demand Forecasting Model and include regional transportation improvements identified in the Comprehensive Transportation Project List. The forecast assumes that agricultural activities (including off-road agricultural equipment) do not change from baseline levels.

EXISTING STATE GHG REDUCTION PROGRAMS

The state of California has been proactive in reducing GHG emissions. Several regulations and efforts at the state level will lessen Contra Costa County's future GHG emissions, including vehicle standards, building standards, and the renewable energy content of electricity. As a result, an initial step in the assessment of GHG reductions in the unincorporated county is to apply the potential effects of these activities on Contra Costa County's forecasted emissions. The state programs analyzed are limited to those programs that have been formally adopted the state legislature and governor and implemented by state agencies, except as noted. These results are detailed in **Table C.19**.

California's Renewables Portfolio Standard (RPS)

One of the most ambitious renewable energy standards in the country, RPS mandates that 33% of electricity delivered in California be generated by renewable sources like solar, wind, and geothermal by 2020. The California RPS was first codified in 2002 by Senate Bill (SB) 1078 (requiring 20% renewable electricity mix by 2010) and further strengthened in April 2011 with the adoption of SB X 1-2 (requiring 33% renewable electricity mix by 2020). The RPS intended to boost the economy and establish California as a center for the development and use of renewable energy.

Governor Jerry Brown established a goal to increase the RPS to 50% by 2030, and on September 11, 2015, the California legislature passed Senate Bill 350 to codify the governor's executive order. This forecast assumes the RPS goal of 50% by 2030.

AB 1493 Clean Car Standards and the Low Carbon Fuel Standard

California's Clean Car Standards were established by AB 1493 in 2002, requiring new passenger vehicles to reduce tailpipe GHG emissions from 2009 to 2020. These standards are also often referred to as the Pavley standards, after State Senator Fran Pavley who authored AB 1493 when she was a member of the state assembly. A related program, the Low Carbon Fuel Standard (LCFS), establishes a goal of a 10% reduction in carbon intensity in transportation fuels. Reductions from the Clean Car Standards and the LCFS were calculated using the EMFAC2011 modeling software created by CARB, which provides an emissions coefficient that accounts for the impact of these state policies. Emissions reductions per model year and vehicle class were applied to Contra Costa County's transportation emissions.

Emissions reductions per model year and vehicle class were applied to Contra Costa County's transportation emissions.

Title 24, Energy Efficiency Standards

California's Title 24 (CalGreen) energy standards are updated every few years (the most recent update went into effect on July 1, 2014). These are statewide standards applied at the local level by city and county agencies through project review. The CEC provides information on the energy efficiency of each new set of Title 24 standards relative to the previous standards. The calculation of CalGreen energy reductions assumes that all development occurring after 2005 will comply with the version of the Title 24 standards which apply at the time of construction. It also assumes that all growth in natural gas and electricity sectors is from new construction. As a conservative estimate and to avoid creating additional uncertainty in the forecast, reductions from Title 24 assume that the requirements do not become stricter after the 2022 standards go into effect.

Table C.19. GHG Reductions from State Policies, 2020 and 2035

State Policy or Program	2020 ($MTCO_2e$)	2035 ($MTCO_2e$)
Renewables Portfolio Standard	-41,620	-78,030
Clean Car Standard and LCFS	-173,480	-236,270
Title 24 Standards	-2,840	-7,970
TOTAL	**-217,940**	**-322,270**

Source: Michael Baker International 2015

The regulations implemented by the state will have a profound impact on Contra Costa's GHG emissions. As shown in **Table C.20**, reductions from state activities are expected to reduce emissions below baseline levels by 2020, and to continue to decrease emissions by 2035 despite population growth.

Table C.20. GHG Emissions with State Reduction Actions, 2005–2035

Sector	2005 ($MTCO_2e$)	2013 ($MTCO_2e$)	2020 ($MTCO_2e$)	2035 ($MTCO_2e$)	Percent Change, 2005–2035
Residential energy	274,690	258,420	257,310	242,280	-12%
Nonresidential energy	118,740	125,350	119,980	112,170	-6%
Solid waste	48,450	26,540	51,550	53,970	11%
Landfill	193,950	196,500	204,560	218,560	13%
On-road transportation	628,200	651,130	489,340	451,100	-28%
Off-road equipment	71,880	66,230	76,340	79,890	11%
Water and wastewater	8,080	7,400	6,930	5,860	-27%
BART	2,300	2,680	2,450	2,560	11%
Agriculture	57,320	58,200	57,320	57,320	0%
TOTAL	**4,403,610**	**1,392,450**	**1,265,620**	**1,223,170**	**-13%**

Sector	2005 ($MTCO_2e$)	2013 ($MTCO_2e$)	2020 ($MTCO_2e$)	2035 ($MTCO_2e$)	Percent Change, 2005–2035
Percent Change from 2005	-	**-1%**	**-10%**	**-13%**	-

Source: Michael Baker International 2015

GHG REDUCTION TARGETS

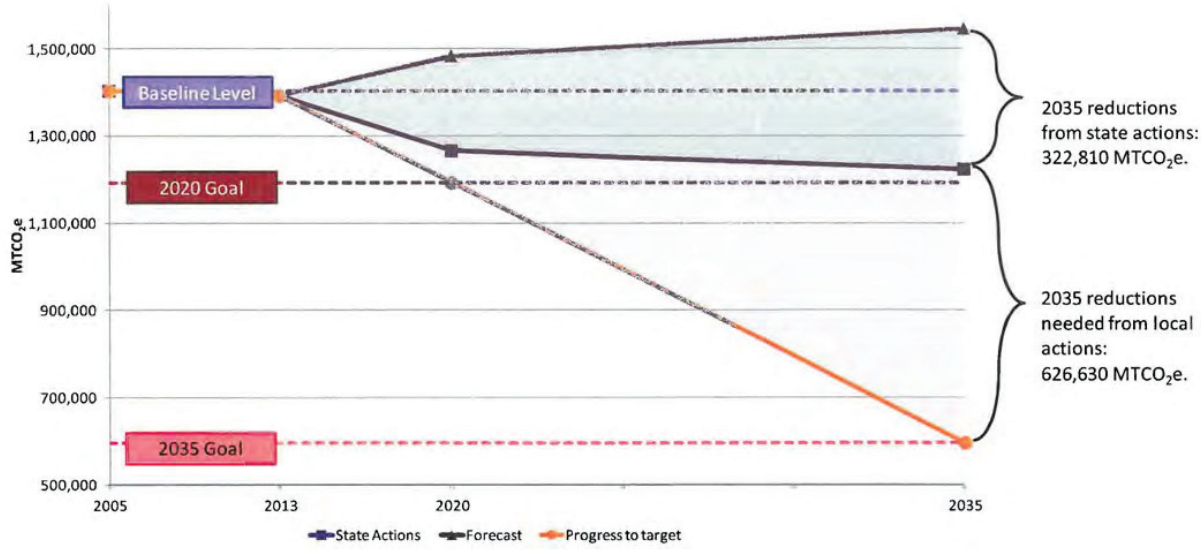
The CEQA Guidelines require that a Qualified GHG Reduction Strategy contain a goal for substantive GHG reductions. The California Global Warming Solutions Act (AB 32) established a statewide GHG reduction goal of returning to 1990 levels by 2020. The AB 32 Scoping Plan, which lays out the strategy to achieve the AB 32 reduction goal, identifies a goal of 15% below baseline levels by 2020 for local communities as being comparable to the 1990 statewide goal for GHG reductions. Executive Order (EO) S-03-05, signed by former Governor Schwarzenegger in 2005, establishes a statewide GHG reduction goal of 80% below 1990 levels by 2050. A 2015 executive order by Governor Brown, EO B-30-15, establishes a statewide reduction goal of 40% below 1990 levels by 2030; legislation codifying both goals is currently being considered by the state legislature. No current or pending legislation would create a statewide goal for 2035. A potential option for a 2035 goal is one that reduces emissions to the level specified in EO B-30-15 by 2030, then continues to reduce emissions on a trajectory that would meet the 2050 target. For 2035, such a goal is equal to 50% below 1990 levels, or approximately 57% below baseline levels. **Table C.21** and **Figure C.4** show the difference between the baseline, forecast, and forecast with state reductions relative to the recommended goals, along with the volume of GHG reductions needed from local activities.

Table C.21. Baseline GHG Emissions, Forecasts, and Reduction Goals

	2020 $MTCO_2e$	2035 $MTCO_2e$
2005 Baseline Emissions	1,403,610	1,403,610
Forecasted Emissions	1,483,720	1,545,980
Emissions with Statewide Reductions	1,265,620	1,223,170
Reduction Target	1,193,070	596,540
Local Reductions Needed	**-72,550**	**-626,630**

Source: Michael Baker International 2015

Figure C.4. Baseline GHG Emissions, Forecasts, and Reduction Goals



Source: Michael Baker International 2015

Appendix D: GHG Reduction Tech Appendix

D



This technical appendix provides a summary of the data sources, assumptions, and performance metrics used in this Climate Action Plan (CAP) for the County of Contra Costa to quantify estimated greenhouse gas (GHG) reductions. The sources and metrics are organized by policy and rely on four primary types of data and research: (1) the County's GHG emissions inventory and forecast, (2) government agency tools and reports, (3) case studies in similar jurisdictions, and (4) scholarly research. The approach to quantification is consistent with the guidance provided by the Bay Area Air Quality Management District (BAAQMD) for the development of a Qualified GHG Reduction Strategy.

The baseline GHG inventory and forecast serve as the foundation for the quantification of the County's GHG reduction measures. Activity data from the inventory forms the basis of measure quantification, including vehicle miles traveled, kilowatt-hours (kWh) of electricity or therms of natural gas consumed, and tons of waste disposed. Activity data was combined with the performance targets and indicators identified by the County and Michael Baker International staff. Together, the metrics of activity data and performance targets and indicators were used throughout the quantification process to calculate the GHG reduction benefit of each measure. This approach ensures that the County's GHG reductions are tied to the baseline and future activities that are actually occurring within Contra Costa County. The approach to quantification is further described in **Chapter 4**.

Measure LUT 4: Vehicle Miles Traveled Reduction

Policy Language: Reduce vehicle miles traveled.

Action Items:

1. Collaborate with BART and other transit providers to increase ridership in the county.
2. Partner with waste haulers and other fleets with regular routes to reduce the frequency of routes where possible.
3. Support and increase the use of carpooling services such as rideshare or casual carpool.
4. Continue to promote voluntary trip reduction programs such as school buses, Rideshare, Spare-the-Air Days, Bike to Work Day, employer shuttles, and alternative work schedules.
5. Work to increase densities within half a mile of BART and Amtrak stations, and within a quarter of a mile of stops for express bus routes.
6. Prioritize alternative mode access to BART and other transit stations.
7. Continue to explore funding transit with development applications and other alternative transportation finance methods.
8. Continue the County's policy of encouraging the establishment of Priority Economic Development Areas in residential communities.

Participation Assumptions:

	2020	2035
Increase in per capita bus ridership from 2005 levels	10%	20%
Increase in BART ridership from 2005 levels (independent of East Contra Costa Extension)	15%	30%
Number of new homes within 1/2 mile of a BART or Amtrak station, or within ¼ mile of a bus stop	230	1,120
Estimated HOV lane cost per mile	$0.22	$0.22

Performance Targets:

	2020	2035
Number of BART extension trips taken by unincorporated county residents	54,400 (average of 40 miles per trip)	143,310 (average of 40 miles per trip)
Number of new bus ridership miles taken by unincorporated county residents	3,274,820	9,728,220
Number of new BART ridership miles taken by unincorporated county residents	1,202,980	4,112,830
Estimated decrease in VMT from HOV lanes	1,170,070	2,678,280

Appendix E: Development Checklist

E



The development checklist (**Table E.1**) was created to help both project applicants and County staff determine where a proposed new development project is consistent with Contra Costa County's Climate Action Plan (CAP). This checklist should be filled out for each new project subject to discretionary review. The County will work with applicants on a project-by-project basis to identify appropriate measures to integrate with the project through conditions of approval or project design, or other techniques as applicable. This approach allows the County to ensure that new projects are consistent with and do not compromise the County's ability to attain the greenhouse gas (GHG) reduction targets outlined in this CAP. To assist with implementation, the checklist provides descriptions and performance criteria that explain how individual projects can comply with requirements. The individual project criterion clarifies implementation of the CAP, providing additional information that is consistent with the assumptions identified in **Appendix D**.

Development Checklist

E

6) Is the project located in a specific plan area?

□ Yes □ No

If yes, which one?

7) Please complete the following table to identify project compliance with any applicable CAP measures.

Table E.1. Standards for CAP Consistency – New Development

Reduction Measure and Applicable Standard	Does the Project Comply?	Notes & Comments
EE 1 & EE 6. New residential development will install high-efficiency appliances and insulation to prepare for the statewide transition to zero net energy.	□ Yes □ No □ N/A	Additional Notes:
EE 1. New nonresidential development will install high-efficiency appliances and insulation.	□ Yes □ No □ N/A	Additional Notes:
RE 1. New residential and nonresidential development will meet the standards to be solar ready as defined by the California Building Standards Code.	□ Yes □ No □ N/A	If yes, how many kW of solar will be installed? Additional Notes:
LUT 2. New single-family houses and multi-family units with private attached garages or carports will provide prewiring for EV charging stations inside the garage or carport.	□ Yes □ No □ N/A	If yes, how many spaces are prewired? Additional Notes:
LUT 2. New multi-family (greater than five units) and nonresidential (greater than 10,000 square feet) developments will provide EV charging stations in designated parking spots.	□ Yes □ No □ N/A	If yes, how many spaces are prewired? Additional Notes:
LUT 4. New residential and nonresidential development will be located within one half-mile of a BART or Amtrak station, or within one quarter-mile of bus station.	□ Yes □ No □ N/A	If yes, what is the vehicle miles traveled reduction from the project? Additional Notes:

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California Environmental Quality Act

Air Quality Guidelines









Updated May 2011

ATTACHMENT C

regulatory, reporting, voluntary, and market mechanisms to achieve quantifiable reductions in GHG emissions to meet the statewide goal.

In December of 2008, ARB adopted its *Climate Change Scoping Plan* (*Scoping Plan*), which is the State's plan to achieve GHG reductions in California, as required by AB 32 (ARB 2008). The Scoping Plan contains strategies California will implement to achieve a reduction of 169 MMT CO_2e emissions, or approximately 28 percent from the state's projected 2020 emission level of 596 MMT of CO_2e under a business-as-usual scenario (this is a reduction of 42 MMT of CO_2e, or almost 10 percent, from 2002-2004 average emissions), so that the state can return to 1990 emission levels, as required by AB 32.

While the Scoping Plan establishes the policy intent to control numerous GHG sources through regulatory, incentive, and market means, given the early phase of implementation and the level of control that local CEQA lead agencies have over numerous GHG sources, CEQA is an important and supporting tool in achieving GHG reductions overall in compliance with AB 32. In this spirit, BAAQMD is considering the adoption of thresholds of significance for GHG emissions for stationary source and land use development projects.

Senate Bill 375

Senate Bill (SB) 375, signed in September 2008, aligns regional transportation planning efforts, regional GHG reduction targets, and land use and housing allocation. SB 375 requires Metropolitan Planning Organizations (MPOs) to adopt a Sustainable Communities Strategy (SCS) or Alternative Planning Strategy (APS), which will prescribe land use allocation in that MPO's Regional Transportation Plan (RTP). ARB, in consultation with MPOs, will provide each affected region with reduction targets for GHGs emitted by passenger cars and light trucks in the region for the years 2020 and 2035. These reduction targets will be updated every eight years, but can be updated every four years if advancements in emission technologies affect the reduction strategies to achieve the targets. ARB is also charged with reviewing each MPO's SCS or APS for consistency with its assigned targets. If MPOs do not meet the GHG reduction targets, transportation projects would not be eligible for State funding programmed after January 1, 2012. New provisions of CEQA incentivize qualified projects that are consistent with an approved SCS or APS, categorized as "transit priority projects."

The revised District CEQA Guidelines includes methodology consistent with the recently updated State CEQA Guidelines, which provides that certain residential and mixed use projects, and transit priority projects consistent with an applicable SCS or APS need not analyze GHG impacts from cars and light duty trucks (CEQA Guidelines §15183.5(c)).

2.2.2. Project-Level GHG Thresholds

Staff recommends setting GHG significance thresholds based on AB 32 GHG emission reduction goals while taking into consideration emission reduction strategies outlined in ARB's Scoping Plan. Staff proposes two quantitative thresholds for land use projects: a bright line threshold based on a "gap" analysis and an efficiency threshold based on emission levels required to be met in order to achieve AB 32 goals.

Staff also proposes one qualitative threshold for land use projects: if a project complies with a Qualified Greenhouse Gas Reduction Strategy (as defined in Section 2.3.4 below) that addresses the project it would be considered less than significant. As explained in detail in Section 2.3.4 below, compliance with a Qualified Greenhouse Gas Reduction Strategy (or similar adopted policies, ordinances and programs), would provide the evidentiary basis for making CEQA findings that development consistent with the plan would result in feasible, measureable, and verifiable GHG reductions consistent with broad state goals such that projects approved under

qualified Greenhouse Gas Reduction Strategies or equivalent demonstrations would achieve their fair share of GHG emission reductions.

Land Use Projects "Gap-Based" Threshold

Staff took eight steps in developing this threshold approach, which are summarized here and detailed in the sections that follow. It should be noted that the "gap-based approach" used for threshold development is a conservative approach that focuses on a limited set of state mandates that appear to have the greatest potential to reduce land use development-related GHG emissions at the time of this writing. It is also important to note that over time, as the effectiveness of the State's implementation of AB 32 (and SB 375) progresses, BAAQMD will need to reconsider the extent of GHG reductions needed over and above those from the implementation thereof for the discretionary approval of land use development projects. Although there is an inherent amount of uncertainty in the estimated capture rates (i.e., frequency at which project-generated emissions would exceed a threshold and would be subject to mitigation under CEQA) and the aggregate emission reductions used in the gap analysis, they are based on BAAQMD's expertise, the best available data, and use conservative assumptions for the amount of emission reductions from legislation in derivation of the gap (e.g., only adopted legislation was relied upon). This approach is intended to attribute an appropriate share of GHG emission reductions necessary to reach AB 32 goals to new land use development projects in BAAQMD's jurisdiction that are evaluated pursuant to CEQA.

Step 1 Estimate from ARB's statewide GHG emissions inventory the growth in emissions between 1990 and 2020 attributable to "land use-driven" sectors of the emission inventory as defined by OPR's guidance document (*CEQA and Climate Change*). Land use-driven emission sectors include Transportation (On-Road Passenger Vehicles; On-Road Heavy Duty), Electric Power (Electricity; Cogeneration), Commercial and Residential (Residential Fuel Use; Commercial Fuel Use) and Recycling and Waste (Domestic Waste Water Treatment).

Result:1990 GHG emissions were 295.53 MMT CO_2e/yr and projected 2020 business-as-usual GHG emissions would be 400.22 MMT CO_2e/yr; thus a 26.2 percent reduction from statewide land use-driven GHG emissions would be necessary to meet the AB 32 goal of returning to 1990 emission levels by 2020. (See Table 2)

Step 2 Estimate the anticipated GHG emission reductions affecting the same land use-driven emissions inventory sectors associated with adopted statewide regulations identified in the AB 32 Scoping Plan.

Result: Estimated a 23.9 percent reduction can be expected in the land use-driven GHG emissions inventory from adopted Scoping Plan regulations, including AB 1493 (Pavley), LCFS, Heavy/Medium Duty Efficiency, Passenger Vehicle Efficiency, Energy-Efficiency Measures, Renewable Portfolio Standard, and Solar Roofs. (See Table 3)

Step 3 Determine any short fall or "gap" between the 2020 statewide emission inventory estimates and the anticipated emission reductions from adopted Scoping Plan regulations. This "gap" represents additional GHG emission reductions needed statewide from the land use-driven emissions inventory sectors, which represents new land use development's share of the emission reductions needed to meet statewide GHG emission reduction goals.

Result: With the 23.9 percent reductions from AB 32 Scoping Measures, there is a "gap" of 2.3 percent in necessary additional GHG emissions reductions to meet AB 32

goals of a 26.2 percent reduction from statewide land use-driven GHG emissions to return to 1990 levels in 2020. (See Table 2)

Step 4 Determine the percent reduction this "gap" represents in the "land use-driven" emissions inventory sectors from BAAQMD's 2020 GHG emissions inventory. Identify the mass of emission reductions needed in the SFBAAB from land use-driven emissions inventory sectors.

Result: Estimated that a 2.3 percent reduction in BAAQMD's projected 2020 emissions projections requires emissions reductions of 1.6 MMT CO_2e/yr from the land use-driven sectors. (See Table 4)

Step 5 Assess BAAQMD's historical CEQA database (2001-2008) to determine the frequency distribution trend of project sizes and types that have been subject to CEQA over the past several years.

Result: Determined historical patterns of residential, commercial and industrial development by ranges of average sizes of each development type. Results were used in Step 6 below to distribute anticipated Bay Area growth among different future project types and sizes.

Step 6 Forecast new land use development for the Bay Area using DOF/EDD population and employment projections and distribute the anticipated growth into appropriate land use types and sizes needed to accommodate the anticipated growth (based on the trend analysis in Step 5 above). Translate the land use development projections into land use categories consistent with those contained in the Urban Emissions Model (URBEMIS).

Result: Based on population and employment projections and the trend analysis from Step 5 above, forecasted approximately 4,000 new development projects, averaging about 400 projects per year through 2020 in the Bay Area.

Step 7 Estimate the amount of GHG emissions from each land use development project type and size using URBEMIS and post-model manual calculation methods (for emissions not included in URBEMIS). Determine the amount of GHG emissions that can reasonably and feasibly be reduced through currently available mitigation measures ("mitigation effectiveness") for future land use development projects subject to CEQA (based on land use development projections and frequency distribution from Step 6 above).

Result: Based on the information available and on sample URBEMIS calculations, found that mitigation effectiveness of between 25 and 30 percent is feasible.

Step 8 Conduct a sensitivity analysis of the numeric GHG mass emissions threshold needed to achieve the desired emissions reduction (i.e., "gap") determined in Step 4. This mass emission GHG threshold is that which would be needed to achieve the emission reductions necessary by 2020 to meet the Bay Area's share of the statewide "gap" needed from the land use-driven emissions inventory sectors.

Result: The results of the sensitivity analysis conducted in Step 8 found that reductions between about 125,000 MT/yr (an aggregate of 1.3 MMT in 2020) and over 200,000 MT/yr (an aggregate of over 2.0 MMT in 2020) were achievable and feasible. A mass emissions threshold of 1,100 MT of CO_2e/yr would result in approximately 59 percent of all projects being above the significance threshold (e.g., this is approximately the operational GHG emissions that would be associated with a 60 residential unit

subdivision) and must implement feasible mitigation measures to meet CEQA requirements. With an estimated 26 percent mitigation effectiveness, the 1,100 MT threshold would achieve 1.6 MMT CO_2e/yr in GHG emissions reductions.

Detailed Basis and Analysis

Derivation of Greenhouse Gas Reduction Goal

To meet the target emissions limit established in AB 32 (equivalent to levels in 1990), total GHG emissions would need to be reduced by approximately 28 percent from projected 2020 forecasts (ARB 2009a). The AB 32 Scoping Plan is ARB's plan for meeting this mandate (ARB 2008). While the Scoping Plan does not specifically identify GHG emission reductions from the CEQA process for meeting AB 32 derived emission limits, the scoping plan acknowledges that "other strategies to mitigate climate change . . . should also be explored." The Scoping Plan also acknowledges that "Some of the measures in the plan may deliver more emission reductions than we expect; others less . . . and new ideas and strategies will emerge." In addition, climate change is considered a significant environmental issue and warrants consideration under CEQA. SB 97 represents the State Legislature's confirmation of this fact, and it directed the Governor's Office of Planning and Research (OPR) to develop CEQA Guidelines for evaluation of GHG emissions impacts and recommend mitigation strategies. In response, OPR released the *Technical Advisory: CEQA and Climate Change* (OPR 2008), and proposed revisions to the State CEQA guidelines (April 14, 2009) for consideration of GHG emissions. The California Natural Resources Agency adopted the proposed State CEQA Guidelines revisions on December 30, 2009 and the revisions were effective beginning March 18, 2010. It is known that new land use development must also do its fair share toward achieving AB 32 goals (or, at a minimum, should not hinder the State's progress toward the mandated emission reductions).

Foreseeable Scoping Plan Measures Emission Reductions and Remaining "Gap"

Step 1 of the Gap Analysis entailed estimating from ARB's statewide GHG inventory the growth in emissions between 1990 and 2020 attributable to land use driven sectors of the emissions inventory. As stated above, to meet the requirements set forth in AB 32 (i.e., achieve California's 1990-equivalent GHG emissions levels by 2020) California would need to achieve an approximate 28 percent reduction in emissions across all sectors of the GHG emissions inventory compared with 2020 projections. However, to meet the AB 32 reduction goals in the emissions sectors that are related to land use development (e.g., on-road passenger and heavy-duty motor vehicles, commercial and residential area sources [i.e., natural gas], electricity generation/consumption, wastewater treatment, and water distribution/consumption), staff determined that California would need to achieve an approximate 26 percent reduction in GHG emissions from these land use-driven sectors (ARB 2009a) by 2020 to return to 1990 land use emission levels.

Next, in Step 2 of the Gap Analysis, Staff determined the GHG emission reductions within the land use-driven sectors that are anticipated to occur from implementation of the Scoping Plan measures statewide, which are summarized in Table 2 and described below. Since the GHG emission reductions anticipated with the Scoping Plan were not accounted for in ARB's or BAAQMD's 2020 GHG emissions inventory forecasts (i.e., business as usual), an adjustment was made to include (i.e., give credit for) GHG emission reductions associated with key Scoping Plans measures, such as the Renewable Portfolio Standard, improvements in energy efficiency through periodic updates to Title 24, AB 1493 (Pavley) (which recently received a federal waiver to allow it to be enacted in law), the Low Carbon Fuel Standard (LCFS), and other measures. With reductions from these State regulations (Scoping Plan measures) taken into consideration and accounting for an estimated 23.9 percent reduction in GHG emissions, in Step 3 of the Gap Analysis Staff determined that the Bay Area would still need to achieve an additional 2.3 percent reduction from projected 2020 GHG emissions to meet the 1990 GHG emissions goal from the

land-use driven sectors. This necessary 2.3 percent reduction in projected GHG emissions from the land use sector is the "gap" the Bay Area needs to fill to do its share to meet the AB 32 goals. Refer to the following explanation and Tables 2 through 4 for data used in this analysis.

Because the transportation sector is the largest emissions sector of the state's GHG emissions inventory, it is aggressively targeted in early actions and other priority actions in the Scoping Plan including measures concerning gas mileage (Pavley), fuel carbon intensity (LCFS) and vehicle efficiency measures.

Table 2 – California 1990, 2002-2004, and 2020 Land Use Sector GHG[1] (MMT CO_2e/yr)

Sector	1990 Emissions	2002-2004 Average	2020 BAU Emissions Projections	% of 2020 Total
Transportation	**137.98**	**168.66**	**209.06**	**52%**
On-Road Passenger Vehicles	108.95	133.95	160.78	40%
On-Road Heavy Duty	29.03	34.69	48.28	12%
Electric Power	**110.63**	**110.04**	**140.24**	**35%**
Electricity	95.39	88.97	107.40	27%
Cogeneration[2]	15.24	21.07	32.84	8%
Commercial and Residential	**44.09**	**40.96**	**46.79**	**12%**
Residential Fuel Use	29.66	28.52	32.10	8%
Commercial Fuel Use	14.43	12.45	14.63	4%
Recycling and Waste[1]	**2.83**	**3.39**	**4.19**	**1%**
Domestic Wastewater Treatment	2.83	3.39	4.19	1%
TOTAL GROSS EMISSIONS	**295.53**	**323.05**	**400.22**	
% Reduction Goal from Statewide land use driven sectors (from 2020 levels to reach 1990 levels in these emission inventory sectors)			26.2%	
% Reduction from AB32 Scoping Plan measures applied to land use sectors (see Table 3)			-23.9%	
% Reduction needed statewide beyond Scoping Plan measures (Gap)			2.3%	

Notes: MMT CO_2e /yr = million metric tons of carbon dioxide equivalent emissions per year.
[1] Landfills not included. See text.
[2] Cogeneration included due to many different applications for electricity, in some cases provides substantial power for grid use, and because electricity use served by cogeneration is often amenable to efficiency requirements of local land use authorities.
Sources: Data compiled by EDAW and ICF Jones & Stokes from ARB data.

Pavley Regulations. The AB 32 Scoping Plan assigns an approximate 20 percent reduction in emissions from passenger vehicles associated with the implementation of AB 1493. The AB 32 Scoping Plan also notes that "AB 32 specifically states that if the Pavley regulations do not remain in effect, ARB shall implement alternative regulations to control mobile sources to achieve

equivalent or greater reductions of greenhouse gas emissions (HSC §38590)." Thus, it is reasonable to assume full implementation of AB 1493 standards, or equivalent programs that would be implemented by ARB. Furthermore, on April 1, 2010, U.S. EPA and the Department of Transportation's National Highway Safety Administration (NHTSA) announced a joint final rule establishing a national program that will dramatically reduce greenhouse gas emissions and improve fuel economy for new cars and trucks sold in the United States after 2011. Under this national program, automobile manufacturers will be able to build a single light-duty national fleet that satisfies all requirements under both the national program and the standards of California and other states. Nonetheless, BAAQMD may need to revisit this methodology as the federal standards come on line to ensure that vehicle standards are as aggressive as contemplated in development of this threshold.

Table 3 – 2020 Land Use Sector GHG Emission Reductions from State Regulations and AB 32 Measures

Affected Emissions Source	California Legislation	% Reduction from 2020 GHG inventory	End Use Sector (% of Bay Area LU Inventory)	Scaled % Emissions Reduction (credit)
Mobile	AB 1493 (Pavley)	19.7%	On road passenger/light truck transportation (45%)	8.9%
	LCFS	7.2%	On road passenger/light truck transportation (45%)	3.2%
	LCFS	7.2%	On road Heavy/Medium Duty Transportation (5%)	0.4%
	Heavy/Medium Duty Efficiency	2.9%	On road Heavy/Medium Duty Transportation (5%)	0.2%
	Passenger Vehicle Efficiency	2.8%	On road passenger/light truck transportation (45%)	1.3%
Area	Energy-Efficiency Measures	9.5%	Natural gas (Residential, 10%)	1.0%
			Natural gas (Non-residential, 13%)	1.2%
Indirect	Renewable Portfolio Standard	21.0%	Electricity (excluding cogen) (17%)	3.5%
	Energy-Efficiency Measures	15.7%	Electricity (26%)	4.0%
	Solar Roofs	1.5%	Electricity (excluding cogen) (17%)	0.2%
Total credits given to land use-driven emission inventory sectors from Scoping Plan measures				**23.9%**

Notes: AB = Assembly Bill; LCFS = Low Carbon Fuel Standard; SB = Senate Bill; RPS = Renewable Portfolio Standard
Sources: Data compiled by ICF Jones & Stokes.

LCFS. According to the adopted LCFS rule (CARB, April 2009), the LCFS is expected to result in approximately 10 percent reduction in the carbon intensity of transportation fuels. However, a

portion of the emission reductions required from the LCFS would be achieved over the life cycle of transportation fuel production rather than from mobile-source emission factors. Based on CARB's estimate of nearly 16 MMT reductions in on-road emissions from implementation of the LCFS and comparison to the statewide on-road emissions sector, the LCFS is assumed to result in a 7.2 percent reduction compared to 2020 BAU conditions (CARB 2009e).

Table 4 – SFBAAB 1990, 2007, and 2020 Land Use Sector GHG Emissions Inventories and Projections (MMT CO_2e/yr)

Sector	1990 Emissions	2007 Emissions	2020 Emissions Projections	% of 2020 Total[2]
Transportation	**26.1**	**30.8**	**35.7**	**50%**
On-Road Passenger Vehicles	23.0	27.5	32.0	
On-Road Heavy Duty	3.1	3.3	3.7	
Electric Power	**25.1**	**15.2**	**18.2**	**26%**
Electricity	16.5	9.9	11.8	
Cogeneration	8.6	5.3	6.4	
Commercial and Residential	**8.9**	**15.0**	**16.8**	**24%**
Residential Fuel Use	5.8	7.0	7.5	
Commercial Fuel Use	3.1	8.0	9.3	
Recycling and Waste[1]	**0.2**	**0.4**	**0.4**	**1%**
Domestic Waste Water Treatment	0.2	0.4	0.4	
TOTAL GROSS EMISSIONS	**60.3**	**61.4**	**71.1**	
SFBAAB's "Fair Share" % Reduction (from 2020 levels to reach 1990 levels) with AB-32 Reductions (from Table 3)			2.3%	
SFBAAB's Equivalent Mass Emissions Land Use Reduction Target at 2020 (MMT CO2e/yr)			1.6	

Notes: MMT CO_2e /yr = million metric tons of carbon dioxide equivalent emissions per year; SFBAAB = San Francisco Bay Area Air Basin.

[1] Landfills not included.

[2] Percentages do not sum exactly to 100% in table due to rounding.

Sources: Data compiled by EDAW 2009, ICF Jones & Stokes 2009, BAAQMD 2008.

Renewable Portfolio Standard, Energy Efficiency and Solar Roofs. Energy efficiency and renewable energy measures from the Scoping Plan were also included in the gap analysis. The Renewable Portfolio Standard (rules) will require the renewable energy portion of the retail electricity portfolio to be 33 percent in 2020. For PG&E, the dominant electricity provider in the Basin, approximately 12 percent of their current portfolio qualifies under the RPS rules and thus the gain by 2020 would be approximately 21 percent. The Scoping Plan also estimates that energy efficiency gains with periodic improvement in building and appliance energy standards and incentives will reach 10 to 15 percent for natural gas and electricity respectively. The final state measure included in this gap analysis is the solar roof initiative, which is estimated to result in reduction of the overall electricity inventory of 1.5 percent.

Landfill emissions are excluded from this analysis. While land use development does generate waste related to both construction and operations, the California Integrated Waste Management Board (CIWMB) has mandatory diversion requirements that will, in all probability, increase over time to promote waste reductions, reuse, and recycle. The Bay Area has relatively high levels of waste diversion and extensive recycling efforts. Further, ARB has established and proposes to increase methane capture requirements for all major landfills. Thus, at this time, landfill emissions associated with land use development waste generation is not included in the land use sector inventory used to develop this threshold approach.

Industrial stationary sources thresholds were developed separately from the land use threshold development using a market capture approach as described below. However, mobile source and area source emissions, as well as indirect electricity emissions that derive from industrial use are included in the land use inventory above as these particular activities fall within the influence of local land use authorities in terms of the affect on trip generation and energy efficiency.

AB 32 mandates reduction to 1990-equivalent GHG levels by 2020, with foreseeable emission reductions from State regulations and key Scoping Plan measures taken into account, were applied to the land use-driven emission sectors within the SFBAAB (i.e., those that are included in the quantification of emissions from a land use project pursuant to a CEQA analysis [on-road passenger vehicles, commercial and residential natural gas, commercial and residential electricity consumption, and domestic waste water treatment], as directed by OPR in the Technical Advisory: *Climate Change and CEQA* [OPR 2008]). This translates to a 2.3 percent gap in necessary GHG emission reductions by 2020 from these sectors.

Land Use Projects Bright Line Threshold

In Steps 4 and 5 of the gap analysis, Staff determined that applying a 2.3 percent reduction to these land use emissions sectors in the SFBAAB's GHG emissions inventory would result in an equivalent fair share of 1.6 million metric tons per year (MMT/yr) reductions in GHG emissions from new land use development. As additional regulations and legislation aimed at reducing GHG emissions from land use-related sectors become available in the future, the 1.6 MMT GHG emissions reduction goal may be revisited and recalculated by BAAQMD.

In order to derive the 1.6 MMT "gap," a projected development inventory for the next ten years in the SFBAAB was calculated (see Table 4 and *Revised Draft Options and Justifications Report* (BAAQMD 2009)). CO_2e emissions were modeled for projected development in the SFBAAB and compiled to estimate the associated GHG emissions inventory. The GHG (i.e., CO_2e) CEQA threshold level was adjusted for projected land use development that would occur within BAAQMD's jurisdiction over the period from 2010 through 2020.

Projects with emissions greater than the threshold would be required to mitigate to the threshold level or reduce project emissions by a percentage (mitigation effectiveness) deemed feasible by the lead agency under CEQA compared to a base year condition. The base year condition is defined by an equivalent size and character of project with annual emissions using the defaults in URBEMIS and the California Climate Action Registry's General Reporting Protocol for 2008. By this method, land use project mitigation subject to CEQA would help close the "gap" remaining after application of the key regulations and measures noted above supporting overall AB 32 goals.

This threshold takes into account Steps 1-8 of the gap analysis described above to arrive at a numerical mass emissions threshold. Various mass emissions significance threshold levels (i.e., bright lines) could be chosen based on the mitigation effectiveness and performance anticipated to be achieved per project to meet the aggregate emission reductions of 1.6 MMT needed in the

SFBAAB by 2020(see Table 5 and *Revised Draft Options and Justifications Report* (BAAQMD 2009)). Staff recommends a 1,100 MT CO_2e per year threshold. Choosing a 1,100 MT mass emissions significance threshold level (equivalent to approximately 60 single-family units), would result in about 59 percent of all projects being above the significance threshold and having to implement feasible mitigation measures to meet their CEQA obligations. These projects account for approximately 92 percent of all GHG emissions anticipated to occur between now and 2020 from new land use development in the SFBAAB.

Project applicants and lead agencies could use readily available computer models to estimate a project's GHG emissions, based on project specific attributes, to determine if they are above or below the bright line numeric threshold. With this threshold, projects that are above the threshold level, after consideration of emission-reducing characteristics of the project as proposed, would have to reduce their emissions to below the threshold to be considered less than significant.

Table 5 – Operational GHG Threshold Sensitivity Analysis

Option	Mitigation Effectiveness Assumptions		Mass Emission Threshold Level (MT CO_2e/yr)	% of Projects Captured (>threshold)	% of Emissions Captured (> threshold)	Emissions Reduction per year (MT/yr)	Aggregate Emissions Reduction (MMT) at 2020	Threshold Project Size Equivalent (single family dwelling units)
	Performance Standards Applied to All Projects with Emissions < Threshold Level	Mitigation Effectiveness Applied to Emissions > Threshold Level						
1A	N/A	30%	975	60%	93%	201,664	2.0	53
1A	N/A	25%	110	96%	100%	200,108	2.0	66
1A	N/A	30%	1,225	21%	67%	159,276	1.6	67
1A	N/A	26%	1,100	59%	92%	159,877	1.6	60
1A	N/A	30%	2,000	14%	61%	143,418	1.4	109
1A	N/A	25%	1,200	58%	92%	136,907	1.4	66
1A	N/A	30%	3,000	10%	56%	127,427	1.3	164
1A	N/A	25%	1,500	20%	67%	127,303	1.3	82
1B	26%	N/A	N/A	100%	100%	208,594	2.1	N/A[1]
1C	5%	30%	1,900	15%	62%	160,073	1.6	104
1C	10%	25%	1,250	21%	67%	159,555	1.6	68
1C	5%	30%	3,000	10%	56%	145,261	1.5	164
1C	10%	25%	2,000	4%	61%	151,410	1.5	109
1C	10%	30%	10,000	2%	33%	125,271	1.3	547

MMT = million metric tons per year; MT CO_2e/yr = metric tons of carbon dioxide equivalent emissions per year; MT/yr = metric tons per year; N/A = not applicable.

[1] Any project subject to CEQA would trigger this threshold.

Source: Data modeled by ICF Jones& Stokes

Source: Data modeled by ICF Jones & Stokes.

Establishing a "bright line" to determine the significance of a project's GHG emissions impact provides a level of certainty to lead agencies in determining if a project needs to reduce its GHG emissions through mitigation measures and when an EIR is required.

Land Use Projects Efficiency-Based Threshold

GHG efficiency metrics can also be utilized as thresholds to assess the GHG efficiency of a project on a per capita basis (residential only projects) or on a "service population" basis (the sum of the number of jobs and the number of residents provided by a project) such that the project will allow for consistency with the goals of AB 32 (i.e., 1990 GHG emissions levels by 2020). GHG efficiency thresholds can be determined by dividing the GHG emissions inventory goal (allowable emissions), by the estimated 2020 population and employment. This method allows highly efficient projects with higher mass emissions to meet the overall reduction goals of AB 32. Staff believes it is more appropriate to base the land use efficiency threshold on the service population metric for the land use-driven emission inventory. This approach is appropriate because the threshold can be applied evenly to all project types (residential or commercial/retail only and mixed use) and uses only the land use emissions inventory that is comprised of all land use projects. Staff will provide the methodology to calculate a project's GHG emissions in the revised CEQA Guidelines, such as allowing infill projects up to a 50 percent or more reduction in daily vehicle trips if the reduction can be supported by close proximity to transit and support services, or a traffic study prepared for the project.

Table 6 – California 2020 GHG Emissions, Population Projections and GHG Efficiency Thresholds - Land Use Inventory Sectors

Land Use Sectors Greenhouse Gas Emissions Target	295,530,000
Population	44,135,923
Employment	20,194,661
California Service Population (Population + Employment)	64,330,584
AB 32 Goal GHG emissions (metric tons CO_2e)/SP[1]	**4.6**

Notes: AB = Assembly Bill; CO_2e = carbon dioxide equivalent; GHG = greenhouse gas; SP = service population.
[1] Greenhouse gas efficiency levels were calculated using only the "land use-related" sectors of ARB's emissions inventory.
Sources: Data compiled by EDAW 2009, ARB 2009a, DOF 2009, EDD 2009, ICF Jones & Stokes 2009.

Staff proposes a project-level efficiency threshold of 4.6 MT CO_2e/SP, the derivation of which is shown Table 6. This efficiency-based threshold reflects very GHG-efficient projects. As stated previously and below, staff anticipates that significance thresholds (rebuttable presumptions of significance at the project level) will function on an interim basis only until adequate programmatic approaches are in place at the city, county, and regional level that will allow the CEQA streamlining of individual projects. (See State CEQA Guidelines §15183.5 ["Tiering and Streamlining the Analysis of Greenhouse Gas Emissions"]).

2.2.3. Plan-Level GHG Thresholds

Staff proposes using a two step process for determining the significance of proposed plans and plan amendments for GHG. As a first step in assessing plan-level impacts, Staff is proposing that agencies that have adopted a qualified Greenhouse Gas Reduction Strategy (or have incorporated similar criteria in their general plan) and the general plan is consistent with the Greenhouse Gas Reduction Strategy, the general plan would be considered less than significant. In addition, as discussed above for project-level GHG impacts, Staff is proposing an efficiency

threshold to assess plan-level impacts. Staff believes a programmatic approach to limiting GHG emissions is appropriate at the plan-level. Thus, as projects consistent with the Greenhouse Gas Reduction Strategy are proposed, they may be able to tier off the plan and its environmental analysis.

GHG Efficiency Metrics for Plans

For local land use plans, a GHG-efficiency metric (e.g., GHG emissions per unit) would enable comparison of a proposed general plan to its alternatives and to determine if the proposed general plan meets AB 32 emission reduction goals.

AB 32 identifies local governments as essential partners in achieving California's goal to reduce GHG emissions. Local governments have primary authority to plan, zone, approve, and permit how and where land is developed to accommodate population growth and the changing needs of their jurisdiction. ARB has developed the Local Government Operations Protocol and is developing a protocol to estimate community-wide GHG emissions. ARB encourages local governments to use these protocols to track progress in reducing GHG emissions. ARB encourages local governments to institutionalize the community's strategy for reducing its carbon footprint in its general plan. SB 375 creates a process for regional integration of land development patterns and transportation infrastructure planning with the primary goal of reducing GHG emissions from the largest sector of the GHG emission inventory, light duty vehicles.

If the statewide AB 32 GHG emissions reduction context is established, GHG efficiency can be viewed independently from the jurisdiction in which the plan is located. Expressing projected 2020 mass of emissions from land use-related emissions sectors by comparison to a demographic unit (e.g., population and employment) provides evaluation of the GHG efficiency of a project in terms of what emissions are allowable while meeting AB 32 targets.

Two approaches were considered for efficiency metrics. The "service population" (SP) approach would consider efficiency in terms of the GHG emissions compared to the sum of the number of jobs and the number of residents at a point in time. The per capita option would consider efficiency in terms of GHG emissions per resident only. Staff recommends that the efficiency threshold for plans be based on all emission inventory sectors because, unlike land use projects, general plans comprise more than just land use related emissions (e.g. industrial). Further, Staff recommends that the plan threshold be based on the service population metric as general plans include a mix of residents and employees. The Service Population metric would allow decision makers to compare GHG efficiency of general plan alternatives that vary residential and non-residential development totals, encouraging GHG efficiency through improving jobs/housing balance. This approach would not give preference to communities that accommodate more residential (population-driven) land uses than non-residential (employment driven) land uses which could occur with the per capita approach.

A SP-based GHG efficiency metric (see Table 7) was derived from the emission rates at the State level that would accommodate projected population and employment growth under trend forecast conditions, and the emission rates needed to accommodate growth while allowing for consistency with the goals of AB 32 (i.e., 1990 GHG emissions levels by 2020).

CAPCOA

CALIFORNIA AIR POLLUTION CONTROL OFFICERS ASSOCIATION









CEQA & Climate Change

Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act

January 2008

ATTACHMENT D

Appendix B

Mitigation Measure Summary

Table 16
Mitigation Measure Summary

Mitigation Measure	Applicable Project/Source Type[1]	Effective		Feasible (Yes/No)		Secondary Effects (Yes/No)	Agency/Organization/Other[6]	Description/Comments
		Emissions Reduction/Score[2]	Cost (Yes/No)[3]	Technical[4]	Logistical[5]			
					stations in the U.S., 5 in CA. Vehicles available in select regions only			
MM T-21: Flex Fuel Vehicles	LD (R, C, M), I, SP, TP, AQP, RR, P/Mobile	5466.97 lb GHG/year/Low (DOE Fuel Economy)	Yes: E85 costs less than gasoline per gallon, but results in lower fuel economy.	Yes	Yes: More than 900 E85 fueling stations in the U.S., 5 in CA. Vehicles available in select regions only	Adverse: Yes Issues with the energy intensive ethanol production process (e.g., wastewater treatment requirements). Beneficial: CAPs, TACs	DGS, CA air quality management and control districts and cities/counties (e.g., SJVAPCD).	Use of and/or provide vehicles that utilize gasoline/ethanol blends (e.g., E85).
Design								
Commercial & Residential Building Design Measures								
MM D-1: Office/Mixed Use Density	LD (C, M), SP, TP, AQP, RR, P/Mobile	0.05%-2%/Moderate: This range is from SMAQMD, depending	Yes	Yes (VTPI 2007)	Yes (VTPI 2007)	Adverse: No Beneficial: CAPs, TACs	CA air quality management and control districts and cities/counties	Project provides high density office or mixed-use proximate to transit. Project must provide

AG=Attorney General; ARB=California Air Resources Board; ASTM=American Society for Testing and Material; BAAQMD=Bay Area Air Quality Management District; BEES= Building for Environmental and Economic Sustainability; CA=California; Caltrans=California Department of Transportation; CAPs=Criteria Air Pollutants; CCAP=Center for Clean Air Policy; CF=Connectivity Factor; CIWMB=California Integrated Waste Management Board; CO= Carbon Monoxide; CO_2=Carbon Dioxide; DGS=Department of General Services; DOE=U.S. Department of Energy; DPF=Diesel particulate Filter; E85=85% Ethanol; EERE=Energy Efficiency and Renewable Energy; EOE=Encyclopedia of Earth; EPA=U.S. Environmental Protection Agency; ETC=Edmonton Trolley Coalition; EVs/CNG=Electric Vehicles/Compressed Natural Gas; FAR=Floor Area Ratio, GHG=Greenhouse Gas; ITE=Institute of Transportation Engineers; kg/m^2=kilogram per square meter; km=Kilometer; lb=pound; LEED=Leadership in Energy and Environmental Design; M=Million; NA=Not Available; NEV=Neighborhood Electric Vehicle; NIST=National Institute of Standards and Technology; NO_X=Oxides of Nitrogen; NREL=National Renewable Energy Laboratory; N/S=North/South; PG&E=Pacific Gas and Electric; PM=Particulate Matter; SJVAPCD=San Joaquin Valley Air Pollution Control District; SMAQMD=Sacramento Metropolitan Air Quality Management District; SMUD=Sacramento Municipal Utilities District; SO_x=Sulfur Oxides; SRI=Solar Reflectance Index; TACs=Toxic Air Contaminants; TDM=Transportation Demand Management; TMA=Transportation Management Association; THC=Total Hydrocarbon; ULEV=Ultra Low Emission Vehicle; USGBC=U.S. Green Building Council; and VTPI=Victoria Transit Policy.

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Mitigation Measure	Applicable Project/Source Type[1]	Effective		Feasible (Yes/No)		Secondary Effects (Yes/No)	Agency/Organization/Other[6]	Description/Comments
		Emissions Reduction/Score[2]	Cost (Yes/No)[3]	Technical[4]	Logistical[5]			
		on FAR and headway frequencies (Nelson/Nygaard Consulting Associates 2005, EDAW 2006, SMAQMD 2007).					(e.g., SMAQMD).	safe and convenient pedestrian and bicycle access to all transit stops within one-quarter mile.
MM D-2: Orientation to Existing/Planned Transit, Bikeway, or Pedestrian Corridor	LD (R, C, M), I, SP, TP, AQP, RR, P/Mobile	0.4%-1%/Moderate: CCAP attributes a 0.5% reduction per 1% improvement in transit frequency (Dierkers et al. 2007). SMAQMD presents a range of 0.25%-5% (JSA 2005, EDAW 2006, SMAQMD 2007).	Yes	Yes (Dierkers et al. 2007)	Yes (Dierkers et al. 2007)	Adverse: No Beneficial: CAPs, TACs	CA air quality management and control districts and cities/counties (e.g., SMAQMD).	Project is oriented towards existing transit, bicycle, or pedestrian corridor. Setback distance between project and existing or planned adjacent uses is minimized or nonexistent. Setback distance between different buildings on project site is minimized. Setbacks between project buildings and planned or existing sidewalks are minimized. Buildings are oriented towards existing or planned street frontage. Primary entrances to buildings are located along planned or existing public street frontage. Project provides bicycle access to any planned bicycle corridor(s). Project provides pedestrian access to any planned pedestrian corridor(s).
MM D-3: Services Operational	LD (R, C, M), I, SP, TP, AQP, RR, P/Mobile	0.5%-5%/Moderate	Yes	Yes	Yes	Adverse: No Beneficial: CAPs, TACs	CA air quality management and control districts and cities/counties (e.g., SMAQMD).	Project provides on-site shops and services for employees.

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Mitigation Measure	Applicable Project/Source Type[1]	Effective		Feasible (Yes/No)		Secondary Effects (Yes/No)	Agency/Organization/Other[6]	Description/Comments
		Emissions Reduction/Score[2]	Cost (Yes/No)[3]	Technical[4]	Logistical[5]			
MM D-4: Residential Density (Employ Sufficient Density for New Residential Development to Support the Use of Public Transit)	LD (R, M), SP, TP, AQP, RR, P/Mobile	1%-40%/High: #7, EPA presents a range of 32%-40% (EPA 2006). SMAQMD presents a range of 1%-12% depending on density and headway frequencies (Nelson/Nygaard Consulting Associates 2005, JSA 2005, EDAW 2006, SMAQMD 2007). Nelson/Nygaard presents a trip reduction formula: Trip Reduction = 0.6*(1-(19749*((4.814+ households per residential acre)/(4.814+7.14))^-06.39)/25914).	Yes	Yes (VTPI 2007, Holtzclaw 2007)	Yes (VTPI 2007, Holtzclaw 2007)	Adverse: No Beneficial: CAPs, TACs	CA air quality management and control districts and cities/counties (e.g., SMAQMD).	Project provides high-density residential development. Transit facilities must be within one-quarter mile of project border. Project provides safe and convenient bicycle/pedestrian access to all transit stop(s) within one-quarter mile of project border.
MM D-5: Street Grid	LD (R, C, M), I, SP, TP, AQP, RR,	1%/Moderate: SMAQMD presents this % reduction (JSA	Yes	Yes (Dierkers et al. 2007, VTPI 2007)	Yes (Dierkers et al. 2007,	Adverse: No Beneficial: CAPs, TACs	CA air quality management and control districts and cities/counties	Multiple and direct street routing (grid style). This measure only applies to projects

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Mitigation Measure	Applicable Project/Source Type[1]	Effective		Feasible (Yes/No)		Secondary Effects (Yes/No)	Agency/Organization/Other[6]	Description/Comments
		Emissions Reduction/Score[2]	Cost (Yes/No)[3]	Technical[4]	Logistical[5]			
	P/Mobile	2005, EDAW 2006, SMAQMD 2007).			VTPI 2007)		(e.g., SMAQMD).	with an internal CF >/= 0.80, and average of one-quarter mile or less between external connections along perimeter of project. [CF= # of intersections / (# of cul-de-sacs + intersections)]. Cul-de-sacs with bicycle/pedestrian through access may be considered "complete intersections" when calculating the project's internal connectivity factor. External connections are bike/pedestrian pathways and access points, or streets with safe and convenient bicycle and pedestrian access that connect the project to adjacent streets, sidewalks, and uses. If project site is adjacent to undeveloped land; streets, pathways, access points, and right-of-ways that provide for future access to adjacent uses may count for up to 50% of the external connections. Block perimeter (the sum of the measurement of the length of all block sides) is limited to no more than 1,350 feet. Streets internal to the project should connect to streets external to the project whenever possible.

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		Emissions Reduction/Score[2]	Cost (Yes/No)[3]	Technical[4]	Logistical[5]			
MM D-6: NEV Access	LD (R, C, M), SP, TP, AQP, RR, P/Mobile	0.5%-1.5%/Low: SMAQMD presents this % reduction (EDAW 2006, SMAQMD 2007).	Yes	Yes (Litman 1999, Sperling 1994)	Yes (Litman 1999, Sperling 1994)	Adverse: No Beneficial: CAPs, TACs	CA air quality management and control districts and cities/counties (e.g., SMAQMD).	Make physical development consistent with requirements for neighborhood electric vehicles. Current studies show that for most trips, NEVs do not replace gas-fueled vehicles as the primary vehicle.
MM D-7: Affordable Housing Component	LD (R, M), SP, TP, AQP, RR, P/Mobile	0.4%-6%/Moderate: SMAQMD presents this % reduction (Nelson/Nygaard Consulting Associates 2005, EDAW 2006, SMAQMD 2007).	Yes	Yes	Yes	Adverse: No Beneficial: CAPs, TACs	CA air quality management and control districts and cities/counties (e.g., SMAQMD).	Residential development projects of five or more dwelling units provide a deed-restricted low-income housing component on-site (or as defined in the code). Developers who pay into In-Lieu Fee Programs are not considered eligible to receive credit for this measure. The award of emission reduction credit shall be based only on the proportion of affordable housing developed on-site because in-lieu programs simply induce a net increase in development. Percentage reduction shall be calculated according to the following formula:

AG=Attorney General; ARB=California Air Resources Board; ASTM=American Society for Testing and Material; BAAQMD=Bay Area Air Quality Management District; BEES= Building for Environmental and Economic Sustainability; CA=California; Caltrans=California Department of Transportation; CAPs=Criteria Air Pollutants; CCAP=Center for Clean Air Policy; CF=Connectivity Factor; CIWMB=California Integrated Waste Management Board; CO= Carbon Monoxide; CO_2=Carbon Dioxide; DGS=Department of General Services; DOE=U.S. Department of Energy; DPF=Diesel particulate Filter; E85=85% Ethanol; EERE=Energy Efficiency and Renewable Energy; EOE=Encyclopedia of Earth; EPA=U.S. Environmental Protection Agency; ETC=Edmonton Trolley Coalition; EVs/CNG=Electric Vehicles/Compressed Natural Gas; FAR=Floor Area Ratio; GHG=Greenhouse Gas; ITE=Institute of Transportation Engineers; kg/m^2=kilogram per square meter; km=Kilometer; lb=pound; LEED=Leadership in Energy and Environmental Design; M=Million; NA=Not Available; NEV=Neighborhood Electric Vehicle; NIST=National Institute of Standards and Technology; NO_X=Oxides of Nitrogen; NREL=National Renewable Energy Laboratory; N/S=North/South; PG&E=Pacific Gas and Electric; PM=Particulate Matter; SJVAPCD=San Joaquin Valley Air Pollution Control District; SMAQMD=Sacramento Metropolitan Air Quality Management District; SMUD=Sacramento Municipal Utilities District; SO_X=Sulfur Oxides; SRI=Solar Reflectance Index; TACs=Toxic Air Contaminants; TDM=Transportation Demand Management; TMA=Transportation Management Association; THC=Total Hydrocarbon; ULEV=Ultra Low Emission Vehicle; USGBC=U.S. Green Building Council; and VTPI=Victoria Transit Policy.

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		Emissions Reduction/Score[2]	Cost (Yes/No)[3]	Technical[4]	Logistical[5]			
								% reduction = % units deed-restricted below market rate housing * 0.04
MM D-8: Recharging Area	LD (R, M), SP, TP, AQP, RR, P/Mobile	NA/Low	Yes	Yes	Yes	Adverse: No Beneficial: CAPs, TACs		Provide residential buildings with a "utility" room or space for recharging batteries, whether for use in a car, electric lawnmower, other electric landscaping equipment, or even batteries for small items such as flashlights.
Mixed-Use Development Measures								
MM D-9: Urban Mixed-Use	LD (M), SP, TP, AQP, RR, P/Mobile	3%-9%/Moderate: SMAQMD presents this % reduction (TIAX 2005, EDAW 2006, SMAQMD 2007).	Yes	Yes (EPA 2006)	Yes (EPA 2006)	Adverse: No Beneficial: CAPs, TACs	CA air quality management and control districts and cities/counties (e.g., SMAQMD).	Development of projects predominantly characterized by properties on which various uses, such as office, commercial, institutional, and residential, are combined in a single building or on a single site in an integrated development project with functional interrelationships and a coherent physical design.
MM D-10: Suburban Mixed-Use	LD (R, C, M), I, SP, TP, AQP, RR, P/Mobile	3%/Moderate: SMAQMD presents this % reduction (TIAX 2005, EDAW 2006, SMAQMD 2007).	Yes	Yes (EPA 2006)	Yes (EPA 2006)	Adverse: No Beneficial: CAPs, TACs	CA air quality management and control districts and cities/counties (e.g., SMAQMD).	Have at least three of the following on site and/or offsite within one-quarter mile: Residential Development, Retail Development, Park, Open Space, or Office.
MM D-11: Other Mixed-Use	LD (R, M), SP, TP, AQP, RR, P/Mobile	1%/Moderate: SMAQMD presents this % reduction (TIAX 2005, EDAW	Yes	Yes (EPA 2006)	Yes (EPA 2006)	Adverse: No Beneficial: CAPs, TACs	CA air quality management and control districts and cities/counties (e.g., SMAQMD).	All residential units are within one-quarter mile of parks, schools or other civic uses.

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		2006, SMAQMD 2007).						
MM D-12: Infill Development	LD (R, C, M), I, SP, TP, AQP, RR, P/Mobile	3%-30%/High: Infill development reduces vehicle trips and VMT by 3% and 20%, respectively (Fehr & Peers 2007). CCAP identifies a site level VMT reduction range of 20%-30% (Dierkers et al. 2007).	Yes	Yes (Dierkers et al. 2007)	Yes (Dierkers et al. 2007)	Adverse: No Beneficial: CAPs, TACs	CA air quality management and control districts and cities/counties (e.g., SMAQMD).	Project site is on a vacant infill site, redevelopment area, or brownfield or greyfield lot that is highly accessible to regional destinations, where the destinations rating of the development site (measured as the weighted average travel time to all other regional destinations) is improved by 100% when compared to an alternate greenfield site.
Miscellaneous Measures								
MM D-13: Electric Lawnmower	LD (R, M), SP, AQP, RR, P/Area	1%/Low: SMAQMD presents this % reduction (EDAW 2006, SMAQMD 2007).	Yes	Yes	Yes	Adverse: No Beneficial: CAPs, TACs	CA air quality management and control districts and cities/counties (e.g., SMAQMD).	Provide a complimentary electric lawnmower to each residential buyer.

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MM D-14: Enhanced Recycling/Waste Reduction, Reuse, Composting	LD (R, C, M), I, SP, AQP, RR, P/Stationary & Area	NA/Low	Yes	Yes	Yes: Association with social awareness.	Adverse: No Beneficial: CAPs, TACs	CIWMB	Provide infrastructure/education that promotes the avoidance of products with excessive packaging, recycle, buying of refills, separating of food and yard waste for composting, and using rechargeable batteries.
MM D-15: LEED Certification	LD (R, C, M), I, SP, AQP, RR, P/Stationary & Area	NA/Moderate	Yes: Receive tax rebates, incentives (e.g., EDAW San Diego office interior remodel cost $1,700,000 for 32,500 square feet) (USGBC 2007)	Yes	Yes: More than 700 buildings of different certifications in CA (USGBC 2007).	Adverse: No Beneficial: CAPs, TACs	USGBC, CA air quality management and control districts and cities/counties (e.g., BAAQMD).	LEED promotes a whole-building approach to sustainability by recognizing performance in five key areas of human and environmental health: sustainable site development, water savings, energy efficiency, materials selection, and indoor environmental quality.
MM D-16: Retro-Commissioning	LD (C, M), I, SP, AQP, RR, P/Stationary & Area	8%-10% reduction in energy usage/Moderate: (Mills et al. 2004)	Yes: Average $0.28/square feet, varies with building size (Haasl and Sharp 1999).	Yes	Yes: 27 projects underway in CA, 21 more to be completed in 2007, mostly state buildings owned by DGS (DGS 2007).	Adverse: No Beneficial: CAPs, TACs	DGS, CA air quality management and control districts and cities/counties (e.g., BAAQMD).	The process ensures that all building systems perform interactively according to the contract documents, the design intent and the owner's operational needs to optimize energy performance.
MM D-17 Landscaping	LD (R, C, M), I, SP, AQP, RR,	NA/Low	Yes	Yes	Yes	Adverse: No Beneficial: CAPs, TACs	Alliance for the Chesapeake Bay, EPA Green Landscaping	Project shall use drought resistant native trees, trees with low emissions and high carbon

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	P/Stationary & Area						Resources	sequestration potential. Evergreen trees on the north and west sides afford the best protection from the setting summer sun and cold winter winds. Additional considerations include the use of deciduous trees on the south side of the house that will admit summer sun; evergreen plantings on the north side will slow cold winter winds; constructing a natural planted channel to funnel summer cooling breezes into the house. Neighborhood CCR's not requiring that front and side yards of single family homes be planted with turf grass. Vegetable gardens, bunch grass, and low-water landscaping shall also be permitted, or even encouraged.
MM D-18: Local Farmers' Market	LD (M), SP/Mobile, Stationary, &	NA/Low	Yes	Yes	Yes: Associated with social	Adverse: No Beneficial: CAPs, TACs	Cities/counties (e.g., Davis, Sacramento)	Project shall dedicate space in a centralized, accessible location for a weekly farmers' market.

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	Area				choice and public awareness.			
MM D-19: Community Gardens	LD (M), SP/Mobile, Stationary, & Area	NA/Low	Yes	Yes	Yes: Associated with social choice and public awareness.	Adverse: No Beneficial: CAPs, TACs	Cities/counties (e.g., Davis)	Project shall dedicate space for community gardens.
Energy Efficiency/Building Component								
MM E-1: High-Efficiency Pumps	LD (R, C, M), SP, AQP, RR, P/Stationary & Area	NA/Low	Yes	Yes	Yes	Adverse: No Beneficial: CAPs, TACs	CA air quality management and control districts and cities/counties (e.g., BAAQMD).	Project shall use high-efficiency pumps.
MM E-2: Wood Burning Fireplaces/Stoves	LD (R, M), SP, AQP, RR, P/Stationary & Area	NA/Low: EDAW 2006	Yes	Yes	Yes	Adverse: No Beneficial: CAPs, TACs	CA air quality management and control districts and cities/counties (e.g., SMAQMD).	Project does not feature fireplaces or wood burning stoves.
MM E-3: Natural Gas Stove	LD (R, M), SP, AQP, RR, P/Stationary & Area	NA/Low: EDAW 2006	Yes: Cost of stove—$350 (gas) and $360 (electric) same brand, total yearly cost of $42.17 as opposed to $56.65 for electric (Saving Electricity 2006).	Yes	Yes	Adverse: No Beneficial: CAPs, TACs	CA air quality management and control districts and cities/counties (e.g., SMAQMD).	Project features only natural gas or electric stoves in residences.

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MM E-4: Energy Star Roof	LD (R, C, M), I, SP, AQP, RR, P/Stationary & Area	0.5%-1%/Low: SMAQMD presents this % reduction (EDAW 2006, SMAQMD 2007).	Yes	Yes	Yes: 866 Energy Star labeled buildings in California (Energy Star 2007)	Adverse: No Beneficial: CAPs, TACs	CA air quality management and control districts and cities/counties (e.g., SMAQMD).	Project installs Energy Star labeled roof materials.
MM E-5: On-site Renewable Energy System	LD (R, C, M), I, SP, AQP, RR, P/Stationary & Area	1%-3%/Moderate: SMAQMD presents this % reduction (USGBC 2002 and 2005, EDAW 2006, SMAQMD 2007).	Yes	Yes (USGBC 2002 and 2005)	Yes (USGBC 2002 and 2005)	Adverse: No Beneficial: CAPs, TACs	CA air quality management and control districts and cities/counties (e.g., SMAQMD).	Project provides onsite renewable energy system(s). Nonpolluting and renewable energy potential includes solar, wind, geothermal, low-impact hydro, biomass and bio-gas strategies. When applying these strategies, projects may take advantage of net metering with the local utility.

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MM E-6: Exceed Title 24	LD (R, C, M), I, GSP, AQP, RR, P/Stationary & Area	1%/Moderate: SMAQMD presents this % reduction (EDAW 2006, SMAQMD 2007).	Yes	Yes (PG&E 2002, SMUD 2006)	Yes (PG&E 2002, SMUD 2006)	Adverse: No Beneficial: CAPs, TACs	PG&E, SMUD, CA air quality management and control districts and cities/counties (e.g., SMAQMD).	Project exceeds title 24 requirements by 20%.
MM E-7: Solar Orientation	LD (R, C, M), I, SP, AQP, RR, P/Stationary & Area	0.5%/Low: SMAQMD presents this % reduction (EDAW 2006, SMAQMD 2007).	Yes	Yes	Yes	Adverse: No Beneficial: CAPs, TACs	CA air quality management and control districts and cities/counties (e.g., SMAQMD).	Project orients 75% or more of homes and/or buildings to face either north or south (within 30° of N/S). Building design includes roof overhangs that are sufficient to block the high summer sun, but not the lower winter sun, from penetrating south facing windows. Trees, other landscaping features and other buildings are sited in such a way as to maximize shade in the summer and maximize solar access to walls and windows in the winter.
MM E-8: Nonroof Surfaces	LD (R, C, M), I, GSP, AQP, RR, P/Stationary & Area	1.0%/Low: SMAQMD presents this % reduction (EDAW 2006, SMAQMD 2007).	Yes	Yes (USGBC 2002 and 2005)	Yes (USGBC 2002 and 2005)	Adverse: No Beneficial: CAPs, TACs	CA air quality management and control districts and cities/counties (e.g., SMAQMD).	Provide shade (within 5 years) and/or use light-colored/high-albedo materials (reflectance of at least 0.3) and/or open grid pavement for at least 30% of the site's nonroof impervious surfaces, including parking lots, walkways, plazas, etc.; OR place a minimum of 50% of parking spaces underground or covered by structured parking; OR use an open-grid pavement system (less than 50% impervious) for a minimum of

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								50% of the parking lot area. The mitigation measure reduces heat islands (thermal gradient differences between developed and undeveloped areas to minimize impact on microclimate and human and wildlife habitats. This measure requires the use of patented or copyright protected methodologies created by the ASTM. The SRI is a measure of the constructed surface's ability to reflect solar heat, as shown by a small rise in temperature. It is defined so that a standard black (reflectance 0.05, emittance 0.90) is "0" and a standard white (reflectance 0.80, emittance 0.90) is 100. To calculate SRI for a given material, obtain the reflectance value and emittance value for the material. SRI is calculated according to ASTM E 1980-01. Reflectance is measured

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								according to ASTM E 903, ASTM E 1918, or ASTM C 1549. Emittance is measured according to ASTM E 408 or ASTM C 1371. Default values for some materials will be available in the LEED-NC v2.2 Reference Guide.
MM E-9: Low-Energy Cooling	LD (C, M), I, SP, AQP, RR, P/Stationary & Area	1%-10%/Low: EDAW presents this percent reduction range (EDAW 2006).	Yes	Yes (USGBC 2002 and 2005)	Yes (USGBC 2002 and 2005)	Adverse: No Beneficial: CAPs, TACs	CA air quality management and control districts and cities/counties (e.g., SMAQMD).	Project optimizes building's thermal distribution by separating ventilation and thermal conditioning systems.
MM E-10: Green Roof	LD (R, C, M), I, SP, AQP, RR, P/Stationary & Area	1.0%/Moderate: SMAQMD presents this % reduction (EDAW 2006, SMAQMD 2007).	Yes	Yes (USGBC 2002 and 2005)	Yes (USGBC 2002 and 2005)	Adverse: Increased Water Consumption Beneficial: CAPs, TACs	CA air quality management and control districts and cities/counties (e.g., SMAQMD).	Install a vegetated roof that covers at least 50% of roof area. The reduction assumes that a vegetated roof is installed on a least 50% of the roof area or that a combination high albedo and vegetated roof surface is installed that meets the following standard: (Area of SRI Roof/0.75)+(Area of vegetated roof/0.5) >= Total Roof Area. Water consumption reduction measures shall be considered in the design of the green roof.
MM E-11: EV Charging Facilities	LD (C, M), SP, AQP, RR, P/Stationary & Area	NA/Low	Yes: $500-$5000/ vehicle site (PG&E 1999)	Yes	Yes: 381 facilities in CA (Clean Air Maps 2007).	Adverse: No Beneficial: CAPs, TACs	DOE, EERE, CA air quality management and control districts and cities/counties (e.g., BAAQMD).	Project installs EV charging facilities.
MM E-12:	LD (R, C, M),	NA/Low: Increasing	Yes: Light	Yes	Yes: Apply	Adverse: No		Project provides light-colored

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Light-Colored Paving	I, SP, AQP, RR, P/Stationary & Area	the albedo of 1,250 km of pavement by 0.25 would save cooling energy worth $15M per year.	colored aggregates and white cement are more expensive than gray cement. Certain blended cements are very light in color and may reflect similarly to white cement at an equivalent cost to normal gray cement.		natural sand or gravel colored single surface treatments to asphalt (EOE 2007).	Beneficial: CAPs, TACs		paving (e.g., increased albedo pavement).
MM E-13: Cool Roofs	LD (R, C, M), I, SP, AQP, RR, P/Stationary & Area	NA/Low	Yes: 0.75–1.5/square feet coating (EPA 2007a)	Yes	Yes: Over 90% of the roofs in the United States are dark colored	Adverse: No Beneficial: CAPs, TACs	CEC	Project provides cool roofs. Highly reflective, highly emissive roofing materials that stay 50-60°F cooler than a normal roof under a hot summer sun. CA's Cool Savings

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					(EPA 2007a).			Program provided rebates to building owners for installing roofing materials with high solar reflectance and thermal emittance. The highest rebate went to roofs on air conditioned buildings, while buildings with rooftop ducts and other nonresidential buildings were eligible for slightly less. The program aimed to reduce peak summer electricity demand and was administered by the CEC.
MM E-14: Solar Water Heaters	LD (R, M), SP, AQP, RR, P/Stationary & Area	20%–70% reduction in cooling energy needs/Moderate	Yes: $1675/20 square feet, requires a 50 gallon tank, annual operating cost of $176 (DOE 2007).	Yes	Yes: Based on solar orientation, building codes, zoning ordinances.	Adverse: No Beneficial: CAPs, TACs	Europe	Project provides solar water heaters.
MM E-15: Electric Yard Equipment Compatibility	LD (R, M), SP, AQP, RR, P/Stationary & Area	NA/Low	Yes: $75–$250/outlet from existing circuit (Cost Helper 2007).	Yes	Yes	Adverse: No Beneficial: CAPs, TACs		Project provides electrical outlets at building exterior areas.
MM E-16: Energy Efficient Appliance Standards	LD (R, C, M), SP, AQP, RR, P/Stationary & Area	NA/Low	Yes: Varies for each appliance—higher capital costs, lower operating costs (Energy	Yes	Yes: Major retail stores.	Adverse: No Beneficial: CAPs, TACs		Project uses energy efficient appliances (e.g., Energy Star).

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			Star 2007).					
MM E-17: Green Building Materials	LD (R, C, M), SP, AQP, RR, P/Stationary & Area	NA/Low: 25-30% more efficient on average.	Yes	Yes: BEES software allows users to balance the environmental and economic performance of building products; developed by NIST (NIST 2007).	Yes	Adverse: No Beneficial: CAPs, TACs		Project uses materials which are resource efficient, recycled, with long life cycles and manufactured in an environmentally friendly way.
MM E-18: Shading Mechanisms	LD (R, C, M), I, SP, AQP, RR, P/Stationary, & Area	NA/Low: Up to $450 annual energy savings (Energy Star 2007).	Yes: Higher capital costs, lower operating and maintenance costs (Energy Star 2007).	Yes	Yes: Major retail stores.	Adverse: No Beneficial: CAPs, TACs		Install energy-reducing shading mechanisms for windows, porch, patio and walkway overhangs.

AG=Attorney General; ARB=California Air Resources Board; ASTM=American Society for Testing and Material; BAAQMD=Bay Area Air Quality Management District; BEES= Building for Environmental and Economic Sustainability; CA=California; Caltrans=California Department of Transportation; CAPs=Criteria Air Pollutants; CCAP=Center for Clean Air Policy; CF=Connectivity Factor; CIWMB=California Integrated Waste Management Board; CO= Carbon Monoxide; CO_2=Carbon Dioxide; DGS=Department of General Services; DOE=U.S. Department of Energy; DPF=Diesel particulate Filter; E85=85% Ethanol; EERE=Energy Efficiency and Renewable Energy; EOE=Encyclopedia of Earth; EPA=U.S. Environmental Protection Agency; ETC=Edmonton Trolley Coalition; EVs/CNG=Electric Vehicles/Compressed Natural Gas; FAR=Floor Area Ratio; GHG=Greenhouse Gas; ITE=Institute of Transportation Engineers; kg/m^2=kilogram per square meter; km=Kilometer; lb=pound; LEED=Leadership in Energy and Environmental Design; M=Million; NA=Not Available; NEV=Neighborhood Electric Vehicle; NIST=National Institute of Standards and Technology; NO_X=Oxides of Nitrogen; NREL=National Renewable Energy Laboratory; N/S=North/South; PG&E=Pacific Gas and Electric. PM=Particulate Matter; SJVAPCD=San Joaquin Valley Air Pollution Control District; SMAQMD=Sacramento Metropolitan Air Quality Management District; SMUD=Sacramento Municipal Utilities District; SO_x=Sulfur Oxides; SRI=Solar Reflectance Index; TACs=Toxic Air Contaminants; TDM=Transportation Demand Management; TMA=Transportation Management Association; THC=Total Hydrocarbon; ULEV=Ultra Low Emission Vehicle; USGBC=U.S. Green Building Council; and VTPI=Victoria Transit Policy.

Table 16
Mitigation Measure Summary

Mitigation Measure	Applicable Project/Source Type[1]	Effective		Feasible (Yes/No)		Secondary Effects (Yes/No)	Agency/Organization/Other[6]	Description/Comments
		Emissions Reduction/Score[2]	Cost (Yes/No)[3]	Technical[4]	Logistical[5]			
MM E-19: Ceiling/Whole-House Fans	LD (R, C, M), I, SP, AQP, RR, P/Stationary, & Area	NA/Low: 50% more efficient than conventional fans (Energy Star 2007).	Yes: $45-$200/fan, installation extra (Lowe's 2007).	Yes	Yes: Major retail stores.	Adverse: No Beneficial: CAPs, TACs		Install energy-reducing ceiling/whole-house fans.
MM E-20: Programmable Thermostats	LD (R, C, M), I, SP, AQP, RR, P/Stationary, & Area	NA/Low: $100 annual savings in energy costs (Energy Star 2007).	Yes: $60/LCD display and 4 settings for typical residential use (Lowe's 2007).	Yes	Yes: Major retail stores.	Adverse: Yes, Mercury Beneficial: CAPs, TACs		Install energy-reducing programmable thermostats that automatically adjust temperature settings.
MM E-21: Passive Heating and Cooling Systems	LD (R, C, M), I, SP, AQP, RR, P/Stationary, & Area	NA/Low	Yes: $800 (wall heaters) to $4,000+ (central systems)	Yes	Yes	Adverse: No Beneficial: CAPs, TACs		Install energy-reducing passive heating and cooling systems (e.g., insulation and ventilation).
MM E-22: Day Lighting Systems	LD (R, C, M), I, SP, AQP, RR, P/Stationary, & Area	NA/Low	Yes: $1,300 to $1,500 depending upon the kind of roof (Barrier 1995), installation extra.	Yes	Yes: Work well only for space near the roof of the building, little benefit in multi-floor buildings.	Adverse: No Beneficial: CAPs, TACs		Install energy-reducing day lighting systems (e.g., skylights, light shelves and interior transom windows).
MM E-23: Low-Water Use Appliances	LD (R, C, M), I, SP, AQP, RR, P/Stationary, & Area	NA/Low: Avoided water agency cost for using water-efficient kitchen pre-rinse spray valves of $65.18 per acre-foot.	Yes: Can return their cost through reduction in water consumption,	Yes	Yes	Adverse: No Beneficial: CAPs, TACs		Require the installation of low-water use appliances.

Table 16
Mitigation Measure Summary

Mitigation Measure	Applicable Project/Source Type[1]	Effective	Feasible (Yes/No)			Secondary Effects (Yes/No)	Agency/Organization/Other[6]	Description/Comments
		Emissions Reduction/Score[2]	Cost (Yes/No)[3]	Technical[4]	Logistical[5]			
			pumping, and treatment.					
MM E-24: Goods Transport by Rail	LD (C, M), I, SP, AQP, RR, P/Mobile	NA/Moderate	Yes	Yes	Yes	Adverse: No Beneficial: CAPs, TACs	ARB Goods Movement Plan (ARB 2007)	Provide a spur at nonresidential projects to use nearby rail for goods movement.
Social Awareness/Education								
MM S-1: GHG Emissions Reductions Education	LD (R, C, M), I, SP, TP, AQP, RR, P/Mobile, Stationary, & Mobile	NA/Low	Yes	Yes	Yes: Similar programs currently exist in CA.	Adverse: No Beneficial: CAPs, TACs		Provide local governments, businesses, and residents with guidance/protocols/information on how to reduce GHG emissions (e.g., energy saving, food miles).
MM S-2: School Curriculum	LD (R, C, M), I, SP, TP, AQP, RR, P/Mobile, Stationary, & Mobile	NA/Low	Yes	Yes	Yes: Similar programs currently exist in CA.	Adverse: No Beneficial: CAPs, TACs		Include how to reduce GHG emissions (e.g., energy saving, food miles) in the school curriculum.
Construction								
MM C-1: ARB-Certified Diesel Construction Equipment	LD (R, C, M), I, SP, TP, AQP, RR, P/Mobile	NA/Low	Yes: Oxidation Catalysts, $1,000-	Yes	Yes	Adverse: Yes, NO_x Beneficial: CAPs, TACs	AG, EPA, ARB, and CA air quality management and pollution control districts.	Use ARB-certified diesel construction equipment. Increases CO_2 emissions when trapped CO and carbon particles

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Table 16
Mitigation Measure Summary

Mitigation Measure	Applicable Project/Source Type[1]	Effective	Feasible (Yes/No)			Secondary Effects (Yes/No)	Agency/Organization/Other[6]	Description/Comments
		Emissions Reduction/Score[2]	Cost (Yes/No)[3]	Technical[4]	Logistical[5]			
			$2,000. DPF, $5000-$10,000; installation extra (EPA 2007b).					are oxidized (Catalyst Products 2007, ETC 2007).
MM C-2: Alternative Fuel Construction Equipment	LD (R, C, M), I, SP, TP, AQP, RR, P/Mobile	NA/Low	Yes	Yes	Yes	Adverse: Yes, THC, NO_x Beneficial: CO, PM, SO_x	AG, EPA, ARB, and CA air quality management and pollution control districts.	Use alternative fuel types for construction equipment. At the tailpipe biodiesel emits 10% more CO_2 than petroleum diesel. Overall lifecycle emissions of CO_2 from 100% biodiesel are 78% lower than those of petroleum diesel (NREL 1998, EPA 2007b).
MM C-3: Local Building Materials	LD (R, C, M), I, SP, TP, AQP, RR, P/Mobile	NA/Low	Yes	Yes	Yes: Depends on location of building material manufacture sites.	Adverse: No Beneficial: CAPs, TACs		Use locally made building materials for construction of the project and associated infrastructure.
MM C-4: Recycle Demolished Construction Material	LD (R, C, M), I, SP, TP, AQP, RR, P/Mobile	NA/Low	Yes	Yes	Yes	Adverse: No Beneficial: CAPs, TACs		Recycle/Reuse demolished construction material. Use locally made building materials for construction of the project and associated infrastructure.

Table 16
Mitigation Measure Summary

Mitigation Measure	Applicable Project/Source Type[1]	Effective	Feasible (Yes/No)			Secondary Effects (Yes/No)	Agency/Organization/Other[6]	Description/Comments
		Emissions Reduction/Score[2]	Cost (Yes/No)[3]	Technical[4]	Logistical[5]			
Miscellaneous								
MM M-1: Off-Site Mitigation Fee Program	LD (R, C, M), I, SP, TP, AQP, RR, P/Mobile & Area	NA/Moderate-High: Though there is currently no program in place, the potential for real and quantifiable reductions of GHG emissions could be high if a defensible fee program were designed.	Yes	Yes	No: Program does not exist in CA, but similar programs currently exist (e.g., Carl Moyer Program, SJVAPCD Rule 9510, SMAQMD Off-Site Construction Mitigation Fee Program).	Adverse: No Beneficial: CAPs, TACs		Provide/Pay into an off-site mitigation fee program, which focuses primarily on reducing emissions from existing development and buildings through retro-fit (e.g., increased insulation).
MM M-2: Offset Purchase	LD (R, C, M), I, SP, TP, AQP, RR, P/Mobile, Stationary, & Area	NA/Low	Yes	Yes	No: ARB has not adopted official program, but similar programs	No		Provide/purchase offsets for additional emissions by acquiring carbon credits or engaging in other market "cap and trade" systems.

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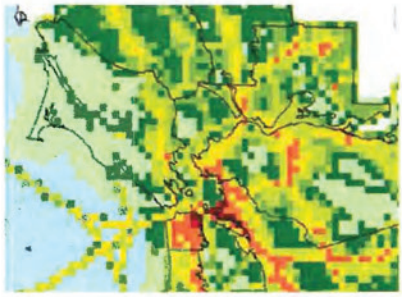
BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Bay Area 2010 Clean Air Plan







Final Clean Air Plan - Volume I

Adopted September 15, 2010

Association of Bay Area Governments

bcdc

METROPOLITAN TRANSPORTATION COMMISSION

ATTACHMENT E

Chapter 4 – Overview of CAP Control Strategy

The control strategy is the heart of the Bay Area 2010 Clean Air Plan. It describes specific measures and actions that the Air District and its partners will implement to improve air quality, protect public health, and protect our climate. This chapter includes:

- A description of the scope and underlying rationale of the control strategy;
- A summary of the specific control measures that comprise the overall strategy;
- A discussion of key themes that are embedded in the strategy;
- Estimates of emissions reductions and cost-effectiveness for control measures; and
- A description of how the control strategy will be implemented.

As discussed in Appendix B, the control strategy has been developed pursuant to the "all feasible measures" provisions of Section 40914 of the California Health & Safety Code. The control strategy includes 55 measures which are described in detail in Volume II. The control measures that comprise the CAP control strategy are divided into five categories which are discussed below. This includes the three categories used in prior plans - Stationary Source Measures, Mobile Source Measures, and Transportation Control Measures - as well as two new control measure categories: Land Use & Local Impacts Measures, and Energy & Climate Measures.

In developing the control strategy for the 2010 CAP, Air District staff reviewed control measures in other air quality plans throughout California and elsewhere in the U.S., and solicited suggestions from Air District staff, staff of regional agency partners, members of the public, and diverse stakeholder groups. Staff also reviewed emissions inventory data and existing Air District rules and programs to identify emission reduction opportunities. As described in Appendix F, staff analyzed control measures based on the evaluation criteria set forth in the Health & Safety Code, as well as their potential to reduce the range of pollutants addressed in this plan.

Scope and Rationale

The CAP control strategy is designed as an integrated strategy to:

- Reduce emissions and transport of ozone precursors by developing a control strategy that includes all feasible measures to fulfill air quality planning requirements pursuant to the California Health & Safety Code;
- Reduce emissions of other pollutants, including particulate matter (PM), key air toxics, and key greenhouse gases, in addition to ozone precursors;

- Help to forge a multi-agency partnership to combat climate change by developing a regional strategy to address land use, transportation, and air quality.

The control strategy seeks to maximize co-benefits from control measures that reduce ozone precursors, and also to include additional measures that focus on reducing PM, air toxics, and GHGs. Most control measures proposed in the CAP will reduce ozone precursors along with other pollutants. However, the proposed control strategy does include several measures that are focused on reducing PM, air toxics, and/or greenhouse gases, while providing little or no direct ozone benefit.

Although the Air District has clear authority to regulate emissions from stationary sources, its regulatory power is very limited in some areas that have great impact on air quality, such as mobile sources, land use decision-making, energy-efficiency standards for building, etc. Therefore, in developing the control strategy, staff identified the full range of tools and resources available to the Air District, both regulatory and non-regulatory, and applied the most appropriate ones in crafting each measure. Implementation of each control measure will rely on some combination of the following:

- Adoption and enforcement of rules to reduce emissions from stationary sources, area sources, and indirect sources;
- Revisions to the Air District's permitting requirements for stationary sources;
- Enforcement of CARB rules to reduce emissions from heavy-duty diesel engines;
- Allocation of grants and other funding by the Air District and/or partner agencies;
- Promotion of best policies and practices that can be implemented by local agencies through guidance documents, model ordinances, etc.;
- Partnerships with local governments, other public agencies, the business community, non-profits, etc.;
- Public outreach and education;
- Enhanced air quality monitoring;
- Development of land use guidance and CEQA guidelines, and Air District review and comment on Bay Area projects pursuant to CEQA; and
- Leadership and advocacy.

Overview of CAP Control Strategy

The proposed 2010 CAP control strategy proposes a total of 55 control measures in five categories, including:

- 18 measures to reduce emissions from stationary and area sources
- 10 mobile source measures
- 17 transportation control measures

- 6 land use and local impact measures
- 4 energy and climate measures

In addition, to complement the formal control measures outlined above, a total of 18 Further Study Measures, as well as a Leadership Platform, are proposed.

Figure 4-1 provides an overview of the CAP plan framework.

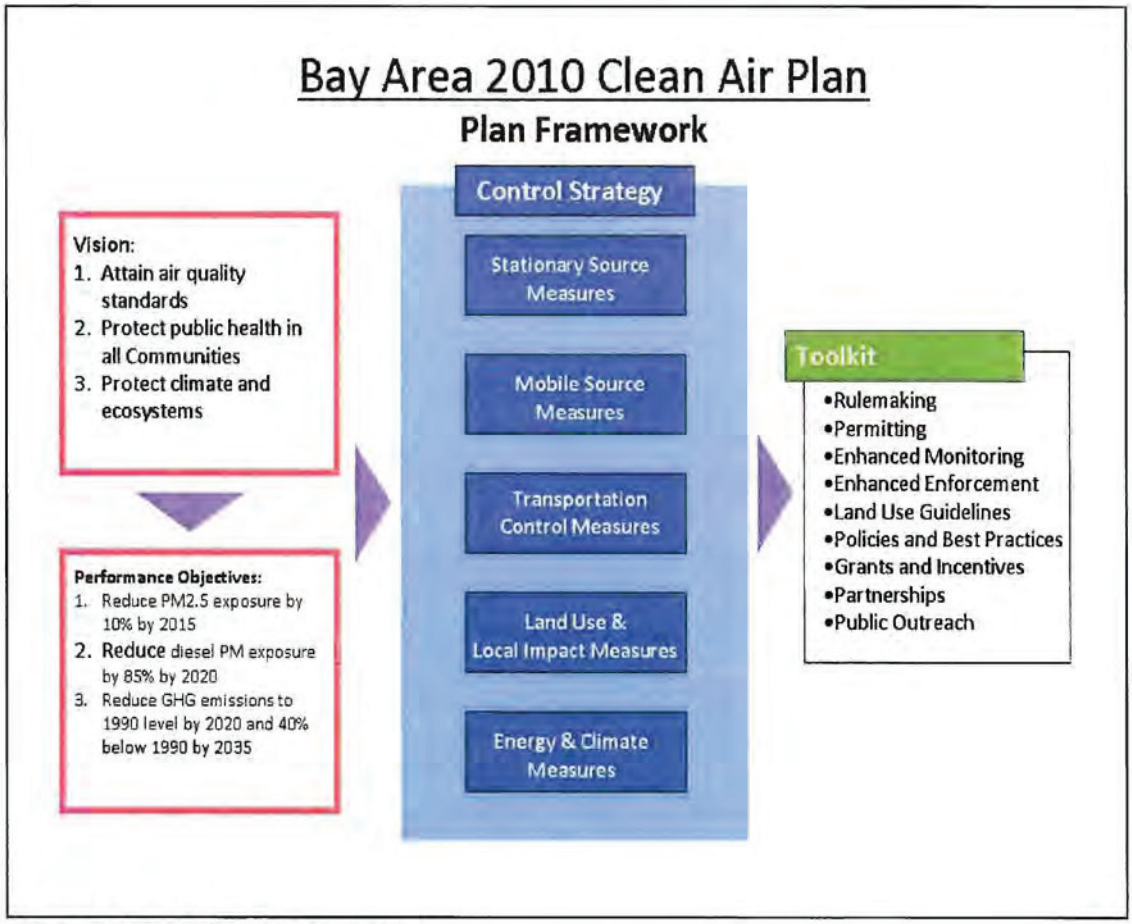


Figure 4-1. 2010 CAP Framework.

A brief summary of each category of control measures is provided in the section below. Detailed descriptions of the CAP control measures, FSMs, and Leadership Platform are provided in CAP Volume II. An overview of the control strategy and discussion of several key themes that run through the strategy are provided below.

Stationary Source Measures (SSMs) are measures that the Air District adopts and enforces pursuant to its authority to control emissions from stationary sources of air pollution such as manufacturing facilities, refineries, dry cleaners, auto body shops, gas

stations, etc. Since the adoption of its first state ozone plan in 1991, the Air District has adopted or amended 68 rules to reduce emissions from stationary sources; in aggregate, these rules have reduced ROG emissions by 70-72 tons per day and NOx emissions by 108-123 tons per day.

A total of 18 SSMs are proposed in the 2010 CAP control strategy to enhance the Air District's regulatory program and ensure that the Bay Area remains in the forefront in controlling emissions from stationary sources. The proposed SSMs will provide reductions in emissions of ozone precursors, direct PM and PM precursors, air toxics, and greenhouse gases. The SSMs are briefly summarized in Table 4-1.

Mobile Source Measures (MSMs) are measures that reduce emissions by accelerating the replacement of older, dirtier vehicles and equipment through programs such as the Air District's Vehicle Buy-Back and Smoking Vehicle Programs, and promoting advanced-technology vehicles that reduce emissions of criteria pollutants and/or greenhouse gases. Since CARB is responsible for establishing statewide motor vehicle emissions standards and fuel specifications, implementation of the 10 MSMs relies heavily upon incentive programs, such as the Carl Moyer Program and the Transportation Fund for Clean Air, to achieve voluntary emission reductions in advance of, or in addition to, CARB requirements. The MSMs are briefly summarized in Table 4-2.

Table 4-1. Stationary and area source measures.

Number	Title	Description
SSM 1	Metal Melting Facilities	Limit emissions of organic compounds, fine particulates, toxic compounds, and odors from foundry operations and metal melting facilities.
SSM 2	Digital Printing	Establish VOC limits or control requirements for inkjet, electro-photographic and other digital printing technologies.
SSM 3	Livestock Waste	Establish management practices to reduce ROG, ammonia, PM, GHG.
SSM 4	Natural Gas Processing and Distribution	Reduce emissions of VOCs and methane from natural gas production facilities.
SSM 5	Vacuum Trucks	Require carbon or other control technology on vacuum trucks to reduce emissions of VOCs.
SSM 6	General Particulate Matter Weight Rate Limitation	Reduce particulate weight limitation as a function of exhaust gas volume and/or as a function of process weight rate.
SSM 7	Open Burning	Further limit agricultural burning of some crops to be burned on a given day to reduce VOCs, NOx, and PM.
SSM 8	Coke Calcining	Reduce SOx emissions from coke calcining.
SSM 9	Cement Kilns	Further limit NOx and SOx from cement production and reduce toxic emissions.
SSM 10	Refinery Boilers and Heaters	Further reduce NOx emissions from refinery boilers, heaters, and steam generators.
SSM 11	Residential Fan Type Furnaces	Reduce allowable NOx limits for residential furnaces.
SSM 12	Space Heating	Establish NOx limits for industrial and commercial space heating.
SSM 13	Dryers, Ovens, Kilns	Establish NOx limits for industrial dryers, ovens, and kilns.
SSM 14	Glass Furnaces	Reduce NOx limits for glass furnaces.
SSM 15	Greenhouse Gases in Permitting – Energy Efficiency	Consider greenhouse gas (GHG) emissions during permitting of new or modified stationary sources. This may include (1) adopting GHG CEQA significance threshold for stationary sources, and (2) requiring GHG reduction measures in ministerial permits.
SSM 16	Revise Regulation 2, Rule 2: New Source Review	Amend Reg. 2, Rule 2 to address the District's anticipated non-attainment status of the 24-hour PM2.5 National Ambient Air Quality Standard.
SSM 17	Revise Regulation 2, Rule 5: New Source Review for Air Toxics	Implement more health-protective District permitting requirements in Regulation 2, Rule 5, New Source Review of Toxic Air Contaminants based on revisions to OEHHA risk factors and methodologies. For Priority CARE Communities, track the toxicity-weighted emissions from all sources in the identified communities.
SSM 18	Revise Air Toxics "Hot Spots" Program	Revise the District's Air Toxics Hot Spots program to incorporate more stringent risk reduction requirements from existing sources.

Table 4-2. Mobile source measures.

Mobile Source Control Measures (On-Road Light Duty Vehicles)		
Number	**Title**	**Description**
MSM A-1	Promote Clean, Fuel Efficient Light & Medium-Duty Vehicles	Expand the use of Super Ultra-low Emission (SULEV) and Partial - Zero emission (PZEV) light-duty passenger vehicles and trucks within the Bay Area.
MSM A-2	Zero Emission Vehicles and Plug-in Hybrids	Expand the use of Zero Emission (ZEV) and Plug-in Hybrid (PHEV) passenger vehicles and light-duty trucks within the Bay Area, working in partnership with the Bay Area Electric Vehicle Corridor coalition.
MSM A-3	Green Fleets (Light, Medium & Heavy-Duty Vehicles)	Develop a green fleet certification component of the Bay Area Green Business program, promote best practices for green fleets, and evaluate existing grant programs to ensure incentive funding is directed towards fleets and vehicles that meet stringent fuel economy standards.
MSM A-4	Replacement or Repair of High-Emitting Vehicles	Enhance the Air District's Vehicle Buy Back program to increase participation from car owners; e.g., via higher cash payments and/or increased marketing. Consider including motorcycles in the VBB programs, or other potential enhancements, e.g. implementing a vehicle repair program. Pursue improvements to the Air District's Smoking Vehicle program.
Mobile Source Control Measures (On-Road Heavy Duty Vehicles)		
MSM B-1	HDV Fleet Modernization	Provide incentives to accelerate the replacement or retrofit of on-road heavy-duty diesel engines in advance of requirements for the CARB in-use heavy-duty truck regulation.
MSM B-2	Low NOx Retrofits for In-Use Engines	Provide cash incentives to install retrofit devices that reduce NOx emissions from MY 1994-2006 heavy-duty engines. Continue requiring software updates to engine control modules in model year 1993-1998 diesel trucks as a condition of all heavy duty vehicle retrofit grants.
MSM B-3	Efficient Drive Trains	Encourage development and demonstration of hybrid drive trains for medium- and heavy-duty vehicles, in partnership with CARB, CEC and other existing programs.
Mobile Source Control Measures (Off-Road Equipment)		
MSM C-1	Construction and Farming Equipment	Reduce emissions from construction and farming equipment by 1) cash incentives to retrofit construction and farm equipment with diesel particulate matter filters or upgrade to a Tier III or IV off-road engine; 2) work with CARB, CEC and others to develop more fuel efficient off-road engines and drive-trains; 3) work with local communities, contractors and developers to encourage the use of renewable alternative fuels in applicable equipment.
MSM C-2	Lawn & Garden Equipment	Reduce emissions from lawn and garden equipment through voluntary retirement and replacement programs.
MSM C-3	Recreational Vessels	Reduce emissions from recreational vessels through voluntary retirement and replacement programs.

Transportation Control Measures (TCMs) are strategies to reduce vehicle trips, vehicle use, vehicle miles traveled, vehicle idling, or traffic congestion for the purpose of reducing motor vehicle emissions. The draft Control Strategy includes 17 TCMs to improve transit service; encourage walking, bicycling, and transit use; improve efficiency of the regional transit and roadway systems; support focused growth; and develop and implement pricing strategies. The TCMs for the 2010 Clean Air Plan were developed by reviewing the 2005 Ozone Strategy measures, and modifying and expanding them based on new investment and policy decisions and public input. In particular, the TCMs have been updated to reflect the policy and investment decisions made in MTC's regional transportation plan, *Transportation 2035: Change in Motion*.

The TCMs are organized into five categories:

- Improve Transit Services
- Improve System Efficiency
- Encourage Sustainable Travel Behavior
- Support Focused Growth
- Implement Pricing Strategies

New TCMs have been added to:

- Emphasize the importance of "smart driving" and the need to reduce high-speed driving (TCM C-5)
- Encourage parking policies that will help to reduce motor vehicle travel (TCM E-2)
- Advocate that the Air District and its regional agency partners join forces to develop a regional transportation pricing strategy (TCM E-3)

In preparing the Transportation 2035 Plan, MTC defined performance objectives related to the "Three E's" – Economy, Environment, and Equity – and evaluated how various investment and policy scenarios would perform relative to these objectives. MTC concluded that implementation of innovative pricing and land use policies will be the most effective means of achieving the T2035 objectives.[136] Transportation pricing and parking policies are both potentially potent tools to reduce motor vehicle use, while also generating revenues that can be used to support alternative transportation modes. The plan includes TCM E-1 (value pricing), TCM E-2 (parking), and TCM E-3 (other pricing measures). TCM E-3 calls for the Bay Area regional agencies to join forces to establish a regional pricing task force to define goals, evaluate transportation pricing policy options, develop a recommended regional transportation pricing strategy, and pursue implementation of the strategy. The TCMs are briefly summarized in Table 4-3.

[136] See MTC Transportation 2035 Plan, pages 21-30.

Table 4-3. Transportation control measures.

Number	Title	Description
TCM A-1	Improve Local and Areawide Bus Service	Improve transit by providing new Express Bus or Bus Rapid Transit on major travel corridors, funding the replacement of older and dirtier buses, and implementing Transit Priority Measures on key transit routes.
TCM A-2	Improve Local and Regional Rail Service	Improve rail service by sustaining and expanding local and regional rail services and by providing funds to maintain rail-cars, stations, and other rail capital assets.
TCM B-1	Implement Freeway Performance Initiative	Improve the performance and efficiency of freeway and arterial systems through operational improvements, including implementing the Freeway Performance Initiative, the Arterial Management Program, and the Bay Area Freeway Service Patrol.
TCM B-2	Improve Transit Efficiency and Use	Improve transit efficiency and use through continued operation of 511 Transit, and full implementation of TransLink® fare payment system and the Transit Hub Signage Program.
TCM B-3	Bay Area Express Lane Network	Introduce roadway pricing on Bay Area highways through the implementation of an express lane network, also known as a High Occupancy Toll (HOT) lane network.
TCM B-4	Goods Movement Improvements and Emission Reduction Strategies	Improve goods movement and reduce emissions from diesel equipment through implementation of the Bay Area's Trade Corridors Improvement Fund (TCIF) projects and various funding programs to replace or retrofit diesel equipment.
TCM C-1	Support Voluntary Employer-Based Trip Reduction Program	Support voluntary employer trip-reduction programs through the implementation of the 511 Regional Rideshare Program and Congestion Management Agency rideshare programs, the Spare the Air Program, encouraging cities to adopt transit benefit ordinances, and supporting Bay Area shuttle service providers.
TCM C-2	Implement Safe Routes to Schools and Safe Routes to Transit	Facilitate safe routes to schools and transit by providing funds and working with transportation agencies, local governments, schools, and communities to implement safe access for pedestrians and cyclists.
TCM C-3	Promote Rideshare Services and Incentives	Promote rideshare services and incentives through the implementation of the 511 Regional Rideshare Program and Congestion Management Agency rideshare programs including marketing rideshare services, operating rideshare information call center and website, and providing vanpool support services.
TCM C-4	Conduct Public Outreach and Education	Educate the public about the air quality, environmental, and social benefits of carpooling, vanpooling, taking public transit, biking, walking, and telecommuting, through the Spare the Air campaign and Transportation Climate Action Campaign.
TCM C-5	Promote Smart Driving/Speed Moderation	Educate the public about the air quality and climate protection benefits of reducing high-speed driving and observing posted speed limits.

Table 4-3 (continued). Transportation control measures.

Number	Title	Description
TCM D-1	Improve Bicycle Access and Facilities	Expand bicycle facilities serving transit hubs employment sites, educational and cultural facilities, residential areas, shopping districts, and other activity centers.
TCM D-2	Improve Pedestrian Access and Facilities	Provide funding for projects to improve pedestrian access to transit hubs, employment sites, educational and cultural facilities, residential areas, shopping districts, and other activity centers.
TCM D-3	Support Local Land Use Strategies	Promote land use patterns, policies, and infrastructure investments that support mixed-use, transit-oriented development that reduce motor vehicle dependence and facilitate walking, bicycling and transit use.
TCM E-1	Value Pricing Strategies	Implement value pricing (congestion pricing) on Bay Bridge; consider expanding value pricing to other Bay Area toll bridges to manage travel demand during congested periods. Measure may also include value pricing in the City of San Francisco.
TCM E-2	Parking Pricing and Management Strategies	Promote policies to implement market-rate pricing of parking facilities, reduce parking requirements for new development projects, parking "cash-out", unbundling of parking in residential and commercial leases, shared parking at mixed-use facilities, etc.
TCM E-3	Implement Transportation Pricing Reform	Develop a regional transportation pricing strategy that includes policy evaluation and implementation. Pricing policies to be evaluated include gasoline taxes, bridge tolls, congestion pricing, parking pricing, HOT lanes, VMT or carbon fees, pay-as-you-drive insurance, etc.

Land Use and Local Impacts Measures (LUMs) are a new category of measures designed to (1) promote mixed-use, compact development to reduce motor vehicle travel and emissions, and (2) ensure that we plan for focused growth in a way that protects people from exposure to air pollution from stationary and mobile sources of emissions. Building on the Air District's CARE program and Clean Air Communities Initiative, this component of the Control Strategy puts a special emphasis on the need to monitor and reduce population exposure to hazardous pollutants in communities that are most heavily impacted by emissions. The measures in this category draw upon the full range of tools available to the Air District, including rulemaking, notably development of a new indirect source review rule; revised CEQA guidelines and enhanced CEQA review by the Air District; working with local jurisdictions to encourage and assist them in developing Community Risk Reduction Plans to reduce population exposure to air toxics and PM; providing incentives to reduce emissions from heavy-duty diesel equipment; targeted enforcement of CARB diesel control rules; land use guidance; and enhanced air quality monitoring. The LUMs are briefly summarized in Table 4-4.

Table 4-4. Land use and local impacts measures.

Land Use and Local Impact Control Measures		
Number	**Title**	**Description**
LUM 1	Goods Movement	Reduce diesel PM and GHG emissions from goods movement in the Bay Area through targeted enforcement of CARB diesel ATCMs in impacted communities, partnerships with ports and other stakeholders, increased signage indicating truck routes and anti-idling rules, shifts in freight transport mode, shore-side power for ships, and improvements in the efficiency of engine drive trains, distribution systems (roadways, logistic systems) and land use patterns.
LUM 2	Indirect Source Review Rule	Develop an indirect source review rule to reduce construction and vehicular emissions associated with new or modified land uses.
LUM 3	Enhanced CEQA Program	1) Develop revised CEQA guidelines and thresholds of significance and 2) expand District review of CEQA documents.
LUM 4	Land Use Guidelines	Provide guidance to local governments re: 1) air quality and greenhouse gases in General Plans, and 2) how to address and mitigate population exposure related to land use development.
LUM 5	Reduce Risk in Impacted Communities	Establish a system to track cumulative health risks from all emissions sources in impacted communities (as identified by the District's CARE program) in order to monitor progress in reducing population exposure.
LUM 6	Enhanced Air Quality Monitoring	Expand monitoring program to provide better local air quality monitoring data in impacted communities.

Energy and Climate Measures (ECMs) are a new category of measures designed to reduce ambient concentrations of criteria pollutants, reduce emissions of CO2, and protect our climate by:

- Promoting energy conservation and energy efficiency in homes, schools, and commercial and industrial buildings;
- Promoting renewable forms of energy production, such as solar panels and solar thermal;
- Reducing "urban heat island" effects by increasing reflectivity of roofs and parking lots, in order to decrease energy consumption by air conditioning, reduce evaporative emissions from motor vehicles, and help offset temperature increases associated with global warming; and
- Promoting the planting of (low-VOC emitting) trees in order to reduce biogenic emissions from trees, lower air temperatures, provide shading to reduce energy use, and absorb CO2 and other air pollutants.

The ECMs are briefly summarized in Table 4-5.

Table 4-5. Energy and climate measures.

Energy and Climate Control Measures		
Number	**Title**	**Description**
ECM 1	Energy Efficiency	Provide 1) education to increase energy efficiency; 2) technical assistance to local governments to adopt and enforce energy- efficient building codes; and 3) incentives for improving energy efficiency at schools.
ECM 2	Renewable Energy	Promote distributed renewable energy generation (solar, micro wind turbines, cogeneration, etc.) on commercial and residential buildings, and at industrial facilities
ECM 3	Urban Heat Island Mitigation	Mitigate the "urban heat island" effect by promoting the implementation of cool roofing, cool paving, and other strategies.
ECM 4	Tree-Planting	Promote planting of low-VOC-emitting shade trees to reduce urban heat island effects, save energy, and absorb CO2 and other air pollutants.

These new Energy & Climate measures are proposed in recognition of the fact that promoting energy efficiency, renewable energy, and green building standards are essential for purposes of both air quality and climate protection. However, the Air District has very limited direct regulatory authority in the area of energy or building standards. A well-defined regulatory structure is already in place via regulations and programs developed by the California Energy Commission, the California Public Utilities Commission, and other entities, and California has the most stringent energy efficiency standards in the nation. Energy efficiency and renewable energy use in the buildings sector also play a major role in the AB 32 Scoping Plan. Therefore, in crafting energy and climate measures for the CAP, the challenge is to identify where gaps may exist in the current structure and how the Air District can play a useful role in this arena within the constraints of its authority and resources.

The four ECMs focus on promoting voluntary action, largely by local governments, to adopt best practices and model policies to further energy conservation. The Air District can play an important role in facilitating the spread of best practices, for example, by drawing on the experience gained from projects funded by the District's Climate Protection Grant Programs. The District can also build on its relationships with the local planning community, via CEQA commenting, supporting the development of local climate action plans, and other activities, to promote these measures at the local level.

The ECMs focus on reducing GHG emissions and offsetting anticipated temperature increases related to global warming; this will have the effect of mitigating ozone increases that would occur with increased temperatures. To the extent that these measures are successful in reducing energy use, they will also contribute to reducing emissions of pollutants such as NOx, PM, and air toxics.

Further Study Measures: In reviewing potential control measures for the CAP, District staff identified 18 potential measures that appear to have merit but are not yet ready to

be included as formal control measures. These measures have been included as further study measures (FSMs), as described in CAP Volume II. Measures have been classified as FSMs for a variety of reasons, including lack of emissions data for the targeted source, uncertainty as to the cost-effectiveness of a measure, or because the proposed control technology has not been adequately demonstrated. By designating measures as FSMs, the District commits to continue to evaluate these measures. However, the District makes no commitment to actually adopt or implement any FSM as a control measure unless and until a given measure has been demonstrated to be feasible pursuant to the control measure evaluation criteria specified in the Health & Safety Code. The FSMs are briefly summarized in Table 4-6.

Table 4-6. Further study control measures.

Further Study Measures		
Number	**Title**	**Description**
FSM 1	Adhesives and Sealants	Research the emission inventory for this source category, reconcile discrepancies with the inventories of other districts in the State, and determine if some VOC limits found in South Coast Rule are feasible in the Bay Area.
FSM 2	Reactivity in Coating and Solvents	Consider replacing VOC limits in certain rules, measured in mass VOC per volume, with limits based on the relative contribution to ozone formation of each of the organic species that make up the VOC content of a product.
FSM 3	Solvent Cleaning and Degreasing Operations	Consider reducing VOC emissions from solvent cleaning and degreasing operations based on CARB's statewide study.
FSM 4	Emissions from Cooling Towers	Research ways to reduce VOC emissions from cooling towers in refineries.
FSM 5	Equipment Leaks	Research ways to reduce VOC emissions from equipment leaks through remote sensing technologies and other methods.
FSM 6	Wastewater from Coke Cutting	Review coke cutting operations to determine if emissions reductions can be achieved from the resulting wastewater.
FSM 7	SO2 from Refinery Processes	Review refinery processes to identify opportunities to reduce SO2 emissions.
FSM 8	Reduce Emission from LPG, Propane, Butane, and other Pressurized Gases	Reduce emissions of LPG, propane, butane and other pressurized organic gases by requiring tanks and relief valves to be gas tight, prohibiting venting during tank filling, and establishing a leakage allowance for hoses.
FSM 9	Greenhouse Gas Mitigation in BACT and TBACT Determinations	Consider flexibility in BACT/TBACT determinations in order to reduce secondary green house gas (GHG) emissions from abatement devices.
FSM 10	Further Reductions from Commercial Cooking Equipment	Consider reducing emissions from commercial wok cooking, and solid fueled cooking devices such as wood-fired pizza ovens.

Table 4-6 (continued). Further study control measures.

Number	Title	Description
FSM 11	Magnet Source Rule	Explore the viability of developing a magnet source rule to reduce mobile source emissions from facilities such as airports, seaports, warehouses, distribution centers, shopping centers, and other facilities that generate mobile source emissions of criteria air pollutants, toxic air contaminants and greenhouse gases.
FSM 12	Wood Smoke	Study the impacts of existing Air District rules regarding wood burning and open burning, in order to develop more effective methods to implement, promote, enforce, and possibly expand, existing rules.
FSM 13	Energy Efficiency and Renewable Energy	Review the results of ECM1 and ECM 2 in 2010 CAP, and consider potential enhancements to promote energy efficiency and renewable energy.
FSM 14	Winery Fermentation	Review emissions generated by fermentation at wineries to determine if reductions in VOC emissions can be achieved.
FSM 15	Composting Operations	Review emissions generated by composting operations and consider reductions in emissions from composting.
FSM 16	Vanishing Oils and Rust Inhibitors	Research VOC emissions reductions from vanishing oils and rust inhibitors.
FSM 17	Ferry System Expansion	Work with MTC and the Water Emergency Transportation Authority to ensure that expansion of the regional ferry network will provide the greatest possible air quality benefit.
FSM 18	Greenhouse Gas Fee	Evaluate the idea of adopting a GHG fee on stationary sources to promote energy efficiency and reduce GHG emissions.

Leadership Platform: Some of the most potentially beneficial measures to improve air quality will require action by other agencies such as CARB or US EPA, or adoption of new legislation. Therefore, the CAP also includes a Leadership Platform, summarized in Table 4-7, which identifies policies and actions by other entities to complement the CAP control strategy.[137] The control measures that these actions would complement are identified in parentheses.

[137] The Leadership Platform is intended to help define the District's priorities for legislation and advocacy over the term of the CAP. However, it is not intended to preempt or supplant the Legislative Agenda that the District's Board of Directors defines each year.

Table 4-7. CAP leadership platform.

#	Advocacy Area	Actions
1	Cleaner Vehicles & Equipment	1. Advocate for more enforcement by CARB in Bay Area of diesel air toxics control measures and snap-idle inspection program. (MSM A-1) (LUM 1) 2. Support major revisions to the Smog Check program to improve its performance, such as using on-board diagnostics and remote sensing technologies to diagnose and repair vehicle emission malfunctions more quickly. (MSM A-4) 3. Support improvements to existing Smog Check program: older vehicles and newer high-mileage vehicles should be checked annually; also test for exhaust particulate matter (PM). (MSM A-4) 4. Support a motorcycle SmogCheck program. (MSM A-4) 5. Advocate for CARB to allow BAAQMD to include motorcycles and heavy-duty trucks in VAVR. (MSM A-4) 6. Support the phase out of new and in-use two-stroke engines. (MSM C-2, C-3) 7. Support public sector light- and heavy-duty green fleets. (MSM A-2) 8. Seek an on-going source of funding to provide incentives to reduce emissions from light-duty off-road equipment, such as lawn & garden and recreational watercraft. (MSM C-2, C-3)
2	Land Use/Building Standards	1. Support legislation to expand "parking cash-out." (TCM E-2) 2. Support enforcement of "parking cash-out." (TCM E-2) 3. Support legislation to require un-bundling of parking in leases. (TCM E-2) 4. Advocate for local building code requirements to exceed Title 24 requirements for commercial & residential multi-family housing to meet "cool roof" standards. (ECM 3) 5. Advocate for local zoning ordinances for "cool paving" standards and adding shade trees when existing parking lots undergo re-surfacing; also require shade trees in new lots. (ECM 3, 4) 6. Encourage CARB to provide credits for local government land use actions that can be used in GHG cap & trade system.
3	Pricing & Tax Policy	1. Support congestion pricing to reduce motor vehicle emissions. (TCM B-3, E-1) 2. Support a regional parking fee for privately owned lots, more cash-out incentives. (TCM E-2) 3. Support mileage-based vehicle and registration and/or license fees. (TCM E-3) 4. Support gas taxes or fees, and/or floor price for gasoline & diesel. (TCM E-3) 5. Support "pay as you drive" insurance. (TCM E-3) 6. Support cash incentives for the purchase of fuel efficient vehicles "feebates." (TCM E-3) 7. Support container fees at Ports. (LUM 1)

Table 4-7 (continued). CAP leadership platform.

#	Advocacy Area	Actions
4	Trip Reduction / Alternative Modes	1. Support legislation to empower air districts and local governments to adopt employer-based trip reduction requirements. (TCM C-1) 2. Support legislation to expand incentives for employer-based trip reduction programs, such as tax deductions and credits. (TCM C-1) 3. Encourage local governments to replicate San Francisco Commute Benefits Ordinance (allow employees to purchase transit passes with pre-tax $$). (TCM C-1) 4. Advocate for more diverse ways to measure Level of Service (LOS) than solely based on vehicle service volume to capacity ratios. (TCM D-1, D-2)
5	Other	1. Advocate with Caltrans and CHP for better enforcement of speed limits on freeways. (TCM C-5)

Key Themes Embedded in CAP Control Strategy

The CAP control strategy described above is wide-ranging and ambitious. To further explain the underlying rationale for the control strategy, we discuss in this section several key themes that are embedded in the strategy, including:

- Efficiency
- Reducing motor vehicle emissions
- Land use and community design
- Transportation pricing
- Goods movement

Efficiency

To date, most pollution control efforts have focused on reducing smokestack or tailpipe emissions, primarily by means of installing emission control devices. However, to address today's air quality and climate challenges, we need to address the root causes of air pollution and greenhouse gas emissions by analyzing energy consumption and emissions of air pollutants on a cradle-to-grave basis, promoting efficiencies, and making fundamental changes in fuels and/or production processes.

Incomplete combustion of fossil fuels results in emissions of ROG, NOx, PM, and air toxics.[138] To date, emissions of these pollutants have been reduced primarily by installing abatement devices on smokestacks and motor vehicle engines. Although this approach has generally been effective in reducing emissions of air pollutants, it does not

[138] NOx emissions result from combustion in the presence of nitrogen. NOx emissions have been reduced by using abatement devices or by reducing combustion temperatures.

address fundamental causes. Moreover, emission control devices often consume energy or affect efficiency, and thus may indirectly increase CO2 emissions.

CO2, the principal greenhouse gas, presents an entirely new problem. Unlike the pollutants discussed above which are emitted as byproducts of incomplete combustion, emissions of carbon dioxide are the direct and unavoidable product of complete combustion of fossil fuels. We cannot reduce emissions of CO2 simply by installing emission control devices. Ensuring more complete combustion, which might work to reduce ROG, PM, and air toxics, will increase CO2 emissions.

The most fundamental solution to reduce emissions of criteria pollutants, air toxics, and CO2 is to reduce the amount of fossil fuels that we burn. Thus, we need to make our vehicles, our buildings, and our production processes more efficient, and we need to find alternative ways to produce energy that do not rely on fossil fuels.

To attain our greenhouse gas and air quality goals, we need to pursue efficiency in all sectors, including:

- Energy generation and transmission
- Community design and building design
- Goods movement and distribution
- Motor vehicles propulsion systems
- Transportation infrastructure and systems

In addition to improving air quality, promoting efficiency and reducing energy consumption provides economic benefits in the form of cost savings and increased productivity. The concept of promoting efficiency is integrated into the CAP control strategy, and is expressed most directly in SSM 5, MSM A-1, MSM B-3, TCMs B-1 through B-4, and ECMs 1 and 3.

Reducing Motor Vehicle Emissions

Motor vehicles and other mobile sources are the primary source of ROG, NOx, air toxics, and greenhouse gas emissions in the Bay Area, as well as substantial contributors of PM emissions.

The CAP control strategy includes a comprehensive set of measures to reduce emissions from mobile sources. Overall, the CAP measures are based on the idea that we need to:

- Drive cleaner
- Drive smarter
- Drive less

Driving Cleaner

Driving cleaner – that is, reducing tailpipe emissions via technological controls - has been the primary strategy to improve air quality over the past several decades. Fleet-wide emission rates decline as older, more-polluting vehicles are replaced by newer, cleaner ones that meet more stringent emissions standards. The CAP includes Mobile Source Measures to accelerate the retirement or retrofit of older vehicles and to encourage the introduction of new, advanced technology vehicles, especially vehicles that use alternative (non-fossil) fuels, including electric vehicles and plug-in hybrid vehicles. These measures will help to reduce emissions of criteria pollutants and greenhouse gases from motor vehicles.

Driving Smarter

There are many easy, low-tech ways that we can reduce emissions by driving smarter, as described in TCM C-5. We can greatly reduce emissions of air pollutants and greenhouse gases and improve fuel economy by keeping tires properly inflated and vehicles well maintained, and by practicing sensible driving habits such as avoiding hard accelerations and braking.

Speed moderation is perhaps the most important aspect of smart driving. Emission rates of ROG, NOx, PM, and CO2 all increase significantly at high speed. As shown in Figure 4-2, emission factors for all these pollutants are lowest in the range of 35 mph to 50 mph. A vehicle driven at 75 mph consumes approximately 40% more fuel and emits 35% more emissions than one driven at 60 mph. Approximately 60% of Bay Area driving (VMT) takes place on the freeway system and, according to Caltrans data, 34% of freeway driving occurs at speeds in excess of 65 mph. Observing posted speed limits can have a major impact in reducing emissions, conserving energy, decreasing expenditures on gasoline and diesel, and saving lives by reducing traffic accidents.

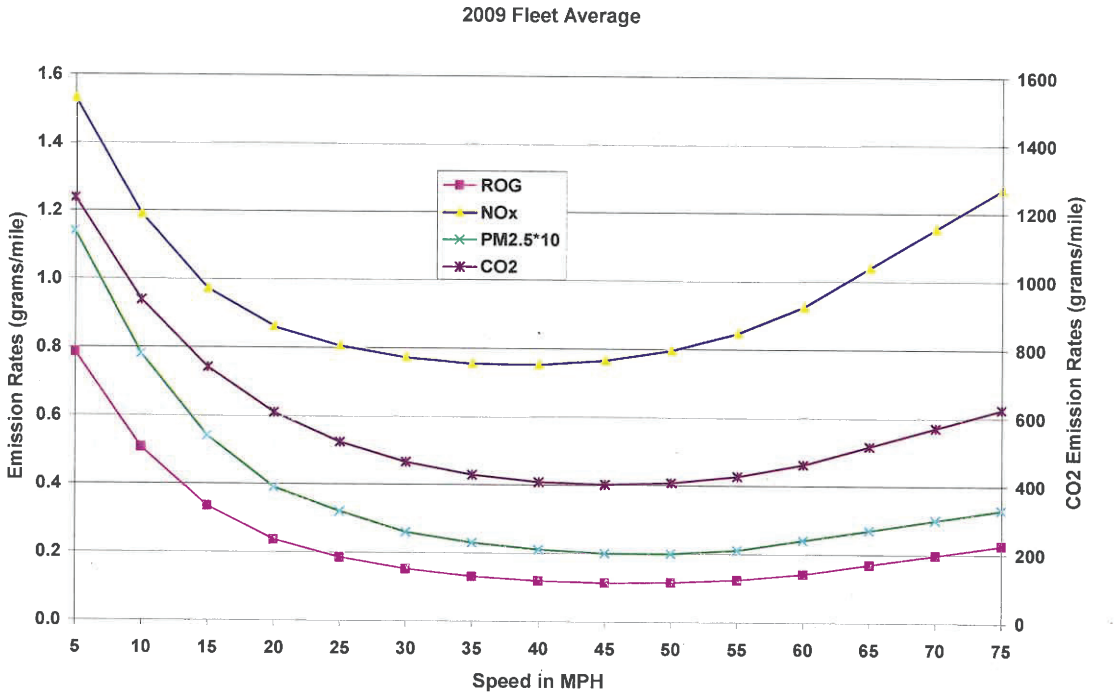


Figure 4-2. Emission rates vs. speed. Note: PM2.5 emission rates have been multiplied by a factor of 10 so as to best fit on the y-axis using the scale provided.

Driving Less

California has the most stringent motor vehicle tailpipe emission standards in the world. This accounts for much of our air quality progress to date. But it also means that once older vehicles have been replaced by new ones, and all the vehicles on the road meet these stringent standards, it will be difficult to squeeze more emissions reductions out of the Bay Area fleet. Motor vehicles will likely continue to be the primary source of air pollution in the future, so it will be imperative to continue to reduce motor vehicle emissions. Simply put, this means that we will need to drive less in the years to come to continue to improve air quality and protect our climate. However, experience to date shows that this will be difficult to accomplish. Reducing motor vehicle use will require an integrated strategy based on revising land use patterns, transportation pricing, providing viable alternatives to auto use, and public education.

VMT and Vehicle Ownership

Considerable effort is being invested at both the State and regional level to better integrate land use, transportation, air quality, and climate planning. Much of this effort is focused on the need to reduce the amount that we drive, often expressed by the term *vehicle miles of travel* (VMT). As shown in Figure 4-3, vehicle ownership and VMT have

both doubled since 1970, and vehicle ownership and VMT have both increased significantly faster than population.

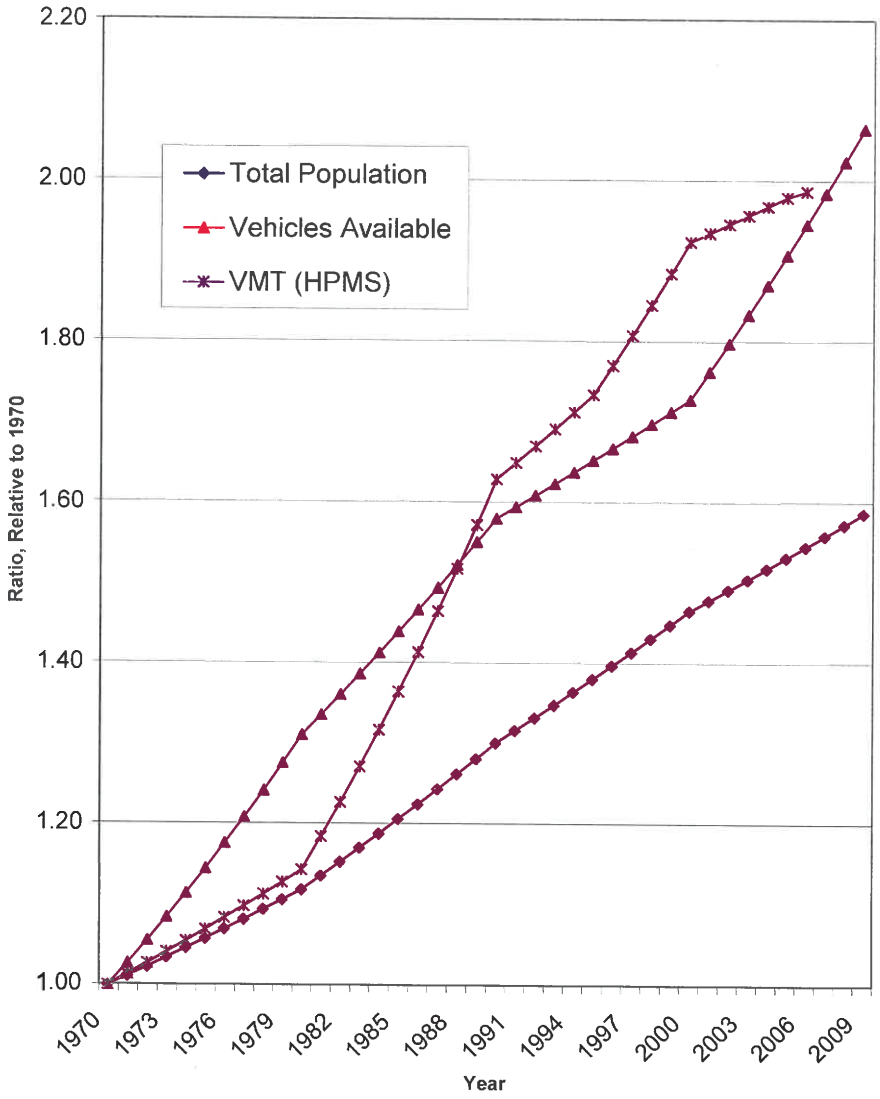


Figure 4-3. Growth in Bay Area population and motor vehicle use: 1970-2009.

This trend is expected to continue in the future. MTC forecasts that vehicle ownership and vehicle miles of travel (VMT) will both increase by approximately 30% in Bay Area [139] over the next 25 years; this is slightly faster than the rate of increase in population. An increase of this magnitude will translate into 1.25 million more vehicles driving an

[139] See MTC Travel Forecasts for Transportation 2035 Vision Analysis (November 2007). Per capita vehicle ownership is projected to increase from 638 per 1000 persons to 650 vehicles per 1000 persons by 2030. Household vehicles in Bay Area will increase from 4.33 million to 5.69 million by year 2030, an increase of 31.5% in 30 years.

additional 40 million miles per day on our already-congested roadways. This projected growth in vehicle ownership and VMT will lead to a wide range of negative impacts: more emissions of criteria pollutants and greenhouse gases, pressure to make costly investments to expand the roadway network and the supply of parking, increased water and noise pollution, and urban heat island effects that contribute to ozone formation.

A wide range of policies, many of which have been incorporated in the 2010 CAP control strategy, are proposed to reduce VMT. However, reducing motor vehicle ownership is rarely discussed as a means to reduce VMT, let alone as a legitimate objective in its own right. Yet there are good reasons to focus on reducing vehicle ownership, both on its own merits and as one of the most effective ways to reduce VMT.

- Motor vehicles can and do pollute even when they are not in use. On hot summer days, diurnal evaporative emissions from parked cars account for a significant amount of ROG, the key ozone precursor in the Bay Area.[140]
- Vehicle ownership rates are a strong predictor of VMT. Research indicates that at least 80% of the difference in VMT per household can be traced to differences in household vehicle ownership rates.[141]
- Once someone makes an investment to purchase and insure a motor vehicle, that vehicle generally becomes their default mode of transportation. In fact, having invested the money to purchase a car, it makes perfect economic sense for the owner to use the vehicle in order to maximize his or her return on that investment.

Even a modest reduction in vehicle ownership could provide significant benefit. For example, if the projected rate of increase in vehicle ownership could be reduced by 10% (i.e., from 1% per year to 0.9% per year) this would prevent the addition of 125,000 more vehicles on Bay Area roads in the coming decades. The potential benefits of reducing vehicle ownership include:

- Reduced VMT and reduced tailpipe emissions;
- Reduced evaporative emissions of ROG which contribute to ozone formation on hot days;
- Reduced need for parking, thus freeing space for other uses and helping to reduce urban heat island impacts (see control measure ECM 3);
- Reduced traffic congestion;
- Increased transit ridership, and thus a better return on capital investment in transit;
- Reduced roadway maintenance costs;
- Less need to expand the region's roadway network;

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[140] In the Bay Area, diurnal evaporation accounts for 18.8 tons of ROG on a typical summer day. This represents 15% of the estimated 126.0 tons of ROG per day emitted by on-road motor vehicles (EMFAC2007, November 2006) and approximately 5% of the total ROG inventory.

[141] "Location Efficiency: Neighborhood and Socio-Economic Characteristics Determine Auto Ownership and Use" John Holtzclaw et al, *Transportation Planning and Technology*, March 2002

- Better water quality (due to reduction in run-off of pollution from non-point sources);
- Reduced household transportation costs;[142] this could be especially beneficial for low-income households, for whom vehicle ownership costs may represent a major burden.[143]

The objective of reducing vehicle ownership is not to be punitive or to actively discourage any one from owning a car; on an individual level, motor vehicle ownership can provide important economic and social benefits. Rather, the objective is to create communities where people have a viable choice as to whether they want to own a vehicle or not. This requires fostering policies and conditions that make it possible, or even more advantageous, for people to choose a reduced-car or car-free option.

The CAP control strategy includes a number of measures to help reduce the need for vehicle ownership, such as promoting infill, mixed-use development (TCM D-3); improving transit service and efficiency (TCMs A-1, A-2, and B-2); promoting other modes including walking and bicycling (TCM D-1 and D-2); promoting ride-sharing and car-sharing (TCM C-3); and implementing transportation pricing strategies (TCMs E-1, E-2, and E-3).

Land Use and Community Design

There is a growing recognition in the Bay Area and beyond that current land use patterns, and the transportation infrastructure needed to serve those land uses, are core causes of some of our most fundamental problems, including air quality, water quality, climate change, high energy consumption, reliance on imported oil, and public health and fitness. A key long-term solution is to channel future growth into vibrant urban communities where goods and services are close at hand, and people have a range of viable transportation options.

To a great extent, community design dictates individual travel mode. For people who live (and/or work) in low-density, car-oriented development, the motor vehicle is often the only viable transportation option. In such situations, even the most robust strategy to promote alternative modes of travel can have, at best, only a very modest effect. In contrast, compact communities with a mix of land uses make it much easier to walk, cycle, or take transit for at least some daily trips.

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[142] On average, Bay Area household spend approximately 15% of household income on transportation. A November 2009 Urban Land Institute study entitled "Bay Area Burden" documents that on average Bay Area residents who live in the urban core spend significantly less on transportation than people who live in outlying parts of the region.

[143] Low-income Bay Area households spend 27% of their income on transportation; compared to 11% for high- income households. See MTC's Equity Analysis Report for T2035: Appendix E, Table E-2.

Focused growth needs to address *where we work* as well as where we live. Over the past 40 years, Bay Area job growth has increasingly migrated to suburban areas. The percentage of jobs located in core business districts that are well-served by transit has declined significantly. Today, the central business districts of San Francisco, Oakland, and San Jose collectively account for only 10% of total regional employment.[144] This suggests that policies to promote job growth in core areas well served by transit should be an important part of a comprehensive land use strategy to reduce VMT and emissions of air pollutants.

In addition to reduced air pollution, the benefits of focused development include reduced infrastructure costs, protection of open space and agricultural land, and encouraging vibrant communities with a strong retail tax base. Bay Area regional agencies are collaborating with local governments to promote infill development and identify priority development areas through the FOCUS program described in Chapter 3. But a stronger effort will likely be needed to build consensus in support of a sustainable plan for future Bay Area development in response to SB 375.

Senate Bill 375

Recognizing the importance of integrating land use, transportation, and climate protection planning, the State of California adopted SB 375 in fall 2008. SB 375 mandates that major metropolitan areas throughout California develop and implement integrated land use and transportation plans, known as "Sustainable Communities Strategies" or SCS, to achieve greenhouse gas reduction targets established by CARB. Programs to reduce on-road GHG emissions to meet SB 375 requirements will also result in reductions in ozone precursors, fine PM and air toxics.

The first Bay Area SCS must be developed and adopted by 2013. Development of the SCS is the primary responsibility of ABAG and MTC. However, the Air District can also play an important role in the development of the Bay Area SCS. The Air District for many years has worked with cities and counties on air quality issues, providing technical information and policy guidance, In addition, the Air District enjoys a strong working relationship with its regional agency partners; can exercise policy levers that influence new development, such as its CEQA guidelines and a forthcoming indirect source review regulation; and can provide technical expertise to ensure that the region and local jurisdictions pursue focused development in a way that protects public health.

Promoting Focused Development and Protecting Public Health

Promoting focused development in core areas of the region is essential in order to reduce emissions of criteria pollutants, air toxics and greenhouse gases from motor

[144] See March 2009 issue of *Urbanist*, published by the San Francisco Planning & Urban Research Association (SPUR).

vehicles, and thus achieve our air quality and climate protection goals. However, there is a potential tension, at least in the short term, between promoting focused development and protecting public health. Some areas that are well-suited for focused infill development, including areas designated as "priority development areas" by the region's FOCUS program, are in close proximity to heavily traveled roadways, industry, distribution centers, and ports. As a result, these areas currently experience high levels of emissions and/or population exposure to air pollutants on a localized level. To address this tension, Bay Area regional agencies and local governments will need to work together to nurture infill development that provides long-term benefits to the region as a whole, without exposing residents of the infill areas to undue exposure and health risk.

This issue was a key concern in developing the CAP control strategy. Building on the CARE program and the District's Clean Air Communities Initiative described in Chapter 3, the control strategy established the new category of Land Use and Local Impacts measures, as described above, to address this issue. See additional discussion in the "Reducing Impacts of Air Toxics in Local Communities" section in Chapter 5.

Pricing Strategies

While land use and community design are critical solutions over the long term, these strategies will take time to implement. To reduce motor vehicle emissions in the near term, pricing strategies are potentially the most effective tool. Motor vehicle travel imposes a variety of costs on society, including air pollution, that are not fully reflected in the price that drivers currently pay to own and operate a vehicle. There is widespread agreement among economists and planners that pricing policies could be a powerful means to reduce hidden subsidies that increase motor vehicle use, as well as to encourage more efficient use of our transportation systems.

There are a wide range of potential pricing policies and mechanisms, as described in TCM E-3. Both the conceptual framework and the technical capabilities to implement pricing measures are available, and real world examples have been successfully implemented for many pricing mechanisms. There are, however, significant differences among potential pricing policies in terms of their impacts on motor vehicle use and vehicle emissions, their socio-economic impacts, their revenue-generating potential, and their degree of political acceptability.

Pricing measures have, in fact, been indentified as important elements in Bay Area air quality and transportation plans for the past two decades, but relatively little progress has been achieved to date. No single agency has the resources and authority to develop and implement a pricing strategy on its own. The real challenge is how to develop and execute a clear strategy to implement transportation pricing in the Bay Area. As noted above, TCM E-3 calls for the Bay Area regional agencies to join forces to establish a regional pricing task force to develop a recommended regional transportation pricing

strategy and pursue implementation of the strategy. Forging support to implement transportation pricing policies will require political leadership, public outreach, and education, strategies to minimize impacts on low-income households, and coordination among the Bay Area's regional agencies and local jurisdictions.

Reducing Emissions from New Development

Although the Air District has no direct authority over land use decisions, the District can play an important role in helping to reduce the air quality and climate change impacts of new development and protect public health in impacted communities by means of indirect source review, CEQA, and guidelines for local land use plans (see LUMs 2, 3, and 4), as discussed below.

CEQA and Land Use Guidelines

The Air District is developing proposed revised guidelines and thresholds of significance for lead agencies to use in reviewing the air quality and greenhouse gas impacts of new projects under the California Environmental Quality Act (CEQA). The guidelines are intended to ensure that the appropriate level of environmental review occurs and that meaningful mitigation measures are implemented to reduce a project's emissions of criteria pollutants, air toxics, and greenhouse gases by:

- Adding the first-ever significance thresholds for GHGs;
- Adding a new threshold for localized PM2.5 impacts;
- Adding a new threshold for cumulative air toxics impacts;
- Recommending preparation of Community Risk Reduction Plans; and
- Recommending preparation of greenhouse gas reduction plans.

Air District staff will work closely with local agencies to help them implement the CEQA guidelines, and provide training and support in the use of the guidelines.

Indirect Source Review Regulation

Pursuant to Health & Safety Code Section 40716, air districts in California have authority to regulate emissions from indirect sources. The term "indirect source" refers to development that attracts or generates motor vehicle trips, such as housing, office parks, shopping centers, universities. As described in LUM 2, Air District staff will develop a proposal, for consideration by the District's Board of Directors, to adopt and implement an indirect source review regulation in order to reduce emissions associated with new or modified land use development. The rule may also achieve co-benefits by reducing emissions of greenhouse gases. The measure is intended to encourage projects to be sited, designed, and constructed so as to reduce construction and

operating emissions from motor vehicles as well as area sources, such as fireplaces, heating and cooling, and landscape maintenance equipment. In developing the ISR regulation, the Air District will work with its regional agency partners and local agencies to ensure that the regulation will serve to complement and support regional focused growth development programs.

Reducing Emissions from the Goods Movement Sector

Goods movement, a key function of the regional transportation system, is a critical component of the Bay Area economy. Nearly 40 percent of the region's economic output is in manufacturing, freight transportation, and the warehouse and distribution businesses, and goods movement accounts for over 10 percent of regional employment. The Port of Oakland is one of the nation's busiest container ports. Although cargo volumes are currently down due to the economic recession, projections show cargo volumes at the Port and throughout the region and state will grow significantly over the next 20 years. The Port of Oakland also plays an important role in supporting the state's agricultural sector, providing the primary means of transporting produce from the Central Valley to the Pacific Rim.

Despite its economic contributions, the goods movement sector is a significant source of air pollution, primarily PM and NOx. Exposure to diesel emissions from goods movement impacts the health of residents near ports, rail yards, distribution centers, and roads with high truck volumes. Diesel engines directly emit fine PM, and their NOx emissions contribute to formation of ozone and secondary PM2.5.

The 2010 CAP proposes a comprehensive strategy to reduce emissions and population exposure to diesel emissions, based upon the following principles:

- Promote greater efficiency and/or mode shift in order to move freight with less energy and fewer environmental impacts;
- Promote the use of the cleanest, most efficient mode of transportation (alternative fuels/ hybrid technologies);
- Ensure that any conventional vehicles and equipment used in goods movement are equipped with the most effective emission control systems available;
- Ensure that all vehicles and equipment used in goods movement are fully compliant with applicable State or federal regulations; and
- Encourage local land use decisions that do not expose sensitive populations to high levels of diesel emissions.

The CAP goods movement strategy will be implemented through a combination of actions. Key elements of the implementation include the following:

- Providing grants and incentives for the use of clean heavy-duty vehicles, as described in MSMs B-1, B-2, and B-3, and TCM B-4;

- Improving goods movement infrastructure in key corridors, as described in TCM B-4;
- Reducing local population exposure to diesel exhaust through enforcement, signage, and other measures described in LUM 1; and
- Pursuing partnerships with key stakeholders and promoting best practices to enhance efficiency and reduce emissions, as discussed in LUM 1.

Emission Reductions, Costs, and Benefits

Air District staff developed estimated emission reductions and implementation / compliance costs for the CAP control measures, as described below.[145] Per the requirements of the Health & Safety Code Section 40922, staff calculated the cost-effectiveness of control measures based upon reductions in ozone precursors (ROG and NOx). In addition, staff used the MPEM (described in Chapter 1) to estimate the public health and climate protection benefits of CAP control measures in monetary terms.

Emission Reductions: Air District staff estimated the emission reductions for all categories of control measures. In addition to ROG, NOx, and direct emissions of PM2.5, emission reductions were estimated, wherever possible, for SO2 and ammonia (precursors to secondary PM2.5 formation), the five air toxics addressed in the CAP, and the "Kyoto 6" greenhouse gases (CO2, methane, N2O, etc.).[146] Emission reductions could not be estimated for several control measures, either because the measure would not directly reduce emissions (e.g., LUM 5, LUM 6) or because additional analysis will be required during the rule development process (SSM 1, SSM 2, SSM 15, SSM 16, SSM 17, SSM 18).

Emissions reduction estimates for TCMs were calculated using CARB's most recent emissions inventory model, EMFAC2007, operating in the "BURDEN" mode. The BURDEN mode produces detailed reports on mobile source, on-road emissions at the county, air basin, and regional level, distributed by 13 distinct "speed bins" based upon time of day, which were forecast as a part of the Transportation 2035 travel forecasts.

The task of estimating emission reductions was complicated by the fact that the various control measures address a wide range of emissions sources and rely upon a diverse set of implementation mechanisms. In addition, many of the measures, especially measures that address land use, transportation pricing, and energy and climate, will rely heavily on partnerships and collaboration with other stakeholders, and/or preparation of guidance documents; it is difficult to quantify the emissions reductions for these measures. Because of these uncertainties, staff used relatively conservative emission

[145] MTC staff played a major role in developing emission reduction and cost estimates for the Transportation Control Measures.

[146] For some types of control measures, emission factors were not available for all pollutants.

reduction assumptions, so as not to over-estimate the reductions that the plan can deliver.

Analysis Years: Emissions reductions were estimated for years 2012 and 2020. The year 2012 was selected in order to evaluate the impact of control measures over the short-term, three-year horizon of the plan. However, because some measures will take longer to implement, 2020 was also selected to analyze longer term emissions reductions.

Costs: Many of the challenges in estimating emission reductions described above also apply in trying to estimate implementation costs for the various control measures. The types of the potential costs vary greatly among the measures. For stationary source measures, costs are based on the compliance cost to regulated industries. For many of the mobile source measures, costs are based on anticipated grants and incentives awarded by District programs and/or the incremental cost of cleaner, advanced-technology vehicles. For transportation control measures, there are various types of costs, depending upon the measure: e.g., capital costs to expand transit; costs to operate pubic outreach and information programs; or potential user fees as in the case of TCMs B-3, E-1, E-2, and E-3. It should also be noted that some measures that promote energy efficiency or the use of fuel-efficient engine technologies may provide significant user savings over the life of a project, which may offset or exceed the initial capital investments.

To provide additional information on cost impacts, the District also commissioned the preparation of a report entitled *Bay Area 2010 Clean Air Plan: Socio-Economic Analysis* to evaluate the potential impacts of control measures on regulated industries, public agencies, Bay Area households, and the regional economy as whole. Key findings of this report, which is available on the Air District website, include the following:

- The CAP control strategy as a whole will have a net positive economic impact on the Bay Area.
- Some regulated industries would potentially experience economic impacts if proposed rules are adopted, but compliance costs for proposed stationary source measures would not be deemed significant, based on the threshold defined in the report.
- The CAP control measures would not impose significant costs or unfunded mandates on local governments in the Bay Area.

For the proposed control measures that will be adopted as rules by the Air District Board of Directors, such as the stationary source measures and the Indirect Source Review regulation, additional analysis regarding potential costs and socio-economic impacts will be developed during the rule-making process for each measure.

Benefits: Evaluation of control measures has traditionally focused on the cost-effectiveness of measures in reducing ozone precursors, by dividing compliance costs by the tons of ROG and NOx reduced. However, for purposes of this plan, the Air District

also evaluated control measures on the basis of their potential to reduce multiple pollutants. In addition, using the multi-pollutant evaluation method (MPEM) described in Chapter 1, certain benefits of the various control measures have also been estimated; i.e., their potential to reduce negative health impacts, including premature mortality, and impacts related to climate change. It should be noted, however, that the MPEM does not fully consider all benefits related to improving air quality. Nor does the MPEM include other co-benefits for certain measures such as improved mobility, reduced traffic congestion, enhanced safety for pedestrians and bicyclists, reduced water pollution, etc.[147]

The 2010 CAP breaks new ground in attempting to quantify the benefits of control measures in monetary terms. From the standpoint of policy-making, Air District staff believes that it makes sense to consider health and climate protection benefits, in addition to compliance costs, in the evaluation of control measures.

The Air District estimates that, summing the benefits of the individual control measures, the control strategy as a whole will provide health and climate protection benefits with a monetary value in the range of $270 million to $1.5 billion per year, with a likely value on the order of $770 million per year. Roughly 80% of the estimated economic benefits from the CAP control measures can be attributed to reductions in PM2.5 (66% non-diesel PM2.5 and 14% diesel PM2.5). Reductions in greenhouse gases account for approximately 20% of the economic benefits.

As discussed in Chapter 1, there is uncertainty involved in the assumptions and methods incorporated in the MPEM. To address this issue, Air District staff has performed a MPEM Probability Analysis[148] to evaluate the uncertainty in the estimated benefits calculated by the MPEM. The Probability Analysis is used to find a range of likely values for each control measure and for the CAP control strategy as a whole, and to determine whether the differences in the estimated benefits of the various control measures are statistically significant. As described in the Probability Analysis, for each variable or parameter, a set of 1,000 values was simulated according to the appropriate distribution, resulting in 1,000 vectors of simulated parameter values. The methodology is designed so that, even though there may be considerable uncertainty in the estimated "bottom line" benefit for each of the control measures, it is possible to determine with confidence that the benefit for one measure is significantly greater than the benefit of

[147] The MPEM does not include all pollutants or all health effects, nor the benefits of improvements in air quality beyond the boundaries of the Air District due to reduced emissions in the Bay Area. Nor does it consider economic benefits such as reduced damage to agricultural crops and to property (tires, building surfaces, paints, etc.), the benefit of clean air for property values, tourism, ecosystems protection, water quality etc. Finally, the MPEM does not include the potential co-benefits of transportation measures such as improved transit service, reduced traffic accidents, etc.

[148] The MPEM Probability Analysis is available on the Resource and Technical Documents tab of the 2010 CAP web page at www.baaqmd.gov/Divisions/Planning-and-Research/Plans/Clean-Air-Plans/Resources.aspx.

another measure. An example comparing two control measures is provided in Section 6.1 of the Probability Analysis.

Summary of Emission Reductions, Costs, and Benefits: Table 4-8 shows the estimated emission reductions for ROG, NOx, PM2.5, and greenhouse gases (CO2-e), as well as:

- the estimated annual cost of each measure
- the cost-effectiveness in reducing ozone precursors (ROG & NOx reductions combined)
- the weighted cost-effectiveness based on MPEM weighting factors[149]
- estimated annual benefit in reducing health and climate-related impacts, and
- the ratio of estimated benefit to estimated cost

A more detailed version of this table which also shows estimated emission reductions for other pollutants, including ammonia, SO2, benzene, butadiene, acetaldehyde, formaldehyde, and methane is provided on the Resource and Technical Documents tab of the 2010 CAP web page.

[149] The weighted multi-pollutant cost-effectiveness is calculated by multiplying the estimated emission reductions for each pollutant by the MPEM weighting factor shown in Table 1-2, and then dividing the annual weighted emission reductions by the annual cost of the control measure.

Table 4-8. Emission reduction, cost, and benefit summary table.

DRAFT CONTROL STRATEGY EMISSIONS REDUCTIONS (tons per day)			ROG	NOx	PM2.5	CO2-e (See note #11)	Cost/Yr	C-E for ROG & NOx	Weighted Multi-Pollutant C-E	$ Benefit/Yr from MPEM
Stationary Source Measures		***Notes***								
SSM1	Metal Melting Facilities	2								
SSM2	Digital Printing	2								
SSM3	Livestock Waste		0.3000			65	$1,200,000	$11,000	$1,500	$1,126,000
SSM4	Natural Gas Processing	1,4	0.3000			120				$1,636,000
SSM5	Vacuum Trucks		6.0000				$21,900,000	$10,000	$10,000	$10,459,000
SSM6	General PM Weight Rate Limitation	1			0.2870					$47,811,000
SSM7	Open Burning		0.0400	0.0100	0.0900					$15,089,000
SSM8	Coke Calcining	1					$5,700,000		$760	$35,993,000
SSM9	Cement Kilns	1		4.3800			$2,800,000	$1,800	$1,100	$11,641,000
SSM10	Refinery Boilers & Heaters	1		2.9000						$7,709,000
SSM11	Residential Fan Type Furnaces	7		4.2000			$5,000,000	$3,300	$2,100	$11,163,000
SSM12	Large Space Heating	7		1.2000			$6,833,333	$15,600	$10,200	$3,191,000
SSM13	Dryers, Ovens, Kilns	1		0.2000			$570,000	$7,800	$5,100	$532,000
SSM14	Glass Furnaces			0.3800			$760,000	$5,500	$3,600	$1,197,000
SSM15	GHG in Permitting - Energy Efficiency	2								
SSM16	Revise Reg 2 Rule 2 NSR	2								
SSM17	Revise Reg 2 Rule 5 NSR TAC	2								
SSM18	Changes to Toxic Hot Spots Program	2								
	Stationary Source Subtotal		6.640	13.270	0.377	184.800				$147,547,000

Table 4-8 (continued). Emission reduction, cost, and benefit summary table.

DRAFT CONTROL STRATEGY EMISSIONS REDUCTIONS (tons per day)			ROG	NOx	PM2.5	CO2-e (See note #11)	Cost/Yr	C-E for ROG & NOx	Weighted Multi-Pollutant C-E	$ Benefit/Yr from MPEM
Mobile Source Measures		***Notes***								
MSM A-1	Promote Clean Fuel Efficient Vehicles		0.0500	0.0300	0.0050	0.0001	$10,000,000	$342,000	$48,000	$1,005,000
MSM A-2	Zero Emissions Vehicles & Plug-In Hybrids		0.0100	0.0100	0.0050	0.0001	$14,400,000	$1,973,000	$78,000	$883,000
MSM A-3	Green Fleets		0.0200	0.0200	0.0200	0.0002	$550,000	$38,000	$800	$3,422,000
MSM A-4	Reduce High-Emitting Vehicles		4.3700	2.0600	0.0200	44.1425	$333,000	$140	$80	$17,279,000
MSM B-1	HDV Fleet Modernization		0.1000	5.0000	0.0330	0.6390	$58,333,000	$31,000	$9,300	$30,042,000
MSM B-2	Software/Catalytic Convertors			0.9900			$12,500,000	$35,000	$23,000	$2,632,000
MSM B-3	Efficient Drive Trains		0.0100	0.2900	0.0095	0.2274	$6,667,000	$61,000	$13,300	$2,374,000
MSM C-1	Construction & Farming Equipment		0.0400	0.7200	0.0190		$2,400,000	$9,000	$2,200	$5,149,000
MSM C-2	Lawn & Garden Equipment		0.0400	0.0090	0.0060	0.0008	$2,000,000	$112,000	$8,700	$94,000
MSM C-3	Recreational Vessels		0.0600	0.0090	0.0090	0.4156	$1,000,000	$40,000	$2,900	$1,632,000
	Mobile Source Subtotal		4.700	9.138	0.127	45.426				$64,511,000
Transportation Control Measures		***Notes***								
TCM A-1	Improve Local & Area-Wide Bus Service		0.0279	0.0316	0.0010	23	$340,433,000	$15,670,000	$1,018,000	$617,000
TCM A-2	Improve Local & Regional Rail Service	3	0.1386	0.1520	0.0280	516	$1,200,000,000	$11,315,000	$165,000	$12,430,000
TCM B-1	Implement Freeway Performance Initiative		0.9216	3.3150	0.1190	2,451	$51,667,000	$33,000	$1,500	$54,387,000

Table 4-8 (continued). Emission reduction, cost, and benefit summary table.

DRAFT CONTROL STRATEGY EMISSIONS REDUCTIONS (tons per day)			ROG	NOx	PM2.5	CO2-e (See note #11)	Cost/Yr	C-E for ROG & NOx	Weighted Multi-Pollutant C-E	$ Benefit/Yr from MPEM
Transportation Control Measures		***Notes***								
TCM B-2	Improve Transit Efficiency & Use		0.0039	0.0045	0.0003	6.13	$25,667,000	$8,377,000	$296,000	$152,000
TCM B-3	Bay Area Express Lane Network		0.8603	1.3617	0.2750	1,892	$108,000,000	$133,000	$3,400	$70,685,000
TCM B-4	Goods Movement Improvements	1	0.5850	4.8175	0.0613	4,045	$40,000,000	$20,000	$700	$82,172,000
TCM C-1	Voluntary Employer Trip Reduction		0.0761	0.0943	0.0040	97	$3,600,000	$88,000	$4,100	$2,240,000
TCM C-2	Safe Routes to School and Transit		0.0084	0.0082	0.0004	8.18244	$13,333,000	$3,361,000	$172,000	$211,000
TCM C-3	Promote Rideshare Services		0.0837	0.1051	0.0080	153	$5,667,000	$125,000	$4,000	$3,808,000
TCM C-4	Public Outreach and Education		0.0200	0.0200	0.0020	40.42	$4,333,333	$297,000	$7,600	$981,000
TCM C-5	Smart Driving/Speed Moderation		0.0744	0.1683	0.0090	180	$1,000,000	$11,000	$400	$3,753,000
TCM D-1	Improve Bicycle Access and Facilities		0.0037	0.0041	0.0002	4.44	$1,500,000	$527,000	$24,000	$110,000
TCM D-2	Improve Pedestrian Access and Facilities		0.0028	0.0020	0.0001	1.76	$40,000	$23,000	$1,500	$49,000
TCM D-3	Support Local Land Use Strategies		0.2418	0.3111	0.1450	873.63	$5,866,667	$29,000	$400	$36,598,000
TCM E-1	Value Pricing Strategies		0.0000	0.0105	0.0030	9.87	$26,000,000	$6,784,100	$107,300	$733,000
TCM E-2	Parking Pricing & Management Strategies		0.1800	0.1882	0.0164	294	$1,478,171,000	$10,996,900	$354,000	$7,268,000
TCM E-3	Implement Transportation Pricing Reform		0.1152	0.1204	0.0105	188	$471,143,000	$5,478,100	$165,000	$5,561,000
	TCM Subtotal		3.343	10.714	0.683	10,783.543				$281,755,000

Table 4-8 (continued). Emission reduction, cost, and benefit summary table.

DRAFT CONTROL STRATEGY EMISSIONS REDUCTIONS (tons per day)			ROG	NOx	PM2.5	CO2-e (See note #11)	Cost/Yr	C-E for ROG & NOx	Weighted Multi-Pollutant C-E	$ Benefit/Yr from MPEM
Land Use Measures		***Notes***								
LUM1	Goods Movement		0.0120	1.7188	0.2207	2,561	$1,449,000	$2,000		$65,101,000
LUM2	Indirect Source Review Rule		0.3020	0.2441	0.1076	340	$1,412,000	$7,100	$100	$52,864,000
LUM3	Enhanced CEQA Program	1	0.4400	0.3500	0.1600	447				$76,216,000
LUM4	Land Use Guidelines		0.0774	0.0810	0.0070	139				$2,805,000
LUM5	Reduce Risk in Impacted Communities	2								
LUM6	Enhanced Air Quality Monitoring	2								
	LUM Subtotal		0.831	2.394	0.495	3,487.504				$196,986,000
Energy and Climate Measures		***Notes***								
ECM1	Energy Efficiency	1	0.05	0.52		543.06	-$20,086,000	-$97,000	-$1,100	$65,906,000
ECM2	Renewable Energy	1	0.000004	0.000049		0.056488	$11,392,000	$584,159,000	$6,273,000	$6,000
ECM3	Urban Heat Island Mitigation		0.002	0.025		30	-$39,649,000	-$4,023,000	-$42,600	$3,137,000
ECM4	Tree Planting		0.0050	0.072000		76	$71,049,000	$2,528,000	$27,000	$9,093,000
	ECM Subtotal		0.0570	0.6170		649.5099				$78,142,000
Total for All Measures			15.5718	36.1334	2.0611	15,151				$768,942,000

Notes:

1. These emission reductions are estimates for year 2020. No information available for year 2012.
2. At this time, emission reductions cannot be determined for this control measure.
3. Emission reductions and costs are for year 2020.
4. Control Measure SSM-4 presents emission reductions as a range between 6 and 9 TOG. The most conservative reduction is represented here.
5. Unable to calculate costs for this measure.
6. CO2-e includes the "Kyoto 6" greenhouse gases (including CO2, methane, and N2O) weighted by their global warming potential.
7. Estimated NOx reductions for this measure represent reductions that will be achieved upon full implementation of the measure. Full implementation is not anticipated until year 2030 or 2040.

Implementing the CAP Control Strategy

Stationary source measures in the 2010 CAP, along with LUM 2 (Indirect Source Review Regulation), will be developed and adopted through the District's rule development process, as described below. The other types of control measures (MSMs, TCMs, LUMs, and ECMs) will be implemented via a variety of mechanisms, including partnerships, grants and incentives, public outreach, developing guidance documents for local agencies, etc. The specific mechanisms for each control measure are specified in the "Implementation Actions" section of the control measures descriptions provided in Volume II.

Progress in implementing the MSMs, TCMs, LUMs, and ECMs will depend upon the availability of resources among the many parties who have a role in implementing the control measures, as well as success in further enhancing existing partnerships among regional agencies, local governments, the business community, community groups, and other stakeholders. In particular, significant resources will be needed on the part of the Air District and/or other partners to implement measures such as an indirect source review regulation, an enhanced CEQA program, land use guidelines for local agencies, urban heat island mitigation, and assisting local governments in the development of Community Risk Reduction Plans and climate action plans.

Summary of the Air District's Rule Development Process for Stationary Source Measures

The Air District goes through a detailed process to adopt rules and regulations to impose standards on and limit emissions from stationary and area sources in the Bay Area. The legal authority for these regulations and many of the requirements that establish the process are found in the California Health and Safety Code.[83] The Air District follows a set of guiding principles for the rule development program:

- Strengthen and refine rules to do a better job of protecting the public health, environment and economy of the Bay Area
- Meet environmental goals in the most efficient and effective manner
- Respect all different points of view and knowledge
- Identify stakeholders with an interest in the outcome of our regulations
- Provide businesses maximum flexibility to meet air quality goals in a way that works best for them, allowing them to be cleaner at a lower cost

Air District staff undertakes a rigorous process to prepare a new rule or rule amendment for consideration by the Board of Directors. Following is a brief summary of the steps involved in developing a new or modified rule:

[83] See e.g. California Health and Safety Code § 40702, 40703, 40725 *et seq.*

- **Internal Scoping Meeting**: Staff conducts an internal meeting to discuss an identified air pollution problem, including divisions that may have relevant expertise. For example, the source test and laboratory departments in the Technical Services Division have input on appropriate test methods to create enforceable standards.
- **Technical Assessment Memorandum**: Staff performs an analysis of the various options for addressing the problem, including technology available to achieve controls, cost effectiveness, and potential environmental impacts. A technical assessment memorandum may precede or may be derived from a control measure.
- **Stakeholders Meetings:** Staff conducts meetings with the affected businesses and other interested parties to discuss issues, exchange information, and ensure effective communication among the various parties. In some cases stakeholder meetings precede and assist in development of technical assessment memoranda.
- **Initial Draft of the Proposed Rule:** After technical assessment, stakeholders meetings, and consultation with affected parties, if staff determines that a new rule or rule amendment is warranted, the District develops a draft rule.
- **Workshops**: Staff conducts one or more public meetings for each new rule or rule modification so that all affected and interested parties can discuss, comment on, and ask questions about a proposed rule.
- **CEQA Determination:** As a draft rule is developed, a CEQA (California Environmental Quality Act) analysis is prepared to determine whether a rule or rule amendment might have any adverse environmental impacts.
- **Socioeconomic Impact Analysis:** Staff researches and prepares cost estimates for implementation of the control strategy and calculates cost effectiveness on a dollars/ton of emissions reduced basis. An analysis of the socioeconomic impact of the rule proposal is prepared to assess the impact of the costs of the rule on the impacted industry and the Bay Area economy, including jobs.
- **Staff Report:** The results of the CEQA determination and socioeconomic analysis are incorporated into a staff report. The staff report explains the technical basis for the rule. It contains emission estimates, a description of the industry, control requirements, as well as rule amendments, costs, incremental costs, impacts on Air District staff resources, and the rule development process, and makes legal findings necessary for rule adoption. Comments and responses on the rule proposal and on the CEQA analysis are also included.
- **Public Hearing:** Staff presents the rule or amendments to the Air District's Board of Directors at one of the Board's regularly scheduled meetings. These meetings are always open to the public, and notice is provided 30 days in advance. Anyone may comment on the proposed rule or amendments during the meeting. At the conclusion of the hearing, the Board decides whether to adopt the rule or amendments.

Subsequent to rule adoption by the Board, staff implements the rule by preparing inspection protocols, policies, and procedures and issuing compliance advisories to notify affected parties of the rule and compliance dates. Staff also forward the rule to CARB and, if appropriate, prepare a State Implementation Plan (SIP) submittal to EPA.

Rule Adoption Schedule

Table 4-9 shows the proposed schedule for rule adoption during 2010, 2011, and 2012. Factors that were considered in developing this schedule include the estimated emission reduction benefit of each measure, the potential of measures to reduce localized health risks and impacts, the expected amount of time required to complete the rule development process for each measure based on data needs and other technical factors, as well as the need for participation in the rule development process by affected and interested parties.

Consistent with the CAP's emphasis on protecting public health, the proposed rule adoption schedule places high priority on developing regulations that reduce emissions of PM 2.5, as well as air toxics in impacted communities.

The schedule is as expeditious as practicable. Any particular control measure may be advanced or delayed based on information discovered in the rule development process or Air District staff allocation priorities. Also, during the rule development process, it may be determined that a measure may not provide sufficient emission reductions to warrant regulation or may not be cost effective.

Table 4-9. Rule adoption schedule, 2010-2012.

2010 Regulatory Agenda		
CM #	Control Measure (Regulation and Rule)	ER Potential
SSM 1	Metal Melting Facilities	TBD PM [1]
SSM 5	Vacuum Trucks	6.0 tpd ROG
SSM 6	General Particulate Matter (Reg. 6-1)	2.87 PM
SSM 9	Cement Kilns	4.38 tpd NOx [2]
SSM 10	NOx from Petroleum Refinery Boilers and Heaters (Reg. 9-10)	2.9 tpd NOx
SSM 17	New Source Review for Toxic Air Contaminants (Reg. 2-5)	n/a [4]

2011 Regulatory Agenda		
CM #	Control Measure (Regulation and Rule)	ER Potential
SSM 4	Natural Gas Production and Distribution (Reg. 8-37)	0.3 – 0.4 tpd ROG [3]
SSM 7	Open Burning	0.04 ROG
SSM 8	Petroleum Coke Calcining	2.6 tpd SO2
SSM 11	NOx from Residential Fan Furnaces (Reg. 9-4)	4.2 tpd NOx
SSM 12	NOx from Large Residential and Commercial Space Heating	1.2 tpd NOx
SSM 18	Air Toxics Hot Spots	TBD
LUM 2	Indirect Source Review Rule	0.3 ROG, 0.24 NOx, 0.47 PM10 [2]

Table 4-9 (continued). Rule adoption schedule, 2010-2012.

2012 Regulatory Agenda		
CM #	Control Measure (Regulation and Rule)	ER Potential
SSM 2	Digital Printing	TBD ROG
SSM 3	Livestock Waste	0.3 tpd ROG [3]
SSM 13	NOx from Dryers, Ovens and Kilns	0.2 tpd NOx
SSM 14	NOx from Glass Furnaces (Reg. 9-12)	0.38 tpd NOx
SSM 15	GHG in Permitting	n/a [4]
SSM 16	New Source Review for PM2.5	n/a [4]

1 Control Measure would also reduce toxic air contaminants.
2 Control Measure would also reduce toxic air contaminants, SOx and PM.
3 Control Measure would also reduce methane, a potent greenhouse gas.
4 New Source Review and permitting decisions mitigate emissions from future sources; consequently, no reductions from baseline are projected.

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Appendix C:
Agricultural Preservation Agreement

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Exhibit A: Proposed Preservation and Enhancement Area

Mt Diablo State Park

Morgan Territory Regional Park

Los Vaqueros Reservoir Watershed Land

Blackhawk

Camino Tassajara

DANVILLE

Camino-Tassajara

SAN RAMON

Finley Rd

Old School Rd

Country Ln

Joseph Ln

Bruce Dr

Penny Ln

Johnston Rd

Highland Rd

Marciel Rd

Victorine Rd

Storybook Ln

Morgan Territory Rd

Sky Ranch Dr

Doubletree Ln

Twin Oaks Ln

Los Vaqueros Rd

Windemere Pkwy

Bollinger Canyon Rd

E Branch Pkwy

Camino Tassajara

Collier Canyon Rd

Carneal Rd

Manning Rd

Camp Parks (USA)

Alameda County

N

W E

S

Map created 08/21/2020
by Contra Costa County Department of
Conservation and Development, GIS Group
30 Muir Road, Martinez, CA 94553
37:59:41.791N 122:07:03.756W

Proposed Preservation and Enhancement Area
17,667 acres

Proposed Dedication Area
727 acres

County Urban Limit Line

San Ramon Urban Growth Boundary

Contra Costa/Alameda County Line

Miles
0 0.5 1

This map or dataset was created by the Contra Costa County Department of Conservation and Development with data from the Contra Costa County GIS Program. Some base data, primarily City Limits, is derived from the CA State Board of Equalization's tax rate areas. While obligated to use this data the County assumes no responsibility for its accuracy. This map contains copyrighted information and may not be altered. It may be reproduced in its current state if the source is cited. Users of this map agree to read and accept the County of Contra Costa disclaimer of liability for geographic information.

Exhibit B: Proposed Dedication Area

Blackhawk
Camino-Tassajara
SAN RAMON

Blackhawk Dr
Kingswood Ln
Camino Tassajara
Channi Ct
Angora Ct
Casablanca St
Griffon Ct
Charbray St
Lusitano St
Ariel Dr
Enderby St
Bengali St
Belarus St
Massara St
Gritstone St
Drysdale St
Kerry Hill St
Robert Duchi Way
Finley Rd
Old School Rd
Joseph Ln
Country Ln
Tassajara Creek
Bruce Dr
Penny Ln
Johnston Rd
Camino Tassajara
Highland Rd

San Ramon Urban Growth Boundary
County Urban Limit Line
Proposed Dedication Area
727 ac

N
W
E
S

Feet
0
1,000
2,000

Map created 08/21/2020
by Contra Costa County Department of Conservation and Development, GIS Group
30 Muir Road, Martinez, CA 94553
37:59:41.791N 122:07:03.756W

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AGREEMENT
REGARDING PRESERVATION AND AGRICULTURAL ENHANCEMENT IN THE TASSAJARA VALLEY

This Agreement Regarding Preservation and Agricultural Enhancement in the Tassajara Valley ("**Agreement"**) is entered into on _____, 2020 ("**Effective Date**") by and among the County of Contra Costa, a political subdivision of the State of California ("**County**"), the City of San Ramon, a California municipal corporation ("**San Ramon**"), and the East Bay Regional Park District ("**EBRPD**"), a regional park district formed pursuant to Article 3 of Chapter 3 of Division 5 of the Public Resources Code. The County, San Ramon, and EBRPD are sometimes hereinafter referred to individually as a "**Party**" and collectively as the "**Parties**."

RECITALS

A. The Parties enter into this Agreement for the purpose of cooperating to preserve and enhance agricultural uses within the Tassajara Valley. This Agreement is intended to be a "preservation agreement" under the Land Use Element (Chapter 3) of the County of Contra Costa General Plan 2005-2020 ("**County General Plan**") and Section 82-1.018 of the Contra Costa County Ordinance Code ("**County Ordinance Code**"). This Agreement is also intended to protect the economic viability of agricultural land within the Tassajara Valley and accomplish the dedication and permanent preservation of certain land therein.

B. The general plans of the County and San Ramon, and the EBRPD Master Plan, (collectively, "**Existing Agricultural and Open Space Protection Policies**") contain provisions intended to protect agricultural lands and open space. The Existing Agricultural and Open Space Protection Policies include the Contra Costa County Urban Limit Line ("**ULL**") and the San Ramon Urban Growth Boundary ("**UGB**").

C. In November 1990, voters approved Measure C-1990, the Contra Costa County 65/35 Land Preservation Plan Ordinance (Ordinance Code Chapter 82-1). The 65/35 Land Preservation Plan Ordinance limits urban development to no more than thirty-five percent (35%) of the land in the County and requires that at least sixty-five percent (65%) of the land in the County be preserved for agriculture, open space, wetlands, parks, and other non-

urban uses. Measure C-1990 also established the County's ULL to enforce the 65/35 standard.

D. In 2004, County voters approved Measure J. Among other things, Measure J requires the County and all cities within the County to have a voter-approved urban limit line, developed and maintained in accord with the "Principles of Agreement for Establishing the Urban Limit Line" ("**Principles**"), to receive the sales tax proceeds from Measure C-1988.

E. In November 2006, County voters approved Measure L, which extended the term of the 65/35 Land Preservation Plan Ordinance to December 31, 2026, and required a four-fifths (4/5) vote of the Board of Supervisors and voter approval to expand the ULL by more than thirty (30) acres.

F. In 1999, San Ramon voters approved a growth management initiative known as Measure G, initiating a general plan update that created a UGB that protects visible hillsides and ridgelines from development, protects significant agricultural resources, preserves open space, encourages infill development and workforce housing, and encourages efficient provision of municipal services such as sewer and water. Land beyond the UGB is intended to remain rural in nature until such time as the UGB is reevaluated to assess the city's future needs for housing and employment.

G. In November 2010, San Ramon voters disapproved Measure W, a ballot initiative that would have amended the city's general plan to add a portion of the Tassajara Valley and lands in the west side of the city within its UGB. With the defeat of Measure W, the Tassajara Valley remains outside of San Ramon's UGB and San Ramon's Sphere of Influence ("**SOI**") and under the jurisdiction of the County.

J. EBRPD's jurisdiction includes all of the counties of Alameda and Contra Costa and provides regional park facilities and activities within this two-county area. EBRPD has a broad mandate under Public Resources Code section 5541 to "plan, adopt, lay out, plant, develop, and otherwise improve, extend, control, operate, and maintain a system of public parks, playgrounds, golf courses, beaches, trails, natural areas, ecological and open space preserves, parkways, scenic drives, boulevards, and other facilities for public recreation, for the use and enjoyment of all the inhabitants of the district."

K. Through this Agreement the Parties express their interest in endeavoring to preserve and enhance agricultural and other non-urban land uses within an approximately seventeen thousand six hundred sixty seven (17,667)-acre area in the Tassajara Valley, located in unincorporated Contra Costa County, as more particularly shown on Exhibit A ("**Preservation and Enhancement Area**").

L. The Parties also agree to support the dedication and permanent preservation of land at two locations comprising approximately seven hundred twenty seven (727) acres in the Tassajara Valley, as shown on Exhibit B, (collectively, "**Dedication Area**"). Following project approval by the County, the Dedication Area will be permanently preserved through fee title conveyance to EBRPD or Regional Parks Foundation.

M. The Preservation and Enhancement Area and the Dedication Area are outside of the County's ULL and the San Ramon UGB. The Preservation and Enhancement Area and Dedication Area do not fall within any municipality's SOI, and they are outside of the current service areas and SOIs for all special districts providing water and sewer service in adjacent areas.

NOW, THEREFORE, based on the foregoing recitals, which are true and correct and incorporated by this reference, the Parties agree to the following understandings:

AGREEMENT

1. Each Party hereby expressly reaffirms its commitment to the Existing Agricultural and Open Space Protection Policies adopted by each respective Party's legislative body for all land within the Party's respective jurisdiction, including but not limited to the County's ULL and the San Ramon UGB (referred to collectively as the "**ULL/UGBs**"). Each Party acknowledges and agrees that the Preservation and Enhancement Area and Dedication Area are outside the ULL/UGBs, both of which prevent urban development.

2. The Parties acknowledge and agree that, under the Existing Agricultural and Open Space Protection Policies, no new urban development will be allowed in the

Preservation and Enhancement Area or Dedication Area, except as otherwise provided in this Agreement.

3. The Parties agree to support the addition of the Preservation and Enhancement Area and Dedication Area to the Association of Bay Area Government's list of Priority Conservation Areas to improve access to grant funding for acquisition of land or easements from willing sellers.

4. Consistent with the Existing Agricultural and Open Space Protection Policies for their respective jurisdictions, and except as otherwise provided in this Agreement, each Party agrees not to support any proposal to annex all or any portion of the Preservation and Enhancement Area or Dedication Area into a municipality or a utility services district unless the annexation serves non-urban uses, such as agriculture, open space, wetlands, parks, recreation, and other non-urban uses. EBRPD agrees that following County certification of the EIR (as defined below) and Project approval (as defined below), it will accept fee title to the Dedication Area, either directly from the Developer or through a dedication from the Regional Parks Foundation. The Parties will also cooperate to cause the County General Plan land use designation for the Dedication Area changed to Parks and Recreation (-PR).

5. Consistent with the Existing Agricultural and Open Space Protection Policies for their respective jurisdictions, and except as otherwise provided in this Agreement, each Party agrees not to support any proposal to modify the SOI of any municipality or utility services district to include all or any portion of either the Preservation and Enhancement Area or Dedication Area, unless the modification serves non-urban uses such as agriculture, open space, wetlands, parks, recreation, and other non-urban uses in the Preservation and Enhancement Area or Dedication Area.

6. Consistent with the Existing Agricultural and Open Space Protection Policies for their respective jurisdictions, and except as otherwise provided in this Agreement, each Party agrees not to support any proposal to extend, expand, or connect to urban infrastructure or service, all or any portion of either the Preservation and Enhancement Area or Dedication Area, unless: (a) the extension, expansion, or connection serves non-urban uses such as agriculture, open space, wetlands, parks, recreation, and other non-urban

uses; or (b) the extension, expansion, or connection (i) is the minimum necessary to avoid an unconstitutional taking of private property, (ii) is the minimum necessary to comply with state or federal law, or (iii) is the minimum necessary to avoid specific, adverse impacts upon public health and safety.

7. Consistent with the Existing Agricultural and Open Space Protection Policies for their respective jurisdictions, and except as otherwise provided in this Agreement, each Party understands that the County does not support amending the General Plan land use designation for all or any portion of either the Preservation and Enhancement Area or Dedication Area, unless such proposed amendment is for one or more of the following County General Plan land use designations: Agricultural Lands, Public and Semi-Public, Open Space, or Parks and Recreation Uses, or other non-urban uses.

8. Consistent with the Existing Agricultural and Open Space Protection Policies for their respective jurisdictions, and except as otherwise provided in this Agreement, each Party understands that the County does not support amending the zoning designations in either the Preservation and Enhancement Area or Dedication Area to a non-agricultural designation or other designation that is not compatible with agriculture, open space, parks, recreation, and other non-urban uses.

9. Consistent with the Existing Agricultural and Open Space Protection Policies for their respective jurisdictions, each Party agrees that it does not support any future urban development in either the Preservation and Enhancement Area or Dedication Area, except as otherwise provided in this Agreement.

10. The Parties agree to work together to support, develop, and implement policies, programs, and other actions intended to enhance agriculture and to preserve open space, wetlands, parks, recreation, and other non-urban uses in the Preservation and Enhancement Area. Actions which include, but are not limited to, the following:

    (a) Encouraging and promoting purchase of land or conservation easements, from willing sellers, to protect and enhance agriculture and to preserve and enhance open space, wetlands, parks, recreation, and other non-urban uses;

(b) Continuing the California Land Conservation Act of 1965 ("**Williamson Act**"; Gov. Code, § 51200 *et seq*.) program to provide tax incentives for property owners who agree not to develop their land;

(c) Encouraging lease of public land for agricultural activities such as grazing;

(d) Encouraging and promoting enhanced ground water management for agriculture and rural use, including technical support for more efficient water application and cooperative groundwater management and extraction;

(e) Encouraging and promoting enhanced marketing for locally-grown agricultural goods, including better connecting farmers to local markets;

(f) Encouraging continuation and augmentation of the technical support available to farmers, especially in the areas of financing, weed abatement and management, soil conservation, and range management;

(g) Exploring and pursuing a range of funding opportunities for agricultural enhancement and preservation of open space, wetlands, parks, recreation and other non-urban uses through activities such as grants, allocations from funding measures, and appropriations from density transfer programs and mitigation programs;

(h) Cooperating with stakeholders to develop a shared vision for the future of the Tassajara Valley;

(i) Encouraging public beautification projects, public signage, way-finding signage, and traffic regulations and improvements that enhance agricultural activities in the Tassajara Valley, or the rural character of the Tassajara Valley.

11. Notwithstanding anything contained in this Agreement to the contrary, the Parties agree that the County is authorized, in its sole discretion, to find that this Agreement satisfies the requirements of Section 82-1.018(a)(3) of the County Ordinance Code, provided that the County, in its sole discretion as Lead Agency, (a) certifies an Environmental Impact Report ("**EIR**") pursuant to CEQA and the CEQA Guidelines for the Tassajara Parks housing development project ("**Project**"), where the Project would be required to both (i) permanently preserve the Dedication Area, and (ii) provide an irrevocable contribution of at least $4 million ("**Ag Contribution**") to an agricultural enhancement fund established by the County ("**Fund**") following Project approval.

12. If the County finds that this Agreement satisfies the requirements set forth in Section 11 of this Agreement and the Fund is established and funded with the Ag Contribution, the monies in the Fund shall not be commingled with other moneys held by the County. The County agrees to expend monies in the Fund solely for one or more of the purposes set forth in Section 10 of this Agreement. Subject to the County's identification of willing sellers, the County will endeavor to dedicate up to approximately ninety percent (90%) of the Fund to the purchase, from willing sellers, (a) fee title to property, and (b) conservation easements in furtherance of one or more of the purposes set forth in Section 10 of this Agreement. Any interest income earned by monies in the Fund shall also be deposited into the Fund and shall be expended solely for one or more of the purposes set forth in Section 10 of this Agreement.

13. The County Administrator, or designee, shall administer the Fund consistent with the purposes of this Agreement.

14. When it makes or receives a proposal to expend the monies in the Fund, the County Administrator, or designee, will meet and consult with representatives from the Parties. The consultation will be considered concluded when the Parties' representatives mutually agree on the expenditure of monies in the Fund, consistent with one or more of the purposes set forth in Section 10 of this Agreement, or when the County Administrator, or designee, determines that mutual agreement cannot be reached despite good faith efforts to reach mutual agreement and resolve the identified issues of disagreement.

15. The Parties agree that this Agreement is not intended to facilitate additional urban development within the Preservation and Enhancement Area or Dedication Area. The Parties agree that this Agreement is not intended to limit, and does not limit, the authority of the voters to elect to extend or not extend the life of the ULL. If the voters ever elect to not extend the life of the ULL, this Agreement shall only apply to the Dedication Area.

16. The Parties agree to cooperate in all matters relating to the interpretation and implementation of this Agreement.

17. The Parties intend that this Agreement be broadly construed to achieve its stated purposes.

18. The Parties do not intend for this Agreement to modify any existing laws, regulations, or policies regarding the Preservation and Enhancement Area nor to limit any jurisdiction's power conferred under Article 11, Section 7 of the California Constitution.

19. There are no third party beneficiaries of this Agreement.

20. If any provision or provisions of this Agreement shall be held in a judicial proceeding to be invalid, illegal, or unenforceable, the validity, legality, and enforceability of the remaining provisions shall not in any way be affected or impaired thereby, provided that the purpose of this Agreement remains legal and enforceable.

21. This Agreement may be executed in multiple counterparts.

[Remainder of page left blank. Signatures on following pages.]

COUNTY OF CONTRA COSTA

By _____

Chair, Board of Supervisors

APPROVED AS TO FORM

By _____

County CounselCITY OF SAN RAMON

By _____

Mayor

APPROVED AS TO FORM

By _____

City Attorney

EAST BAY REGIONAL PARK DISTRICT

By _____

President

APPROVED AS TO FORM

By _____

District Counsel

SMS

\\10.200.1.5\adec\Publications\Client (PN-JN)\2648\26480008\EIR\7 - 2020 FEIR\appendices\App D - Agricultural Preservation Agreement\Preservation Agreement - 9.4.20.docx

Appendix N:
Water Demand Estimate for the Tassajara Parks Project

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3 Quail Run Circle, Suite 101
Salinas, CA 93907
t. 831-883-4848
f. 831-758-6328
s&w@swsv.com

Schaaf & Wheeler
CONSULTING CIVIL ENGINEERS

MEMORANDUM

TO:	Mary Bean, FCS-Intl.	DATE:	August 21, 2017
FROM:	Andrew A. Sterbenz, PE	JOB#:	FCSI.01.17
SUBJECT:	Water Demand Estimate for the Tassajara Parks Project		

The purpose of this memorandum is to provide a water demand estimate for the Tassajara Parks Project in Contra Costa County. The proposed Project is situated on approximately 771 acres of land on two sites located in the Tassajara Valley area of unincorporated Contra Costa County (see attached Local Vicinity Map). The land on which the Project would be located is east of the City of San Ramon and Town of Danville and outside of and adjacent to the Contra Costa County Urban Limit Line. The project consists of two parcels, a 155-acre Northern Site bounded by Camino Tassajara on its southern edge, and a 616-acre Southern Site located approximately one half mile to the south. Water use will be limited to 30-acre portion of the Northern Site where residential development is proposed. The site is located at the eastern edge of the East Bay Municipal Utility District (East Bay MUD) water service area, and northern edge of the Dublin San Ramon Services District.

The residential development consists of 125 single family residential lots, ranging in size from 5,000 to 7,500 square-feet, covering approximately 22.5 acres (see attached Residential Site Plan). The remaining 7.5 acres includes roadways, landscaping, a stormwater detention pond and a trailhead parking area with a public restroom. For the purposes of this analysis, the average lot size was assumed to be 6,250 square feet, and the hardscaped portion of the lot (home, driveway, patio, etc.) was assumed to be 3,500 square feet, leaving 2750 square feet for landscaping. One acre of irrigated landscaping was assumed for the streetscape and common areas. The average household size in Contra Costa County is 2.82 persons per household[1], so the population for this analysis was conservatively assumed to be 3 persons per household. Irrigation demands were estimated using the nearest California Irrigation Management Information System (CIMIS) weather station located in Pleasanton, CA (Station 191, approximately 10 miles south of the residential development).

Water demand for the Project was estimated using four methods, discussed below:

Method 1:
The first estimating method uses the planning factors found in the East Bay MUD 2015 Urban Water Management Plan (UWMP). The UWMP uses an indoor water demand target of 55 gallons per person per day, which was established in Senate Bill X7-7 of 2009. The residential water fixtures allowed under the Green Building code are intended to achieve this indoor water use target. This calculates out to 165 gpd/dwelling unit (= 3 persons/du x 55 gpd). The UWMP also assumes compliance with the current Model Water Efficient Landscape Ordinance, which limits residential irrigation use to 55% of the reference evapotranspiration factor (ETo), and non-residential irrigation use to 45% of the reference ETo. For the Project site, the reference ETo is 50.91 inches/year at CIMIS Station 191 (see attached CIMIS

[1] American Fact Finder, 2011-2015 data

Report). The peak ETo occurred in 2014 during the drought of record, and was 54.28 inches/year. These factors convert to 4.24 acre-feet/acre/year and 4.52 acre-feet/acre/year, respectively.

For the restroom at the trailhead parking lot, a two-stall facility was assumed. A demand factor of 0.0676 acre-feet/year/stall was used for the public restroom[2], for an annual demand of 0.14 acre-feet/year.

This method produced an average year water demand for the Project of 43.6 acre-feet/year, and a drought year demand of 44.9 acre-feet/year (AFY). The drought year demand reflects the increased landscape irrigation demand but assume the indoor demand is unchanged. Adding a 10% allowance for system losses, the totals become 47.9 AFY and 49.4 AFY, respectively. The calculations are shown in Tables 1 and 2, attached.

Method 2:

The next estimating method uses the 2009 residential usage cited in the East Bay MUD 2015 UWMP. Single family residential indoor water use averaged 178.6 gpd/du in 2009. Average outdoor water use for single family residences was 50% of the indoor use, but residential water use varied widely by climate area, with the Project site on the highest-use side of the District. East Bay MUD extends from the San Francisco and San Pablo Bays inland to Mount Diablo. The climate on the eastern edge of the District is significantly warmer and drier than on the western edge. To account for climate difference, outdoor water demand is estimated as 70% of the reference evapotranspiration factor (ETo), consistent with the 2010 version of the Model Water Efficient Landscape Ordinance and East Bay MUD Regulations Section 31[3]. The same restroom usage factor as in Method 1 was assumed.

This method produced an average year water demand for the Project of 51.5 acre-feet/year, and a drought year demand of 53.3 acre-feet/year. Adding a 10% allowance for system losses, the totals become 56.7 AFY and 58.6 AFY, respectively. The calculations are shown in Tables 1 and 2, attached.

Method 3:

The third estimating method uses residential demand factors from the Dublin San Ramon Services District (DSRSD). DSRSD is located within five miles of the residential development site, and entirely within the same climate region. The DSRSD Water System Master Plan uses a demand factor of 350 gpd/du for Low Density Residential use[4], which is 4.7 dwelling units per gross acre. This project will place 125 homes on 30 gross acres, or 4.2 du/ac. The DSRSD demand factors are based on 2013 meter data, which was a single-dry year without mandatory water conservation. This usage factor includes both indoor and outdoor use. Outdoor water demand for the streetscape and common areas assumed 45% of the reference evapotranspiration factor (ETo), consistent with the current Model Water Efficient Landscape Ordinance. The same restroom usage factor as in Method 1 was assumed.

[2] Restroom factor from Marina Coast Water District Code of Ordinances, Appendix C (nearest District with a defined usage factor for restrooms)

[3] East Bay MUD Regulations Section 31, Water Efficiency Requirements, limits irrigation use to 70% of the reference ETo

[4] DSRSD Water Master Plan, table 3-14.

This method produced an average year water demand for the Project of 51.1 acre-feet/year, and a drought year demand of 51.2 acre-feet/year. Adding a 10% allowance for system losses, the totals become 56.2 AFY and 56.3 AFY, respectively. The calculations are shown in Tables 1 and 2, attached.

Method 4:
The fourth estimating method uses historic residential demand provided by East Bay MUD for their Scenic Pressure Zone (Zone PZ), which includes the adjacent portion of San Ramon along Camino Tassajara, and the communities of Danville and Alamo. The historic demand factor for this service area is 580 gpd/du. Outdoor water demand for the streetscape and common areas assumed 45% of the reference evapotranspiration factor (ETo), consistent with the current Model Water Efficient Landscape Ordinance. The same restroom usage factor as in Method 1 was assumed. It should be noted that the communities of Alamo and Danville include single-family residential lots ranging from 6,000 sq-ft to over 100,000 sq-ft, while the proposed project will have residential lots under 10,000 sq-ft, so this method will produce skewed results.

This method produced an average year water demand for the Project of 83.3 acre-feet/year, and a drought year demand of 83.4 acre-feet/year. Adding a 10% allowance for system losses, the totals become 91.6 AFY and 91.7 AFY, respectively. The calculations are shown in Tables 1 and 2, attached.

Conclusion:
Methods 2 and 3 produced comparable results, with the estimates based on the Dublin San Ramon Services District planning factors being the most reliable due the comparable lot sizes and climate conditions. New construction will only use low-flow water fixtures compliant with the California Green Building Code, so these units should not exceed the water use of older homes of similar size with higher flow fixtures. Given the Project's proximity to the DSRSD service area, the use of their planning factors would be the most prudent. We recommend using the drought year estimate up to 56.3 acre-feet/year for the water supply analysis.

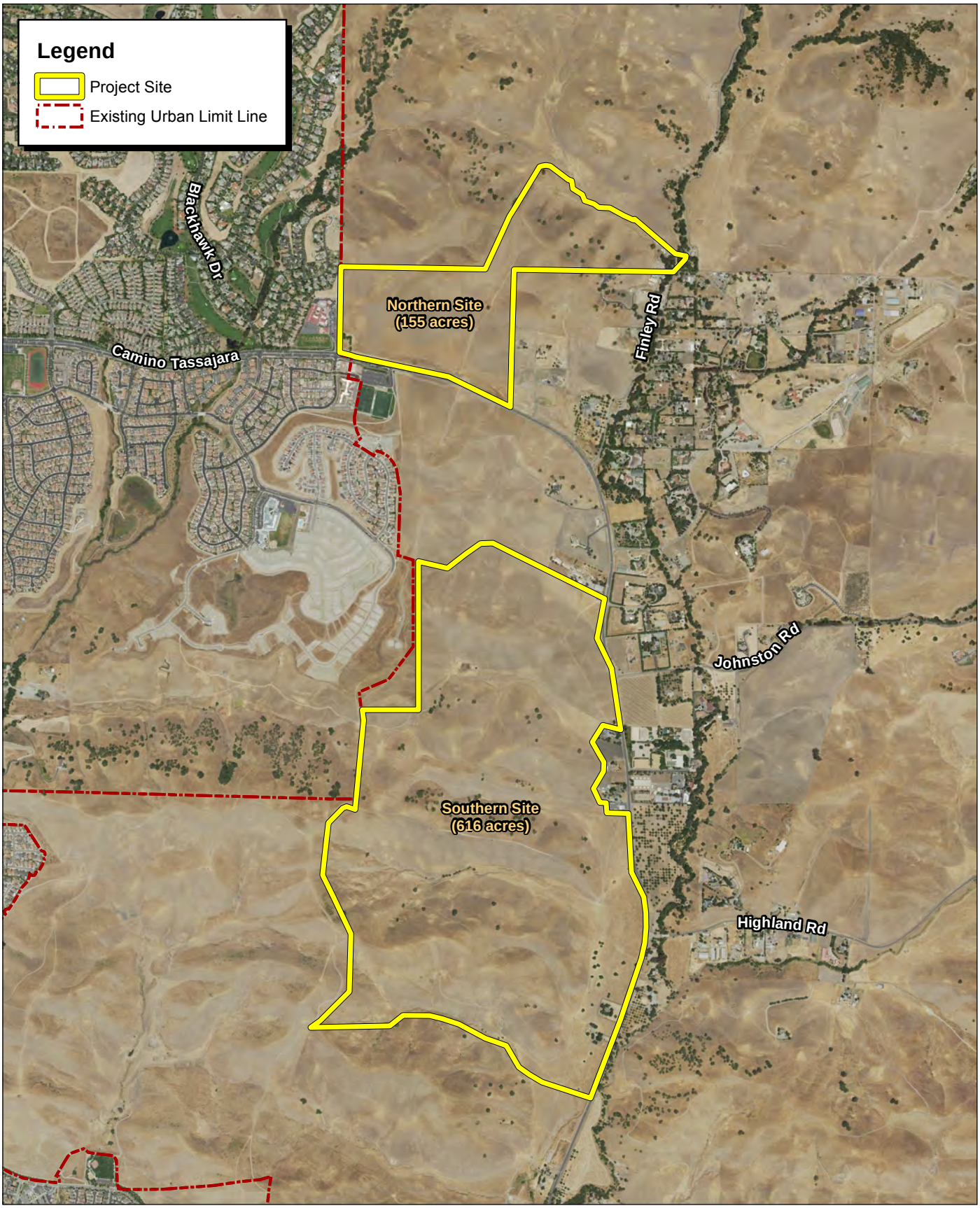
Attachments

1. Project Local Vicinity Map, DEIR exhibit 2-2
2. Residential Site Plan, DEIR Exhibit 2-7
3. CIMIS Monthly ETo Reports, Station 191, Pleasanton
4. Table 1, Tassajara Parks Water Demand Estimate, Average Year
5. Table 2, Tassajara Parks Water Demand Estimate, Drought Year

References:

1. American Fact Finder, www.census.gov, population data for unincorporated Contra Costa County
2. California Code of Regulations, Title 23, Chapter 2,7, Model Water Efficient Landscape Ordinance (§490 et sec.), adopted April 2015
3. California Irrigation Management Information System, www.cimis.water.ca.gov, data for Station 191, Pleasanton, CA
4. Contra Costa County, Recirculated Draft EIR for the Tassajara Parks Project: Section 2, Project Description, and Appendix J, Water Supply Evaluation, 2016
5. Dublin San Ramon Services District, Water System Master Plan, West Yost Associates, March 2016

6. Dublin San Ramon Services District, Standard Procedures, Specifications and Drawings for Design and Installation of Potable Water, Recycled Water and Wastewater Utilities, November 2014
7. East Bay Municipal Utility District, 2015 Urban Water Management Plan, June 2016
8. East Bay Municipal Utility District, Regulations Governing Water Service to Customers, Section 31, Water Efficiency Requirements, effective July 1, 2015
9. East Bay Municipal Utility District, Letter to Contra Costa County Department of Conservation and Development, Re: Notice of Availability for the Recirculated DEIR for the Tassajara Park Project, November 21, 2016
10. City of Danville Municipal Code, Chapter 32, Residential Zoning
11. Contra Costa County Municipal Code, Chapter 84, Residential Zoning



Source: ESRI, Contra Costa County.

2,000 1,000 0 2,000
Feet

Exhibit 2-2
Local Vicinity Map
Aerial Base



Source: Carlson, Barbee & Gibson, Inc, 2015

Exhibit 2-7
Residential Site Plan

California Irrigation Management Information System (CIMIS)

CIMIS Monthly Average ETo Report

Rendered in ENGLISH Units.
Printed on Friday, May 19, 2017

Average ETo Values by Station

Stn Id	Stn Name	CIMIS Region	Jan (in)	Feb (in)	Mar (in)	Apr (in)	May (in)	Jun (in)	Jul (in)	Aug (in)	Sep (in)	Oct (in)	Nov (in)	Dec (in)	Total (in)
191	Pleasanton	SFB	1.54	2.17	3.66	4.93	5.98	7.00	7.41	6.56	4.96	3.39	1.92	1.39	50.91

CIMIS Region Abbreviations		
BIS - Bishop	CCV - Central Coast Valleys	ICV - Imperial/Coachella Valley
LAB - Los Angeles Basin	MBY - Monterey Bay	NCV - North Coast Valleys
NEP - Northeast Plateau	SAV - Sacramento Valley	SBE - San Bernardino
SFB - San Francisco Bay	SJV - San Joaquin Valley	SFH - Sierra Foothill
SCV - South Coast Valleys		

California Irrigation Management Information System (CIMIS)

CIMIS Monthly Report

Rendered in ENGLISH Units.
January 2014 - December 2016
Printed on Tuesday, May 23, 2017

Pleasanton - San Francisco Bay - Station 191

Month Year	Total ETo (in)	Total Precip (in)	Avg Sol Rad (Ly/day)	Avg Vap Pres (mBars)	Avg Max Air Temp (°F)	Avg Min Air Temp (°F)	Avg Air Temp (°F)	Avg Max Rel Hum (%)	Avg Min Rel Hum (%)	Avg Rel Hum (%)	Avg Dew Point (°F)	Avg Wind Speed (mph)	Avg Soil Temp (°F)
Jan 2014	1.96 K	0.07	221	7.3 K	67.4 K	35.4 K	48.9 K	89 K	33 K	61 K	35.6 K	2.4 K	45.3 K
Feb 2014	1.97	3.11	238	9.9	64.0 K	42.5 K	52.5	91	49	72	43.7	3.7 K	52.9
Mar 2014	3.80	1.55	372	9.5	69.9 K	44.3	56.6	87	39	61	42.6	3.7 K	57.8
Apr 2014	5.30	0.87	530	10.3	73.0 K	45.5 K	58.9	88	36	61	45.1	4.0 K	63.4 K
May 2014	7.03	0.34	633	10.2	78.2	50.7	64.0	82	31	52	44.7	4.7 K	69.0
Jun 2014	7.59	0.14	672	11.4 K	84.3 K	53.0	67.8 K	82	27	50 K	47.7 K	4.4	73.2
Jul 2014	7.58	0.15	610	13.6 K	89.0	58.4 K	71.8 K	82	28	53 L	52.8 L	4.6 K	75.7 K
Aug 2014	6.67	0.26 K	572 K	14.1 K	86.3	56.8 K	69.3 K	87 K	31 K	58 K	53.7 K	4.2 K	74.4
Sep 2014	5.18	0.39	467	14.0 K	84.9	56.0 K	68.4	87	33	60 K	53.5 K	3.8 K	72.0
Oct 2014	3.92 K	0.30	342	11.2	82.0 K	49.6	64.2	87	29	56	47.1	3.2 K	65.1
Nov 2014	1.99	1.83 K	229 K	10.5	69.1 K	43.8 K	55.1 K	92	44	71 K	45.5 K	2.8	57.4
Dec 2014	1.29	8.65	142	10.8 K	62.0 K	44.9 K	52.4 K	92	59	78 K	45.1 K	3.4 K	54.1 K
Tots/Avgs	54.28	17.7	419	11.1	75.8	48.4	60.8	87	37	61	46.4	3.7	63.4

Pleasanton - San Francisco Bay - Station 191

Month Year	Total ETo (in)	Total Precip (in)	Avg Sol Rad (Ly/day)	Avg Vap Pres (mBars)	Avg Max Air Temp (°F)	Avg Min Air Temp (°F)	Avg Air Temp (°F)	Avg Max Rel Hum (%)	Avg Min Rel Hum (%)	Avg Rel Hum (%)	Avg Dew Point (°F)	Avg Wind Speed (mph)	Avg Soil Temp (°F)
Jan 2015	1.77 K	0.01 K	211	8.4	63.6	36.3	48.2 K	94	45	73 K	39.5 K	2.5	47.8
Feb 2015	2.33	3.48	273	10.1 K	68.0 K	42.4 K	54.2 K	91	46	70 K	44.0 K	3.7 K	54.2 K
Mar 2015	4.20	0.14 K	418 K	10.1 K	74.1 K	43.9 K	57.9 K	90 K	34 K	61 K	44.6 K	3.2 K	58.9 K
Apr 2015	5.54	1.46	551	9.2	71.8	44.7	57.6	87	33	57	41.8	4.4 K	63.0
May 2015	5.57	0.47	562	11.0	69.5	50.1	58.2	84	48	67	47.0	4.6	67.0
Jun 2015	7.23	0.47	651	12.7 K	86.2 K	54.6 K	69.2 K	86	28	52 L	50.4 L	3.6	74.7
Jul 2015	7.31 K	0.17	618 K	13.9 K	85.2	58.2 K	70.2	83	34	57 L	53.5 L	4.3	75.8
Aug 2015	6.89 K	0.04	577	13.7 K	86.6 K	56.8	70.4 K	85	29	55 K	52.8 K	4.2	74.4
Sep 2015	5.25 K	0.02	453	11.2 K	86.6	53.9 K	69.2 K	79	25	48 K	47.0 K	3.2	70.5
Oct 2015	3.83	0.00	337	12.3	83.1 K	52.1 K	65.5 K	87	31	58 K	49.9 K	2.9	66.7 K
Nov 2015	2.08	2.59 K	243	8.3 K	64.1 K	37.0	49.1	93	40	68 K	38.8 K	2.9 K	53.7
Dec 2015	1.46	4.35	172	8.4	57.9	36.7	46.7	91	50	74	38.9	3.6 K	48.6
Tots/Avgs	53.46	13.2	422	10.8	74.7	47.2	59.7	88	37	62	45.7	3.6	62.9

Pleasanton - San Francisco Bay - Station 191

Month Year	Total ETo (in)	Total Precip (in)	Avg Sol Rad (Ly/day)	Avg Vap Pres (mBars)	Avg Max Air Temp (°F)	Avg Min Air Temp (°F)	Avg Air Temp (°F)	Avg Max Rel Hum (%)	Avg Min Rel Hum (%)	Avg Rel Hum (%)	Avg Dew Point (°F)	Avg Wind Speed (mph)	Avg Soil Temp (°F)
Jan 2016	1.29	4.38	153	10.0 K	59.1	43.5 K	50.7 K	91	59	78 K	44.0 K	3.6 K	50.4 K
Feb 2016	2.78 K	0.98	310	9.6	69.3 K	40.6	53.8 K	92 K	41 K	68 K	43.2 K	3.2 K	53.3
Mar 2016	3.36	5.82	352	10.7 K	66.8	45.0 K	55.2	90	48	71 K	45.9 K	4.3 K	58.6
Apr 2016	4.84 K	1.76	478	10.5 K	71.7 K	47.5 K	59.2 K	88	41	62 K	45.5 K	4.3 K	63.9
May 2016	5.82 K	0.27	550	11.7	75.3 K	51.5	62.5 K	85	42	62 K	48.6 K	4.3 K	68.9
Jun 2016	7.67	0.22	680	11.3 K	85.4 K	53.3 K	68.9 K	82	27	48 K	47.7 K	4.3 K	74.4
Jul 2016	7.95	0.38	665	12.1 K	88.5	54.7	70.2	84	25	49 K	49.6 K	4.0	75.8
Aug 2016	6.69	0.21	582	13.1 K	87.1	54.5	68.1 K	88	28	57 K	51.7 K	3.7 K	74.3
Sep 2016	5.40 K	0.24	476	11.2	85.2	51.1	66.6 K	85 K	25 K	52	47.4	3.4	69.6

Month Year	Total ETo (in)	Total Precip (in)	Avg Sol Rad (Ly/day)	Avg Vap Pres (mBars)	Avg Max Air Temp (°F)	Avg Min Air Temp (°F)	Avg Air Temp (°F)	Avg Max Rel Hum (%)	Avg Min Rel Hum (%)	Avg Rel Hum (%)	Avg Dew Point (°F)	Avg Wind Speed (mph)	Avg Soil Temp (°F)
Oct 2016	3.27 K	4.91 K	297 K	11.8 K	74.6 K	49.4 K	61.2 K	88 L	40 L	64 L	48.5 L	3.9 K	63.8 K
Nov 2016	1.93	1.20	226 K	11.1	68.0	43.7	54.6	93	49	75	46.7	3.0 K	58.8 K
Dec 2016	1.44	3.39	173	8.0 K	58.2	36.4 K	46.2	92	48	73 K	37.7 K	3.2 K	49.2
Tots/Avgs	52.44	23.8	412	10.9	74.1	47.6	59.8	88	39	63	46.4	3.8	63.4

Flag Legend	
M - All Daily Values Missing	K - One or More Daily Values Flagged
J - One or More Daily Values Missing	L - Missing and Flagged Daily Values

Conversion Factors		
W/sq.m = Ly/day/2.065	inches * 25.4 = mm	(F-32) * 5/9 = c
	mBars * 0.1 = kPa	--

Table 1: Tassajara Park Water Demand Estimate, Average Year

	Method 1: EBMUD Current		Method 2: EBMUD (2009)		Method 3: DSRSD		Method 4: EBMUD Zone PZ	
Residential Demand								
Average lot size: 6250 SF								
Indoor								
	3	pers/du						
	55	gpd/pers						
	165	gpd/du	178.6	gpd/du				
	0.18	AFY/du	0.20	AFY/du				
Outdoor					Combined factor		Combined factor	
	50.91	in/yr, ETo	50.91	in/yr, ETo				
	0.55	MWELO factor	0.7	Regulation 31				
	2750	SF of landscape	2750	SF of landscape	350	gpd/du	580	gpd/du
	0.15	AFY/du	0.19	AFY/du	0.39	AFY/du	0.65	AFY/du
Total per residence	0.33	AFY/du	0.39	AFY/du	0.39	AFY/du	0.65	AFY/du
	125	Lots	125	Lots	125	Lots	125	Lots
Total	41.5	AFY	48.4	AFY	49.0	AFY	81.2	AFY
Common Area Landscape								
	50.91	in/yr, ETo	50.91	in/yr, ETo	50.91	in/yr, ETo	50.91	in/yr, ETo
	0.45	MWELO factor	0.7	Regulation 31	0.45	MWELO factor	0.45	MWELO factor
	43560	SF of landscape	43560	SF of landscape	43560	SF of landscape	43560	SF of landscape
	1.91	AFY/du	2.97	AFY/du	1.91	AFY/du	1.91	AFY/du
Park Restroom								
	2	stalls	2	stalls	2	stalls	2	stalls
	0.07	AFY/stall	0.07	AFY/stall	0.07	AFY/stall	0.07	AFY/stall
	0.14	AFY	0.14	AFY	0.14	AFY	0.14	AFY
Total, All Uses	43.6	AFY	51.5	AFY	51.1	AFY	83.3	AFY
Allowance for Loss	1.1	10% loss Factor	1.1	10% loss Factor	1.1	10% loss Factor	1.1	10% loss Factor
Total with Losses	47.9	AFY	56.7	AFY	56.2	AFY	91.6	AFY

Table 2: Tassajara Park Water Demand Estimate, Drought Year

	Method 1: EBMUD Current		Method 2: EBMUD (2009)		Method 3: DSRSD		Method 4: EBMUD Zone PZ	
Residential Demand								
Average lot size: 6250 SF								
Indoor								
	3	pers/du						
	55	gpd/pers						
	165	gpd/du	178.6	gpd/du				
	0.18	AFY/du	0.20	AFY/du				
Outdoor					Combined Indoor + Outdoor		Combined Indoor + Outdoor	
	54.28	in/yr, ETo	54.28	in/yr, ETo				
	0.55	MWELO factor	0.7	Regulation 31				
	2750	SF of landscape	2750	SF of landscape	350	gpd/du	580	gpd/du
	0.16	AFY/du	0.20	AFY/du	0.39	AFY/du	0.65	AFY/du
Total per dwelling unit	0.34	AFY/du	0.40	AFY/du	0.39	AFY/du	0.65	AFY/du
	125	Lots	125	Lots	125	Lots	125	Lots
Total	42.7	AFY	50.0	AFY	49.0	AFY	81.2	AFY
Common Area Landscape								
	54.28	in/yr, ETo	54.28	in/yr, ETo	54.28	in/yr, ETo	54.28	in/yr, ETo
	0.45	MWELO factor	0.7	Regulation 31	0.45	MWELO factor	0.45	MWELO factor
	43560	SF of landscape	43560	SF of landscape	43560	SF of landscape	43560	SF of landscape
	2.04	AFY/du	3.17	AFY/du	2.04	AFY/du	2.04	AFY/du
Park Restroom								
	2	stalls	2	stalls	2	stalls	2	stalls
	0.07	AFY/stall	0.07	AFY/stall	0.07	AFY/stall	0.07	AFY/stall
	0.14	AFY	0.14	AFY	0.14	AFY	0.14	AFY
Total, All Uses	44.9	AFY	53.3	AFY	51.2	AFY	83.4	AFY
Allowance for Loss	1.1	10% loss Factor	1.1	10% loss Factor	1.1	10% loss Factor	1.1	10% loss Factor
Total with Losses	49.4	AFY	58.6	AFY	56.3	AFY	91.7	AFY

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